



# **PGY1 Pharmacy Residency Manual 2020-2021**



**University of Virginia Health  
PGY1 Pharmacy Residency  
2020-2021**

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Ambulatory Care LEDs

- a. Family Medicine Clinic
- b. Internal Medicine Clinic
- c. Infectious Diseases Clinic
- d. Pulmonology Clinic
- e. Solid Organ Transplant Clinic

Critical Care LEDs

- a. Coronary Care Unit (CCU)
- b. Medical Intensive Care Unit (MICU)
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General Medicine Rotations LEDs

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- c. Internal Medicine

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**ASHP Links:**

[PGY1 Pharmacy Accreditation Standard](#)

[PGY1 Pharmacy Residencies Competency Areas, Goals, and Objectives](#)

[PGY1 Community-Based Pharmacy Accreditation Standard](#)

[PGY1 Community-Based Pharmacy Residencies Competency Areas, Goals, and Objectives](#)





## UVA Health

UVA Health includes a hospital, level I trauma center, nationally recognized cancer and heart centers and primary and specialty clinics throughout Central Virginia.

Through [research and clinical trials](#), we stay at the leading edge of the [treatments we offer](#).

We rank among the nation's top hospitals because our doctors, nurses and caregivers make every effort to push the envelope of healthcare.

UVA Health consists of:

- UVA Medical Center
- [UVA School of Medicine](#)
- [UVA School of Nursing](#)
- [Claude Moore Health Sciences Library](#)
- [UVA Physicians Group](#) is the physician group practice that manages billing for UVA physicians.

Updated Facts and Statistics can be found at: <https://uvahealth.com/about/facts-stats>

# Mission, Values & Goals

## Mission

To provide excellence, innovation and superlative quality in the care of patients, the training of health professionals, and the creation and sharing of health knowledge within a culture that promotes equity, diversity and inclusiveness.

## Our Values: ASPIRE

At UVA Health, we put the patient at the center of everything we do. We **ASPIRE** to create a culture of trust, respect and engagement through our values:

- **Accountability:** Acknowledging and assuming responsibility for where we have succeeded and failed in terms of our actions, decisions, policies and results
- **Stewardship:** Responsibly and carefully managing our resources and commitment to continual improvement and learning while acknowledging shortcomings or problems in our quest
- **Professionalism:** Approaching all that we do in a collaborative way, delivering excellent care through the lens of helpfulness, positivity, kindness and competency
- **Integrity:** Being honest, open and fair through our behaviors, attitude and treatment of others
- **Respect:** Being mindful of building a diverse and inclusive environment while showing compassion for everyone through our caring and intentional ways
- **Excellence:** Conducting ourselves in a manner that surpasses ordinary standards through preparation, collaboration and proactivity in all that we do

## Goals

- To become the safest place to receive care
- To be the healthiest work environment
- To provide exceptional clinical care
- To generate biomedical discovery that better the human condition
- To train healthcare providers of the future to work in multi-disciplinary teams
- To ensure value-driven and efficient stewardship of resources

The organizational [leadership structure](https://uvahealth.com/about/leadership) can be found at: <https://uvahealth.com/about/leadership>

[Quality and safety priorities](https://uvahealth.com/about/quality-safety) can be found at: <https://uvahealth.com/about/quality-safety>

## Partnerships

### Novant Health UVA Health

[Novant Health UVA Health](#) forms a regional health system that brings together three medical centers: Novant Health Haymarket Medical Center, Novant Health Prince William Medical Center and Novant Health UVA Health System Culpeper Medical Center. The goal: to provide easy access to specialists and high-quality, patient-centered care for patients throughout the region.



### Bon Secours Health System

This collaboration gives patients a variety of specialized services, including interventional neuroradiology, care for pediatric infectious diseases, pediatric genetics and heart care at [Bon Secours in Richmond](#).



### Riverside Health System

We make it possible for people in the Newport News area to access advanced stereotactic radiosurgery at [Riverside Health System](#).



### Regional Radiosurgery Services

Keeping care close to home, we help offer state-of-the-art stereotactic radiosurgery for patients with brain tumors and other brain disorders at [Chesapeake Regional Healthcare](#).



### Winchester Medical Center

We provide management services and medical direction for the stereotactic radiosurgery and stereotactic body radiotherapy services at [Winchester Medical Center](#).



## UVA Encompass Health Rehabilitation Hospital

Our expert team has extensive experience in today's most advanced therapeutic methods and technologies.



### Hospice of the Piedmont

[Hospice of the Piedmont](#) collaborates with us to provide a 10-bed inpatient hospice unit at the UVA Transitional Care Hospital called the **Center for Acute Hospice Care**.



### Children's Hospital of Pittsburgh of UPMC

In this partnership with the UVA Children's, the [Children's Hospital of Pittsburgh of UPMC](#) brings expertise from the country's first comprehensive pediatric transplant center to Virginia. This expansion increases access to and enhances the quality of UVA's **pediatric liver transplant** services.



### Children's Hospital of the King's Daughters

UVA Children's and [Children's Hospital of The King's Daughters](#) have a regional collaborative for cardiac care at Children's Hospital of The King's Daughters. The UVA/CHKD collaboration combines the efforts of pediatric cardiologists, cardiac surgeons, cardiac anesthesiologists, intensive care physicians and cardiac support professionals from both institutions with the goal of improving outcomes for children with complex congenital heart defects.

# UVA Health History

## A Brief History of the UVA Medical Center

Thomas Jefferson founded UVA's medical education and patient care program in 1825, but no hospital existed until many years later.

A dispensary was constructed in 1895. It served as a surgery center until 1901 and a place for outpatient care until 1916. Patients were taken across the street to a rooming house to recuperate from surgery. For a time, university doctors practiced at a six-bed, public, inpatient facility in a remodeled home.

In the spring of 1901, UVA dedicated its first hospital: a 25-bed building with three operating rooms. By 1916, there had been three new additions to the hospital, bringing the total beds to 200. By 1941, rising patient volume had required another four additions to the hospital and brought inpatient capacity to 485.

In 1960, the cluster of old buildings and additions saw its final expansion with the completion of a modern, eight-story, 400-bed structure that planners called the multistory hospital and the public dubbed the "new hospital." The new facility was air-conditioned, spacious and was equipped with the best technology available at the time.

Another 29 years passed before UVA opened a new hospital building. A certificate of need was approved by the Virginia General Assembly in April 1984. Groundbreaking for the new hospital was held on November 7, 1984, and excavations began the following summer. The total project, including the University Hospital, a 642-space parking garage and a heater/chiller plant, is the largest capital project in the state's history aside from highway construction. It had a budget of \$230 million, including \$24 million from the state.

Read more Health histories:

- [Hospital Centennial Anniversary](#)
- [School of Medicine History](#)
- [Health Sciences Library History](#)



**UVA Health:**

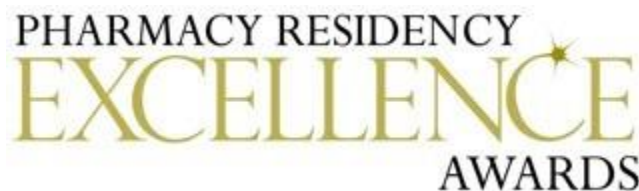
- U.S. News and World Report's #1 Hospital in Virginia in 2016, 2017, 2018, & 2019
- Magnet recognized by the American Nurses Credentialing Center
- Satellite campus for VCU School of Pharmacy

**UVA PGY1 Pharmacy Residency Program:**

- Recipient of the 2015 ASHP Foundation Residency Expansion Grant (\$40,000)
- Recipient of the 2017 ASHP Foundation Residency Excellence Award
- Program Director is one of three recognized by the American Association of Colleges of Pharmacy (AACP) as a 2019 Master Preceptor

**Charlottesville:**

- [Best Places to Visit in Virginia \(#2\)](#)- US News and World Report 2019
- [Top 10 Bleisure Travel Destinations \(#6\)](#) -Expedia 2018
- [10 Best Small City Road Trip Destinations](#) -Travelocity 2018
- [Best Places to Visit In October \(#5\)](#)-U.S. News & World Report
- [Top 100 places to Live \(#5\)](#) -Livability 2018
- [Best Small Cities in the U.S.](#)-National Geographic 2018
- [Happiest cities in the U.S. \(#3\)](#)-National Geographic 2017



## The Department of Pharmacy

### ***Mission***

The UVA Department of Pharmacy Services will provide superlative patient-centered care focused on safe medication practices and innovative education and training.

### ***Vision***

The UVA Pharmacy Department is a vital member of the patient-care team dedicated to expanding patient care services and leading initiatives to maximize patient safety and improve outcomes. We are focused on providing a forum of continuous learning by all employees, a work environment in which staff are engaged and motivated, and nationally-recognized clinical services and educational/ training programs.

**University of Virginia Health System  
Department of Pharmacy Services  
2020-2021 Residency Year Schedule**

GME Orientation	June 16 and 17
Epic Training	June 18
Departmental Orientation	June 19- July 10
Independence Day Holiday (observed)	July 3
Rotation 1	July 13-August 14
Rotation 2	Aug 17-September 18
Labor Day Holiday	September 7
Rotation 3	September 21-October 23
Rotation 4	October 26-Dec 1
Thanksgiving Holiday	November 26 and 27
ASHP Midyear Clinical Meeting	December 5-9
Mini-rotation (5 days)	December 14-18
Research Days/ Applicant Screening	December 2-4, 21-22, 28-30,
Christmas Holiday	December 23-25
New Year's Holiday	December 31 and January 1
Rotation 5	January 4 - February 5
Research/ interviews week	February 8-12
Rotation 6	February 15 - March 18
Rotation 7	March 22 - April 23
Rotation 8	April 26 – May 28
UNC REPS	May 17 and 18
Memorial Day Holiday	May 31
Rotation 9 (elective only-19 days)	June 1-25
Picnic	TBD
Graduation	June 28
Exit interviews, office clean up, etc	June 29,30



University of Virginia Department of Pharmacy Services  
Pharmacy Residency Orientation

<b>Thursday, June 18</b>		
8-5 (broken into 2 groups)	Epic training	
<b>Friday, June 19</b>		
830-1000	Residency Orientation Residency Policy Orientation	Michelle McCarthy
10-1030	Specialty Pharmacy	Nick DiPirro
1030-11	Technology Access (Pyxis, Talyst, VPN etc)	IT Group
11-1130	Review Staff Ready	Michelle McCarthy/ Derek Burden
1130	Resume self-directed learning	
1215-1245	Residency Standard, Self-Evaluations,	Michelle McCarthy
1245- end of day	Continue self-directed learning	Self-directed
<b>Monday, June 22</b> - Begin Inpatient Pharmacy Training as assigned		
<b>Friday, June 26</b>		
1300-1500	Residency Graduation	ZOOM
<b>Wednesday, July 1</b>		
1300-1400	Formulary/ Non-Formulary/ MUP	Brian Spoelhof
<b>Thursday, July 2</b>		
1400-1500	How To Work Up/ Present A Patient	Amanda Hedrick
<b>Friday, July 3: Independence Day (observed)</b>		
<b>Monday, July 6</b>		
As directed by GME	GME orientation	New to UVA PGY2s
1400-1530	Vancomycin kinetics: basics	Nate Hedrick, Brandon Hill, & Zach Elliot
<b>Tuesday, July 7</b>		
1300-1500	Code Training	Donna Truoccolo, Taylor Goins, & Mary Lewis Griffin
1500-1600	Antimicrobial Stewardship	Brandon Hill
<b>Wednesday, July 8</b>		

University of Virginia Department of Pharmacy Services  
Pharmacy Residency Orientation

8-12	Epic training for new to UVA inpatient PGY2s	Sarah Anthony is the trainer  Location- R HSTS Training Rm # 4 CR
1300-1600	Bugs 'n' Drugs	Nate Hedrick/Heather Cox Hall
<b>Thursday, July 9</b>		
1300-1400	Aminoglycoside Basics	Heather Cox Hall
1400-1530	Sepsis Overview	Amanda Hedrick
1530-1600	Formulary/ Non-Formulary/ MUP	Brian Spoelhof New to UVA PGY2s Only
<b>Friday, July 10</b>		

Early Core Curriculum:

- Research Orientation
- Insulin management
- Vancomycin kinetics: special populations
- Nutrition Overview
- Anticoagulation and Factor Training
- Renal dosing
- Fluids and electrolytes
- Lines, drains, and tubes
- Introduction to Micro
- Aminoglycoside Special Populations

Adam (6/11)  
Ashley (6/8)  
Amy (licensed)  
Cameron (licensed)  
Tarak (6/11)

Carson (6/12)  
Amanda (6/6)  
Jessica (6/12)  
Ginae (6/15)  
Kevin (6/4)

Inpt – report to pharmacy at  
0730  
Inpt (1030) - report to  
pharmacy at 1030  
OR1 – report to cubbies at  
0700

eFloat – report to pharmacy  
at 1300  
IV1/2 – report to IV room at  
0700

eIV – report to IV room at  
1400  
eClin – report to cubbies at  
1400  
dClin – report to cubbies at  
0800

June/ July 2020						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
	<u>15</u>	<u>16</u> GME Orientation	<u>17</u> GME Orientation	<u>18</u> Epic	<u>19</u> Didactic sessions	<u>20</u>
<u>21</u>	<u>22</u> 1 eIV 2 inpt 3 exam 4 eClin (med) 5 efloat 6 eClin (surg) 7 exam 8 IV1 9 exam 10 eclin (ICU)	<u>23</u> 1 efloat 2 inpt 3 inpt 1030 4 eclin (med) 5 eclin (surg) 6 eclin (ICU) 7 IV1 8 IV2 9 eIV 10 OR1	<u>24</u> 1 inpt 2 Neuro2 (ted 0800) 3 OR1 4 inpt (1030) 5 eclin (med) 6 IV1 7 eclin (surg) 8 IV2 9 eclin (ICU) 10 eIV	<u>25</u> 1 inpt 0700 2 inpt 0900 3 CCSV 1230 (Amanda L) 4 inpt 0800 5 OR1 6 IV 0900 7 S2 to surg eve (0900 Courtney S) 8 IV1 9 neuro2 to med eve (0900 Annie) 10 IV2	<u>26</u> 1 inpt 2 inpt 1030 3 IV1 4 IV2 5 efloat 6 eclin (med) 7 OR1 8 eclin (surg) 9 eclin (ICU) 10 eIV 1 PM Graduatoin	<u>27</u> 1 inpt (work) (2 IV, 4 inpt) 2 efloat (work) (2 IV, 4 inpt) 3 inpt (2 inpt, 2 clin, 1 IV) 4 efloat (2 clin, 2 inpt, 1 IV) 5 _____ (2 inpt, 3 clin) 6 _____ (4 clin, 2 IV) 7 _____ (4 clin, 1 IV) 8 _____ (2 clin, 4 IV, 0 inpt) 9 _____ (2 inpt, 1 IV, 2 clin) 10 _____ (2 clin, 4 IV)
<u>28</u> 1 2 3 4 5 6 7 8 9 10	<u>29</u> 1 eclin (med) 2 eclin (surg) 3 eIV 4 IV1 5 IV2 6 inpt 7 inpt 1030 8 efloat 9 OR1 10 eclin (ICU)	<u>30</u> 1 dClin (Thomas) 2 dClin (Mary) 3 dClin (Sarah) 4 IV1 5 IV2 6 eIV 7 inpt 8 inpt 1030 9 OR1 10 eclin (med)	<u>1</u> 1 dClin (Thomas) 2 dClin (Mary) 3 inpt 4 inpt 1030 5 IV1 6 IV2 7 eclin (surg) 8 efloat 9 eIV 10 eclin (ICU)	<u>2</u> 1 eclin (med) 2 eclin (surg) 3 IV1 4 eclin (ICU) 5 inpt 6 IV2 7 OR1 8 efloat 9 eIV 10 inpt 1030	<u>3</u> Holiday observed	<u>4</u> 1 _____ (4 clin, 2 IV, 4 inpt) 2 _____ (4 clin, 2 IV, 4 inpt) 3 _____ (3 inpt, 3 clin, 3 IV) 4 _____ (3 inpt, 3 IV, 3 clin) 5 inpt (train) (3 inpt, 3 IV, 3 clin) 6 IV (work) (5 IV, 4 clin, 1 inpt) 7 eclin (train) (6 clin, 1 IV, 2 inpt) 8 efloat (work) (4 IV, 2 clin, 4 inpt) 9 _____ (2 inpt, 3 IV, 4 clin) 10 _____ (5 clin, 4 IV, 1 inpt)
<u>5</u> 1 2 3 4 5 6 7 8 9 10	<u>6</u> 1 IV1 2 IV2 3 Neuro2 4 OR1 5 efloat 6 eclin (surg) 7 eIV 8 eclin (med) 9 eclin (ICU) 10 CCSV/PGY2	<u>7</u> 1 efloat 2 eIV 3 eclin (med) 4 eclin (surg) 5 eclin (ICU) 6 OR1 7 IV2 8 CCSV 9 IV1 10 inpt	<u>8</u> 1 eIV 2 IV1 3 eclin (med) 4 eclin (surg) 5 eclin (ICU) 6 OR1 7 inpt 8 CCSV 9 IV2 10 efloat	<u>9</u> 1 eclin (med) 2 OR1 3 inpt 4 IV1 5 eIV 6 eclin (surg) 7 efloat 8 IV2 9 inpt 10 eclin (ICU)	<u>10</u> 1 S2 training 2 eclin (med) 3 IV1 4 inpt 5 eIV 6 Neuro2 7 IV2 8 eclin (ICU) 9 efloat 10 eclin (surg)	<u>11</u> 1 Surgery Day (work) 2 med eve (train) 3 4 5 6 7 8 9 efloat 10 inpatient

# June/ July 2020

Sun	Mon	Tue	Wed	Thu	Fri	Sat
<div>12</div> <div>1 Surgery Day (work)</div> <div>2 med eve (train)</div> <div>3</div> <div>4</div> <div>5</div> <div>6</div> <div>7</div> <div>8</div> <div>9 efloat</div> <div>10 inpatient</div>	<div>13</div> <div>Rotation 1 begins</div>	<div>17</div>	<div>18</div>	<div>19</div>	<div>20</div>	<div>21</div> <div>Weekend team TBD</div>

**Rotation Schedule  
2020-2021**

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	Rotation 1 (7/13-8/14)	Rotation 2 (8/17-9/18)	Rotation 3 (9/21-10/23)	Rotation 4 (10/26-12/1)	Rotation 5 (1/4-2/5)	Rotation 6 (2/15-3/19)	Rotation 7 (3/22-4/23)	Rotation 8 (4/26-5/28)	Rotation 9 (6/1-6/25)
Adam Archer	Int Med (inpatient)	ID	Pract Mnmt/Policy	Heme/onc	Int med CLINIC*	MICU	Gen peds	PICU	TBD
Ashley Asbell	Acute care neuro	ED*	MICU	Pract Mnmt/Policy	Transplant CLINIC	ID	IDS	TCVPO	TBD
Amy Dorszynski	MICU	CCU	Acute care cards*	ED*	Pract Mnmt/Policy	SOT	Heme/onc	ID CLINIC	TBD
Cameron Lee	IDS	Acute care cards*	CCU	Family med CLINIC	ED*	Pract Mnmt/Policy	Int Med (inpatient)	Fam Med / OB (inpatient)	TBD
Tarak Patel	TCVPO	Pract Mnmt/Policy	Int med CLINIC	Pharmacy informatics	Heme/ onc *	Int med (inpatient)*	ED	STICU	TBD
Carson Shoemaker	Heme/onc*	SOT	Int med (inpatient)	ID CLINIC	MICU*	Pract Mnmt/Policy	ID	CCU	TBD
Amanda VanInwegen	Peds onc	Gen peds	Acute care neuro	NNICU	ID	Fam Med CLINIC*	STICU	Pract Mnmt/Policy	TBD
Jessica Woodward	Gen peds	Int Med CLINIC*	ED*	Acute care cards	TCVPO	Heme/ onc	Pract Mnmt/Policy	MICU	TBD
Ginae Bluitt (Admin)	Pract Mnmt/Policy	Int med (inpatient)*	Med safety	PICU*	Gen peds	Int Med CLINIC	Fam Med / OB (inpatient)	IDS	TBD
Kevin Fekete (Admin)	Pract Mnmt/Policy	Med safety	Heme/onc	Acute care neuro	NNICU*	ID	ID CLINIC	Int Med (inpatient)	TBD
Devki Gajera (Comm)	Operations	TOC- IHM	Family Medicine	Int Med Clinic	Family Medicine- IP	Admin	Amb Care- Geriatrics	Specialty (Leslie)	Transplant
Lauren Pohl (Am Care)	Int Med Clinic		Renal	Geri	ID Clinic	Fam Med Clinic		Tx Clinic (4 weeks)	Cards Clinic (5 weeks)
Mark Albright (Cards)	AC Cards	HF/MCS	Heart/Lung Txp	TCVPO	CCU	Cardiology Consults	Benign Heme	Adv HF/MCS	Adv CCU
Alyssa Burke (Critical Care)	STICU	MICU	TCVPO	ID	PICU	ED	NNICU	TBD	TBD
Jessie Lipstreuer (ED)	ED	ED	ED	MICU	Peds ED	Tox	Trauma ICU	ED	ED
Mackenzie Dolan (ID)	Gen ID#1	OPAT	Clin Micro/ AST	Transplant/ Immuncomp ID 1	Heme Malignancy/ SCT	AST	Gen ID #2	Transplant/ Immuncomp ID 2	
Caroline Jones (Onc)	Malignant heme (inpt)	CLINIC 1	SCT	CLINIC 2	Immunosup ID	Inpt onc / palliative care	IDS- ONC	CLINIC 3	TBD
Melissa West (Peds)	Gen peds	Peds heme/onc	NICU	Peds amb care	PICU	Peds cardiology	Peds GI	TBD	TBD

(cont'd)

Rotation Schedule  
2020-2021

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	Rotation 1 7/20 – 8/21 (5 weeks)	Rotation 2 8/24 – 9/25 (5 weeks)	Rotation 3 9/28-10/23 (4 weeks)	Rotation 4 10/26- 11/208- (4 weeks) + 8 research days	Rotation 5 12/7-1/8 (4 weeks + holidays)	Rotation 6 1/11-2/5 (4 weeks)	Rotation 7 2/8-3/5 (4 weeks)	Rotation 8 3/8-4/2 (4 weeks)	Rotation 9 4/5-4/30 (4 weeks)	Rotation 10 5/3-5/28 (4 weeks)	Rotation 11 5/31-6/30 (4 weeks)
Ara Gharabagi (SOT)	<b>Transplant abdominal I</b>	<b>Transplant heart/lung I</b>	<b>Clinic I</b>	<b>Kidney/ Pancreas II</b>	<b>Transplant lung II</b>	<b>Heart Txp / Advanced HF/ VAD II</b>	<b>Immuno ID</b>	<b>Txp Liver II</b>	<b>Txp abdominal III</b>	<b>Txp heart and lung III</b>	<b>Txp Clinic II</b>

### 2020 Mini rotation schedule

<b>Resident</b>	<b>Dec 14-18 (5 days)</b>
Adam Archer	14-16: Solid organ transplant 17-18: Internal Medicine inpatient (surge): Jillian McClarkey
Ashley Asbell	14-16: Benign Heme: Leslie Ward 17-18: PICU: Rachael Schortemeyer
Ginae Bluit	14-16: HIV Clinic: Lindsey Buscemi 17-18: Informatics
Amy Dorzysynski	14-16: Toxicology: Dr. Holstege (contact Heather Collier) 17-18: Peds Cards: Kelly Lunsford
Kevin Fekete	14-18: ED (Derek Burden)
Cameron Lee	14-15: Med Safety: Virginia Barton 16-18: Inpatient IDS: Kara Thornton
Tarak Patel	14-18: ID Consult: Lindsay Donohue
Carson Shoemaker	14-15: Gen Peds: 16-17: Nutrition (Kelly O'Donnell) 17-18: Toxicology: Dr. Holstege (contact Heather Collier)
Amanda VanInwegen	14-15: Toxicology: Dr. Holstege (contact Heather Collier) 16-18: Benign Heme: Leslie Ward
Jessica Woodward	14-15: Peds ED (Angela Holian) 16-18: Toxicology: Dr. Holstege (contact Heather Collier)

Toxicology schedule

Dec 14	Dec 15	Dec 16	Dec 17	Dec 18
Amanda VanInwegen	Amanda VanInwegen	Jessica Woodward	Jessica Woodward	Jessica Woodward
Amy Dorzsynski	Amy Dorzsynski	Amy Dorzsynski	Carson Shoemaker	Carson Shoemaker



**2020-2021 Pharmacy Resident Seminar Schedule**

Unless otherwise noted:

- First-Run Seminars are held from 7:30-8:30 AM.
- Second-Run Seminars will be held from 2:00-3:00 PM.
- All will be conducted live by Zoom until further notice.

<b>Date</b>	<b>Second-Run Location (in the post-pandemic environment)</b>	<b>Presenter(s)</b>
Thurs, Sept 10 <sup>th</sup> & Wed, Sept 16 <sup>th</sup>		Clarissa Cho
Thurs, Sept 24 <sup>th</sup> & Wed, Sept 30 <sup>th</sup>		Mark Albright
Thurs, Oct 1 <sup>st</sup> & Wed, Oct 7 <sup>th</sup>		Cameron Crowe
Thurs, Oct 8 <sup>th</sup> & Wed, Oct 14 <sup>th</sup>		Melissa West
Thurs, Oct 15 <sup>th</sup> & Wed, Oct 21 <sup>st</sup>		Caroline Jones
Thurs, Oct 29 <sup>th</sup> & Wed, Nov 4 <sup>th</sup>	ERC A	Mackenzie Dolan
Thurs, Nov 5 <sup>th</sup> & Wed, Nov 11 <sup>th</sup>	ERC A	Kevin Fekete
Thurs, Nov 12 <sup>th</sup> & Wed, Nov 18 <sup>th</sup>	Sandridge	Alyssa Burke
Wed, Nov 25 <sup>th</sup> & Wed, Dec 2 <sup>nd</sup>	ERC A	Amanda VanInwegen
Th Dec 10 <sup>th</sup> & Wed, Dec 16 <sup>th</sup>	ERC A (Sandridge)	Devki Gajera
Tues, Dec 15 <sup>th</sup> & Tues, Dec 22	ERC A	Tarak Patel
Th Jan 7 & Wed Jan 13		Cameron Lee
Thurs, Jan 14 <sup>th</sup> & Wed, Jan 20 <sup>th</sup>	ERC A (Sandridge)	Adam Archer
Thurs, Feb 25 <sup>th</sup> & Wed, Mar 3 <sup>rd</sup>	ERC A	Amy Dorszynski
Thurs, March 4 <sup>th</sup> & Wed, March 10 <sup>th</sup>	ERC A	Lauren Pohl
Thurs, March 11 <sup>th</sup> & Wed, March 17 <sup>th</sup>	ERC A (Sandridge)	Ashley Asbell
Thurs, March 25 <sup>th</sup> & Wed, March 31 <sup>st</sup>	ERC A	Ginae Bluitt
Thurs, Apr 1 <sup>st</sup> & Wed, Apr 7 <sup>th</sup>	ERC A	Ara Gharabagi
Thurs, Apr 8 <sup>th</sup> & Wed, Apr 14 <sup>th</sup>	ERC A	Carson Shoemaker
Thurs, Apr 15 <sup>th</sup> & Wed, Apr 21 <sup>st</sup>	ERC A (Sandridge)	Jessie Lipstreuer
Thurs, Apr 29 <sup>th</sup> & Wed, May 5 <sup>th</sup>	ERC A	
Thurs, May 6 <sup>th</sup> & Wed, May 12 <sup>th</sup>	ERC A	Jessica Woodward
Thurs, May 27 <sup>th</sup> & Wed, June 2 <sup>nd</sup>	ERC A	Anh Le
Thurs, June 3 <sup>rd</sup> & Wed, June 9 <sup>th</sup>	ERC A	Backup

**University of Virginia Health System  
PGY1-Pharmacy Residency Program  
2020-2021**

**Longitudinal Assignments and Advisors**

<b>Resident</b>	<b>Advisor</b>	<b>Orientation/ Staffing preceptor</b>
Adam Archer	Zach Elliott	Jeff Sesler
Ashley Asbell	Kathleen Bledsoe	Ray Shi
Ginae Bluit	Lia Lynch	Brian Spoelhof
Amy Dorszynski	Kathy DeGregory	Emily Burns
Kevin Fekete	Jeremy Sen	Detron Brown
Cameron Lee	Kara Thornton	Donna Truoccolo
Tarak Patel	David Volles	Amanda Hedrick
Carson Shoemaker	Jill Dann	Annie Bernacchi Smith
Amanda VanInwegen	Donna Truoccolo	Kevin Lonabaugh
Jessica Woodward	Amanda Hedrick	Matt Morrisette
Devki Gajera	Bethany Delk	

Tarak Amy	Evaluation of Epic MAR unholds for continuous infusion anticoagulation	Emily Burns, Mary Roth
Cameron Ashley	Drug interactions due to implementation of a phenobarbital alcohol withdrawal protocol	Mary Roth, Emily Burns
Ginae Carson	Discharge hospice medication optimization for the inpatient oncology service line	Andy Whitman
Adam Kevin	Evaluating time to antiretroviral therapy in newly established patients in the UVA Ryan White HIV clinic	Lindsey Buscemi
Amanda Jessica	Time to pain medication administration to the pediatric sickle cell patient from triage time in the ED	Emily Chen

<b>Project Title</b>	<b>Primary Advisor</b>	<b>Resident</b>
Antifungal use in PICU	Emily Chen	Amanda VanInwegen
Concomitant Beta blockers and inotropes after cardiac surgery	Matt Morrisette	Amy Dorzynski
Sepsis alert trends in ED	Nate Hedrick	Cameron Lee
OPAT experience with Vancomycin	Megan Shah	Adam Archer
Dosing of SMX-TMP in liver transplant	Hannah Morris	Carson Shoemaker
Vasopressin vs. Lido w/ Epi for bleeding in gynecologic procedures	Brian Spoelhof	Ashley Asbell
Kinetic eGFR	Matt Morrisette	Tarak Patel
MRSA surveillance PCR utilization in febrile neutropenia	Jeremy Sen	Kevin Fekete
Diversity, equity and inclusivity in pharmacy residencies	Michelle McCarthy	Ginae Bluit
Timing of therapy initiation in heart failure	Steve Dunn	Jessica Woodward



## 2020-2021 Resident Administrative Duties

### Administrative Duties

Resident	Administrative Assignment
Ashley	Pharmacy Week representative
Devki	UNC REPS residency conference coordinator (PGY1)
Cameron	Midyear logistics coordinator
Caroline	Residency Representative to ROC/ Resident "lead" (PGY2)
Kevin Adam	Recruitment coordinator (3)
Mark	Core Curriculum schedule coordinator
Cam C	Residency research committee support
Amanda	Student presentation coordination/ communication
Ginae	Scheduling Czar to represent residents on scheduling task force (PGY1 HSPAL)
Tarak	Hoo's News Fall edition editor
Jessie	Hoo's News Spring edition editor
Anh	Residency website editor (PGY2 IT)
Melissa	Historian (photos/ end of year)
Mackenzie	Wellness Champion for pharmacy department
Alyssa	PGY2 management conference
Lauren	Continuing education coordinator (scheduling, advertising)
Jessica	P3 student success facilitator
Carson	P4 student success facilitator
Ara Clarissa	End of year celebration coordination
Amy	Social chair
Clarissa	GME Housestaff Council

**University Of Virginia Health  
Department Of Pharmacy Services**

**Routine Meetings 2020-2021**

1. Department of Pharmacy Staff Meeting
  - a. Fourth Wednesday of month: 14:00-15:00
2. Weekly Meetings with Michelle
  - a. Every week from 13:00-13:30 (after Core Curriculum)
  - b. Attendance is mandatory
  - c. Residents rotate taking minutes
3. Pharmacist Forum
  - a. Second Tuesday of the month from 14:00-15:30
4. Seminars
  - a. Thursdays from 0700-08 and repeated the following Wednesday from 14:00-15:00 (see seminar schedule for presenter and dates)
5. Core Curriculum
  - a. Every Thursday from 12:00-13:00
  - b. Attendance is mandatory for PGY1s

## Resident End of the Year Final Reminders

- Complete Graduation Checklist for your specific program
  - PharmAcademic
  - Finalize research and quality project requirements
  - Submit electronic resident notebook on “O:drive”
- Complete GME Checklist (for those leaving UVA)
  - Parking permit return
  - ID badge return
  - Provide UVA with new address
- Close or transfer ownership of research projects with IRB
- Dispose of, take home, or transfer to your preceptor all posters (quality project and/or research project)
- Turn in iPhone and associated cords to Pharmacy IT
- Provide Pharmacy administrative assistant with new job title and contact information
- If leaving organization, request license from admin specialist from display case
- Resident office clean up
  - Empty desk cabinets and drawers completely (*May leave empty folders*)
  - Wipe down and clean desks and computers
  - Remove any papers/pictures from cabinets/ bulletin board/ white board
  - Erase white board
  - Thoroughly clean refrigerator and microwave
  - Leave recycling and confidential paper bins empty (Contact @ 2-5050 or [recycling@virginia.edu](mailto:recycling@virginia.edu) )
  - Leave trash bins empty (Contact housekeeping @ 2-1555 )
  - Floors/carpet should be vacuumed (Contact housekeeping @ 2-1555)
  - Take home any personal items



**University of Virginia Health  
Department of Pharmacy Services  
PGY1 Pharmacy Residency**

**Residency Purpose Statement**

The purpose of the PGY1 pharmacy residency program is to build on Doctor of Pharmacy (Pharm.D.) education and outcomes to contribute to the development of clinical pharmacists responsible for medication-related care of patients with a wide range of conditions, eligible for board certification, and eligible for postgraduate year two (PGY2) pharmacy residency training.

**Required Competency Areas**

(<http://www.ashp.org/DocLibrary/Accreditation/Regulations-Standards/PGY1-Required-Competency-Areas.pdf>)

Competency Area R1: Patient Care

Competency Area R2: Advancing Practice and Improving Patient Care

Competency Area R3: Leadership and management

Competency Area R4: Teaching, Education, and Dissemination of Knowledge

Competency Area E5: Management of Medical Emergencies

**University of Virginia Health Department of Pharmacy Services  
PGY1-Pharmacy Residency Program Overview  
2020-2021**

**Program Structure**

The 2020-2021 UVA Health System PGY1-Pharmacy Residency will begin in mid-June 2020. Residents must attend graduate medical education orientation held during the middle of June. The residency ends on June 30, 2021.

During the first month of the residency, residents rotate through various Pharmacy Department areas and develop skills required for the provision of services provided by the department. Residents will additionally undergo competency evaluations in select areas such as the pharmacy emergency response (Code) program, aseptic technique, and the Pharmacy computer applications program.

Rotations begin on Monday, July 13, 2020, and are 5 weeks in duration. Required rotations include: acute care specialty, adult general medicine, ambulatory care, critical care, and practice management and policy.

**I. PGY1-Pharmacy Residency Rotations**

**Required Rotations**

**Acute Care Specialty**- Rotation in one Acute Care Specialty area (see choices below)

**Adult General Medicine**- Rotation one General Medicine practice area (see choices below)

**Ambulatory Care**- Rotation in adult Ambulatory Care clinics

**Critical Care**- Rotation in one of the Critical Care areas (see choices below)

**Practice Management and Policy**- Rotation with the leaders in the Department of Pharmacy and Medication Use Policy area

**Acute Care Specialty**

- Emergency Department
- Hematology/Oncology
- Infectious Diseases
- Pediatrics
- Solid Organ Transplantation
- Women's Health

**Critical Care Rotations**

- Coronary Care Unit (CCU)
- Medical Intensive Care Unit (MICU)
- Neonatal Intensive Care Unit (NICU)
- Nerancy Neuro Intensive Care Unit (NNICU)
- Pediatric Intensive Care Unit (PICU)
- Surgical Trauma/Burn Unit (STICU)
- Thoracic/Cardiovascular Surgery Post-Op (TCVPO)

**Adult General Medicine**

- Internal Medicine
- General Medicine- Cardiology
- General Medicine- Neurology

**Ambulatory Care**

- Cardiology Clinic
- Family Medicine Clinic
- Infectious Diseases Clinic
- Internal Medicine Clinic

Residents will have up to 19 weeks (three 5 week and one 4 week rotations) available for elective rotations. To maintain compliance with the accreditation standard, no more than 3 rotations can occur in a similar practice area (eg, critical care) and at least 2/3 of the year will be spent in direct patient care learning experiences. Additional rotations may be developed based on resident interest and preceptor availability. Between the fourth and fifth rotation blocks (December), residents will have a mixture of research days and mini-rotations.

**Mini-rotations** are abbreviated experiences (2-5 days in duration) held in December for a total of 5 days. These abbreviated experiences provide residents with exposure to areas in which 1) they do not have a scheduled rotation; 2) they would like repeat experiences beyond their scheduled rotations; or 3) they would like a varied experience beyond their scheduled rotations (ambulatory hematology/ oncology vs. inpatient hematology/ oncology). Additionally, there are select mini-rotations held with services/ departments outside of the pharmacy (ie, nutrition services, toxicology).



### **Research Activities**

- a. Completion of a major project is a requirement of the residency. Final reports must be submitted in manuscript style and approved by the Project Advisor and Program Director.
- b. During the first half of the year, residents will work in pairs to a Quality Improvement project. Completed projects will be submitted for poster presentation at the Vizient Pharmacy Council meeting held in conjunction with the ASHP Midyear Clinical Meeting.

### **Presentation Requirements**

- a. Residents are required to provide a platform presentation on the results of their residency research project at the regional residency conference.
- b. Each resident is responsible for presenting one seminar and one technician talk during the course of the residency year. The seminar is ACPE-accredited to provide continuing education (CE) to pharmacists and the tech talk is ACPE-accredited for technician CE.

### **Professional Leave for Meeting Attendance**

- a. Residents will attend the ASHP Annual Midyear Clinical Meeting and the regional residency conference. Residency stipends were increased in 2018 to account for travel funding.

### **Longitudinal Service**

- a. Weekend distributive functions provide necessary training for the resident. The total staffing commitment is 416 hours.
- b. Residents provide service in the distributive/ clinical areas 16 hours every other weekend. Additionally, residents will work one major holiday (Thanksgiving and the day after, Christmas Eve and Christmas Day, or New Year's Eve and New Year's Day) and the associated weekend.
- c. Over the course of the year, residents work in various areas in the department including IV admixtures, unit dose, and decentralized clinical coverage.

### **Benefits (Vacation/ Interview days/ Holidays)**

- a. Each resident receives 12 days to be used for personal leave or vacation. In order to avoid conflicts with rotation training experiences, residents should not miss more than 20% of a learning experience. Vacation may not be used for terminal leave. All residents are expected to be at work during the last week of the residency.
- b. Each resident also receives up to 5 days to be used for interviews.
- c. Residents are provided up to 14 calendar days for sick leave. If there are additional sick days, vacation days must be used. Those sick for 2 or more consecutive days must present a physician's note to the Program Director/ Coordinator. In the case of extended illness or disability, please refer to the Leave or Request for Absence Policy.
- d. Residents have 8 holidays that may be used for any of the following holidays in which the resident is not scheduled to work: Independence Day, Labor Day, Thanksgiving and the day after, Christmas Eve, Christmas Day and the day after, New Year's Eve and New Year's Day, and Memorial Day. Trainees shall work one major holiday (Thanksgiving and the day after, Christmas Eve and Christmas Day, New Year's Eve and New Year's Day) and the accompanying weekend in a distributive role during the residency year.

### **Certification**

- a. Residents are required to complete ACLS training and certification. This training is offered through the Medical Center at no charge to the resident. Pharmacy residents participate in ACLS training during the orientation period. Residents respond to code calls during the residency year.

### **Advisors**

- a. Each resident is matched with an advisor for the duration of the residency year. Matches are organized by the program director and are based on the career goals, specialty practice area interests, or other interests of the resident. Advisors serve as resources and mentors to the residents.
- b. Residents will also have a primary preceptor for each of their required presentations as well as their quality improvement and residency projects. Residents and the program director identify appropriate preceptors for these requirements based upon the topic.



## REQUIRED COMPETENCY AREAS, GOALS, AND OBJECTIVES FOR POSTGRADUATE YEAR ONE (PGY1) PHARMACY RESIDENCIES

### Introduction

The competency areas, goals, and objectives are for use with the *ASHP Accreditation Standard for Postgraduate Year One (PGY1) Pharmacy Residency Programs*. The first four competency areas are required and the others are elective.

The required competency areas, including all of the goals and objectives falling under them, must be included in all programs. Programs may add one or more additional competency areas. Programs selecting an additional competency area are not required to include all of the goals and objectives in that competency area. In addition to the potential additional competency areas contained in this document, programs are free to create their own additional competency areas with associated goals and objectives. Each of the goals falling under the program's selection of program competency areas (required and additional) must be evaluated at least once during the residency year. In addition, elective competency areas may be selected for specific residents only.

Each of the document's objectives has been classified according to educational taxonomy (cognitive, affective, or psychomotor) and level of learning. An explanation of the taxonomies is available elsewhere.<sup>1</sup>

**Competency Area:** Categories of the residency graduates' capabilities.

Competency areas fall into one of three categories:

**Required:** Four competency areas are required (all programs must include them and all their associated goals and objectives).

**Additional:** Competency area(s) other than the four areas required for all program that programs may select to add as required for their specific residency program.

**Elective:** Competency area(s) selected optionally for specific resident(s).

**Educational Goals (Goal):** Broad statement of abilities.

**Educational Objective:** Observable, measurable statement describing what residents will be able to do as a result of participating in the residency program.

**Criteria:** Examples intended to help preceptors and residents identify specific areas of successful skill development or needed improvement in residents' work.

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<sup>1</sup> Nimmo, CM. Developing training materials and programs: creating educational objectives and assessing their attainment. In: Nimmo CM, Guerrero R, Greene SA, Taylor JT, eds. *Staff development for pharmacy practice*. Bethesda, MD: ASHP; 2000.

## **Competency Area R1: Patient Care**

**Goal R1.1: In collaboration with the health care team, provide safe and effective patient care to a diverse range of patients, including those with multiple co-morbidities, high-risk medication regimens, and multiple medications following a consistent patient care process.**

**Objective R1.1.1: (Applying) Interact effectively with health care teams to manage patients' medication therapy.**

Criteria:

- Interactions are cooperative, collaborative, communicative, respectful.
- Demonstrates skills in negotiation, conflict management, and consensus building.
- Demonstrates advocacy for the patient.

**Objective R1.1.2 (Applying) Interact effectively with patients, family members, and caregivers.**

Criteria:

- Interactions are respectful and collaborative.
- Uses effective communication skills.
- Shows empathy.
- Empowers patients to take responsibility for their health.
- Demonstrates cultural competence.

**Objective R1.1.3: (Analyzing) Collect information on which to base safe and effective medication therapy.**

Criteria:

- Collection/organization methods are efficient and effective.
- Collects relevant information about medication therapy, including:
  - History of present illness.
  - Relevant health data that may include past medical history, health and wellness information, biometric test results, and physical assessment findings.
  - Social history.
  - Medication history including prescription, non-prescription, illicit, recreational, and non-traditional therapies; other dietary supplements; immunizations; and allergies.
  - Laboratory values.
  - Pharmacogenomics and pharmacogenetic information, if available.
  - Adverse drug reactions.
  - Medication adherence and persistence.
  - Patient lifestyle habits, preferences and beliefs, health and functional goals, and socioeconomic factors that affect access to medications and other aspects of care.
- Sources of information are the most reliable available, including electronic, face-to-face, and others.
- Recording system is functional for subsequent problem solving and decision making. Clarifies information as needed.
- Displays understanding of limitations of information in health records.

**Objective R1.1.4: (Analyzing) Analyze and assess information on which to base safe and effective medication therapy.**

Criteria:

- Includes accurate assessment of patient's:
  - health and functional status,
  - risk factors
  - health data
  - cultural factors
  - health literacy
  - access to medications
  - immunization status
  - need for preventive care and other services when appropriate
  - other aspects of care as applicable.
- Identifies medication therapy problems, including:
  - Lack of indication for medication.
  - Medical conditions for which there is no medication prescribed.
  - Medication prescribed or continued inappropriately for a particular medical condition.
  - Suboptimal medication regimen (e.g., dose, dosage form, duration, schedule, route of administration, method of administration).
  - Therapeutic duplication.
  - Adverse drug or device-related events or potential for such events.
  - Clinically significant drug-drug, drug-disease, drug-nutrient, drug-DNA test interaction, drug-laboratory test interaction, or potential for such interactions.
  - Use of harmful social, recreational, nonprescription, nontraditional, or other medication therapies.
  - Patient not receiving full benefit of prescribed medication therapy.
  - Problems arising from the financial impact of medication therapy on the patient.
  - Patient lacks understanding of medication therapy.
  - Patient not adhering to medication regimen and root cause (e.g., knowledge, recall, motivation, financial, system).
  - Laboratory monitoring needed.
  - Discrepancy between prescribed medications and established care plan for the patient.

**Objective R1.1.5: (Creating) Design or redesign safe and effective patient-centered therapeutic regimens and monitoring plans (care plans).**

Criteria:

- Specifies evidence-based, measurable, achievable therapeutic goals that include consideration of:
  - Relevant patient-specific information including culture and preferences.
  - The goals of other interprofessional team members.
  - The patient's disease state(s).
  - Medication-specific information.
  - Best evidence.
  - Ethical issues involved in the patient's care.
  - Quality-of-life issues specific to the patient.
  - Integration of all the above factors influencing the setting of goals.
- Designs/redesigns regimens that:
  - Are appropriate for the disease states being treated.
  - Reflect:
    - The therapeutic goals established for the patient
    - The patient's and caregiver's specific needs
    - Consideration of:

- Any pertinent pharmacogenomic or pharmacogenetic factors.
  - Best evidence.
  - Pertinent ethical issues.
  - Pharmacoeconomic components (patient, medical, and systems resources).
  - Patient preferences, culture and/or language differences.
  - Patient-specific factors, including physical, mental, emotional, and financial factors that might impact adherence to the regimen.
- Adhere to the health system's medication-use policies.
- Follow applicable ethical standards.
- Address wellness promotion and lifestyle modification.
- Support the organization's or patient's formulary.
- Address medication-related problems and optimize medication therapy.
- Engage the patient through education, empowerment, and self-management.
- Designs/redesigns monitoring plans that:
  - Effectively evaluate achievement of therapeutic goals.
  - Ensure adequate, appropriate, and timely follow-up.
  - Establish parameters that are appropriate measures of therapeutic goal achievement.
  - Reflect consideration of best evidence.
  - Select the most reliable source for each parameter measurement.
  - Have appropriate value ranges selected for the patient.
  - Have parameters that measure efficacy.
  - Have parameters that measure potential adverse drug events.
  - Have parameters that are cost-effective.
  - Have obtainable measurements of the parameters specified.
  - Reflects consideration of compliance.
  - If for an ambulatory patient, includes strategy for ensuring patient returns for needed follow-up visit(s).
  - When applicable, reflects preferences and needs of the patient.

**Objective R1.1.6: (Applying) Ensure implementation of therapeutic regimens and monitoring plans (care plans) by taking appropriate follow-up actions.**

**Criteria:**

- Effectively recommends or communicates patients' regimens and associated monitoring plans to relevant members of the healthcare team.
  - Recommendation is persuasive.
  - Presentation of recommendation accords patient's right to refuse treatment.
  - If patient refuses treatment, pharmacist exhibits responsible professional behavior.
  - Creates an atmosphere of collaboration.
  - Skillfully defuses negative reactions.
  - Communication conveys expertise.
  - Communication is assertive not aggressive.
  - Where the patient has been directly involved in the design of the plans, communication reflects previous collaboration appropriately.
- Ensures recommended plan is implemented effectively for the patient, including ensuring that the:
  - Therapy corresponds with the recommended regimen.
  - Regimen is initiated at the appropriate time.
  - Medication orders are clear and concise.

- Activity complies with the health system's policies and procedures.
- Tests correspond with the recommended monitoring plan.
- Tests are ordered and performed at the appropriate time.
- Takes appropriate action based on analysis of monitoring results (redesign regimen and/or monitoring plan if needed).
- Appropriately initiates, modifies, discontinues, or administers medication therapy as authorized.
- Responds appropriately to notifications and alerts in electronic medical records and other information systems which support medication ordering processes (based on patient weight, age, gender, co-morbid conditions, drug interactions, renal function, hepatic function, etc.).
- Provides thorough and accurate education to patients, and caregivers, when appropriate, including information on medication therapy, adverse effects, compliance, appropriate use, handling, and medication administration.
- Addresses medication- and health-related problems and engages in preventive care strategies, including vaccine administration.
- Schedules follow-up care as needed to achieve goals of therapy.

**Objective R1.1.7: (Applying) Document direct patient care activities appropriately in the medical record or where appropriate.**

Criteria:

- Selects appropriate direct patient-care activities for documentation.
- Documentation is clear.
- Written in time to be useful
- Follows the health system's policies and procedures, including that entries are signed, dated, timed, legible, and concise.

**Objective R1.1.8: (Applying) Demonstrate responsibility to patients.**

Criteria:

- Gives priority to patient care activities.
- Plans prospectively.
- Routinely completes all steps of the medication management process.
- Assumes responsibility for medication therapy outcomes.
- Actively works to identify the potential for significant medication-related problems.
- Actively pursues all significant existing and potential medication-related problems until satisfactory resolution is obtained.
- Helps patients learn to navigate the health care system, as appropriate.
- Informs patients how to obtain their medications in a safe, efficient, and most cost-effective manner.
- Determines barriers to patient compliance and makes appropriate adjustments.

**Goal R1.2: Ensure continuity of care during patient transitions between care settings.**

**Objective R1.2.1: (Applying) Manage transitions of care effectively.**

Criteria:

- Effectively participates in obtaining or validating a thorough and accurate medication history.
- Conducts medication reconciliation when necessary.
- Participates in thorough medication reconciliation.

- Follows up on all identified drug-related problems.
- Participates effectively in medication education.
- Provides accurate and timely follow-up information when patients transfer to another facility, level of care, pharmacist, or provider, as appropriate.
- Follows up with patient in a timely and caring manner.
- Provides additional effective monitoring and education, as appropriate.
- Takes appropriate and effective steps to help avoid unnecessary hospital admissions and/or readmissions.

**Goal R1.3: Prepare, dispense, and manage medications to support safe and effective drug therapy for patients.**

**Objective R1.3.1: (Applying) Prepare and dispense medications following best practices and the organization's policies and procedures.**

**Criteria:**

- Correctly interpret appropriateness of a medication order before preparing or permitting the distribution of the first dose, including:
  - Identifying, clarifying, verifying, and correcting any medication order errors.
  - Considering complete patient-specific information.
  - Identifying existing or potential drug therapy problems.
  - Determining an appropriate solution to an identified problem.
  - Securing consensus from the prescriber for modifications to therapy.
  - Ensuring that the solution is implemented.
- Prepares medication using appropriate techniques and following the organization's policies and procedures and applicable professional standards, including:
  - When required, accurately calibrates equipment.
  - Ensuring solutions are appropriately concentrated, without incompatibilities, stable, and appropriately stored.
  - Adheres to appropriate safety and quality assurance practices.
  - Prepares labels that conform to the health system's policies and procedures.
  - Medication contains all necessary and/or appropriate ancillary labels.
  - Inspects the final medication before dispensing.
- When dispensing medication products:
  - Follows the organization's policies and procedures.
  - Ensures the patient receives the medication(s) as ordered.
  - Ensures the integrity of medication dispensed.
  - Provides any necessary written and/or verbal counseling.
  - Ensures the patient receives medication on time.
- Maintains accuracy and confidentiality of patients' protected health information (PHI).
- Obtains agreement on modifications to medication orders when acting in the absence of, or outside, an approved protocol or collaborative agreement.

**Objective R1.3.2: (Applying) Manage aspects of the medication-use process related to formulary management.**

**Criteria:**

- Follows appropriate procedures regarding exceptions to the formulary, if applicable, in compliance with policy.
- Ensures non-formulary medications are dispensed, administered, and monitored in a manner that ensures patient safety.

**Objective R1.3.3: (Applying) Manage aspects of the medication-use process related to oversight of dispensing.**

**Criteria:**

- When appropriate, follows the organization's established protocols.
- Makes effective use of relevant technology to aid in decision-making and increase safety.
- Demonstrates commitment to medication safety in medication-use process.
- Effectively prioritizes work load and organizes work flow.
- Checks accuracy of medications dispensed, including correct patient identification, medication, dosage form, label, dose, number of doses, expiration dates, and properly repackaged and relabeled medications, including compounded medications (sterile and nonsterile).
- Checks the accuracy of the work of pharmacy technicians, clerical personnel, pharmacy students, and others according to applicable laws and institutional policies.
- Promotes safe and effective drug use on a day-to-day basis.

## **Competency Area R2: Advancing Practice and Improving Patient Care**

**Goal R2.1: Demonstrate ability to manage formulary and medication-use processes, as applicable to the organization.**

**Objective R2.1.1 (Creating) Prepare a drug class review, monograph, treatment guideline, or protocol.**

**Criteria:**

- Displays objectivity.
- Effectively synthesize information from the available literature.
- Applies evidenced-based principles.
- Consults relevant sources
- Considers medication-use safety and resource utilization.
- Uses the appropriate format.
- Effectively communicates any changes in medication formulary, medication usage, or other procedures to appropriate parties.
- Demonstrates appropriate assertiveness in presenting pharmacy concerns, solutions, and interests to internal and external stakeholders.

**Objective 2.1.2 (Applying) Participate in a medication-use evaluation.**

- Uses evidence-based medicine to develop criteria for use.
- Demonstrates a systematic approach to gathering data.
- Accurately analyzes data gathered.
- Demonstrates appropriate assertiveness in presenting pharmacy concerns, solutions, and interests to internal and external stakeholders.
- Implements approved changes, as applicable.



**Objective 2.1.3: (Analyzing) Identify opportunities for improvement of the medication-use system.**

Criteria:

- Appropriately identifies problems and opportunities for improvement and analyzes relevant background data.
- Accurately evaluates or assists in the evaluation of data generated by health information technology or automated systems to identify opportunities for improvement.
- Uses best practices to identify opportunities for improvements.
- When needed, makes medication-use policy recommendations based on a review of practice (e.g., National Quality Measures, ISMP alerts, Joint Commission Sentinel Alerts).
- Demonstrates appropriate assertiveness in presenting pharmacy concerns, solutions, and interests to internal and external stakeholders.

**Objective 2.1.4: (Applying) Participate in medication event reporting and monitoring.**

Criteria:

- Effectively uses currently available technology and automation that supports a safe medication-use process.
- Appropriately and accurately determines, investigates, reports, tracks and trends adverse drug events, medication errors and efficacy concerns using accepted institutional resources and programs

**Goal R2.2: Demonstrate ability to evaluate and investigate practice, review data, and assimilate scientific evidence to improve patient care and/or the medication use system.**

Ideally, objectives R2.2.1-R2.2.5 will be addressed through residents working on one quality improvement or research project; however, if this is not possible, all objectives must be addressed by the end of the residency year and can be addressed through work on more than one initiative.

**Objective R2.2.1: (Analyzing) Identify changes needed to improve patient care and/or the medication-use systems.**

Criteria:

- Appropriately identifies problems and opportunities for improvement and analyzes relevant background data.
- Determine an appropriate topic for a practice-related project of significance to patient care
- Uses best practices or evidence based principles to identify opportunities for improvements
- Accurately evaluates or assists in the evaluation of data generated by health information technology or automated systems to identify opportunities for improvement.

**Objective R2.2.2: (Creating) Develop a plan to improve the patient care and/or medication-use system.**

Criteria:

- Steps in plan are defined clearly.
- Applies safety design practices (e.g., standardization, simplification, human factors training, lean principles, FOCUS-PDCA, other process improvement or research methodologies) appropriately and accurately
- Plan for improvement includes appropriate reviews and approvals required by department or organization, and includes meeting the concerns of all stakeholders.
- Applies evidence-based principles, if needed.
- Develops a sound research or quality improvement question realistic for time frame, if appropriate.

- Develops a feasible design for a project that considers who or what will be affected by the project.
- Identifies and obtains necessary approvals, (e.g., IRB, funding) for a practice-related project.
- Uses appropriate electronic data and information from internal information databases, external online databases, and appropriate internet resources, and other sources of decision support, as applicable
- Plan design is practical to implement and is expected to remedy or minimize the identified opportunity for improvement.

**Objective R2.2.3: (Applying) Implement changes to improve patient care and/or the medication-use system.**

Criteria:

- Follows established timeline and milestones.
- Implements the project as specified in its design.
- Collects data as required by project design.
- Effectively presents plan to appropriate audience (e.g., accurately recommends or contributes to recommendation for operational change, formulary addition or deletion, implementation of medication guideline or restriction, or treatment protocol implementation).
- Plan is based upon appropriate data.
- Gains necessary commitment and approval for implementation
- Effectively communicates any changes in medication formulary, medication usage, or other procedures to appropriate parties.
- Demonstrates appropriate assertiveness in presenting pharmacy concerns, solutions, and interests to external stakeholders.
- Change is implemented fully.

**Objective R2.2.4: (Evaluating) Assess changes made to improve patient care or the medication-use system.**

Criteria:

- Outcome of change is evaluated accurately and fully.
- Includes operational, clinical, economic, and humanistic outcomes of patient care.
- Uses Continuous Quality Improvement (CQI) principles to assess success of implementation of change, if applicable.
- Correctly identifies modifications or if additional changes are needed.
- Accurately assesses the impact, including sustainability if applicable, of the project.
- Accurately and appropriately develops plan to address opportunities for additional changes.

**Objective R2.2.5: (Creating) Effectively develop and present, orally and in writing, a final project report.**

Criteria:

- Outcome of change are reported accurately to appropriate stakeholders(s) and policy making bodies according to department or organizational processes.
- Report includes implications for changes to/improvement in pharmacy practice.
- Report uses an accepted manuscript style suitable for publication in the professional literature.
- Oral presentations to appropriate audiences within the department, organization, or to external audiences use effective communication and presentation skills and tools (e.g., handouts, slides) to convey points successfully.

## **Competency Area R3: Leadership and Management**

### **Goal R3.1: Demonstrate leadership skills.**

#### **Objective R3.1.1: (Applying) Demonstrate personal, interpersonal, and teamwork skills critical for effective leadership.**

##### Criteria:

- Demonstrates effective time management.
- Manages conflict effectively.
- Demonstrates effective negotiation skills.
- Demonstrates ability to lead interprofessional teams.
- Uses effective communication skills and styles.
- Demonstrates understanding of perspectives of various health care professionals.
- Effectively expresses benefits of personal profession-wide leadership and advocacy.

#### **Objective R3.1.2: (Applying) Apply a process of on-going self-evaluation and personal performance improvement.**

##### Criteria:

- Accurately summarizes one's own strengths and areas for improvement (knowledge, values, qualities, skills, and behaviors).
- Effectively uses a self-evaluation process for developing professional direction, goals, and plans.
- Effectively engages in self-evaluation of progress on specified goals and plans.
- Demonstrates ability to use and incorporate constructive feedback from others.
- Effectively uses principles of continuous professional development (CPD) planning (reflect, plan, act, evaluate, record/review).

### **Goal R3.2: Demonstrate management skills.**

#### **Objective R3.2.1: (Understanding) Explain factors that influence departmental planning.**

##### Criteria:

- Identifies and explains factors that influence departmental planning, including:
  - Basic principles of management.
  - Financial management.
  - Accreditation, legal, regulatory, and safety requirements.
  - Facilities design.
  - Human resources.
  - Culture of the organization.
  - The organization's political and decision-making structure.
- Explains the potential impact of factors on departmental planning.
- Explains the strategic planning process.

#### **Objective R3.2.2 (Understanding) Explain the elements of the pharmacy enterprise and their relationship to the healthcare system.**

##### Criteria:

- Identifies appropriate resources to keep updated on trends and changes within pharmacy and healthcare.
- Explains changes to laws and regulations (e.g. value-based purchasing, consumer-driven healthcare, reimbursement models) related to medication use.
- Explains external quality metrics and how they are developed, abstracted, reported, and used (e.g., Risk Evaluation and Mitigation Strategy).
- Describes the governance of the healthcare system and leadership roles.

**Objective R3.2.3: (Applying) Contribute to departmental management.**

Criteria:

- Helps identify and define significant departmental needs.
- Helps develop plans that address departmental needs.
- Participates effectively on committees or informal workgroups to complete group projects, tasks, or goals.
- Participates effectively in implementing changes, using change management and quality improvement best practices/tools, consistent with team, departmental, and organizational goals.

**Objective R3.2.4: (Applying) Manage one's own practice effectively.**

Criteria:

- Accurately assesses successes and areas for improvement (e.g., staffing projects, teaching) in managing one's own practice.
- Makes accurate, criteria-based assessments of one's own ability to perform practice tasks.
- Regularly integrates new learning into subsequent performances of a task until expectations are met.
- Routinely seeks applicable new learning opportunities when performance does not meet expectations.
- Demonstrates effective workload management and time management skills.
- Assumes responsibility for personal work quality and improvement.
- Is well prepared to fulfill responsibilities (e.g., patient care, project, management, meetings).
- Sets and meets realistic goals and timelines.
- Demonstrates awareness of own values, motivations, and emotions.
- Demonstrates enthusiasm, self-motivation, and "can-do" approach.
- Strives to maintain a healthy work-life balance.
- Works collaboratively within the organization's political and decision-making structure.
- Demonstrates pride in, and commitment to, the profession through appearance, personal conduct, planning to pursue board certification, and pharmacy association membership activities.
- Demonstrates personal commitment to and adheres to organizational and departmental policies and procedures.

## **Competency Area R4: Teaching, Education, and Dissemination of Knowledge**

**Goal R4.1: Provide effective medication and practice-related education to patients, caregivers, health care professionals, students, and the public (individuals and groups).**

**Objective R4.1.1: (Applying) Design effective educational activities.**

Criteria:

- Accurately defines learning needs (e.g., level, such as healthcare professional vs patient, and their learning gaps) of audience (individuals or groups).
- Defines educational objectives that are specific, measurable, at a relevant learning level (e.g., applying, creating, evaluating), and that address the audiences' defined learning needs.
- Plans use of teaching strategies that match learner needs, including active learning (e.g., patient cases, polling).
- Selects content that is relevant, thorough, evidence-based (using primary literature where appropriate), and timely, and reflects best practices.
- Includes accurate citations and relevant references, and adheres to applicable copyright laws.

**Objective R4.1.2: (Applying) Use effective presentation and teaching skills to deliver education.**

Criteria:

- Demonstrates rapport with learners.
- Captures and maintains learner/audience interest throughout the presentation.
- Implements planned teaching strategies effectively.
- Effectively facilitates audience participation, active learning, and engagement in various settings (e.g., small or large group, distance learning).
- Presents at appropriate rate and volume and without distracting speaker habits (e.g., excessive "ah's" and "um's").
- Body language, movement, and expressions enhance presentations.
- Summarizes important points at appropriate times throughout presentations.
- Transitions smoothly between concepts.
- Effectively uses audio-visuals and handouts to support learning activities.

**Objective R4.1.3: (Applying) Use effective written communication to disseminate knowledge.**

Criteria:

- Writes in a manner that is easily understandable and free of errors.
- Demonstrates thorough understanding of the topic.
- Notes appropriate citations and references.
- Includes critical evaluation of the literature and advancement in knowledge or summary of what is currently known on the topic.
- Develops and uses tables, graphs, and figures to enhance reader's understanding of the topic when appropriate.
- Writes at a level appropriate for the reader (e.g., physicians, pharmacists, other health care professionals, patients, public).
- Creates one's own work and does not engage in plagiarism.

**Objective R4.1.4: (Applying) Appropriately assess effectiveness of education.**

Criteria:

- Selects assessment method (e.g., written or verbal assessment or self-assessment questions, case with case-based questions, learner demonstration of new skill) that matches activity.
- Provides timely, constructive, and criteria-based feedback to learner.
- If used, assessment questions are written in a clear, concise format that reflects best practices for test item construction.
- Determines how well learning objectives were met.
- Plans for follow-up educational activities to enhance/support/ensure goals were met, if needed.

- Identifies ways to improve education-related skills.
- Obtains and reviews feedback from learners and others to improve their effectiveness.

**Goal R4.2: Effectively employ appropriate preceptors' roles when engaged in teaching (e.g., students, pharmacy technicians, or other health care professionals).**

**Objective R4.2.1: (Analyzing) When engaged in teaching, select a preceptors' role that meets learners' educational needs.**

Criteria:

- Identifies which preceptor role is applicable for the situation (direct instruction, modeling, coaching, facilitating).
  - Selects direct instruction when learners need background content.
  - Selects modeling when learners have sufficient background knowledge to understand skill being modeled.
  - Selects coaching when learners are prepared to perform a skill under supervision.
  - Selects facilitating when learners have performed a skill satisfactorily under supervision.

**Objective R4.2.2: (Applying) Effectively employ preceptor roles, as appropriate.**

Criteria:

- Instructs students, technicians, or others, as appropriate.
- Models skills, including “thinking out loud,” so learners can “observe” critical thinking skills.
- Coaches, including effective use of verbal guidance, feedback, and questioning, as needed.
- Facilitates, when appropriate, by allowing learner independence when ready and using indirect monitoring of performance.

Approved by the Commission on Credentialing of the American Society of Health-System Pharmacists on March 8, 2015. This is the document referenced in the *ASHP Accreditation Standard for Postgraduate Year One (PGY1) Pharmacy Residency Programs* approved on September 19, 2014, and is intended to be used in conjunction with that Standard.

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		T/TE Count	Acute Care Cardiology	Acute Care Neurology	Benign Hematology	Cardiology CLINIC	Coronary Care Unit	Emergency Medicine
<b>PGY1 Pharmacy (2014)</b>								
<b>R1 Patient Care</b>								
R1.1 In collaboration with the health care team, provide safe and effective patient care to a diverse range of patients, including those with multiple co-morbidities, high-risk medication regimens, and multiple medications following a consistent patient care process								
	R1.1.1 Interact effectively with health care teams to manage patients' medication therapy	TE - 23, T - 0	TE	TE	TE	TE	TE	TE
	R1.1.2 Interact effectively with patients, family members, and caregivers	TE - 23, T - 0	TE	TE	TE	TE	TE	TE
	R1.1.3 Collect information on which to base safe and effective medication therapy	TE - 23, T - 0	TE	TE	TE	TE	TE	TE
	R1.1.4 Analyze and assess information on which to base safe and effective medication therapy	TE - 23, T - 0	TE	TE	TE	TE	TE	TE
	R1.1.5 Design or redesign safe and effective patient-centered therapeutic regimens and monitoring plans (care plans)	TE - 23, T - 0	TE	TE	TE	TE	TE	TE
	R1.1.6 Ensure implementation of therapeutic regimens and monitoring plans (care plans) by taking appropriate follow-up actions	TE - 23, T - 0	TE	TE	TE	TE	TE	TE
	R1.1.7 Document direct patient care activities appropriately in the medical record or where appropriate	TE - 23, T - 0	TE	TE	TE	TE	TE	TE
	R1.1.8 Demonstrate responsibility to patients	TE - 23, T - 0	TE	TE	TE	TE	TE	TE
R1.2 Ensure continuity of care during patient transitions between care settings								
	R1.2.1 Manage transitions of care effectively	TE - 23, T - 0	TE	TE	TE	TE	TE	TE
R1.3 Prepare, dispense, and manage medications to support safe and effective drug therapy for patients								
	R1.3.1 Prepare and dispense medications following best practices and the organization's policies and procedures	TE - 2, T - 0						
	R1.3.2 Manage aspects of the medication-use process related to formulary management	TE - 3, T - 0						
	R1.3.3 Manage aspects of the medication-use process related to oversight of dispensing	TE - 2, T - 0						
<b>R2 Advancing Practice and Improving Patient Care</b>								

		Family Medicine CLINIC	General Pediatrics	Hematology Oncology, Inpatient	Infectious Diseases	Infectious Diseases CLINIC	Internal Medicine (Inpatient)	Internal Medicine CLINIC
<b>PGY1 Pharmacy (2014)</b>								
<b>R1 Patient Care</b>								
R1.1 In collaboration with the health care team, provide safe and effective patient care to a diverse range of patients, including those with multiple co-morbidities, high-risk medication regimens, and multiple medications following a consistent patient care process								
	R1.1.1 Interact effectively with health care teams to manage patients' medication therapy	TE	TE	TE	TE	TE	TE	TE
	R1.1.2 Interact effectively with patients, family members, and caregivers	TE	TE	TE	TE	TE	TE	TE
	R1.1.3 Collect information on which to base safe and effective medication therapy	TE	TE	TE	TE	TE	TE	TE
	R1.1.4 Analyze and assess information on which to base safe and effective medication therapy	TE	TE	TE	TE	TE	TE	TE
	R1.1.5 Design or redesign safe and effective patient-centered therapeutic regimens and monitoring plans (care plans)	TE	TE	TE	TE	TE	TE	TE
	R1.1.6 Ensure implementation of therapeutic regimens and monitoring plans (care plans) by taking appropriate follow-up actions	TE	TE	TE	TE	TE	TE	TE
	R1.1.7 Document direct patient care activities appropriately in the medical record or where appropriate	TE	TE	TE	TE	TE	TE	TE
	R1.1.8 Demonstrate responsibility to patients	TE	TE	TE	TE	TE	TE	TE
R1.2 Ensure continuity of care during patient transitions between care settings								
	R1.2.1 Manage transitions of care effectively	TE	TE	TE	TE	TE	TE	TE
R1.3 Prepare, dispense, and manage medications to support safe and effective drug therapy for patients								
	R1.3.1 Prepare and dispense medications following best practices and the organization's policies and procedures							
	R1.3.2 Manage aspects of the medication-use process related to formulary management							
	R1.3.3 Manage aspects of the medication-use process related to oversight of dispensing							
<b>R2 Advancing Practice and Improving Patient Care</b>								



		Longitudinal Service	Medical Intensive Care Unit	Medication Safety	Neonatal ICU	Neurosciences ICU (NNICU)	Obstetrics/ Family Medicine (INPATIENT)	Orientation
<b>PGY1 Pharmacy (2014)</b>								
<b>R1 Patient Care</b>								
R1.1 In collaboration with the health care team, provide safe and effective patient care to a diverse range of patients, including those with multiple co-morbidities, high-risk medication regimens, and multiple medications following a consistent patient care process								
	R1.1.1 Interact effectively with health care teams to manage patients' medication therapy		TE		TE	TE	TE	
	R1.1.2 Interact effectively with patients, family members, and caregivers		TE		TE	TE	TE	
	R1.1.3 Collect information on which to base safe and effective medication therapy		TE		TE	TE	TE	
	R1.1.4 Analyze and assess information on which to base safe and effective medication therapy		TE		TE	TE	TE	
	R1.1.5 Design or redesign safe and effective patient-centered therapeutic regimens and monitoring plans (care plans)		TE		TE	TE	TE	
	R1.1.6 Ensure implementation of therapeutic regimens and monitoring plans (care plans) by taking appropriate follow-up actions		TE		TE	TE	TE	
	R1.1.7 Document direct patient care activities appropriately in the medical record or where appropriate		TE		TE	TE	TE	
	R1.1.8 Demonstrate responsibility to patients		TE		TE	TE	TE	
R1.2 Ensure continuity of care during patient transitions between care settings								
	R1.2.1 Manage transitions of care effectively		TE		TE	TE	TE	
R1.3 Prepare, dispense, and manage medications to support safe and effective drug therapy for patients								
	R1.3.1 Prepare and dispense medications following best practices and the organization's policies and procedures	TE						TE
	R1.3.2 Manage aspects of the medication-use process related to formulary management	TE						TE
	R1.3.3 Manage aspects of the medication-use process related to oversight of dispensing	TE						TE
<b>R2 Advancing Practice and Improving Patient Care</b>								

		Pediatric ICU	Pediatric Oncology	Pharmacy Informatics	Practice Management and Policy	Presentation	Project	Quality Project
<b>PGY1 Pharmacy (2014)</b>								
<b>R1 Patient Care</b>								
R1.1 In collaboration with the health care team, provide safe and effective patient care to a diverse range of patients, including those with multiple co-morbidities, high-risk medication regimens, and multiple medications following a consistent patient care process								
	R1.1.1 Interact effectively with health care teams to manage patients' medication therapy	TE	TE					
	R1.1.2 Interact effectively with patients, family members, and caregivers	TE	TE					
	R1.1.3 Collect information on which to base safe and effective medication therapy	TE	TE					
	R1.1.4 Analyze and assess information on which to base safe and effective medication therapy	TE	TE					
	R1.1.5 Design or redesign safe and effective patient-centered therapeutic regimens and monitoring plans (care plans)	TE	TE					
	R1.1.6 Ensure implementation of therapeutic regimens and monitoring plans (care plans) by taking appropriate follow-up actions	TE	TE					
	R1.1.7 Document direct patient care activities appropriately in the medical record or where appropriate	TE	TE					
	R1.1.8 Demonstrate responsibility to patients	TE	TE					
R1.2 Ensure continuity of care during patient transitions between care settings								
	R1.2.1 Manage transitions of care effectively	TE	TE					
R1.3 Prepare, dispense, and manage medications to support safe and effective drug therapy for patients								
	R1.3.1 Prepare and dispense medications following best practices and the organization's policies and procedures							
	R1.3.2 Manage aspects of the medication-use process related to formulary management				TE			
	R1.3.3 Manage aspects of the medication-use process related to oversight of dispensing							
<b>R2 Advancing Practice and Improving Patient Care</b>								

		Solid Organ Transplantation	Stem cell transplant	Surgical-Trauma Intensive Care Unit (STICU)	Teaching Learning Certificate (TLC)	Thoracic Cardiovascular Surgery Intensive Care Unit (TCV)
<b>PGY1 Pharmacy (2014)</b>						
<b>R1 Patient Care</b>						
R1.1 In collaboration with the health care team, provide safe and effective patient care to a diverse range of patients, including those with multiple co-morbidities, high-risk medication regimens, and multiple medications following a consistent patient care process						
	R1.1.1 Interact effectively with health care teams to manage patients' medication therapy	TE	TE	TE		TE
	R1.1.2 Interact effectively with patients, family members, and caregivers	TE	TE	TE		TE
	R1.1.3 Collect information on which to base safe and effective medication therapy	TE	TE	TE		TE
	R1.1.4 Analyze and assess information on which to base safe and effective medication therapy	TE	TE	TE		TE
	R1.1.5 Design or redesign safe and effective patient-centered therapeutic regimens and monitoring plans (care plans)	TE	TE	TE		TE
	R1.1.6 Ensure implementation of therapeutic regimens and monitoring plans (care plans) by taking appropriate follow-up actions	TE	TE	TE		TE
	R1.1.7 Document direct patient care activities appropriately in the medical record or where appropriate	TE	TE	TE		TE
	R1.1.8 Demonstrate responsibility to patients	TE	TE	TE		TE
R1.2 Ensure continuity of care during patient transitions between care settings						
	R1.2.1 Manage transitions of care effectively	TE	TE	TE		TE
R1.3 Prepare, dispense, and manage medications to support safe and effective drug therapy for patients						
	R1.3.1 Prepare and dispense medications following best practices and the organization's policies and procedures					
	R1.3.2 Manage aspects of the medication-use process related to formulary management					
	R1.3.3 Manage aspects of the medication-use process related to oversight of dispensing					
<b>R2 Advancing Practice and Improving Patient Care</b>						

		T/TE Count	Acute Care Cardiology	Acute Care Neurology	Benign Hematology	Cardiology CLINIC	Coronary Care Unit	Emergency Medicine
R2.1 Demonstrate ability to manage formulary and medication-use processes, as applicable to the organization								
	R2.1.1 Prepare a drug class review, monograph, treatment guideline, or protocol	TE - 2, T - 0						
	R2.1.2 Participate in a medication-use evaluation	TE - 1, T - 0						
	R2.1.3 Identify opportunities for improvement of the medication-use system	TE - 3, T - 0						
	R2.1.4 Participate in medication event reporting and monitoring	TE - 2, T - 0						
R2.2 Demonstrate ability to evaluate and investigate practice, review data, and assimilate scientific evidence to improve patient care and/or the medication-use system								
	R2.2.1 Identify changes needed to improve patient care and/or the medication-use system	TE - 3, T - 0						
	R2.2.2 Develop a plan to improve the patient care and/or the medication-use system	TE - 3, T - 0						
	R2.2.3 Implement changes to improve patient care and/or the medication-use system	TE - 3, T - 0						
	R2.2.4 Assess changes made to improve patient care or the medication-use system	TE - 3, T - 0						
	R2.2.5 Effectively develop and present, orally and in writing, a final project report	TE - 3, T - 0						
<b>R3 Leadership and Management</b>								
R3.1 Demonstrate leadership skills								
	R3.1.1 Demonstrate personal, interpersonal, and teamwork skills critical for effective leadership	TE - 6, T - 0						
	R3.1.2 Apply a process of on-going self-evaluation and personal performance improvement	TE - 30, T - 0	TE	TE	TE	TE	TE	TE
R3.2 Demonstrate management skills								
	R3.2.1 Explain factors that influence departmental planning	TE - 2, T - 0						
	R3.2.2 Explain the elements of the pharmacy enterprise and their relationship to the health care system	TE - 1, T - 0						
	R3.2.3 Contribute to departmental management	TE - 3, T - 0						
	R3.2.4 Manages one's own practice effectively	TE - 4, T - 0						
<b>R4 Teaching, Education, and Dissemination of Knowledge</b>								

		Family Medicine CLINIC	General Pediatrics	Hematology Oncology, Inpatient	Infectious Diseases	Infectious Diseases CLINIC	Internal Medicine (Inpatient)	Internal Medicine CLINIC
R2.1 Demonstrate ability to manage formulary and medication-use processes, as applicable to the organization								
	R2.1.1 Prepare a drug class review, monograph, treatment guideline, or protocol							
	R2.1.2 Participate in a medication-use evaluation							
	R2.1.3 Identify opportunities for improvement of the medication-use system							
	R2.1.4 Participate in medication event reporting and monitoring							
R2.2 Demonstrate ability to evaluate and investigate practice, review data, and assimilate scientific evidence to improve patient care and/or the medication-use system								
	R2.2.1 Identify changes needed to improve patient care and/or the medication-use system							
	R2.2.2 Develop a plan to improve the patient care and/or the medication-use system							
	R2.2.3 Implement changes to improve patient care and/or the medication-use system							
	R2.2.4 Assess changes made to improve patient care or the medication-use system							
	R2.2.5 Effectively develop and present, orally and in writing, a final project report							
<b>R3 Leadership and Management</b>								
R3.1 Demonstrate leadership skills								
	R3.1.1 Demonstrate personal, interpersonal, and teamwork skills critical for effective leadership							
	R3.1.2 Apply a process of on-going self-evaluation and personal performance improvement	TE	TE	TE	TE	TE	TE	TE
R3.2 Demonstrate management skills								
	R3.2.1 Explain factors that influence departmental planning							
	R3.2.2 Explain the elements of the pharmacy enterprise and their relationship to the health care system							
	R3.2.3 Contribute to departmental management							
	R3.2.4 Manages one's own practice effectively							
<b>R4 Teaching, Education, and Dissemination of Knowledge</b>								

		Longitudinal Service	Medical Intensive Care Unit	Medication Safety	Neonatal ICU	Neurosciences ICU (NNICU)	Obstetrics/ Family Medicine (INPATIENT)	Orientation
R2.1 Demonstrate ability to manage formulary and medication-use processes, as applicable to the organization								
	R2.1.1 Prepare a drug class review, monograph, treatment guideline, or protocol			TE				
	R2.1.2 Participate in a medication-use evaluation							
	R2.1.3 Identify opportunities for improvement of the medication-use system			TE				
	R2.1.4 Participate in medication event reporting and monitoring			TE				
R2.2 Demonstrate ability to evaluate and investigate practice, review data, and assimilate scientific evidence to improve patient care and/or the medication-use system								
	R2.2.1 Identify changes needed to improve patient care and/or the medication-use system							
	R2.2.2 Develop a plan to improve the patient care and/or the medication-use system							
	R2.2.3 Implement changes to improve patient care and/or the medication-use system							
	R2.2.4 Assess changes made to improve patient care or the medication-use system							
	R2.2.5 Effectively develop and present, orally and in writing, a final project report							
<b>R3 Leadership and Management</b>								
R3.1 Demonstrate leadership skills								
	R3.1.1 Demonstrate personal, interpersonal, and teamwork skills critical for effective leadership	TE		TE				TE
	R3.1.2 Apply a process of on-going self-evaluation and personal performance improvement	TE	TE	TE	TE	TE	TE	TE
R3.2 Demonstrate management skills								
	R3.2.1 Explain factors that influence departmental planning			TE				
	R3.2.2 Explain the elements of the pharmacy enterprise and their relationship to the health care system							
	R3.2.3 Contribute to departmental management			TE				
	R3.2.4 Manages one's own practice effectively			TE				
<b>R4 Teaching, Education, and Dissemination of Knowledge</b>								

		Pediatric ICU	Pediatric Oncology	Pharmacy Informatics	Practice Management and Policy	Presentation	Project	Quality Project
R2.1 Demonstrate ability to manage formulary and medication-use processes, as applicable to the organization								
	R2.1.1 Prepare a drug class review, monograph, treatment guideline, or protocol				TE			
	R2.1.2 Participate in a medication-use evaluation				TE			
	R2.1.3 Identify opportunities for improvement of the medication-use system			TE	TE			
	R2.1.4 Participate in medication event reporting and monitoring				TE			
R2.2 Demonstrate ability to evaluate and investigate practice, review data, and assimilate scientific evidence to improve patient care and/or the medication-use system								
	R2.2.1 Identify changes needed to improve patient care and/or the medication-use system			TE			TE	TE
	R2.2.2 Develop a plan to improve the patient care and/or the medication-use system			TE			TE	TE
	R2.2.3 Implement changes to improve patient care and/or the medication-use system			TE			TE	TE
	R2.2.4 Assess changes made to improve patient care or the medication-use system			TE			TE	TE
	R2.2.5 Effectively develop and present, orally and in writing, a final project report			TE			TE	TE
<b>R3 Leadership and Management</b>								
R3.1 Demonstrate leadership skills								
	R3.1.1 Demonstrate personal, interpersonal, and teamwork skills critical for effective leadership				TE		TE	TE
	R3.1.2 Apply a process of on-going self-evaluation and personal performance improvement	TE	TE		TE	TE	TE	TE
R3.2 Demonstrate management skills								
	R3.2.1 Explain factors that influence departmental planning				TE			
	R3.2.2 Explain the elements of the pharmacy enterprise and their relationship to the health care system				TE			
	R3.2.3 Contribute to departmental management			TE	TE			
	R3.2.4 Manages one's own practice effectively				TE		TE	TE
<b>R4 Teaching, Education, and Dissemination of Knowledge</b>								

		Solid Organ Transplantation	Stem cell transplant	Surgical-Trauma Intensive Care Unit (STICU)	Teaching Learning Certificate (TLC)	Thoracic Cardiovascular Surgery Intensive Care Unit (TCV)
R2.1 Demonstrate ability to manage formulary and medication-use processes, as applicable to the organization						
	R2.1.1 Prepare a drug class review, monograph, treatment guideline, or protocol					
	R2.1.2 Participate in a medication-use evaluation					
	R2.1.3 Identify opportunities for improvement of the medication-use system					
	R2.1.4 Participate in medication event reporting and monitoring					
R2.2 Demonstrate ability to evaluate and investigate practice, review data, and assimilate scientific evidence to improve patient care and/or the medication-use system						
	R2.2.1 Identify changes needed to improve patient care and/or the medication-use system					
	R2.2.2 Develop a plan to improve the patient care and/or the medication-use system					
	R2.2.3 Implement changes to improve patient care and/or the medication-use system					
	R2.2.4 Assess changes made to improve patient care or the medication-use system					
	R2.2.5 Effectively develop and present, orally and in writing, a final project report					
<b>R3 Leadership and Management</b>						
R3.1 Demonstrate leadership skills						
	R3.1.1 Demonstrate personal, interpersonal, and teamwork skills critical for effective leadership					
	R3.1.2 Apply a process of on-going self-evaluation and personal performance improvement	TE	TE	TE		TE
R3.2 Demonstrate management skills						
	R3.2.1 Explain factors that influence departmental planning					
	R3.2.2 Explain the elements of the pharmacy enterprise and their relationship to the health care system					
	R3.2.3 Contribute to departmental management					
	R3.2.4 Manages one's own practice effectively					
<b>R4 Teaching, Education, and Dissemination of Knowledge</b>						



		T/TE Count	Acute Care Cardiology	Acute Care Neurology	Benign Hematology	Cardiology CLINIC	Coronary Care Unit	Emergency Medicine
R4.1 Provide effective medication and practice-related education to patients, caregivers, health care professionals, students, and the public (individuals and groups)								
	R4.1.1 Design effective educational activities	TE - 4, T - 0						
	R4.1.2 Use effective presentation and teaching skills to deliver education	TE - 24, T - 1	TE	TE	TE	TE	TE	TE
	R4.1.3 Use effective written communication to disseminate knowledge	TE - 0, T - 0						
	R4.1.4 Appropriately assess effectiveness of education	TE - 2, T - 0						
R4.2 Effectively employs appropriate preceptor roles when engaged in teaching students, pharmacy technicians or fellow health care professionals								
	R4.2.1 When engaged in teaching, select a preceptor role that meets learners' educational needs	TE - 23, T - 0	TE	TE	TE	TE	TE	TE
	R4.2.2 Effectively employ preceptor roles, as appropriate	TE - 23, T - 0	TE	TE	TE	TE	TE	TE
<b><u>PGY1 Elective - Management of Medical Emergencies (2014)</u></b>								
<b>E5 Management of Medical Emergencies</b>								
E5.1 Participate in the management of medical emergencies								
	E5.1.1 Exercise skill as a team member in the management of medical emergencies according to the organization's policies and procedures	TE - 15, T - 0	TE	TE			TE	TE

		Family Medicine CLINIC	General Pediatrics	Hematology Oncology, Inpatient	Infectious Diseases	Infectious Diseases CLINIC	Internal Medicine (Inpatient)	Internal Medicine CLINIC
R4.1 Provide effective medication and practice-related education to patients, caregivers, health care professionals, students, and the public (individuals and groups)								
	R4.1.1 Design effective educational activities				TE	TE		
	R4.1.2 Use effective presentation and teaching skills to deliver education	TE	TE	TE	TE	TE	TE	TE
	R4.1.3 Use effective written communication to disseminate knowledge							
	R4.1.4 Appropriately assess effectiveness of education					TE		
R4.2 Effectively employs appropriate preceptor roles when engaged in teaching students, pharmacy technicians or fellow health care professionals								
	R4.2.1 When engaged in teaching, select a preceptor role that meets learners' educational needs	TE	TE	TE	TE	TE	TE	TE
	R4.2.2 Effectively employ preceptor roles, as appropriate	TE	TE	TE	TE	TE	TE	TE
<b><u>PGY1 Elective - Management of Medical Emergencies (2014)</u></b>								
<b>E5 Management of Medical Emergencies</b>								
E5.1 Participate in the management of medical emergencies								
	E5.1.1 Exercise skill as a team member in the management of medical emergencies according to the organization's policies and procedures		TE		TE		TE	

		Longitudinal Service	Medical Intensive Care Unit	Medication Safety	Neonatal ICU	Neurosciences ICU (NNICU)	Obstetrics/ Family Medicine (INPATIENT)	Orientation
R4.1 Provide effective medication and practice-related education to patients, caregivers, health care professionals, students, and the public (individuals and groups)								
	R4.1.1 Design effective educational activities							
	R4.1.2 Use effective presentation and teaching skills to deliver education		TE		TE	TE	TE	
	R4.1.3 Use effective written communication to disseminate knowledge							
	R4.1.4 Appropriately assess effectiveness of education							
R4.2 Effectively employs appropriate preceptor roles when engaged in teaching students, pharmacy technicians or fellow health care professionals								
	R4.2.1 When engaged in teaching, select a preceptor role that meets learners' educational needs		TE		TE	TE	TE	
	R4.2.2 Effectively employ preceptor roles, as appropriate		TE		TE	TE	TE	
<b><u>PGY1 Elective - Management of Medical Emergencies (2014)</u></b>								
<b>E5 Management of Medical Emergencies</b>								
E5.1 Participate in the management of medical emergencies								
	E5.1.1 Exercise skill as a team member in the management of medical emergencies according to the organization's policies and procedures		TE		TE	TE	TE	TE

		Pediatric ICU	Pediatric Oncology	Pharmacy Informatics	Practice Management and Policy	Presentation	Project	Quality Project
R4.1 Provide effective medication and practice-related education to patients, caregivers, health care professionals, students, and the public (individuals and groups)								
	R4.1.1 Design effective educational activities					TE		
	R4.1.2 Use effective presentation and teaching skills to deliver education	TE	TE			TE		
	R4.1.3 Use effective written communication to disseminate knowledge							
	R4.1.4 Appropriately assess effectiveness of education					TE		
R4.2 Effectively employs appropriate preceptor roles when engaged in teaching students, pharmacy technicians or fellow health care professionals								
	R4.2.1 When engaged in teaching, select a preceptor role that meets learners' educational needs	TE	TE					
	R4.2.2 Effectively employ preceptor roles, as appropriate	TE	TE					
<b><u>PGY1 Elective - Management of Medical Emergencies (2014)</u></b>								
<b>E5 Management of Medical Emergencies</b>								
E5.1 Participate in the management of medical emergencies								
	E5.1.1 Exercise skill as a team member in the management of medical emergencies according to the organization's policies and procedures	TE	TE					

		Solid Organ Transplantation	Stem cell transplant	Surgical-Trauma Intensive Care Unit (STICU)	Teaching Learning Certificate (TLC)	Thoracic Cardiovascular Surgery Intensive Care Unit (TCV)
R4.1	Provide effective medication and practice-related education to patients, caregivers, health care professionals, students, and the public (individuals and groups)					
	R4.1.1 Design effective educational activities				TE	
	R4.1.2 Use effective presentation and teaching skills to deliver education	TE	TE	T	TE	TE
	R4.1.3 Use effective written communication to disseminate knowledge					
	R4.1.4 Appropriately assess effectiveness of education					
R4.2	Effectively employs appropriate preceptor roles when engaged in teaching students, pharmacy technicians or fellow health care professionals					
	R4.2.1 When engaged in teaching, select a preceptor role that meets learners' educational needs	TE	TE	TE		TE
	R4.2.2 Effectively employ preceptor roles, as appropriate	TE	TE	TE		TE
<b><u>PGY1 Elective - Management of Medical Emergencies (2014)</u></b>						
<b>E5 Management of Medical Emergencies</b>						
E5.1	Participate in the management of medical emergencies					
	E5.1.1 Exercise skill as a team member in the management of medical emergencies according to the organization's policies and procedures			TE		

Faculty: Coe, Chrissie V.; Hedrick, Amanda; Hedrick, Amanda; Hedrick, J. N.; Holian, Angela; Lonabaugh, Kevin P.; Lynch PharmD, Lia; Madden, Thomas R.; Morris, Hannah; Morrisette, Matthew J.

**Site:**

University of Virginia Health System

**Status:** Active

Required

**Description:**

During the first 3 weeks of the residency year (July), PGY1 pharmacy residents undergo training and orientation throughout the department. Residents will complete Epic, Code 12, and CITI training plus USP 797 and Hazardous Drugs modules. Additionally, residents are required to complete and pass all departmental clinical competencies by the last day of orientation. Residents will receive training in the 3 practice areas where they will work throughout the year: IV Room, Inpatient, and Clinical Verification.

Each resident will be provided with an individualized orientation schedule that includes shift, practice area, and trainer. The resident shall report to the training pharmacist as assigned. All pharmacists involved in the training of the residents will provide input into the evaluation.

**Expectation of Learners:****Preceptor Interaction**

Daily: Residents will work with their assigned trainer for based upon the individualized training schedules. The assigned trainers will provide feedback to the resident frequently and to the preceptor at least weekly.

**Communication**

- A. Daily scheduled meeting times: Residents to prioritize questions and problems to discuss during scheduled meeting times as listed above.
- B. E-mail: Residents are expected to read applicable staffing-related e-mails each day at a minimum for ongoing communication. This is appropriate for routine, non-urgent questions and problems.
- C. Pager: Residents to page preceptor for urgent/emergency situations pertaining to patient care
- D. Personal phone number: Provided to resident at time of learning experience for emergency issues.

**Expected progression of resident responsibility on this learning experience**

(Length of time preceptor spends in each of the phases will be personalized based upon resident's abilities and timing of the learning experience during the residency training year)

*Day 1:* Preceptor to review learning activities and expectations with resident.

*Weeks 1-3:* Over the course of the three week orientation, resident to orient to three practice areas (inpatient/ IV room/ clinical) for one week each. During orientation, various pharmacy team members (pharmacists and technicians) will model optimal practice standards to the pharmacy resident. As each week progresses, the resident take on more responsibilities as the pharmacist with coaching by the trainer.

At the end of the time in each training area, the resident is expected to have successfully completed and obtained pharmacist trainer sign-off on all three training checklists. At the conclusion of orientation, it is expected that each resident will be independent in order verification.

			Activities
<b>Goal R1.3</b>	<b>Prepare, dispense, and manage medications to support safe and effective drug therapy for patients</b>		
OBJ R1.3.1	(Cognitive - Applying) Prepare and dispense medications following best practices and the organization's policies and procedures	Taught and Evaluated	<p>Correctly interpret appropriateness of a medication order before preparing or permitting the distribution of the first dose, including: - Identifying, clarifying, verifying, and correcting any medication order errors; - Considering complete patient-specific information; - Identifying existing or potential drug therapy problems; - Determining an appropriate solution to an identified problem; - Securing consensus from the prescriber for modifications to therapy; - Ensuring that the solution is implemented.</p> <p>Maintains accuracy and confidentiality of patients' protected health information (PHI).</p> <p>Obtains agreement on modifications to medication orders when acting in the absence of, or outside, an approved protocol or collaborative agreement.</p> <p>Prepares medication using appropriate techniques and following the organization's policies and procedures and applicable professional standards, including: - When required, accurately calibrates equipment; - Ensuring solutions are appropriately concentrated, without incompatibilities, stable, and appropriately stored; - Adheres to appropriate safety and quality assurance practices; - Prepares labels that conform to the health system's policies and procedures; - Medication contains all necessary and/or appropriate ancillary labels; - Inspects the final medication before dispensing.</p> <p>When dispensing medication products: - Follows the organization's policies and procedures; - Ensures the patient receives the medication(s) as ordered.</p> <p>Ensures the integrity of medication dispensed; - Provides any necessary written and/or verbal counseling; - Ensures the patient receives medication on time.</p>
OBJ R1.3.2	(Cognitive - Applying) Manage aspects of the medication-use process related to formulary management	Taught and Evaluated	<p>Follows Closed Formulary policy and ensures Medication Use Policy approval for all non-formulary requests.</p> <p>When approved, ensures non-formulary medications are dispensed, administered, monitored, and documented in a manner that ensures patient safety.</p>
OBJ R1.3.3	(Cognitive - Applying) Manage aspects of the medication-use process related to oversight of dispensing	Taught and Evaluated	<p>Check accuracy of medications dispensed, including correct patient identification, medication, dosage form, label, dose, number of doses, expiration dates, and properly repackaged and relabeled medications, including compounded medications (sterile and nonsterile).</p> <p>Check the accuracy of the work of pharmacy technicians, clerical personnel, pharmacy students, and others according to applicable laws and institutional policies.</p> <p>Effectively prioritize work load and organize work flow.</p> <p>Promote safe and effective drug use on a day-to-day basis.</p> <p>Utilizes Pyxis and Talyst technology to aid in decision-making and increase safety.</p>
<b>Goal R3.1</b>	<b>Demonstrate leadership skills</b>		
OBJ R3.1.1	(Cognitive - Applying) Demonstrate personal, interpersonal, and teamwork skills critical for effective leadership	Taught and Evaluated	<p>Communicates effectively with team members.</p> <p>Exhibits responsibility for assigned schedule.</p>
OBJ R3.1.2	(Cognitive - Applying) Apply a process of on-going self-evaluation and personal performance improvement	Taught and Evaluated	<p>Accurately summarizes strengths and areas for improvement.</p> <p>Complete all required self-evaluations.</p> <p>Seeks and incorporates feedback from others.</p>

<b>Goal E5.1</b>	<b>Participate in the management of medical emergencies</b>		
OBJ E5.1.1	(Cognitive - Applying) Exercise skill as a team member in the management of medical emergencies according to the organization's policies and procedures	Taught and Evaluated	Complete Code 12 training Obtains ACLS certification (card must be given to Lori Mitchell for inclusion into your personnel file Pass Code 12 test with score $\geq$ 80%.

**Evaluations:**

	Evaluator	Evaluated	Timing
Summative Evaluation	All Preceptors	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed
ASHP Preceptor Evaluation	Residents	All Preceptors of this Learning Experience	Ending and Quarterly if Needed
ASHP Learning Experience Evaluation	Residents	Learning Experience	Ending and Quarterly if Needed
Summative Evaluation	Residents	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed



Faculty: Ward, Leslie

**Site:**

University of Virginia Health System

**Status:** Active

Not Required

**Description:**

Benign Hematology is one of the acute care specialty rotations for PGY1-pharmacy residents that focuses on the provision of pharmaceutical care to patients seen by adult benign hematology. This rotation takes place primarily in benign hematology outpatient clinics in the Emily Couric Clinical Cancer Center. The hematology clinic team includes heme/onc fellows, residents and attendings, nurses, nurse practitioners, social workers, and pharmacists.

Routine responsibilities include: patient education; reconciling medications; assisting with medication selection, prescription, and monitoring; assisting with medication access; drug monitoring; anticoagulation management; factor planning for surgical procedures and transitions of care. The pharmacist will also provide drug information and education to healthcare professionals and clinic team members.

**Disease States**

Common disease states in which the resident will be expected to gain proficiency through direct patient care experience for common diseases including, but not limited to:

- Anemia
- Thromboembolic disorders
  - Deep vein thrombosis, pulmonary embolism, antiphospholipid syndrome
- Bleeding disorders
  - Hemophilia, von Willebrand's disease, inherited deficiencies of coagulation factors
- Immune thrombocytopenia (ITP)
- Thrombotic thrombocytopenic purpura (TTP)

- Myeloproliferative neoplasms
  - Polycythemia vera, Essential Thrombocythemia, Myelofibrosis

Topic discussions and reading key articles will be used to help develop the resident's patient care skills for common disease states or acquiring knowledge about diseases seen infrequently on the service. During the learning experience the resident will focus on the goals and objectives outlined below by performing the activities that are associated with each objective. The resident will gradually assume responsibility for all of the patients within the assigned rounding service. The PGY1 resident must devise efficient strategies for accomplishing the required activities in a limited time frame.

Achievement of the goals of the residency is determined through assessment of ability to perform the associated objectives. The table below demonstrates the relationship between the activities and the goals/objectives assigned to the learning experience.

#### **Expectation of Learners:**

#### **Preceptor Interaction**

Daily as needed

A: 8-4:30: Tues-Fri in clinic

#### **Communication:**

1. Daily scheduled meeting times: Residents to prioritize questions and problems to discuss during scheduled meeting times.
2. E-mail: Residents are expected to read e-mails at the beginning, middle and end of each day at a minimum for ongoing communication. This is appropriate for routine, non-urgent questions and problems.
3. iPhone/Pager: Resident to page or text preceptor for urgent questions pertaining to patient care.
4. Personal phone number: Provided to resident at time of learning experience for emergency issues.

#### **Expected progression of resident responsibility on this learning experience:**

(Length of time preceptor spends in each of the phases will be personalized based upon resident's abilities and timing of the learning experience during the residency training year)

Day 1: Preceptor to review learning activities and expectations with resident.

Week 1: Resident to work up a portion of the team's patients (number to be determined by preceptor and resident) and present to preceptor daily. Preceptor to attend and participate in team rounds with resident, modeling pharmacist's role on the health care team.

Weeks 2-5: Each week the resident is expected to take over the responsibility of working up more of the team's patients, continuing to discuss identified problems with preceptor daily. Once the resident is able to take responsibility for all patients assigned to the team, the preceptor will no longer attend team rounds, but will continue to facilitate the resident as the pharmacist on the team.

## **Evaluation**

The frequency of evaluations and corresponding documentation requirements can be found in the "Evaluations" grid at the end of each learning experience description.

- All evaluations are to be completed by the last day of the learning experience (and no more than one week after the conclusion of the experience).
- Evaluations are signed/ co-signed only after discussed in a summative evaluation meeting between the preceptor and resident.
- Resident self-evaluations are completed until objective R3.1.2 has been deemed by the RPD as ACHR
- Frequent, immediate, specific, and constructive verbal feedback regarding performance is provided to the resident throughout the rotation.

		<b>Activities</b>	
<b>Goal R1.1</b>	<b>In collaboration with the health care team, provide safe and effective patient care to a diverse range of patients, including those with multiple co-morbidities, high-risk medication regimens, and multiple medications following a consistent patient care process</b>		
OBJ R1.1.1	(Cognitive - Applying) Interact effectively with health care teams to manage patients' medication therapy	Taught and Evaluated	Interact and communicate with all members of the patient care team in a respectful and collaborative manner Interact with patient's provider(s) in order to manage medication therapy. Obtain medication histories and perform medication reconciliation as requested. Provide recommendations to the team in a collaborative manner Respond to drug information questions in a timely manner.
OBJ R1.1.2	(Cognitive - Applying) Interact effectively with patients, family members, and caregivers	Taught and Evaluated	Interact and communicate with patient and family members in a respectful and collaborative manner. Uphold ASPIRE values
OBJ R1.1.3	(Cognitive - Analyzing) Collect information on which to base safe and effective medication therapy	Taught and Evaluated	Collect pertinent information for each assigned patient from medical record and patient (as applicable) and record pertinent data on a patient monitoring form.
OBJ R1.1.4	(Cognitive - Analyzing) Analyze and assess information on which to base safe and effective medication therapy	Taught and Evaluated	Be prepared to discuss problems identified with preceptor prior to patient's appointment. Identify any issues with medication therapy (ie, lack of indication, condition for which no medication is prescribed, suboptimal regimen, therapeutic duplication, adverse events, interactions, social/ financial barriers)
OBJ R1.1.5	(Cognitive - Creating) Design or redesign safe and effective patient-centered therapeutic regimens and monitoring plans (care plans)	Taught and Evaluated	Be prepared to discuss recommendations for addressing problems with preceptor prior to patient's appointment. Determine reasons for a patient's progress or lack of progress toward the state health care goal and be prepared to adjust the therapeutic plan as needed. For all patients, develop evidence-based, measurable, achievable therapeutic goals that take into consideration the patient's disease state(s), ethical issues, quality of life, goals of other interprofessional team members, and relevant patient-specific information including culture and preferences
OBJ R1.1.6	(Cognitive - Applying) Ensure implementation of therapeutic regimens and monitoring plans (care plans) by taking appropriate follow-up actions	Taught and Evaluated	Discuss recommendations with provider after getting approval from preceptor, if required by preceptor. Follow-up after appointment to ensure any agreed upon changes have been implemented.
OBJ R1.1.7	(Cognitive - Applying) Document direct patient care activities appropriately in the medical record or where appropriate	Taught and Evaluated	Document anticoagulation patient education notes in the Epic Document patient encounters appropriately in EPIC, including all pertinent information.
OBJ R1.1.8	(Cognitive - Applying) Demonstrate responsibility to patients	Taught and Evaluated	For all patients, ensure all identified medication-related issues are resolved by the end of the day. If cannot be resolved, ensure that any outstanding issues are communicated with the appropriate clinic team member. Maintain active presence in patient care areas and/or ensure availability to all other team members Prioritize patient care above all other tasks Resolve existing and potential medication-related problems until satisfactory resolution is obtained

<b>Goal R1.2</b>	<b>Ensure continuity of care during patient transitions between care settings</b>		
OBJ R1.2.1	(Cognitive - Applying) Manage transitions of care effectively	Taught and Evaluated	Communicate pertinent information with covering clinical pharmacist for patients admitted from clinic. Provide accurate and timely follow-up information when patients transfer to another facility, level of care, pharmacist, or provider Provide referrals to patient assistance program when needed
<b>Goal R3.1</b>	<b>Demonstrate leadership skills</b>		
OBJ R3.1.2	(Cognitive - Applying) Apply a process of on-going self-evaluation and personal performance improvement	Taught and Evaluated	Accurately summarize strengths and areas for improvement Complete timely, reflective, and qualitative self-evaluations Seek and incorporate feedback from others
<b>Goal R4.1</b>	<b>Provide effective medication and practice-related education to patients, caregivers, health care professionals, students, and the public (individuals and groups)</b>		
OBJ R4.1.2	(Cognitive - Applying) Use effective presentation and teaching skills to deliver education	Taught and Evaluated	Effectively facilitate audience participation, active learning, and engagement Present at appropriate rate and volume and without distracting speaker habits Provide concise, informative, and thorough case conference presentation, when assigned
<b>Goal R4.2</b>	<b>Effectively employs appropriate preceptor roles when engaged in teaching students, pharmacy technicians or fellow health care professionals</b>		
OBJ R4.2.1	(Cognitive - Analyzing) When engaged in teaching, select a preceptor role that meets learners' educational needs	Taught and Evaluated	Co-precept another learner, when applicable Distinguish which preceptor role is applicable for the situation (direct instruction, modeling, coaching, facilitating).
OBJ R4.2.2	(Cognitive - Applying) Effectively employ preceptor roles, as appropriate	Taught and Evaluated	Coach, including effective use of verbal guidance, feedback, and questioning, as needed. Instruct students, technicians, or others, as appropriate. Model skills, including "thinking out loud," so learners can "observe" critical thinking skills.

#### Evaluations:

	Evaluator	Evaluated	Timing
Summative Evaluation	All Preceptors	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed
ASHP Preceptor Evaluation	Residents	All Preceptors of this Learning Experience	Ending and Quarterly if Needed
ASHP Learning Experience Evaluation	Residents	Learning Experience	Ending and Quarterly if Needed
Summative Evaluation	Residents	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed

Faculty: Artale, Jamie; Burden, Derek; Hedrick, J. N.; Holian, Angela; Truoccolo, Donna S.

**Site:**

University of Virginia Health System

**Status:** Active

Required

**Description:**

**General Description:** The Emergency Medicine rotation is a five week acute care specialty rotation for pharmacy residents. This rotation will consist of providing clinical pharmacy services to an emergency medicine service in the emergency department under the preceptorship of a clinical pharmacist. The practice environment will require daily interactions with medical attendings, house staff, and mid-level practitioners, nursing staff, pharmacy staff and other healthcare professionals necessary to optimize pharmacotherapy for patients. In addition to monitoring and consulting on pharmacologic issues, the resident will also provide educational presentations to nursing, pharmacy, and/or physician staff members.

The role of the pharmacists in the ED is to deliver optimal medication therapy as quickly as possible. This presents itself in a variety of ways. As the clinical pharmacist in the ED you will be expected to make recommendations and facilitate delivery of outpatient medications; attend all sepsis, stroke, STEMI, trauma, and aorta alerts; respond to the bedside for all critical patients; respond to drug information inquiries in the department; and assist in culture follow up.

**Overall Rotation Goal**

The major goal of this rotation is to provide a clinical pharmacy practice environment for the resident to apply the clinical, communication, and teaching skills necessary to interact in a multidisciplinary emergency medicine environment.

**Required Meetings**

- Daily patient discussions with the preceptor to present new patients and update existing patient status
- Participate in topic discussions with the preceptor
- Attend all Department of Pharmacy meetings, conferences, and journal clubs
- Attend weekly Emergency Medicine Conference (when applicable topics are discussed)
  - Wednesdays from 7 AM - 12 PM in old Jordan Hall auditorium (Room 1-17)
- Attend weekly Toxicology Conference
  - Friday mornings 8 - 9 AM in Poison Control Center, JPA 1222, 4th Floor
- Attend an Emergency Preparedness Meeting if scheduled during rotation

- Attend a Chest Pain Center Committee Meeting if scheduled during rotation

## **Core Content**

During this rotation, the resident will be expected to become proficient through patient experiences; discussions of reading materials; and/or case presentations in the acute management for the following disease states and significant traumatic events as they present throughout the rotation. The resident is expected to read, evaluate, and present the assigned readings to the preceptor. ***(Note: Not all topics may be covered during the course of the rotation and some additional unique topics may replace those listed):***

- Emergency Preparedness/HAZMAT
- Resuscitation
  - BLS/ACLS (Pediatrics & Adults)
  - Therapeutic hypothermia after cardiac arrest
  - Basic approach to trauma patients (Pediatrics & Adults)
  - Hypovolemic shock
  - Hypothermia management
- Cardiovascular Diseases
  - Acute coronary syndromes (STEMI, NSTEMI, UA)
  - Arrhythmias
  - Hypertensive urgency vs. emergency
  - Acute decompensated heart failure
  - Cardiogenic shock
  - Aortic dissections and aneurysms
- Infectious Diseases/Wound Management
  - Management of common infections presenting to the ED which include but are not limited to: Meningitis, Intra-abdominal infectious, CAP/HCAP, UTI, STD/PID, SSTI, Sepsis, Influenza, Tetanus, Rabies, Sinusitis, Acute Otitis Media, Malaria, Tuberculosis)
  - Sexual assault management
  - Thermal, chemical, and electric burns
  - Reptile bites
  - Arthropod bites and stings
- Hematologic and Oncologic Emergencies
  - Approaches to reversing new and old oral anticoagulants
  - Sickle cell disease
  - Management of acute bleeding in hemophiliacs and Von Willebrand disease
  - Transfusion therapy (FFP vs. platelets vs. pRBC)
  - Factor products
- Gastrointestinal Emergencies
  - Upper/Lower GI bleeds
  - Nausea/Vomiting, diarrhea, and constipation
  - Acute appendicitis
  - Acute vs. chronic pancreatitis
  - Cholecystitis
- Pulmonary Emergencies
  - Acute asthma exacerbation (Pediatrics & Adults)
  - COPD exacerbation
  - Spontaneous pneumothorax

- Endocrine Emergencies
  - Hyper- / hypoglycemia
  - DKA/HHS (Pediatrics & Adults)
  - Hyperthyroidism and Thyroid Storm
  - Hypothyroidism and Myxedema Coma
- Analgesia, anesthesia, and sedation
  - Rapid sequence intubation (Pediatrics and Adults)
  - Procedural Sedation (Pediatrics and Adults)
  - Local/Regional Anesthesia
  - Acute pain management
  - Acute management of gout
- Neurology
  - Acute ischemic stroke
  - Acute psychosis/Agitation
  - Acute migraine management
  - Status epilepticus (Pediatric & Adults)
  - Traumatic brain injuries
  - Intracerebral and subarachnoid hemorrhages
- Toxicology
  - General management of poisoned patients (Toxidromes)
  - Management of common drug overdoses presenting to the ED which include but are not limited to: APAP, salicylates, valproic acid, opioids, benzodiazepines, tricyclic antidepressants, monoamine oxidase inhibitors, lithium, alcohols, cocaine, amphetamines, digoxin, beta-blockers, calcium channel blockers, carbon monoxide, mushrooms, etc.)
- Gynecology and Obstetrics Emergencies
  - Vaginal bleeding in pregnant and non-pregnant patient
  - Emergencies during pregnancy and the postpartum period
  - Pharmacologic management of an emergent delivery
  - Drugs in pregnancy and lactation

Topic discussions and reading key articles will be used to help develop the resident's patient care skills for common disease states or acquiring knowledge about diseases seen infrequently on the service.

During the learning experience the resident will focus on the goals and objectives outlined below by performing the activities that are associated with each objective. The resident will gradually assume responsibility for all of the patients within the assigned rounding service. The PGY1 resident must devise efficient strategies for accomplishing the required activities in a limited time frame.

Achievement of the goals of the residency is determined through assessment of ability to perform the associated objectives. The table below demonstrates the relationship between the activities and the goals/objectives assigned to the learning experience

**Expectation of Learners:**

**Preceptor Interaction**



**Daily:** Interaction with preceptor will occur on a daily basis and times will be based upon a schedule determined at the beginning of the rotation

**Communication:**

- A. Daily scheduled meeting times: Residents to prioritize questions and problems to discuss during scheduled meeting times as listed above.
- B. E-mail: Residents are expected to read e-mails for ongoing communication. This is appropriate for routine, non-urgent questions and issues.
- C. UVa iPhone/pager: Residents to page/text preceptor for urgent situations pertaining to patient care
- D. Personal phone number: Provided to resident at time of learning experience for emergency issues.

**Expected progression of resident responsibility on this learning experience:**

(Length of time preceptor spends in each of the phases will be personalized based upon resident's abilities and timing of the learning experience during the residency training year.

Day 1: Preceptor to review learning activities and expectations with resident.

Week 1: Resident is expected to attend all ED alerts (sepsis, stroke, trauma, STEMI, Aorta) and respond to the bedside of acutely ill patients along with a preceptor. In addition, the resident is responsible for triaging any drug information questions with the help of the preceptor

Week 2: As resident progresses, the expectation is to begin carrying the phone and pager designated to the clinical pharmacist for the shift working. After demonstrating competency with particular alerts through topic discussions and bedside response, the resident is expected to become the primary responder with the preceptor in an observational role.

Weeks 3-5 The expectation is to carry the phone and pager designated to the clinical pharmacist for the shift working. The resident is also expected to operate as the clinical pharmacist for the ED when responding to all alerts and acutely ill patients, using the preceptor as a resource when necessary.

**Evaluation**

The frequency of evaluations and corresponding documentation requirements can be found in the "Evaluations" grid at the end of each learning experience description.

All evaluations are to be completed by the last day of the learning experience (and no more than one week after the conclusion of the experience).

Evaluations are signed/ co-signed only after discussed in a summative evaluation meeting between the preceptor and resident.

Resident self-evaluations are completed until objective R3.1.2 has been deemed by the RPD as ACHR

Frequent, immediate, specific, and constructive verbal feedback regarding performance is provided to the resident throughout the rotation

		<b>Activities</b>	
<b>Goal R1.1</b>	<b>In collaboration with the health care team, provide safe and effective patient care to a diverse range of patients, including those with multiple co-morbidities, high-risk medication regimens, and multiple medications following a consistent patient care process</b>		
OBJ R1.1.1	(Cognitive - Applying) Interact effectively with health care teams to manage patients' medication therapy	Taught and Evaluated	Attend any alerts occurring in the ED during hours worked. Be prepared to provide evidence based recommendations on assigned patients and answer drug information questions in a timely manner. Perform medication histories, make medication recommendations, procure medications and assist in delivery whenever necessary during these alerts. Respond to drug information questions as they arise from nurses, PCTs, and physicians.
OBJ R1.1.2	(Cognitive - Applying) Interact effectively with patients, family members, and caregivers	Taught and Evaluated	Interacts and communicates with team, patient, and family in a respectful and collaborative manner. Upholds ASPIRE values.
OBJ R1.1.3	(Cognitive - Analyzing) Collect information on which to base safe and effective medication therapy	Taught and Evaluated	Determine pertinent information to collect for each assigned patient from medical record, patient's nurse, and patient (as applicable) daily for assigned patients. Develop and prioritize an active problem list and potential differential diagnoses for each patient.
OBJ R1.1.4	(Cognitive - Analyzing) Analyze and assess information on which to base safe and effective medication therapy	Taught and Evaluated	Be prepared to discuss problems with preceptor as they are identified. Facilitate administration of medications necessary for optimal patient outcomes including but not limited to order verification, product removal from Pyxis, product preparation, and programming infusion pump. Identify any issues with medication therapy (ie, lack of indication, condition for which no medication is prescribed, suboptimal regimen, therapeutic duplication, adverse events, interactions, social/financial barriers). Review articles assigned and be prepared for topic discussions as scheduled.
OBJ R1.1.5	(Cognitive - Creating) Design or redesign safe and effective patient-centered therapeutic regimens and monitoring plans (care plans)	Taught and Evaluated	Be prepared to discuss recommendations for addressing problems with preceptor. Ensure patient care plans are supported by primary literature and appropriate professional organization practice guidelines including but not limited to SCCM, IDSA, ACEP. For all patients, develop evidence-based, measurable, achievable therapeutic goals that take into consideration the patient's disease state(s), ethical issues, quality of life, goals of other interprofessional team members, and relevant patient-specific information including culture and preferences.
OBJ R1.1.6	(Cognitive - Applying) Ensure implementation of therapeutic regimens and monitoring plans (care plans) by taking appropriate follow-up actions	Taught and Evaluated	Discuss recommendations with preceptor, residents, and nurses. Ensure recommendations are implemented by assisting in drug delivery to the bedside.
OBJ R1.1.7	(Cognitive - Applying) Document direct patient care activities appropriately in the medical record or where appropriate	Taught and Evaluated	Document interventions using ivents or other appropriate notes/phone communicaitons in the medical record.

OBJ R1.1.8	(Cognitive - Applying) Demonstrate responsibility to patients	Taught and Evaluated	Be present in the department as the clinical pharmacist on the unit. Ensure visibility to patient care team by maintaining an active presence on the unit. For all patients, ensure all identified medication-related issues are resolved by the end of the day. If cannot be resolved, ensure that any outstanding issues are communicated to next clinical pharmacist prior to leaving for the day. Prioritize patient care above all other tasks. Resolve existing and potential medication-related problems until satisfactory resolution is obtained.
<b>Goal R1.2</b>	<b>Ensure continuity of care during patient transitions between care settings</b>		
OBJ R1.2.1	(Cognitive - Applying) Manage transitions of care effectively	Taught and Evaluated	Provide accurate and timely follow-up information when patients transfer to another facility, level of care, pharmacist, or provider.
<b>Goal R3.1</b>	<b>Demonstrate leadership skills</b>		
OBJ R3.1.2	(Cognitive - Applying) Apply a process of on-going self-evaluation and personal performance improvement	Taught and Evaluated	Accurately summarizes strengths and areas for improvement. Perform reflective, qualitative, and timely self-evaluations. Seeks and incorporates feedback from others.
<b>Goal R4.1</b>	<b>Provide effective medication and practice-related education to patients, caregivers, health care professionals, students, and the public (individuals and groups)</b>		
OBJ R4.1.2	(Cognitive - Applying) Use effective presentation and teaching skills to deliver education	Taught and Evaluated	Content adapted to reflect educational need of audience and expectations of preceptor. Effectively facilitates audience participation, active learning, and engagement. Provide concise, informative, and thorough EM conference presentation, when assigned.
<b>Goal R4.2</b>	<b>Effectively employs appropriate preceptor roles when engaged in teaching students, pharmacy technicians or fellow health care professionals</b>		
OBJ R4.2.1	(Cognitive - Analyzing) When engaged in teaching, select a preceptor role that meets learners' educational needs	Taught and Evaluated	Co-precepts another learner. Distinguishes which preceptor role is applicable for the situation (direct instruction, modeling, coaching, facilitating).
OBJ R4.2.2	(Cognitive - Applying) Effectively employ preceptor roles, as appropriate	Taught and Evaluated	Coach, including effective use of verbal guidance, feedback, and questioning, as needed. Facilitate, when appropriate, by allowing learner independence when ready and using indirect monitoring of performance. Instruct students, technicians, or others, as appropriate. Model skills, including "thinking out loud," so learners can "observe" critical thinking skills.
<b>Goal E5.1</b>	<b>Participate in the management of medical emergencies</b>		
OBJ E5.1.1	(Cognitive - Applying) Exercise skill as a team member in the management of medical emergencies according to the organization's policies and procedures	Taught and Evaluated	Adhere to ACLS, PALS, ATLS guidelines as appropriate during medical emergencies. Respond to medical emergencies and act in the role of an emergency medicine pharmacist.

**Evaluations:**

	Evaluator	Evaluated	Timing
Summative Evaluation	All Preceptors	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed
ASHP Learning Experience Evaluation	Residents	Learning Experience	Ending and Quarterly if Needed
ASHP Preceptor Evaluation	Residents	All Preceptors of this Learning Experience	Ending and Quarterly if Needed
Summative Evaluation	Residents	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed

Faculty: Kane, Christine

**Site:**

University of Virginia Health System

**Status:** Active

Not Required

**Description:**

General Pediatrics is a five-week acute care specialty learning experience for PGY1 pharmacy residents. There is one general pediatric medicine teaching and rounding team which encompasses pulmonology and one general pediatric medicine teaching and rounding team (REC) which encompasses cardiology, endocrinology, and nephrology. The general pediatric medicine teaching team consists of an attending physician, 1 PGY2 or PGY3 pediatric medical resident, 2 PGY1 medical residents, 2 or more PY3 or PY4 medical students, a chief pediatric resident, a discharge coordinator, the bedside nurse, and a clinical pharmacist. The pharmacy resident will become fully integrated into the general pediatric medicine interdisciplinary teams, round on a daily basis, and focus on management of drug therapy in pediatric patients with multiple medical problems.

The pediatric clinical pharmacists including the pharmacy resident are responsible for ensuring safe and effective medication use for all patients admitted to the team. Routine responsibilities include: pharmacokinetic drug monitoring, anticoagulation, drug information, order verification, discharge planning/care coordination, immunization review, medication reconciliation with transitions of care, and education to healthcare professionals as well as patients and caregivers, if requested.

**Disease States**

Common disease states in which the resident will be expected to gain proficiency through direct patient care experience for common diseases including, but not limited to:

- Respiratory Disorders
  - Cystic fibrosis, asthma, bronchiolitis
- Endocrinologic Disorders
  - Diabetes, diabetic ketoacidosis
- Renal Disorders
  - Acute kidney insufficiency, chronic kidney insufficiency, hypertension, interstitial nephritis, renal tubular acidosis, hemolytic uremic syndrome
- Infectious Disease Disorders
  - Bacteremia, urinary tract infection, otitis media, pneumonia, sepsis, meningitis, skin and soft tissue infections, appendicitis, osteomyelitis, RSV
- Neurologic Disorders
  - Seizure disorders, infantile spasms, ketogenic diet therapy
- Cardiac Disorders
  - Kawasaki, congenital heart disease

Topic discussions and reading key articles will be used to help develop the resident's patient care skills for common disease states or acquiring knowledge about diseases seen infrequently on the service.

During the learning experience the resident will focus on the goals and objectives outlined below by

performing the activities that are associated with each objective. The resident will gradually assume responsibility for all of the patients within the assigned rounding service. The PGY1 resident must devise efficient strategies for accomplishing the required activities in a limited time frame.

Achievement of the goals of the residency is determined through assessment of ability to perform the associated objectives. The table below demonstrates the relationship between the activities and the goals/objectives assigned to the learning experience.

### **Expectation of Learners:**

#### **Preceptor Interaction**

Daily:

*Before 8:30* - Pre-rounds (preceptor available for questions during this time)

*8:30 – 10:30* - General pediatric medicine teaching rounds

Intermittent:

*2:00 – 3:30* - Topic Discussions and/or patient case discussion

#### **Communication:**

A. Daily scheduled meeting times: Residents to prioritize questions and problems to discuss during scheduled meeting times as listed above.

B. E-mail: Residents are expected to read e-mails at the beginning, middle and end of each day at a minimum for ongoing communication. This is appropriate for routine, non-urgent questions and problems.

C. iPhone/Pager: Resident to page or text preceptor for urgent questions pertaining to patient care.

#### **Expected progression of resident responsibility on this learning experience:**

(Length of time preceptor spends in each of the phases will be personalized based upon resident's abilities and timing of the learning experience during the residency training year)

*Day 1:* Preceptor to review learning activities and expectations with resident.

*Week 1:* Resident to work up a portion of the team's patients (number to be determined by preceptor and resident) and present to preceptor daily. Preceptor to attend and participate in team rounds with resident modeling pharmacist's role on the health care team.

*Weeks 2-5:* Each week the resident is expected to take over the responsibility of working up more of the team's patients, continuing to discuss identified problems with preceptor daily. Once the resident is able to take responsibility for all patients assigned to the team, the preceptor will no longer attend team rounds, but will continue to facilitate the resident as the pharmacist on the team.

#### **Other rotation expectations:**

Attend Pediatric Sepsis alerts and codes in the Children's Hospital or communicate with unit-based clinical pharmacist and/or preceptor if unable to attend.

Perform medication order entry (when physician otherwise occupied or therapy will otherwise be delayed), order verification, and order clarification on assigned patients.

Perform medication reconciliation upon admission, transfer, and discharge as necessary.

Perform discharge medication counseling as requested.

		<b>Activities</b>	
<b>Goal R1.1</b>	<b>In collaboration with the health care team, provide safe and effective patient care to a diverse range of patients, including those with multiple co-morbidities, high-risk medication regimens, and multiple medications following a consistent patient care process</b>		
OBJ R1.1.1	(Cognitive - Applying) Interact effectively with health care teams to manage patients' medication therapy	Taught and Evaluated	Provide recommendations on assigned patients and answer drug information questions in a timely manner. Round Daily with the general pediatrics team.
OBJ R1.1.2	(Cognitive - Applying) Interact effectively with patients, family members, and caregivers	Taught and Evaluated	Interact and communicate with team, patient, and family in a respectful and collaborative manner. Perform discharge medication counseling as requested. Perform medication reconciliation where applicable. Uphold ASPIRE values.
OBJ R1.1.3	(Cognitive - Analyzing) Collect information on which to base safe and effective medication therapy	Taught and Evaluated	Collect pertinent information for each assigned patient from electronic medical record, patient's nurse, patient's caregivers, and patient (as applicable) every morning for assigned patients and record pertinent data on a patient monitoring form.
OBJ R1.1.4	(Cognitive - Analyzing) Analyze and assess information on which to base safe and effective medication therapy	Taught and Evaluated	Discuss problems identified with preceptor prior to or after patient rounds (time to be determined by preceptor). Identify any issues with medication therapy (ie, lack of indication, condition for which no medication is prescribed, suboptimal regimen, therapeutic duplication, adverse events, interactions, social/financial barriers).
OBJ R1.1.5	(Cognitive - Creating) Design or redesign safe and effective patient-centered therapeutic regimens and monitoring plans (care plans)	Taught and Evaluated	Discuss recommendations for addressing problems with preceptor prior to or after morning rounds with team. For all patients, develop evidence-based, measurable, achievable therapeutic goals that take into consideration the patient's disease state(s), ethical issues, quality of life goals, goals of other interprofessional team members, and relevant patient-specific information including patient weight/BSA, culture, PK parameters, and personal preferences.
OBJ R1.1.6	(Cognitive - Applying) Ensure implementation of therapeutic regimens and monitoring plans (care plans) by taking appropriate follow-up actions	Taught and Evaluated	Discuss recommendations with appropriate medical team after getting approval from preceptor, if required by preceptor. Follow-up after rounds to ensure any agreed upon changes have been implemented.
OBJ R1.1.7	(Cognitive - Applying) Document direct patient care activities appropriately in the medical record or where appropriate	Taught and Evaluated	Document all medication histories in appropriate clinical notes. Document appropriate handoff to facilitate communication for off-hour levels and interventions requiring follow up. Document discharge counseling in appropriate clinical notes. Document interventions using iVents.
OBJ R1.1.8	(Cognitive - Applying) Demonstrate responsibility to patients	Taught and Evaluated	Ensure visibility to patient care team by maintaining an active presence on the unit. For all patients, ensure all identified medication-related issues are resolved by the end of the day. If cannot be resolved, ensure that any outstanding issues are communicated to the covering evening pharmacist prior to leaving for the day. Perform medication order entry (when physician otherwise occupied or therapy will otherwise be delayed), order verification, and order clarification on assigned patients. Prioritize patient care above all other tasks. Resolve existing and potential medication-related problems and obtain satisfactory resolutions to these issues.

<b>Goal R1.2</b>	<b>Ensure continuity of care during patient transitions between care settings</b>		
OBJ R1.2.1	(Cognitive - Applying) Manage transitions of care effectively	Taught and Evaluated	Assist case manager and LIPs with medication-related discharge planning needs and recommendations. Perform medication reconciliation upon admission, transfer, and discharge as necessary. Perform medication teaching when deemed necessary or requested by team. This may include medication calendars and medication wean calendars. Provide accurate and timely follow-up information when patients transfer to another facility, level of care, pharmacist, or provider. Provide referrals to patient assistance program when needed.
<b>Goal R3.1</b>	<b>Demonstrate leadership skills</b>		
OBJ R3.1.2	(Cognitive - Applying) Apply a process of on-going self-evaluation and personal performance improvement	Taught and Evaluated	Accurately summarize strengths and areas for improvement. Complete timely, reflective, and qualitative required self-evaluations. Seek and incorporate feedback from others.
<b>Goal R4.1</b>	<b>Provide effective medication and practice-related education to patients, caregivers, health care professionals, students, and the public (individuals and groups)</b>		
OBJ R4.1.2	(Cognitive - Applying) Use effective presentation and teaching skills to deliver education	Taught and Evaluated	Effectively facilitate audience participation, active learning, and engagement. Present at appropriate rate and volume and without distracting speaker habits. Provide concise, informative, and thorough case conference presentation, when assigned.
<b>Goal R4.2</b>	<b>Effectively employs appropriate preceptor roles when engaged in teaching students, pharmacy technicians or fellow health care professionals</b>		
OBJ R4.2.1	(Cognitive - Analyzing) When engaged in teaching, select a preceptor role that meets learners' educational needs	Taught and Evaluated	Co-precept another learner, when applicable. Distinguish which preceptor role is applicable for the situation (direct instruction, modeling, coaching, facilitating).
OBJ R4.2.2	(Cognitive - Applying) Effectively employ preceptor roles, as appropriate	Taught and Evaluated	Coach, including effective use of verbal guidance, feedback, and questioning, as needed. Facilitate, when appropriate, by allowing learner independence when ready and using indirect monitoring of performance. Instruct students, technicians, or others, as appropriate. Model skills, including "thinking out loud," so learners can "observe" critical thinking skills.
<b>Goal E5.1</b>	<b>Participate in the management of medical emergencies</b>		
OBJ E5.1.1	(Cognitive - Applying) Exercise skill as a team member in the management of medical emergencies according to the organization's policies and procedures	Taught and Evaluated	Attend Pediatric Sepsis alerts and codes in the Children's Hospital or communicate with unit-based clinical pharmacist and/or preceptor if unable to attend.

#### Evaluations:

	Evaluator	Evaluated	Timing
Summative Evaluation	All Preceptors	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed



ASHP Learning Experience Evaluation	Residents	Learning Experience	Ending and Quarterly if Needed
ASHP Preceptor Evaluation	Residents	All Preceptors of this Learning Experience	Ending and Quarterly if Needed
Summative Evaluation	Residents	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed

Faculty: Lynch PharmD, Lia; Morris, Amy; Sen, Jeremy; Whitman, Andrew M.

**Site:**

University of Virginia Health System

**Status:** Active

Required

**Description:****General Description**

The acute care hematology/oncology (hem/onc) rotation is available to PGY1 residents as an elective rotation or as a required acute care rotation. Residents on rotation will gain experience working with a multidisciplinary team to manage patients with hematologic disorders, oncologic emergencies, acute complications related to cancer, acute leukemia, aggressive lymphomas, and solid tumors requiring complicated or aggressive chemotherapy regimens. Knowledge of primary treatments, supportive care, and management of complications will be emphasized.

The clinical pharmacists on the team are responsible for ensuring safe and effective medication use for all patients admitted to the service. Routine responsibilities include: medication reconciliation, therapeutic drug monitoring, addressing non-formulary drug requests, prospective pharmacotherapy recommendations focusing on, but not limited to the following: anticoagulation, anti-infectives, anti-diabetic agents, and analgesics. The pharmacist also provides drug information and education to healthcare professionals as well as patients and caregivers.

**Core content** to be covered via patient experiences, discussion or reading materials, and/or case presentations include but are not limited to:

- Tumor lysis syndrome
- Neutropenic fever
- Acute leukemia
- Highly-aggressive lymphomas
- Melanoma
- Hypercalcemia
- Spinal cord compression
- Other oncologic emergencies
- Evaluation and monitoring of chemotherapeutic regimens

Topic discussions and reading key articles will be used to help develop the resident's patient care skills for common disease states or acquiring knowledge about diseases seen infrequently on the service.

During the learning experience, the resident will focus on the goals and objectives outlined below by performing the activities that are associated with each objective. The resident will gradually assume responsibility for all of the patients within the assigned unit. The PGY1 resident must devise efficient strategies for accomplishing the required activities in a limited time frame.

Achievement of the goals of the residency is determined through assessment of ability to perform the associated objectives. The table below demonstrates the relationship between the activities and the goals/objectives assigned to the learning experience.

#### **Expectation of Learners:**

##### **Preceptor Interaction**

**Daily:** 8:00 - 8:30 Pre-rounds with clinical pharmacist on the floor

Schedule time daily with preceptor for topic discussions,  
reviewing progress notes, patient updates, etc.

##### **Communication:**

- A. Daily scheduled meeting times: Residents to prioritize questions and problems to discuss during scheduled meeting times as listed above.
- B. E-mail: Residents are expected to read e-mails for ongoing communication. This is appropriate for routine, non-urgent questions and issues.
- C. UVa iPhone/pager: Residents to page/text preceptor for urgent situations pertaining to patient care
- D. Personal phone number: Provided to resident at time of learning experience for emergency issues.

##### **Expected progression of resident responsibility on this learning experience:**

(Length of time preceptor spends in each of the phases will be personalized based upon resident's abilities and timing of the learning experience during the residency training year)

Day 1: Preceptor to review learning activities and expectations with resident.

Week 1: Resident to work up a portion of the team's patients (as determined by the resident and preceptor) and present to preceptor daily. Preceptor to attend and participate in team rounds with resident, modeling pharmacist's role on the health care team.

Week 2: Each week the resident is expected to take over the responsibility of working up more of the team's patients, continuing to discuss identified problems with preceptor daily with the goal of covering the respective team pager by the end of week 2. Preceptor to attend team rounds with resident, coaching the resident to take on more responsibilities as the pharmacist on the team.

Weeks 3-5: Each week the resident is expected to take over the responsibility of working up all of the team's patients (as appropriate based on resident and preceptor comfort), continuing to discuss identified problems with preceptor daily. Once the resident is able to take responsibility for all patients assigned to the team, the preceptor will no longer attend team rounds, but will continue to facilitate the resident as the pharmacist on the team.

### Evaluation

The frequency of evaluations and corresponding documentation requirements can be found in the "Evaluations" grid at the end of each learning experience description.

- ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ All evaluations are to be completed by the last day of the learning experience (and no more than one week after the conclusion of the experience).
- ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ Evaluations are signed/ co-signed only after discussed in a summative evaluation meeting between the preceptor and resident.
- ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ Resident self-evaluations are completed until objective R3.1.2 has been deemed by the RPD as ACHR
- ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ Frequent, immediate, specific, and constructive verbal feedback regarding performance is provided to the resident throughout the rotation.

		<b>Activities</b>	
<b>Goal R1.1</b>	<b>In collaboration with the health care team, provide safe and effective patient care to a diverse range of patients, including those with multiple co-morbidities, high-risk medication regimens, and multiple medications following a consistent patient care process</b>		
OBJ R1.1.1	(Cognitive - Applying) Interact effectively with health care teams to manage patients' medication therapy	Taught and Evaluated	Be prepared to provide evidence based recommendations on assigned patients and answer drug information questions in a timely manner. Participate in daily rounds with assigned heme/SCT or med onc team.

OBJ R1.1.2	(Cognitive - Applying) Interact effectively with patients, family members, and caregivers	Taught and Evaluated	Interacts and communicates with team, patient, and family in a respectful and collaborative manner. Perform discharge counselling for all stem cell transplant patients and other oncology patients upon request. Upholds ASPIRE values.
OBJ R1.1.3	(Cognitive - Analyzing) Collect information on which to base safe and effective medication therapy	Taught and Evaluated	Determine pertinent information to collect for each assigned patient from medical record, patient's nurse, and patient (as applicable) daily for assigned patients. Maintain and prioritize an active problem list for each patient
OBJ R1.1.4	(Cognitive - Analyzing) Analyze and assess information on which to base safe and effective medication therapy	Taught and Evaluated	Be prepared to discuss problems identified with preceptor prior to rounds. Identify any issues with medication therapy (ie, lack of indication, condition for which no medication is prescribed, suboptimal regimen, therapeutic duplication, adverse events, interactions, social/financial barriers) Review and evaluate the primary literature for all chemotherapy treatment plans assigned to your patients.
OBJ R1.1.5	(Cognitive - Creating) Design or redesign safe and effective patient-centered therapeutic regimens and monitoring plans (care plans)	Taught and Evaluated	Be prepared to discuss recommendations for addressing problems with preceptor prior to morning rounds with team. Ensure patient care plans are supported by primary literature and appropriate professional organization practice guidelines such as NCCN, ASCO, ASBMT, and IDSA. For all patients, develop evidence-based, measurable, achievable therapeutic goals that take into consideration the patient's disease state(s), ethical issues, quality of life, goals of other interprofessional team members, and relevant patient-specific information including culture and preferences.
OBJ R1.1.6	(Cognitive - Applying) Ensure implementation of therapeutic regimens and monitoring plans (care plans) by taking appropriate follow-up actions	Taught and Evaluated	Discuss recommendations with team. Follow-up after rounds to ensure any agreed upon changes have been implemented.
OBJ R1.1.7	(Cognitive - Applying) Document direct patient care activities appropriately in the medical record or where appropriate	Taught and Evaluated	Document interventions using ivents or other appropriate notes/phone communicaitons in the medical record.
OBJ R1.1.8	(Cognitive - Applying) Demonstrate responsibility to patients	Taught and Evaluated	Ensure visibility to patient care team by maintaining an active presence on the unit. For all patients, ensure all identified medication-related issues are resolved by the end of the day. If cannot be resolved, ensure that any outstanding issues are communicated to evening pharmacy prior to leaving for the day. Prioritize patient care above all other tasks.
<b>Goal R1.2</b>	<b>Ensure continuity of care during patient transitions between care settings</b>		
OBJ R1.2.1	(Cognitive - Applying) Manage transitions of care effectively	Taught and Evaluated	Develop a discharge plan for all patients (this process begins upon admission) and inform case manager and team of high cost/high risk discharge prescriptions or other patient specific medication or educational needs. Provide accurate and timely follow-up information when patients transfer to another facility, level of care, pharmacist, or provider.
<b>Goal R3.1</b>	<b>Demonstrate leadership skills</b>		
OBJ R3.1.2	(Cognitive - Applying) Apply a process of on-going self-evaluation and personal performance improvement	Taught and Evaluated	Accurately summarizes strengths and areas for improvement. Perform timely, reflective, and qualitative self-evaluations. Seeks and incorporates feedback from others.

<b>Goal R4.1</b>	<b>Provide effective medication and practice-related education to patients, caregivers, health care professionals, students, and the public (individuals and groups)</b>		
OBJ R4.1.2	(Cognitive - Applying) Use effective presentation and teaching skills to deliver education	Taught and Evaluated	Effectively facilitates audience participation, active learning, and engagement Presents at appropriate rate and volume and without distracting speaker habits Provide concise, informative, and thorough case conference presentation, when assigned
<b>Goal R4.2</b>	<b>Effectively employs appropriate preceptor roles when engaged in teaching students, pharmacy technicians or fellow health care professionals</b>		
OBJ R4.2.1	(Cognitive - Analyzing) When engaged in teaching, select a preceptor role that meets learners' educational needs	Taught and Evaluated	Co-precepts another learner. Distinguishes which preceptor role is applicable for the situation (direct instruction, modeling, coaching, facilitating).
OBJ R4.2.2	(Cognitive - Applying) Effectively employ preceptor roles, as appropriate	Taught and Evaluated	Coach, including effective use of verbal guidance, feedback, and questioning, as needed. Facilitate, when appropriate, by allowing learner independence when ready and using indirect monitoring of performance. Instruct students, technicians, or others, as appropriate. Model skills, including "thinking out loud," so learners can "observe" critical thinking skills.

#### Evaluations:

	Evaluator	Evaluated	Timing
Summative Evaluation	All Preceptors	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed
ASHP Learning Experience Evaluation	Residents	Learning Experience	Ending and Quarterly if Needed
ASHP Preceptor Evaluation	Residents	All Preceptors of this Learning Experience	Ending and Quarterly if Needed
Summative Evaluation	Residents	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed

Faculty: Cox Hall, Heather L.; Donohue, Lindsay E.; Elliott, Zachary; Hill, Brandon; Shah, Megan

**Site:**

University of Virginia Health System

**Status:** Active

Required

**Description:**

Adult Infectious Diseases (ID) is a five-week acute care specialty rotation for pharmacy residents that provides exposure to several domains of ID pharmacist practice. During this team-taught rotation, the resident will participate in pharmacist-led direct patient care within the Antimicrobial Stewardship and OPAT (outpatient parenteral antimicrobial therapy) services, followed by traditional multidisciplinary care within one of the adult ID consultation teaching teams.

Antimicrobial stewardship oversees formulary restriction and preauthorization activities in addition to providing real-time intervention in response to new microbiology results. Residents will assess use of unapproved or expiring restricted agents for appropriateness and respond to new positive cultures and rapid diagnostic results upon request. Retrospective assessment of antecedent antibiotic appropriateness for new cases of nosocomial *C. difficile* is also performed when prompted by the BeSafe dashboard.

The OPAT service enrolls patients prior to discharge and follows ID-related issues until completion of IV antimicrobial therapy. Daily activities, including interdisciplinary rounds, are run collaboratively by an NP and ID pharmacist with ID physician oversight. Residents will evaluate patients for enrollment, complete intake notes in Epic, present patients on rounds, and assist in coordinating care for outpatients with adverse effects or other barriers to successful completion of therapy.

The General ID consult team includes an attending physician, an ID pharmacist, 2 ID Fellows, and medical residents and students. Pharmacist team members participate in interdisciplinary care rounds, providing daily pre-rounds profile review (including diagnostic procedures, laboratory results, and past medical history) to assess appropriateness of antimicrobial therapy. The following elements should be considered in considering selection and duration: allergies, drug interaction potential, spectrum, microbiology, prior antimicrobial use convenience, shortages, home health implications, national/local guidelines, primary literature, cost, etc. Antimicrobial dosage/schedule must be pro-actively assessed given considerations such as infecting pathogen, site, indication, organ function/dialysis modality, height/weight, desired pharmacodynamic parameter optimization, etc.

**Core Content**

Core content which will be covered via patient experiences, discussions of reading materials, ID didactic lectures, and/or case presentations generally includes:

- Antimicrobial stewardship/principles of antimicrobial use

- ☐ Bone and joint infections
- ☐ Catheter-related bloodstream infections
- ☐ CNS infections
- ☐ Endovascular infections
- ☐ Intra-abdominal infections
- ☐ Invasive fungal infections
- ☐ Mechanisms of resistance/microbial pathogenesis
- ☐ Microbiological methods/susceptibility testing
- ☐ Pneumonia (community-acquired, healthcare-associated, hospital-acquired, ventilator-associated)
- ☐ Skin and skin structure/surgical site infections

Relevant antimicrobial classes and may be addressed in conjunction with case/topic discussions and it is expected that residents will independently review relevant antimicrobial pharmacology in addition to assigned readings. Additional topics for discussion may be decided upon based on resident interest, and/or when they present themselves in patient care discussions.

During the learning experience the resident will focus on the goals and objectives outlined below by performing the activities that are associated with each objective. The PGY1 resident must devise efficient strategies for accomplishing the required activities in a limited time frame. Achievement of the goals of the residency is determined through assessment of ability to perform the associated objectives. The table below demonstrates the relationship between the activities and the goals/objectives assigned to the learning experience.



## **Expectation of Learners:**

### **Daily preceptor interaction**

#### *ASP/OPAT*

Intermittently throughout the day. OPAT rounding times vary by attending. It is recommended to discuss the anticipated schedule with the preceptor at the beginning and end of each business day.

#### *ID Consult Service*

**Before 10:00am:** Pre-rounds (preceptor available for questions during this time).

**10:00 - noon:** ID teaching rounds

**Noon - 1pm:** ID Conference (most days)

Schedule time (usually daily) with preceptor for patient and topic discussions. Note that patient care needs will take priority over scheduled learning activities should urgent issues arise.

### **Communication:**

A. Daily scheduled meeting times: Residents to prioritize questions and problems to discuss during scheduled meeting times as listed above.

B. E-mail: Residents are expected to read e-mails at the beginning, middle and end of each day at a minimum for ongoing communication. This is appropriate for routine, non-urgent questions and problems. Close, frequent attention to email during ASP and OPAT experiences is critical.

C. iPhone/Pager: Resident to page or text preceptor for urgent questions pertaining to patient care.

### **Expected progression of resident responsibility on this learning experience:**

(Length of time preceptor spends in each of the phases will be personalized based upon resident's abilities and timing of the learning experience during the residency training year)

Day 1: Preceptor to review learning activities and expectations with resident. Discuss schedule and mentors for each component of the rotation.

Week 1-2 (ASP/OPAT): Resident to work up assigned patients and present to preceptor in real-time. Preceptor to attend and participate in team activities with resident, modeling pharmacist's role on the team. Resident to increasingly take responsibility for communication of pharmacotherapy interventions. Become adept at navigating and communicating anti-infective policies and procedures in advance of consult service participation.

Week 3: Begin ID consult service, following one of the fellows' lists. The preceptor will attend rounds and model the pharmacist role. The resident should focus on thorough patient work up and associated patient presentations that include clear, evidence-based plans for anti-infective use. Once the preceptor determines that the resident is prepared for autonomous rounding, the preceptor will no longer attend team rounds, but will continue to facilitate the resident as the pharmacist on the team.

Week 4-5: The resident should take ownership of communicating interventions to the assigned fellows' patients with preceptor coaching and facilitation. Depending on patient census and timing within the year, the preceptor may permit autonomous rounding either continuously or intermittently. Regardless, the resident should continue to mature his/her patient presentations and associated pharmacotherapeutic plans.

### **Evaluation**

The frequency of evaluations and corresponding documentation requirements can be found in the "Evaluations" grid at the end of each learning experience description.

- All evaluations are to be completed by the last day of the learning experience (and no more than one week after the conclusion of the experience).
- Evaluations are signed/ co-signed only after discussed in a summative evaluation meeting between the preceptor and resident.
- Resident self-evaluations are completed until objective R3.1.2 has been deemed by the RPD as ACHR
- Frequent, immediate, specific, and constructive verbal feedback regarding performance is provided to the resident throughout the rotation.

		<b>Activities</b>	
<b>Goal R1.1</b>	<b>In collaboration with the health care team, provide safe and effective patient care to a diverse range of patients, including those with multiple co-morbidities, high-risk medication regimens, and multiple medications following a consistent patient care process</b>		
OBJ R1.1.1	(Cognitive - Applying) Interact effectively with health care teams to manage patients' medication therapy	Taught and Evaluated	Attend and evaluate material discussed during weekly ID case/didactic conferences, HIV/transplant ID lectures, and ID journal club. Consult with the pharmacist overseeing the patient's care on the primary team and other members of the multidisciplinary team as needed to clarify and resolve medication-related problems. Establish a position as a contributing infectious diseases consult team member and develop good report with members of the team by showing respect and demonstrating sound clinical knowledge and responsibility for recommendations and actions. Integrate elements of professional maturity, judgement, responsibility, and dedication in all work and communication with health-care members and patients. Uphold ASPIRE values
OBJ R1.1.3	(Cognitive - Analyzing) Collect information on which to base safe and effective medication therapy	Taught and Evaluated	Identify the reason for ID consultation Review the patient's medical record and laboratory parameters , as needed. This should include knowledge of reports from radiology, echocardiography, pathology, etc. where appropriate to resolve medication-related problems.

OBJ R1.1.4	(Cognitive - Analyzing) Analyze and assess information on which to base safe and effective medication therapy	Taught and Evaluated	Analyze patient medication profiles daily, emphasizing the following areas: Indication for all current/recent antimicrobials; Indication for all prophylactic medications and immunosuppressants; Appropriateness of dose/route/schedule; Elimination of therapeutic duplication; Therapy omissions; Regimen duration; Detection of drug-drug, drug-food, or drug-allergy interactions; Detection of treatment-related adverse events; ALL recent reports from microbiology. Be prepared to discuss problems identified with preceptor prior to or after patient rounds (time to be determined by preceptor). If formal rounds do not occur, review and assess ID progress notes to ensure knowledge and appropriateness of team recommendations.
OBJ R1.1.5	(Cognitive - Creating) Design or redesign safe and effective patient-centered therapeutic regimens and monitoring plans (care plans)	Taught and Evaluated	For all patients, develop evidence-based, measurable, achievable therapeutic goals that take into consideration the patient's co-morbid conditions, outcomes of previous therapies, ethical issues, quality of life, goals of other interprofessional team members, and other relevant patient-specific information Identify efficacy and safety monitoring parameters for all antimicrobials. Integrate knowledge gained from primary literature and IDSA practice guideline review into the design of the therapeutic regimen. Produce individualized medication regimens for patients with drugs that require therapeutic drug monitoring.
OBJ R1.1.6	(Cognitive - Applying) Ensure implementation of therapeutic regimens and monitoring plans (care plans) by taking appropriate follow-up actions	Taught and Evaluated	Follow-up after rounds to ensure any agreed upon changes have been implemented. Perform comprehensive therapeutic drug monitoring for all applicable antimicrobials in consultation with primary team pharmacists. Use good interpersonal and collaborative skills to achieve a consensus from both the ID consult and primary team for recommendations made.
OBJ R1.1.7	(Cognitive - Applying) Document direct patient care activities appropriately in the medical record or where appropriate	Taught and Evaluated	Document patient encounters appropriately in Epic, including all pertinent information Select relevant therapeutic interventions, allergies, adverse drug reactions, and medication errors for documentation in the appropriate electronic system. Utilize EPIC i-Vents and sign-out procedures to communicate pertinent clinical information to other pharmacists.
OBJ R1.1.8	(Cognitive - Applying) Demonstrate responsibility to patients	Taught and Evaluated	Prioritize daily tasks such that patient care is first and not neglected or issues at hand are passed along to the preceptor or someone else. Resolve any outstanding medication problems by the end of the work day and when not possible, have an explanation as to why the issue cannot be resolved.
<b>Goal R1.2</b>	<b>Ensure continuity of care during patient transitions between care settings</b>		
OBJ R1.2.1	(Cognitive - Applying) Manage transitions of care effectively	Taught and Evaluated	Analyze and select the most pertinent information to pass along to colleagues, such as medication histories, current and previous antimicrobial therapy histories, microbiological results, antimicrobial drug levels/goals, drug allergy information, and drug-induced adverse effect details. Communicate pertinent information with covering clinical pharmacist for patients admitted from clinic.
<b>Goal R3.1</b>	<b>Demonstrate leadership skills</b>		
OBJ R3.1.2	(Cognitive - Applying) Apply a process of on-going self-evaluation and personal performance improvement	Taught and Evaluated	Complete all required self-evaluations Perform timely, reflective, and qualitative self-evaluations. Seek and incorporate feedback from others

<b>Goal R4.1</b>	<b>Provide effective medication and practice-related education to patients, caregivers, health care professionals, students, and the public (individuals and groups)</b>		
OBJ R4.1.1	(Cognitive - Applying) Design effective educational activities	Taught and Evaluated	Accurately defines learning needs (level, such as healthcare professional vs patient, and learning gaps) Plans use of teaching strategies that match learner needs (handouts, pictures)
OBJ R4.1.2	(Cognitive - Applying) Use effective presentation and teaching skills to deliver education	Taught and Evaluated	Effectively facilitate audience participation, active learning, and engagement Prepare and provide patient presentations in standard medical format (CC, HPI, PMH, FH, SH, Allergies, Meds, ROS/PE, Labs/Cultures, Radiology) and demonstrate clear understanding of the patient's drug-related problems and treatment course. Present at appropriate rate and volume and without distracting speaker habits Provide concise, informative, and thorough case conference presentation, when assigned
<b>Goal R4.2</b>	<b>Effectively employs appropriate preceptor roles when engaged in teaching students, pharmacy technicians or fellow health care professionals</b>		
OBJ R4.2.1	(Cognitive - Analyzing) When engaged in teaching, select a preceptor role that meets learners' educational needs	Taught and Evaluated	Co-precept another learner, when applicable Distinguish which preceptor role is applicable for the situation (direct instruction, modeling, coaching, facilitating).
OBJ R4.2.2	(Cognitive - Applying) Effectively employ preceptor roles, as appropriate	Taught and Evaluated	Coach, including effective use of verbal guidance, feedback, and questioning, as needed. Facilitate, when appropriate, by allowing learner independence when ready and using indirect monitoring of performance. Instruct students, technicians, or others, as appropriate. Model skills, including "thinking out loud," so learners can "observe" critical thinking skills.

#### Evaluations:

	Evaluator	Evaluated	Timing
Summative Evaluation	All Preceptors	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed
ASHP Learning Experience Evaluation	Residents	Learning Experience	Ending and Quarterly if Needed
ASHP Preceptor Evaluation	Residents	All Preceptors of this Learning Experience	Ending and Quarterly if Needed
Summative Evaluation	Residents	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed

Faculty: Kelsey, Julie J.

**Site:**

University of Virginia Health System

**Status:** Active

Not Required

**Description:**

The Obstetrics/Family Medicine serves as a 5 week acute care specialty elective learning experience for PGY1-pharmacy residents. The Obstetric Service consists of a high risk OB attending (MFM), a generalist OB attending, a 3rd or 4th year OB/GYN resident a 2nd year OB/GYN resident, an OB/GYN intern, a Family Medicine intern and a clinical pharmacist. The Family Medicine Service is made up of a 1st, 2nd and 3rd year Family Medicine residents, one attending and a clinical pharmacist.

The team pharmacist is fully integrated into the Family Medicine team, rounds on a daily basis, and focuses on management of drug therapy in patients with multiple medical problems. The pharmacist also follows the high risk obstetric patients. The pharmacist is responsible for ensuring safe and effective medication use for all patients admitted to the team. Routine responsibilities include: pharmacokinetic drug monitoring, anticoagulation, drug information, order verification, discharge planning/care coordination, and education to healthcare professionals as well as patients and caregivers, if requested

**Disease States**

Common disease states in which the resident will be expected to gain proficiency through direct patient care experience for common diseases including, but not limited to:

- Obstetric conditions

- o Chronic disease management, infections during pregnancy, labor, and postpartum, hypertensive disorders of pregnancy, gestational diabetes, other pregnancy induced conditions (i.e. hyperemesis, preterm labor, premature rupture of membranes)

- Gynecologic conditions

- o Gynecologic infections, ectopic pregnancy, abnormal uterine bleeding

- Renal disorders

- o Acute kidney insufficiency, chronic kidney disease, end-stage renal disease

- Respiratory disorders

- o COPD, asthma
- Endocrinologic disorders
- o Diabetes Mellitus, thyroid disorders
- Infectious diseases
- o UTI, pneumonia, endocarditis, sepsis, skin and soft tissue infections, bone and joint infections

Topic discussions and reading key articles will be used to help develop the resident's patient care skills for common disease states or acquiring knowledge about diseases seen infrequently on the service.

During the learning experience the resident will focus on the goals and objectives outlined below by performing the activities that are associated with each objective. The resident will gradually assume responsibility for all of the patients within the assigned rounding service. The PGY1 resident must devise efficient strategies for accomplishing the required activities in a limited time frame.

Achievement of the goals of the residency is determined through assessment of ability to perform the associated objectives. The table below demonstrates the relationship between the activities and the goals/objectives assigned to the learning experience.

#### **Expectation of Learners:**

#### **Preceptor Interaction**

<b>Daily:</b>	8:00	Obstetric rounds (except Wednesdays)
	~8:30 - 9:00	Available time for pre-rounds for Family Medicine
	9:00 - 10:30	FM teaching rounds

Schedule time daily with preceptor for topic discussions, reviewing progress notes, patient updates, etc.

#### **Communication:**

A. Daily scheduled meeting times: Residents to prioritize questions and problems to discuss during scheduled meeting times and between rounds.

B. E-mail: Residents are expected to read e-mails at the beginning, middle and end of each day at a minimum for ongoing communication. This is appropriate for routine, non-urgent questions and problems.

C. iPhone/Pager: Resident to page or text preceptor for urgent questions pertaining to patient care.

D. Personal phone number: Provided to resident at time of learning experience for emergency issues.

**Expected progression of resident responsibility on this learning experience:**

(Length of time preceptor spends in each of the phases will be personalized based upon resident's abilities and timing of the learning experience during the residency training year)

Day 1: Preceptor to review learning activities and expectations with resident.

Week 1-2: Resident to work up a portion of the team's patients (number to be determined by team patient load) and present to preceptor daily. Preceptor to attend and participate in team rounds with resident modeling pharmacist's role on the health care team. Preceptor will attend rounds with Obstetric team daily.

Weeks 3-5: Each week the resident is expected to take over the responsibility of working up more of the team's patients, continuing to discuss identified problems with preceptor daily. Once the resident is able to take responsibility for all patients assigned to the team, the preceptor will no longer attend team rounds, but will continue to facilitate the resident as the pharmacist on the team. The preceptor will continue to attend Obstetric rounds.

**Evaluation**

The frequency of evaluations and corresponding documentation requirements can be found in the "Evaluations" grid at the end of each learning experience description.

- ☐☐ All evaluations are to be completed by the last day of the learning experience (and no more than one week after the conclusion of the experience).
- ☐☐ Evaluations are signed/ co-signed only after discussed in a summative evaluation meeting between the preceptor and resident.
- ☐☐ Resident self-evaluations are completed until objective R3.1.2 has been deemed by the RPD as ACHR
- ☐☐ Frequent, immediate, specific, and constructive verbal feedback regarding performance is provided to the resident throughout the rotation.

		<b>Activities</b>	
<b>Goal R1.1</b>	<b>In collaboration with the health care team, provide safe and effective patient care to a diverse range of patients, including those with multiple co-morbidities, high-risk medication regimens, and multiple medications following a consistent patient care process</b>		
OBJ R1.1.1	(Cognitive - Applying) Interact effectively with health care teams to manage patients' medication therapy	Taught and Evaluated	Be prepared to provide recommendations on assigned patients and answer drug information questions in a timely manner. Participate in daily rounds with Obstetrics and Family Medicine teams.
OBJ R1.1.2	(Cognitive - Applying) Interact effectively with patients, family members, and caregivers	Taught and Evaluated	Interact and communicate with team, patient, and family in a respectful and collaborative manner. Obtain admitting medication histories and perform medication reconciliation as requested. Perform discharge medication counseling as requested. Uphold ASPIRE values.
OBJ R1.1.3	(Cognitive - Analyzing) Collect information on which to base safe and effective medication therapy	Taught and Evaluated	Collect pertinent information for each assigned patient from medical record, patient's nurse, and patient (as applicable) every morning for assigned patients and record pertinent data on a patient monitoring form.
OBJ R1.1.4	(Cognitive - Analyzing) Analyze and assess information on which to base safe and effective medication therapy	Taught and Evaluated	Be prepared to discuss problems identified with preceptor after patient rounds. Identify any issues with medication therapy (ie, lack of indication, condition for which no medication is prescribed, suboptimal regimen, therapeutic duplication, adverse events, interactions, social/financial barriers).
OBJ R1.1.5	(Cognitive - Creating) Design or redesign safe and effective patient-centered therapeutic regimens and monitoring plans (care plans)	Taught and Evaluated	Be prepared to discuss recommendations for addressing problems with preceptor after morning rounds with team. For all patients, develop evidence-based, measurable, achievable therapeutic goals that take into consideration the patient's disease state(s), ethical issues, quality of life, goals of other interprofessional team members, and relevant patient-specific information including culture and preferences.
OBJ R1.1.6	(Cognitive - Applying) Ensure implementation of therapeutic regimens and monitoring plans (care plans) by taking appropriate follow-up actions	Taught and Evaluated	Discuss recommendations with family medicine or obstetric team after getting approval from preceptor, if required by preceptor. Follow-up after rounds to ensure any agreed upon changes have been implemented.
OBJ R1.1.7	(Cognitive - Applying) Document direct patient care activities appropriately in the medical record or where appropriate	Taught and Evaluated	Document interventions using iVents.
OBJ R1.1.8	(Cognitive - Applying) Demonstrate responsibility to patients	Taught and Evaluated	Ensure visibility to patient care team by maintaining an active presence on the unit. For all patients, ensure all identified medication-related issues are resolved by the end of the day. If cannot be resolved, ensure that any outstanding issues are communicated to evening pharmacist prior to leaving for the day via direct communication and One Note. Perform medication order entry (when physician otherwise occupied or therapy will otherwise be delayed), order verification, and order clarification on assigned patients. Prioritize patient care above all other tasks. Resolve existing and potential medication-related problems until satisfactory resolution is obtained.



<b>Goal R1.2</b>	<b>Ensure continuity of care during patient transitions between care settings</b>		
OBJ R1.2.1	(Cognitive - Applying) Manage transitions of care effectively	Taught and Evaluated	Assist case manager and LIPs with medication-related discharge planning needs and recommendations. Provide accurate and timely follow-up information when patients transfer to another facility, level of care, pharmacist, or provider. Provide referrals to patient assistance program when needed.
<b>Goal R3.1</b>	<b>Demonstrate leadership skills</b>		
OBJ R3.1.2	(Cognitive - Applying) Apply a process of on-going self-evaluation and personal performance improvement	Taught and Evaluated	Accurately summarize strengths and areas for improvement. Perform timely, reflective, and qualitative self-evaluations. Seek and incorporate feedback from others.
<b>Goal R4.1</b>	<b>Provide effective medication and practice-related education to patients, caregivers, health care professionals, students, and the public (individuals and groups)</b>		
OBJ R4.1.2	(Cognitive - Applying) Use effective presentation and teaching skills to deliver education	Taught and Evaluated	Effectively facilitate audience participation, active learning, and engagement. Present at appropriate rate and volume and without distracting speaker habits. Provide concise, informative, and thorough case conference presentation, when assigned.
<b>Goal R4.2</b>	<b>Effectively employs appropriate preceptor roles when engaged in teaching students, pharmacy technicians or fellow health care professionals</b>		
OBJ R4.2.1	(Cognitive - Analyzing) When engaged in teaching, select a preceptor role that meets learners' educational needs	Taught and Evaluated	Co-precept another learner, when applicable. Distinguish which preceptor role is applicable for the situation (direct instruction, modeling, coaching, facilitating).
OBJ R4.2.2	(Cognitive - Applying) Effectively employ preceptor roles, as appropriate	Taught and Evaluated	Coach, including effective use of verbal guidance, feedback, and questioning, as needed. Facilitate, when appropriate, by allowing learner independence when ready and using indirect monitoring of performance. Instruct students, technicians, or others, as appropriate. Model skills, including "thinking out loud," so learners can "observe" critical thinking skills.
<b>Goal E5.1</b>	<b>Participate in the management of medical emergencies</b>		
OBJ E5.1.1	(Cognitive - Applying) Exercise skill as a team member in the management of medical emergencies according to the organization's policies and procedures	Taught and Evaluated	Attend SIRS/SPRINT alerts on assigned patients or communicate with unit-based clinical pharmacist and preceptor if unable to attend.

#### Evaluations:

	Evaluator	Evaluated	Timing
Summative Evaluation	All Preceptors	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed
ASHP Preceptor Evaluation	Residents	All Preceptors of this Learning Experience	Ending and Quarterly if Needed
ASHP Learning Experience Evaluation	Residents	Learning Experience	Ending and Quarterly if Needed

Summative Evaluation	Residents	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed
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Faculty: Chen, Emily

**Site:**

University of Virginia Health System

**Status:** Active

Not Required

**Description:****General Description**

Pediatric Hematology/Oncology (hem/onc) is a five-week acute care specialty learning experience for PGY1 pharmacy residents. The PGY1 pharmacy resident will need to demonstrate experience in general pediatrics before being fully integrated into the pediatric hem/onc service. The hem/onc pediatric medicine teaching and rounding team also covers pediatric gastroenterology patients. The pediatric hem/onc medicine teaching team consists of an attending physician, 1 PGY2 or PGY3 pediatric medical residents, 1 PGY1 medical resident, 1 or more PY3 or PY4 medical students, a hem/onc nurse practitioner, the bedside nurse, and a clinical pharmacist. The pharmacy resident will be integrated into the pediatric hem/onc medicine interdisciplinary team, round on a daily basis, and focus on management of drug therapy in pediatric hem/onc patients with multiple medical problems. Knowledge of primary treatments, supportive care, and management of complications will be emphasized.

The pediatric clinical pharmacists including the pharmacy resident are responsible for ensuring safe and effective medication use for all patients admitted to the team. Routine responsibilities include: pharmacokinetic drug monitoring, anticoagulation, drug information, order verification which may include chemotherapy, medication reconciliation, transitions of care education, discharge planning/care coordination, and education to healthcare professionals as well as patients and caregivers, if requested. Pharmacotherapy recommendations focus on, but are not limited to the management of: pain, antibiotic, supportive care, and drug interactions. The pharmacist also provides drug information and education to healthcare professionals as well and patients and caregivers.

**Disease States**

Common disease states in which the resident will be expected to gain proficiency through direct patient care experience for common diseases including, but not limited to:

- Leukemia/Lymphoma
  - ALL, AML, Hodgkins and Non Hodgkins Lymphoma
- Neuroblastoma
- Sarcoma
- Hemophilia
- Osteosarcoma
- Rhabdomyosarcoma
- Retinoblastoma
- Sickle Cell Disease
- Tumor Lysis Syndrome
- Febrile Neutropenia

- Oncologic Emergencies

Topic discussions and reading key articles will be used to help develop the resident's patient care skills for common disease states or acquiring knowledge about diseases seen infrequently on the service.

During the learning experience the resident will focus on the goals and objectives outlined below by performing the activities that are associated with each objective. The resident will gradually assume responsibility for all of the patients within the assigned rounding service. The PGY1 resident must devise efficient strategies for accomplishing the required activities in a limited time frame.

Achievement of the goals of the residency is determined through assessment of ability to perform the associated objectives. The table below demonstrates the relationship between the activities and the goals/objectives assigned to the learning experience.

#### **Expectation of Learners:**

#### **Preceptor Interaction**

##### **Daily:**

- Before 8:30 Pre-rounds (preceptor available for questions during this time)
- 8:30 - 10:30 Pediatric hem/onc medicine teaching rounds

##### **Intermittent:**

- 2:00 - 3:30 Topic Discussions and/or patient case discussion

#### **Communication:**

A. Daily scheduled meeting times: Residents to prioritize questions and problems to discuss during scheduled meeting times as listed above.

B. E-mail: Residents are expected to read e-mails at the beginning, middle and end of each day at a minimum for ongoing communication. This is appropriate for routine, non-urgent questions and problems.

C. iPhone/Pager: Resident to page or text preceptor for urgent questions pertaining to patient care.

#### **Expected progression of resident responsibility on this learning experience:**

(Length of time preceptor spends in each of the phases will be personalized based upon resident's abilities and timing of the learning experience during the residency training year)

##### **Day 1:**

Preceptor to review learning activities and expectations with resident.

## Week 1:

Resident to work up a portion of the team's patients (number to be determined by preceptor and resident) and present to preceptor daily. Preceptor to attend and participate in team rounds with resident modeling pharmacist's role on the health care team.

## Weeks 2-5:

Each week the resident is expected to take over the responsibility of working up more of the team's patients, continuing to discuss identified problems with preceptor daily. Once the resident is able to take responsibility for all patients assigned to the team, the preceptor will no longer attend team rounds, but will continue to facilitate the resident as the pharmacist on the team. This may or may not be achieved during this rotation, especially if pediatrics is a new experience, but it is the goal.

## Evaluation

The frequency of evaluations and corresponding documentation requirements can be found in the "Evaluations" grid at the end of each learning experience description.

- All evaluations are to be completed by the last day of the learning experience (and no more than one week after the conclusion of the experience).
- Evaluations are signed/ co-signed only after discussed in a summative evaluation meeting between the preceptor and resident.
- Resident self-evaluations are completed until objective R3.1.2 has been deemed by the RPD as ACHR
- Frequent, immediate, specific, and constructive verbal feedback regarding performance is provided to the resident throughout the rotation.

		<b>Activities</b>	
<b>Goal R1.1</b>	<b>In collaboration with the health care team, provide safe and effective patient care to a diverse range of patients, including those with multiple co-morbidities, high-risk medication regimens, and multiple medications following a consistent patient care process</b>		
OBJ R1.1.1	(Cognitive - Applying) Interact effectively with health care teams to manage patients' medication therapy	Taught and Evaluated	Be prepared to provide recommendations on assigned patients and answer drug information questions in a timely manner.
OBJ R1.1.2	(Cognitive - Applying) Interact effectively with patients, family members, and caregivers	Taught and Evaluated	Interact and communicate with team, patient, and family in a respectful and collaborative manner. Perform discharge counseling where applicable. Perform medication reconciliation where applicable. Uphold ASPIRE values.
OBJ R1.1.3	(Cognitive - Analyzing) Collect information on which to base safe and effective medication therapy	Taught and Evaluated	Collect pertinent information for each assigned patient from electronic medical record, patient's nurse, patient's caregivers, and patient (as applicable) every morning for assigned patients and record pertinent data on a patient monitoring form.
OBJ R1.1.4	(Cognitive - Analyzing) Analyze and assess information on which to base safe and effective medication therapy	Taught and Evaluated	Be prepared to discuss problems identified with preceptor prior to or after patient rounds (time to be determined by preceptor). Identify any issues with medication therapy (ie, lack of indication, condition for which no medication is prescribed, suboptimal regimen, therapeutic duplication, adverse events, interactions, social/ financial barriers).

OBJ R1.1.5	(Cognitive - Creating) Design or redesign safe and effective patient-centered therapeutic regimens and monitoring plans (care plans)	Taught and Evaluated	Be prepared to discuss recommendations for addressing problems with preceptor prior to or after morning rounds with team. For all patients, develop evidence-based, measurable, achievable therapeutic goals that take into consideration the patient's disease state(s), ethical issues, quality of life goals, goals of other interprofessional team members, and relevant patient-specific information including patient weight/BSA, culture, PK parameters, and personal preferences.
OBJ R1.1.6	(Cognitive - Applying) Ensure implementation of therapeutic regimens and monitoring plans (care plans) by taking appropriate follow-up actions	Taught and Evaluated	Discuss recommendations with appropriate medical team after getting approval from preceptor, if required by preceptor. Follow-up after rounds to ensure any agreed upon changes have been implemented.
OBJ R1.1.7	(Cognitive - Applying) Document direct patient care activities appropriately in the medical record or where appropriate	Taught and Evaluated	Document appropriately in RXHandoff for signout purposes. Document as necessary in the patient chart for: vancomycin and aminoglycoside pharmacokinetic monitoring, sedation and analgesia weans, medication reconciliation, discharge counseling, other complicated medication issues as needed. Document interventions using iVents.
OBJ R1.1.8	(Cognitive - Applying) Demonstrate responsibility to patients	Taught and Evaluated	Ensure visibility to patient care team by maintaining an active presence on the unit. For all patients, ensure all identified medication-related issues are resolved by the end of the day. If cannot be resolved, ensure that any outstanding issues are communicated to the covering evening pharmacist prior to leaving for the day. Perform medication order entry (when physician otherwise occupied or therapy will otherwise be delayed), order verification, and order clarification on assigned patients. Prioritize patient care above all other tasks. Resolve existing and potential medication-related problems and obtain satisfactory resolutions to these issues.
<b>Goal R1.2</b>	<b>Ensure continuity of care during patient transitions between care settings</b>		
OBJ R1.2.1	(Cognitive - Applying) Manage transitions of care effectively	Taught and Evaluated	Assist case manager and LIPs with medication-related discharge planning needs and recommendations. Perform discharge medication counseling as requested. Perform medication reconciliation upon admission, transfer, and discharge as necessary. Provide accurate and timely follow-up information when patients transfer to another facility, level of care, pharmacist, or provider. Provide referrals to patient assistance program when needed.
<b>Goal R3.1</b>	<b>Demonstrate leadership skills</b>		
OBJ R3.1.2	(Cognitive - Applying) Apply a process of on-going self-evaluation and personal performance improvement	Taught and Evaluated	Accurately summarize strengths and areas for improvement. Complete timely, reflective, and qualitative required self-evaluations. Seek and incorporate feedback from others.

<b>Goal R4.1</b>	<b>Provide effective medication and practice-related education to patients, caregivers, health care professionals, students, and the public (individuals and groups)</b>		
OBJ R4.1.2	(Cognitive - Applying) Use effective presentation and teaching skills to deliver education	Taught and Evaluated	Effectively facilitate audience participation, active learning, and engagement. Present at appropriate rate and volume and without distracting speaker habits. Provide concise, informative, and thorough case conference presentation, when assigned.
<b>Goal R4.2</b>	<b>Effectively employs appropriate preceptor roles when engaged in teaching students, pharmacy technicians or fellow health care professionals</b>		
OBJ R4.2.1	(Cognitive - Analyzing) When engaged in teaching, select a preceptor role that meets learners' educational needs	Taught and Evaluated	Co-precept another learner, when applicable. Distinguish which preceptor role is applicable for the situation (direct instruction, modeling, coaching, facilitating).
OBJ R4.2.2	(Cognitive - Applying) Effectively employ preceptor roles, as appropriate	Taught and Evaluated	Coach, including effective use of verbal guidance, feedback, and questioning, as needed. Facilitate, when appropriate, by allowing learner independence when ready and using indirect monitoring of performance. Instruct students, technicians, or others, as appropriate. Model skills, including "thinking out loud," so learners can "observe" critical thinking skills.
<b>Goal E5.1</b>	<b>Participate in the management of medical emergencies</b>		
OBJ E5.1.1	(Cognitive - Applying) Exercise skill as a team member in the management of medical emergencies according to the organization's policies and procedures	Taught and Evaluated	Attend Pediatric Sepsis alerts and codes in the Children's Hospital or communicate with unit-based clinical pharmacist and/or preceptor if unable to attend.

#### Evaluations:

	Evaluator	Evaluated	Timing
Summative Evaluation	All Preceptors	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed
ASHP Preceptor Evaluation	Residents	All Preceptors of this Learning Experience	Ending and Quarterly if Needed
ASHP Learning Experience Evaluation	Residents	Learning Experience	Ending and Quarterly if Needed
Summative Evaluation	Residents	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed

Faculty: Dann, Jillian C.; Geyston, Jennifer; Jones, Bruce S.; Wassimi, Maira

**Site:**

University of Virginia Health System

**Status:** Active

Required

**Description:****General Description:**

The solid organ transplant clinical pharmacist works collaboratively with the transplant surgery interdisciplinary team, which consists of transplant surgery attendings, surgery fellows, nurse practitioners, pharmacists, care coordinator, dietitians, and social work, in all aspects of patient care and across all levels of acuity. The transplant pharmacist focuses on the provision of clinical pharmaceutical care to transplant patients on the abdominal solid organ transplant surgery service inclusive of adult kidney, liver, and pancreas transplant patients. The in-patient transplant service patient population consists of patients presenting for transplant or re-admitted post-transplant due to complications. Additionally, the transplant surgery service may be consulted for patients on other services with a history of transplantation that may require surgical intervention.

**Principle duties and responsibilities of the solid organ transplant pharmacist:**

- Attend daily transplant surgery rounds
- Facilitate patient admission medication reconciliation and discharge education
- Attend transplant selection and quality meetings
- Ensure all Centers for Medicare and Medicaid Services (CMS) requirements involving the transplant pharmacist are met
- Provide interdisciplinary education in the form of didactic and informal lectures
- Lead quality improvement projects and implement transplant specific medication protocols

Expected patient volume: 10-20 patients admitted to the transplant surgery service (50% liver and 50% kidney/pancreas transplant patients)

For calendar year 2016 transplant volumes were as follows: 68 livers, 99 kidneys, 3 pancreas.

**Core Content:**

Common topics in which the resident will be expected to gain proficiency through direct participation include but are not limited to:

- Transplant recipient selection and listing process (UNOS and OPTN)
- Disease states associated with end stage organ disease and indications for transplantation
  - o Liver: Hepatitis C, hepatitis B, alcoholic, non-alcoholic steatohepatitis, hepatocellular carcinoma, etc.
  - o Kidney: Hypertension, diabetes, focal sclerosing glomerulonephritis, polycystic kidney disease, drug toxicity, etc.



- o Pancreas: Specific indications for pancreas transplant, including hypoglycemic unawareness

#### Abdominal organ transplantation

- o Liver, kidney, pancreas, simultaneous liver kidney, simultaneous kidney pancreas
- o Post-operative surgical and medical management/complications
- o Living vs. deceased donor

#### Principles of transplant pharmacotherapy

- o Review and evaluate the UVA specific transplant immunosuppression and prophylaxis protocols, order sets, patient education materials, as well as the transplant services policies related to pharmacy (will be provided to the resident).
- o Immunosuppression
- o Infection prophylaxis

#### Allograft rejection

- o Cellular and humoral (antibody-mediated) rejection

#### Infections in the solid organ transplant recipient

- o Cytomegalovirus, pneumocystis jiroveci, BK virus, etc.

#### Management of metabolic disease in the transplant recipient, including but not limited to:

- o Hypertension, diabetes, hyperlipidemia, anemia, thyroid disease, etc.
- Pain management in the surgical patient

Topic discussions and reading key articles will be used to help develop the resident's patient care skills for common disease states or acquiring knowledge about diseases seen infrequently on the service.

During the learning experience, the resident will focus on the goals and objectives outlined below by performing the activities that are associated with each objective. The resident will gradually assume responsibility for all of the patients within the assigned unit. The PGY1 resident must devise efficient strategies for accomplishing the required activities in a limited time frame.

Achievement of the goals of the residency is determined through assessment of ability to perform the associated objectives. The table below demonstrates the relationship between the activities and the goals/objectives assigned to the learning experience.

## **Expectation of Learners:**

### **Preceptor Interaction**

Multidisciplinary Transplant Discharge Planning rounds (attended by the preceptor/transplant clinical pharmacist and resident)

- 7:30-8:00 on Monday, Tuesdays, Thursdays,
- 7:30-8:00 on Friday if transplant conference is not scheduled and 9:00-9:30 if transplant conference scheduled
- 9:15-9:45 on Wednesdays
- 9:00-9:30 on Fridays if transplant conference scheduled

Attending rounds immediately follows discharge planning rounds, unless otherwise indicated. (preceptor/transplant clinical pharmacist presence based on resident progression below)

Schedule time daily with preceptor/transplant clinical pharmacist for patient updates following rounds, topic discussions, patient presentations, etc. with additional follow up interactions occurring in the afternoon to ensure completion of all necessary patient care related activities

### **Communication:**

- A. Daily scheduled meeting times: Residents to prioritize questions and problems to discuss during scheduled meeting times as listed above.
- B. E-mail: Residents are expected to read e-mails for ongoing communication. This is appropriate for routine, non-urgent questions and issues.
- C. UVa iPhone/pager: Residents to page/text preceptor for urgent situations pertaining to patient care
- D. Personal phone number: Provided to resident at time of learning experience for emergency issues.

### **Expected progression of resident responsibility on this learning experience:**

Length of time preceptor spends in each of the phases will be personalized based upon resident's abilities and timing of the learning experience during the residency training year

Day 1: Preceptor to review learning activities and expectations with resident.

Week 1: Resident to work up a portion of the team's patients (as determined by the resident and preceptor) and present to preceptor or rounding transplant clinical pharmacist daily. Resident should familiarize themselves with the transplant medication protocols, order sets, and patient education materials. Preceptor/transplant clinical pharmacist to attend and participate in team rounds with resident, modeling pharmacist's role on the health care team. Resident expected to progress in transplant medication teaching sessions under the coaching

model (see one, do one, teach one)

Week 2: The resident is expected to take over the responsibility of working up more of the team's patients, continuing to discuss identified problems with preceptor daily with the goal of serving as the go-to pharmacist for the team by the end of week 2. Preceptor/transplant clinical pharmacist to attend team rounds with resident, coaching the resident to take on more responsibilities as the pharmacist on the team. Resident should be able to conduct transplant medication education sessions independently by the end of week 2.

Weeks 3-5: Each week the resident is expected to take over the responsibility of working up all of the team's patients (as appropriate based on resident and preceptor comfort), continuing to discuss identified problems with preceptor/transplant clinical pharmacist daily. Once the resident is able to take responsibility for all patients assigned to the team, the preceptor will no longer attend walking rounds, but will continue to facilitate the resident as the pharmacist on the team.

### **Evaluations:**

The frequency of evaluations and corresponding documentation requirements can be found in the "Evaluations" grid at the end of each learning experience description.

- ☐☐☐☐☐☐☐☐ All evaluations are to be completed by the last day of the learning experience (and no more than one week after the conclusion of the experience).
- ☐☐☐☐☐☐☐ Evaluations are signed/ co-signed only after discussed in a summative evaluation meeting between the preceptor and resident.
- ☐☐☐☐☐☐☐ Resident self-evaluations are completed until objective R3.1.2 has been deemed by the RPD as ACHR
- ☐☐☐☐☐☐☐ Frequent, immediate, specific, and constructive verbal feedback regarding performance is provided to the resident throughout the rotation.

		<b>Activities</b>	
<b>Goal R1.1</b>	<b>In collaboration with the health care team, provide safe and effective patient care to a diverse range of patients, including those with multiple co-morbidities, high-risk medication regimens, and multiple medications following a consistent patient care process</b>		
OBJ R1.1.1	(Cognitive - Applying) Interact effectively with health care teams to manage patients' medication therapy	Taught and Evaluated	Attend and actively participate in daily patient care walking rounds that follow the daily multidisciplinary transplant multidisciplinary. Be prepared to provide recommendations on assigned patients and answer drug information questions in a timely manner. Participate in daily discharge planning and afternoon immunosuppression rounds with transplant surgery team.
OBJ R1.1.2	(Cognitive - Applying) Interact effectively with patients, family members, and caregivers	Taught and Evaluated	Interacts and communicates with team, patient, and family in a respectful and collaborative manner. Provide comprehensive transplant medication education counseling including, but not limited to: new prescriptions, medication compliance, inhaler technique teaching, glucometer technique, insulin teaching, anticoagulation teaching, pill box education. Upholds ASPIRE values.
OBJ R1.1.3	(Cognitive - Analyzing) Collect information on which to base safe and effective medication therapy	Taught and Evaluated	Determine pertinent information to collect for each assigned patient from medical record, patient's nurse, and patient (as applicable) daily for assigned patients. Maintain and prioritize an active problem list for each patient.
OBJ R1.1.4	(Cognitive - Analyzing) Analyze and assess information on which to base safe and effective medication therapy	Taught and Evaluated	Be prepared to discuss problems identified with preceptor/transplant clinical pharmacist immediately after discharge planning rounds if time allows, between patients during attending rounds, or after rounds during follow up if necessary. Identify any issues with medication therapy (ie, lack of indication, condition for which no medication is prescribed, suboptimal regimen, therapeutic duplication, adverse events, interactions, social/ financial barriers).
OBJ R1.1.5	(Cognitive - Creating) Design or redesign safe and effective patient-centered therapeutic regimens and monitoring plans (care plans)	Taught and Evaluated	Be prepared to discuss recommendations for addressing problems with preceptor/transplant clinical pharmacist immediately after discharge planning rounds if time allows, between patients during attending rounds, or after rounds during follow up if necessary. Ensure patient care plans are supported by primary literature and appropriate professional organization practice guidelines. For all patients, develop evidence-based, measurable, achievable therapeutic goals that take into consideration the patient's disease state(s), ethical issues, quality of life, goals of other interprofessional team members, and relevant patient-specific information including culture and preferences.
OBJ R1.1.6	(Cognitive - Applying) Ensure implementation of therapeutic regimens and monitoring plans (care plans) by taking appropriate follow-up actions	Taught and Evaluated	Discuss recommendations with team. Follow-up after rounds to ensure any agreed upon changes have been implemented.

OBJ R1.1.7	(Cognitive - Applying) Document direct patient care activities appropriately in the medical record or where appropriate	Taught and Evaluated	Document BeSafeEvents (BSE's) in the appropriate reporting system. Document interventions using ivents or other appropriate notes/phone communications in the medical record. Document pharmacist participation in the care of the inpatient transplant patient in accordance with CMS requirements and hospital policy/ initiatives: Transplant Pharmacy Admission progress note; Transplant Pharmacy Discharge progress note; Transplant Living Donor Admission/Discharge note; Medication Reconciliation Admission note; Patient education through the Patient Education pathway in the electronic medical record. Document pharmacist participation in the outpatient pre-transplant selection process: Potential transplant recipient pharmacy evaluation progress note ; or a Potential living donor pharmacy evaluation progress note.
OBJ R1.1.8	(Cognitive - Applying) Demonstrate responsibility to patients	Taught and Evaluated	Ensure visibility to patient care team by maintaining an active presence on the unit. If cannot be resolved, ensure that any outstanding issues are communicated to evening pharmacy prior to leaving for the day. Perform medication order entry (when physician otherwise occupied or therapy will otherwise be delayed), order verification, and order clarification on assigned patients. Prioritize patient care above all other tasks. Proactively resolve existing and potential medication-related problems until satisfactory resolution is obtained.
<b>Goal R1.2</b>	<b>Ensure continuity of care during patient transitions between care settings</b>		
OBJ R1.2.1	(Cognitive - Applying) Manage transitions of care effectively	Taught and Evaluated	Obtain admitting medication histories and perform medication reconciliation as requested. Participate in the development of a discharge plan for all patients (this process begins upon admission) and inform care coordinator and team of high cost/high risk discharge prescriptions or other patient specific medication or educational needs. Provide accurate and timely follow-up information when patients transfer to another facility, level of care, pharmacist, or provider.
<b>Goal R3.1</b>	<b>Demonstrate leadership skills</b>		
OBJ R3.1.2	(Cognitive - Applying) Apply a process of on-going self-evaluation and personal performance improvement	Taught and Evaluated	Accurately summarizes strengths and areas for improvement. Perform timely, reflective, and qualitative self-evaluations. Seeks and incorporates feedback from others.
<b>Goal R4.1</b>	<b>Provide effective medication and practice-related education to patients, caregivers, health care professionals, students, and the public (individuals and groups)</b>		
OBJ R4.1.2	(Cognitive - Applying) Use effective presentation and teaching skills to deliver education	Taught and Evaluated	Effectively facilitates audience participation, active learning, and engagement. Presents at appropriate rate and volume and without distracting speaker habits. Provide concise, informative, and thorough case conference presentation, when assigned.

<b>Goal R4.2</b>	<b>Effectively employs appropriate preceptor roles when engaged in teaching students, pharmacy technicians or fellow health care professionals</b>		
OBJ R4.2.1	(Cognitive - Analyzing) When engaged in teaching, select a preceptor role that meets learners' educational needs	Taught and Evaluated	Co-precepts another learner. Identifies which preceptor role is applicable for the situation (direct instruction, modeling, coaching, facilitating).
OBJ R4.2.2	(Cognitive - Applying) Effectively employ preceptor roles, as appropriate	Taught and Evaluated	Coaches, including effective use of verbal guidance, feedback, and questioning, as needed. Facilitates, when appropriate, by allowing learner independence when ready and using indirect monitoring of performance. Instructs students, technicians, or others, as appropriate. Models skills, including "thinking out loud," so learners can "observe" critical thinking skills.

#### Evaluations:

	Evaluator	Evaluated	Timing
Summative Evaluation	All Preceptors	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed
ASHP Learning Experience Evaluation	Residents	Learning Experience	Ending and Quarterly if Needed
ASHP Preceptor Evaluation	Residents	All Preceptors of this Learning Experience	Ending and Quarterly if Needed
Summative Evaluation	Residents	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed

Faculty: DeGregory, Kathlene; Sen, Jeremy

**Site:**

University of Virginia Health System

**Status:** Active

Not Required

**Description:**

The inpatient and ambulatory Stem Cell transplant rotation is available to PGY1 residents as an elective rotation. Residents on rotation will gain experience working with a multidisciplinary team to manage patient in the pre, peri and post transplant setting. Knowledge of conditioning regimens, supportive care, graft versus host disease prophylaxis/management, and management of transplant complications will be emphasized.

The clinical pharmacists on the team are responsible for ensuring safe and effective medication use for all patients admitted to the inpatient service or seen in clinic. Routine responsibilities include: medication reconciliation, therapeutic drug monitoring, addressing non-formulary drug requests, prospective pharmacotherapy recommendations focusing on, but not limited to the following: conditioning regimens, immunosuppressive agents, anti-infectives, anti-emetics, and other supportive agents. The pharmacist also provides drug information and education to healthcare professionals as well as patients and caregivers.

**Core content** to be covered via patient experiences, discussion or reading materials, and/or case presentations include but are not limited to:

- Donor selection
- Stem Cell Mobilization
- Conditioning (preparative) regimens and toxicity management
- Infectious complications (prophylaxis and management)
- Graft Vs Host Disease prophylaxis and management (acute and chronic Sinusoidal Obstruction Syndrome (SOS - formerly known as VOD)

Topic discussions and reading key articles will be used to help develop the resident's patient care skills for common disease states or acquiring knowledge about diseases seen infrequently on the service or in clinic.

During the learning experience, the resident will focus on the goals and objectives outlined below by performing the activities that are associated with each objective. The resident will gradually assume responsibility for all of the patients within the assigned unit or clinic. The PGY1 resident must devise efficient strategies for accomplishing the required activities in a limited time frame.

Achievement of the goals of the residency is determined through assessment of ability to perform the associated objectives. The table below demonstrates the relationship between the activities and the goals/objectives assigned to the learning experience.

## **Expectation of Learners:**

### **Preceptor Interaction**

#### **Daily:**

8:00 - 8:30

Pre-rounds with clinical pharmacist on the floor or in clinic

Schedule time daily with preceptor for topic discussions, reviewing progress notes, patient updates, etc.

### **Communication:**

1. Daily scheduled meeting times: Residents to prioritize questions and problems to discuss during scheduled meeting times as listed above.
2. E-mail: Residents are expected to read e-mails for ongoing communication. This is appropriate for routine, non-urgent questions and issues.
3. UVA iPhone/pager: Residents to page/text preceptor for urgent situations pertaining to patient care.
4. Personal phone number: Provided to resident at time of learning experience for emergency issues.

### **Expected progression of resident responsibility on this learning experience:**

(Length of time preceptor spends in each of the phases will be personalized based upon resident's abilities and timing of the learning experience during the residency training year)

Day 1: Preceptor to review learning activities and expectations with resident.

Week 1: Resident to work up a portion of the team's patients (as determined by the resident and preceptor) and present to preceptor daily. Preceptor to attend and participate in team rounds with resident, modeling pharmacist's role on the health care team.

Week 2: Each week the resident is expected to take over the responsibility of working up more of the team's patients, continuing to discuss identified problems with preceptor daily with the goal of covering the respective team pager by the end of week 2. Preceptor to attend team rounds with resident, coaching the resident to take on more responsibilities as the pharmacist on the team.

Weeks 3-5: There will be a switch from the inpatient setting to the outpatient setting. An abbreviated orientation to the clinic will occur and a day with the preceptor for modelling and coaching. Each week the resident is expected to take over the responsibility of working up all of the appropriate clinic patients (as appropriate based on resident and preceptor comfort), continuing to discuss identified problems with preceptor daily. Once the resident is able to take responsibility for all patients assigned to them, the preceptor will no longer attend team rounds or clinic, but will continue to facilitate the resident as the pharmacist on the team.

### **Evaluation**

The frequency of evaluations and corresponding documentation requirements can be found in the "Evaluations" grid at the end of each learning experience description.

- All evaluations are to be completed by the last day of the learning experience (and no more than one week after the conclusion of the experience).



- Evaluations are signed/ co-signed only after discussed in a summative evaluation meeting between the preceptor and resident.
- Resident self-evaluations are completed until objective R3.1.2 has been deemed by the RPD as ACHR.
- Frequent, immediate, specific, and constructive verbal feedback regarding performance is provided to the resident throughout the rotation.

		<b>Activities</b>	
<b>Goal R1.1</b>	<b>In collaboration with the health care team, provide safe and effective patient care to a diverse range of patients, including those with multiple co-morbidities, high-risk medication regimens, and multiple medications following a consistent patient care process</b>		
OBJ R1.1.1	(Cognitive - Applying) Interact effectively with health care teams to manage patients' medication therapy	Taught and Evaluated	Follow and round when possible with hospitalist/NP service. Participate in daily patient care rounds with assigned heme/SCT team and interdisciplinary discharge rounds. Provide evidence based recommendations on assigned patients and answer drug information questions in a timely manner. See patients in Stem Cell clinics as assigned by the clinical oncology pharmacist.
OBJ R1.1.2	(Cognitive - Applying) Interact effectively with patients, family members, and caregivers	Taught and Evaluated	Interact and communicates with team, patient, and family in a respectful and collaborative manner. Perform discharge counselling for all stem cell transplant patients in collaboration with the heme/SCT pharmacist. Provides pre-transplant patient education regarding mobilization regimens and conditioning regimens and associated supportive care. Upholds ASPIRE values.
OBJ R1.1.3	(Cognitive - Analyzing) Collect information on which to base safe and effective medication therapy	Taught and Evaluated	Collect medication histories for clinic patients assigned. Determine pertinent information to collect for each assigned patient from medical record, patient's nurse, and patient (as applicable) daily for assigned patients. Maintain and prioritize an active problem list for each patient Sign off on student/technician/intern medication histories, or perform medication histories as able on inpatients assigned.
OBJ R1.1.4	(Cognitive - Analyzing) Analyze and assess information on which to base safe and effective medication therapy	Taught and Evaluated	Discuss medication therapy issues identified with preceptor prior to rounds/ clinic appointments. Identify any issues with medication therapy (ie, lack of indication, condition for which no medication is prescribed, suboptimal regimen, therapeutic duplication, adverse events, interactions, social/ financial barriers). Review and evaluate the primary literature for all chemotherapy treatment plans assigned to your patients.

OBJ R1.1.5	(Cognitive - Creating) Design or redesign safe and effective patient-centered therapeutic regimens and monitoring plans (care plans)	Taught and Evaluated	Discuss recommendations for therapeutic regimens and monitoring plans with preceptor prior to morning rounds/ clinic appointments. Ensure patient care plans are supported by primary literature and appropriate professional organization practice guidelines such as NCCN, ASCO, ASBMT, and IDSA. For all patients, develop evidence-based, measurable, achievable therapeutic goals that take into consideration the patient's disease state(s), ethical issues, quality of life, goals of other interprofessional team members, and relevant patient-specific information including culture and preferences.
OBJ R1.1.6	(Cognitive - Applying) Ensure implementation of therapeutic regimens and monitoring plans (care plans) by taking appropriate follow-up actions	Taught and Evaluated	Discuss recommendations with team. Follow-up after rounds or clinic to ensure any agreed upon changes have been implemented.
OBJ R1.1.7	(Cognitive - Applying) Document direct patient care activities appropriately in the medical record or where appropriate	Taught and Evaluated	Document interventions using events or other appropriate notes/phone communications in the medical record. Use established medication education note templates as appropriate
OBJ R1.1.8	(Cognitive - Applying) Demonstrate responsibility to patients	Taught and Evaluated	Ensure visibility to patient care team by maintaining an active presence on the unit/clinic. For all patients, ensure all identified medication-related issues are resolved by the end of the day. If cannot be resolved, ensure that any outstanding issues are communicated to evening pharmacy prior to leaving for the day. Prioritize patient care above all other tasks.
<b>Goal R1.2</b>	<b>Ensure continuity of care during patient transitions between care settings</b>		
OBJ R1.2.1	(Cognitive - Applying) Manage transitions of care effectively	Taught and Evaluated	Develop a discharge plan for all patients (this process begins upon admission) and inform case manager and team of high cost/high risk discharge prescriptions or other patient specific medication or educational needs. Develop an appropriate follow up plan for clinic patients. Provide accurate and timely follow-up information when patients transfer to another facility, level of care, pharmacist, or provider.
<b>Goal R3.1</b>	<b>Demonstrate leadership skills</b>		
OBJ R3.1.2	(Cognitive - Applying) Apply a process of on-going self-evaluation and personal performance improvement	Taught and Evaluated	Accurately summarizes strengths and areas for improvement. Perform timely, reflective, and qualitative self-evaluations. Seeks and incorporates feedback from others.
<b>Goal R4.1</b>	<b>Provide effective medication and practice-related education to patients, caregivers, health care professionals, students, and the public (individuals and groups)</b>		
OBJ R4.1.2	(Cognitive - Applying) Use effective presentation and teaching skills to deliver education	Taught and Evaluated	Effectively facilitates audience participation, active learning, and engagement. Presents at appropriate rate and volume and without distracting speaker habits. Provide concise, informative, and thorough presentations, when assigned. Uses appropriate layman's terms when educating patients and validates patient learning via the "teach back" method.

<b>Goal R4.2</b>	<b>Effectively employs appropriate preceptor roles when engaged in teaching students, pharmacy technicians or fellow health care professionals</b>		
OBJ R4.2.1	(Cognitive - Analyzing) When engaged in teaching, select a preceptor role that meets learners' educational needs	Taught and Evaluated	Co-precepts another learner. Distinguishes which preceptor role is applicable for the situation (direct instruction, modeling, coaching, facilitating).
OBJ R4.2.2	(Cognitive - Applying) Effectively employ preceptor roles, as appropriate	Taught and Evaluated	Coach, including effective use of verbal guidance, feedback, and questioning, as needed. Facilitate, when appropriate, by allowing learner independence when ready and using indirect monitoring of performance. Instruct students, technicians, or others, as appropriate. Model skills, including "thinking out loud," so learners can "observe" critical thinking skills.

#### Evaluations:

	Evaluator	Evaluated	Timing
Summative Evaluation	All Preceptors	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed
ASHP Preceptor Evaluation	Residents	All Preceptors of this Learning Experience	Ending and Quarterly if Needed
ASHP Learning Experience Evaluation	Residents	Learning Experience	Ending and Quarterly if Needed
Summative Evaluation	Residents	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed

Faculty: Brooker, Christian

**Site:**

University of Virginia Health System

**Status:** Active

Required

**Description:**

Family Medicine (Ambulatory Care) is a five week learning experience for PGY1 pharmacy residents in outpatient family medicine and serves as one of the required ambulatory care rotations. This rotation provides the opportunity to provide pharmaceutical care for patients seen in the Family Medicine Clinic at Primary Care Center and within the International Family Medicine Clinic.

This core clinic is a family medicine clinic composed of medical residents and attendings, nursing staff, nurse practitioners, social workers, and a clinical pharmacist serving a dual purpose of providing patient care and offering an ideal setting for resident outpatient education and training. The clinical pharmacist provides chronic disease management including initiation of therapy, drug therapy monitoring and medication adjustment for diagnosed and treated patients referred by their primary care provider as well as patient/caregiver education. One unique aspect is the opportunity to provide clinical care to a large refugee population that are managed within the International Family Medicine Clinic. Experiences will include direct patient care, transitions of care rounds, and quality improvement initiatives and experience in the primary care setting.

**Disease States:**

Common disease states and ambulatory related topics in which the resident will be expected to gain proficiency through direct patient care experience, topic discussions and / or case presentations including, but not limited to:

- Cardiovascular disorders
  - o Hypertension, heart failure, hyperlipidemia
- Respiratory disorders
  - o COPD, asthma, tobacco cessation
- Endocrinologic disorders
  - o Diabetes ( including DM1, DM2, LADA, gestational DM), DKA and HHNS, thyroid disorders, obesity
- Anticoagulation

- o Warfarin, LMWH, and DOAC therapy
- Refugee Care/International Medicine
- o Immunizations, travel medicine, H. pylori, parasitic infections
- Immunizations
- Transitions of care

Topic discussions and reading key articles will be used to help develop the resident's patient care skills for common disease states or acquiring knowledge about diseases seen infrequently in clinic.

During the learning experience the resident will focus on the goals and objectives outlined below by performing the activities that are associated with each objective. The resident will gradually assume responsibility for all of the patients in clinic. The PGY1 resident must devise efficient strategies for accomplishing the required activities in a limited time frame.

#### **Expectation of Learners:**

#### **Preceptor Interaction**

<b>Daily:</b>	8:00 – 9:00	Engage in clinical discussion regarding scheduled patients for the clinic session
	9:00 – 12:00	Patient care activities
	13:00 – 16:00	Patient care activities

Monday Afternoons	Transitions of Care Rounds
Select Monday Afternoons	Qualitative Improvement Meeting
Select Tuesday Mornings	Family Medicine All Practice Clinic Meeting
Select Tuesday Afternoons Grand Rounds)	Family Medicine Resident Conference (including
Select Wednesday Afternoons	Family Medicine Team Meeting
Select Other Afternoons	Scheduled topic discussions and presentations
Friday Afternoons	Feedback and follow-up

#### **Communication:**

A. Daily scheduled meeting times: Residents to prioritize questions and problems to discuss during scheduled meeting times as listed above. Time may vary from day to day due to clinic.

B. E-mail: Residents are expected to read e-mails at the beginning, middle and end of each day at a minimum for ongoing communication. This is appropriate for routine, non-urgent questions and problems.

C. Office extension and cell phone : Appropriate for urgent questions pertaining to patient care or other issues that may arise.

D. Pager: Residents to page preceptor using pager etiquette for FYI; Need Action ; or for urgent/emergency situations pertaining to patient care

E. Personal phone number: Provided to resident at time of learning experience for emergency issues.

### **Expected progression of resident responsibility on this learning experience:**

(Length of time preceptor spends in each of the phases will be personalized based upon resident's abilities, comfort, and timing of the learning experience during the residency training year)

Day 1: Preceptor to review learning activities and expectations with resident. Review and give resident clinic hours and days in

various clinical activities.

Week 1: Resident to become familiar with shared SMART Phrases and Texts needed for note writing. Shadow patient interactions and become proficient with physical assessment. Transition to interviewing patient with preceptor present. Orally present patients to preceptor.

Week 2: Transition to taking on more patients and completing visits including ordering labs, prescriptions and providing clinical pharmacy services

Weeks 3-5: Each week the resident is expected to take over the responsibility of seeing clinic patients working up more/most/all scheduled patients in a given day, continuing to discuss identified problems with the preceptor. Once the resident is able to take responsibility for all patients scheduled, the preceptor will no longer review notes but will continue to facilitate the resident as the pharmacist in clinic.

### **Evaluation**

The frequency of evaluations and corresponding documentation requirements can be found in the "Evaluations" grid at the end of each learning experience description.

- All evaluations are to be completed by the last day of the learning experience (and no more than one week after the conclusion of the experience).
- Evaluations are signed/ co-signed only after discussed in a summative evaluation meeting between the preceptor and resident.
- Resident self-evaluations are completed until objective R3.1.2 has been deemed by the RPD as ACHR

- Frequent, immediate, specific, and constructive verbal feedback regarding performance is provided to the resident throughout the rotation.

		Activities	
Goal R1.1	In collaboration with the health care team, provide safe and effective patient care to a diverse range of patients, including those with multiple co-morbidities, high-risk medication regimens, and multiple medications following a consistent patient care process		
OBJ R1.1.1	(Cognitive - Applying) Interact effectively with health care teams to manage patients' medication therapy	Taught and Evaluated	<p>Be prepared to present each patient with recommendations to preceptor or healthcare provider if necessary. Format of presentation must be a formal medical presentation that includes all of the necessary pieces to gain consensus with the plan and is necessary for changes in therapy, adding new therapy, and ordering labs.</p> <p>Devise strategies to maximize the delivery of patient care within a limited time frame and be able to prioritize work load for the day to provide the best patient care.</p> <p>Follow up on all ordered labs, record interventions if appropriate and contact the provider and/or patient within 24 hour period.</p> <p>In addition to scheduled patients, the resident be available for real time consultations with providers, staff, and patients and answer drug information questions through EPIC, phone calls, or pages.</p> <p>Maintain clinic flow by seeing or calling each patient in a timely manner.</p> <p>Participate actively in transitions of care clinics by reviewing each patient ahead of time including assessing medication compliance to provide effective patient centered care.</p> <p>Participate in required meetings and function as the clinical pharmacist for all disciplines in clinic and the health system.</p> <p>Represent ambulatory clinical pharmacy services in person, through EPIC or by phone.</p> <p>Utilize appropriate language and terminology when interacting with members of the health care team.</p>
OBJ R1.1.2	(Cognitive - Applying) Interact effectively with patients, family members, and caregivers	Taught and Evaluated	<p>Demonstrate sensitivity and empathy to cultural differences, psychosocial issues, language barriers, literacy, and financial status.</p> <p>Incorporate motivational interviewing and assessment of readiness to learn to build patient confidence and help establish patient self-stated goals.</p> <p>Interact and communicate with patient and family/caregivers in a respectful and collaborative manner.</p> <p>Perform medication reconciliation on patients referred to the clinical pharmacist.</p> <p>Provide medication counseling and education – new medications, medication compliance, appropriate device technique, appropriate injection technique, and immunizations if appropriate.</p> <p>Upholds ASPIRE values.</p> <p>Utilize effective listening skills through reflection, understanding, and repeating back what the patient says and understands.</p>

OBJ R1.1.3	(Cognitive - Analyzing) Collect information on which to base safe and effective medication therapy	Taught and Evaluated	<p>Collect pertinent information for each scheduled patient from medical records including labs, chart notes, pharmacy records, and financial status of patients prior to clinic.</p> <p>Engage in dialogue with patients, providers, and/or staff to obtain information regarding patient's disease state or medication-related problem.</p> <p>Utilize and record pertinent data on a patient monitoring form (or resident's preferred patient information sheet) before, during, and after visit.</p>
OBJ R1.1.4	(Cognitive - Analyzing) Analyze and assess information on which to base safe and effective medication therapy	Taught and Evaluated	<p>Discuss medication-related problems identified with preceptor prior to or during clinic with appropriate prioritization of problem.</p> <p>Identify any issues with medication therapy (i.e., lack of indication, condition for which no medication is prescribed, suboptimal regimen, therapeutic duplication, adverse events, interactions, social/financial barriers, and adherence).</p> <p>Review and evaluate the literature with regards to patient cases discussed.</p> <p>Review articles assigned and be prepared for topic discussions as scheduled.</p>
OBJ R1.1.5	(Cognitive - Creating) Design or redesign safe and effective patient-centered therapeutic regimens and monitoring plans (care plans)	Taught and Evaluated	<p>Demonstrate ability to use ADA, AACE, JNC8, ASCVD, CHEST and other appropriate guidelines for the care of clinic patients.</p> <p>Develop evidence-based, measurable, achievable therapeutic goals (SMART goals) that take into consideration the patient's disease state(s), ethical issues, quality of life, goals of other team members, and relevant patient-specific requests including culture and preferences.</p> <p>Discuss recommendations for addressing problems with preceptor prior to plan implementation with patient.</p> <p>Follow-up of detected drug therapy problems by alteration in therapy, initiation of new therapy, health education, referral to other sources of care and follow up of referrals, or other appropriate measures.</p> <p>Provide monitoring of serum drug concentrations including appropriate recommendations when indicated.</p> <p>Understand and deliver care under the scope of practice of clinical pharmacist utilizing a collaborative practice agreement.</p> <p>Update all immunization records and order immunizations as necessary.</p>
OBJ R1.1.6	(Cognitive - Applying) Ensure implementation of therapeutic regimens and monitoring plans (care plans) by taking appropriate follow-up actions	Taught and Evaluated	<p>Follow-up to ensure medications, labs, and referrals have been signed in a timely manner.</p> <p>Order appropriate labs when necessary and follow up on ordered labs in a timely manner.</p> <p>Order medications when indicated as outlined under collaborative practice agreement.</p> <p>Utilize teach back method to ensure understanding of therapeutic plan by patient and/or caregiver.</p> <p>Utilize verbal, written, demonstration, and actual models in educating patients and caregivers.</p>
OBJ R1.1.7	(Cognitive - Applying) Document direct patient care activities appropriately in the medical record or where appropriate	Taught and Evaluated	<p>Complete all clinic notes or communications to patient, provider, and staff in a timely manner.</p> <p>Document all patient instructions and patient understanding or demonstration appropriately in Epic utilizing appropriate note templates and appropriate level of detail.</p> <p>Forward all notes to the appropriate members of care team when necessary.</p>



OBJ R1.1.8	(Cognitive - Applying) Demonstrate responsibility to patients	Taught and Evaluated	<p>Ensure all identified medication-related issues have a plan to resolve the issue before the end of the encounter. If it cannot be resolved, ensure that any outstanding issues are communicated to the preceptor and/or provider if needed.</p> <p>Ensure visibility to patient care team by maintaining an active presence in clinic.</p> <p>Maintain accessibility by pager/ cell phone to follow up on items from the day if you must leave clinic.</p> <p>Prioritize patient care above all other tasks.</p> <p>Provide written instructions to patient regarding drug therapy changes during clinic visits.</p> <p>Use appropriate communication source to follow up with patient (phone call, office visit, secure messaging via EPIC).</p> <p>Utilize appropriate patient-friendly terminology and language during patient interactions.</p> <p>Utilize interpreter services appropriately during patient interactions.</p>
<b>Goal R1.2</b>	<b>Ensure continuity of care during patient transitions between care settings</b>		
OBJ R1.2.1	(Cognitive - Applying) Manage transitions of care effectively	Taught and Evaluated	<p>Conduct medication reconciliation with patient and/or family/caregiver when appropriate.</p> <p>Contact all pharmacies or skilled nursing facility to assure appropriateness of medication list prior to a hospital follow up or post-MI clinic visit and document all changes in EPIC prior to the visit.</p> <p>Provide accurate and timely follow-up information when patients transfer to another facility, level of care, pharmacist, or provider.</p> <p>Review chart and provide recommendations of other clinical interventions (i.e. social worker, family stress clinic, RN care coordinator) during care transitions.</p> <p>Review chart and provide recommendations of possible medication related issues that may occur during care transitions.</p> <p>Serve as a liaison between pharmacy and all other staff to resolve any questions or problems with transitions of care with regards to securing medications through UVA outpatient pharmacies or patient assistance programs.</p>
<b>Goal R3.1</b>	<b>Demonstrate leadership skills</b>		
OBJ R3.1.2	(Cognitive - Applying) Apply a process of on-going self-evaluation and personal performance improvement	Taught and Evaluated	<p>Accurately summarizes strengths and areas for improvement.</p> <p>Complete all required self-evaluations.</p> <p>Participate in scheduled feedback sessions.</p> <p>Seeks and incorporates feedback from others.</p>

<b>Goal R4.1</b>	<b>Provide effective medication and practice-related education to patients, caregivers, health care professionals, students, and the public (individuals and groups)</b>		
OBJ R4.1.2	(Cognitive - Applying) Use effective presentation and teaching skills to deliver education	Taught and Evaluated	Effectively facilitates audience participation, active learning, and engagement. Engage in review of patients scheduled and provide brief verbal overview of patients that resident is scheduled to engage with during that day. Prepare and present education inservice to nursing staff or providers regarding therapeutic drug topic of their choice (including handout for reference). Presents at appropriate rate and volume and without distracting speaker habits. Provide appropriate educational handouts to patients ensuring that patient can utilize the educational handout effectively. Provide concise, informative, and thorough case presentation, journal club, or other verbal presentation (when assigned). When engaging in patient care, utilize appropriate patient friendly language during discussions about drug therapy and chronic disease states.
<b>Goal R4.2</b>	<b>Effectively employs appropriate preceptor roles when engaged in teaching students, pharmacy technicians or fellow health care professionals</b>		
OBJ R4.2.1	(Cognitive - Analyzing) When engaged in teaching, select a preceptor role that meets learners' educational needs	Taught and Evaluated	Distinguish which preceptor role is applicable for the situation (direct instruction, modeling, coaching, facilitating). Evaluate the situation in which teaching occurs and develop best approach to providing educational instruction.
OBJ R4.2.2	(Cognitive - Applying) Effectively employ preceptor roles, as appropriate	Taught and Evaluated	Facilitates learner independence when ready and using indirect monitoring of performance. Instruct students and other learners in an appropriate manner. Provide effective coaching to the learner to develop their clinical skill set. Utilize models that allow for development of critical thinking skills by the learner.

#### Evaluations:

	Evaluator	Evaluated	Timing
Summative Evaluation	All Preceptors	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed
ASHP Preceptor Evaluation	Residents	All Preceptors of this Learning Experience	Ending and Quarterly if Needed
ASHP Learning Experience Evaluation	Residents	Learning Experience	Ending and Quarterly if Needed
Summative Evaluation	Residents	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed

Faculty: White, Donna M.

**Site:**

University of Virginia Health System

**Status:** Active

Required

**Description:**

Ambulatory Care is one of the required five week learning experiences for PGY1 pharmacy residents.

This rotation takes place primarily in University Medical Associates (UMA) Clinic. This internal medicine clinic is staffed by medical residents and attendings, nurses, nurse practitioners, social workers, and pharmacists serving a dual purpose of providing patient care and offering an ideal setting for resident outpatient education and training. Other clinic experiences will include time in a Diabetes / Cardiology Clinic (DCC) working with an interdisciplinary team and a cardiologist. An internal medicine Hospital Follow UP Clinic meets 2 half days and provides transition of care for patients at discharge helping to reduce readmissions.

Pharmacists in this clinic provide pharmaceutical care and chronic disease management including initiation of therapy, drug therapy monitoring and medication adjustment for diagnosed and treated patients referred by their primary care physician as well as patient/ caregiver education.

**Required meetings:**

Residents will attend all committee meetings as they occur during the rotation (Anticoagulation, Patient Education). Residents will participate in an employee population health initiative documenting phone calls appropriately.

**Disease States:**

Common disease states and ambulatory related topics in which the resident will be expected to gain proficiency through direct patient care experience, topic discussions and / or case presentations including, but not limited to:

- Cardiovascular disorders
  - Hypertension, heart failure, hyperlipidemia
- Respiratory disorders
  - COPD, asthma, tobacco cessation
- Endocrinology disorders
  - Diabetes ( including DM1, DM2 and LADA), DKA and HHNS, thyroid disorders
- Anticoagulation
  - Warfarin, LMWH, and DOACS
- Motivational Interviewing and assessing readiness to learn
- CPA , Financial Screening, patient care assistance program and ambulatory epic
  - Obesity, Lifestyle Modification, CV risk reduction, Immunizations

- Transition of Care

Topic discussions and reading key articles will be used to help develop the resident's patient care skills for common disease states or acquiring knowledge about diseases seen infrequently in clinic.

During the learning experience the resident will focus on the goals and objectives outlined below by performing the activities that are associated with each objective. The resident will gradually assume responsibility for all of the patients in clinic. The PGY1 resident must devise efficient strategies for accomplishing the required activities in a limited time frame.

Achievement of the goals of the residency is determined through assessment of ability to perform the associated objectives. The table below demonstrates the relationship between the activities and the goals/objectives assigned to the learning experience.

**Expectation of Learners:**

**Preceptor Interaction**

**Daily:** 8:00 – 8:30 Attend and Participate in Morning Report / Discussion on Monday, Thursday and Friday;

Daily feedback/ weekly Friday Follow up and Feedback. ( 10-15 minutes set aside to assess/reassess)

Preceptor available in office for topic discussions, reviewing progress notes, patient updates, etc. daily.

**Communication:**

A. Daily scheduled meeting times: Residents to prioritize questions and problems to discuss during scheduled meeting times as listed above. Time may vary from day to day due to clinic.

B. E-mail: Residents are expected to read e-mails at the beginning, middle and end of each day at a minimum for ongoing communication. This is appropriate for routine, non-urgent questions and problems.

C. Office extension and cell phone: Appropriate for urgent questions pertaining to patient care or other issues that may arise.

D. Pager: Residents to page preceptor using pager etiquette for FYI; Need Action ; or for urgent/emergency situations pertaining to patient care

E. Personal phone number: Provided to resident at time of learning experience for emergency issues.

**Expected progression of resident responsibility on this learning experience:**

(Length of time preceptor spends in each of the phases will be personalized based upon resident's abilities, comfort, and timing of the learning experience during the residency training year)

Day 1: Preceptor to review learning activities and expectations with resident. Review and give

resident clinic hours and days in various clinics.

Week 1: Resident to become familiar with shared SMART Phrases and Texts needed for note writing. Shadow patient interactions and become proficient with physical assessment. Transition to interviewing patient with preceptor present. Orally present patients to preceptor.

Week 2: Transition to taking on more patients and completing visits including ordering labs, prescriptions and begin oral presentation to attending physicians.

Weeks 3-5: Each week the resident is expected to take over the responsibility of seeing clinic patients working up more/most/all scheduled patients in a given day, continuing to discuss identified problems with the preceptor. Once the resident is able to take responsibility for all patients scheduled in clinic, the preceptor will no longer review notes or be present for oral presentations to the attending physician, but will continue to facilitate the resident as the pharmacist in clinic.

### **Evaluation**

The frequency of evaluations and corresponding documentation requirements can be found in the "Evaluations" grid at the end of each learning experience description.

- All evaluations are to be completed by the last day of the learning experience (and no more than one week after the conclusion of the experience).
- Evaluations are signed/ co-signed only after discussed in a summative evaluation meeting between the preceptor and resident.
- Resident self-evaluations are completed until objective R3.1.2 has been deemed by the RPD as ACHR
- Frequent, immediate, specific, and constructive verbal feedback regarding performance is provided to the resident throughout the rotation.

		<b>Activities</b>	
<b>Goal R1.1</b>	<b>In collaboration with the health care team, provide safe and effective patient care to a diverse range of patients, including those with multiple co-morbidities, high-risk medication regimens, and multiple medications following a consistent patient care process</b>		
OBJ R1.1.1	(Cognitive - Applying) Interact effectively with health care teams to manage patients' medication therapy	Taught and Evaluated	Be prepared to present each patient with recommendations to an attending physician. Format of presentation must be a formal medical presentation that includes all of the necessary pieces to gain consensus with the plan. This is necessary for changes in therapy, adding new therapy, ordering labs. It is not required for insulin titration in patients continuing on the same insulin. In addition to scheduled patients, be available for just in time teaching and answering all DI in clinic and those posed through epic, phone calls or pages. Participate in morning report and function as the clinical pharmacist for all disciplines in clinic and the health system. Represent ambulatory clinical virtually through epic or by phone. Participate in General Medicine M&M when scheduled.

OBJ R1.1.2	(Cognitive - Applying) Interact effectively with patients, family members, and caregivers	Taught and Evaluated	<p>Demonstrate sensitivity and empathy to ethnicity, psychosocial issues including body habitus, language barriers, literacy and financial status.</p> <p>Incorporate motivational interviewing and assessment of readiness to learn to build patient confidence and help establish patient self stated goals.</p> <p>Interact and communicate with patient team, and family/ caregivers in a respectful and collaborative manner.</p> <p>Perform medication reconciliation on every patient referred to the pharmacy clinic(s).</p> <p>Provide medication counseling and education – new prescriptions, medication compliance, inhaler technique teaching, glucometer technique, insulin teaching, pill box education, MDI teaching, and immunizations if appropriate.</p> <p>Upholds ASPIRE values.</p> <p>Utilize effective listening skills through reflection, understanding and repeating back what the patient says and understands.</p>
OBJ R1.1.3	(Cognitive - Analyzing) Collect information on which to base safe and effective medication therapy	Taught and Evaluated	<p>Collect pertinent information for each scheduled clinic patient from medical records: including labs, notes, specialty notes, pharmacy records and understand financial status of patient prior to clinic. Utilize and record pertinent data on a patient monitoring form and during visit.</p>
OBJ R1.1.4	(Cognitive - Analyzing) Analyze and assess information on which to base safe and effective medication therapy	Taught and Evaluated	<p>Be prepared to discuss problems identified with preceptor prior to or during clinic visit.</p> <p>Identify any issues with medication therapy (i.e., lack of indication, condition for which no medication is prescribed, suboptimal regimen, therapeutic duplication, adverse events, interactions, social/ financial barriers, and adherence).</p> <p>Review and evaluate the literature with regards to patients cases discussed.</p> <p>Review articles assigned and be prepared for topic discussions as scheduled.</p>
OBJ R1.1.5	(Cognitive - Creating) Design or redesign safe and effective patient-centered therapeutic regimens and monitoring plans (care plans)	Taught and Evaluated	<p>Be prepared to discuss recommendations for addressing problems with preceptor prior to presenting to attending physician or to preceptor if working in collaborative practice area.</p> <p>Ensure patient care plans are supported by primary literature and appropriate professional organization practice guidelines such as ADA, AACE, JNC8, ASCVD, CHEST and others.</p> <p>Follow-up of detected drug therapy problems by alteration in therapy, initiation of new therapy, health education, referral to other sources of care and follow up of referrals, or other appropriate measures. Must review all labs and add an addendum to completed notes.</p> <p>For all patients, develop evidence-based, measurable, achievable therapeutic goals (SMART) that take into consideration the patient's disease state(s), ethical issues, quality of life, goals of other team members, and relevant patient-specific information including culture and preferences.</p> <p>Provide monitoring of serum drug concentrations including appropriate recommendations.</p> <p>Update all immunization records and order immunizations as necessary under an attending physician.</p>

OBJ R1.1.6	(Cognitive - Applying) Ensure implementation of therapeutic regimens and monitoring plans (care plans) by taking appropriate follow-up actions	Taught and Evaluated	<p>Determine the acuity of lab results and the next action to take; including paging a physician and / or sending message through Epic. Document all interactions in Epic.</p> <p>Follow up ordered labs in a timely manner. Record and notify the appropriate MD and/or patient of the results and any actions or changes to the plan.</p> <p>Follow-up to ensure labs and prescriptions or referrals have been signed.</p> <p>Make appropriate follow up or referrals to be included in the AVS.</p> <p>Order appropriate labs when necessary.</p> <p>Print after visit summaries (AVS) for every patient and review with the patient or caregiver before leaving the patient leaves the room.</p> <p>Utilize verbal, written, demonstration, and actual models in educating patients and caregivers.</p>
OBJ R1.1.7	(Cognitive - Applying) Document direct patient care activities appropriately in the medical record or where appropriate	Taught and Evaluated	<p>Complete all clinic SOAP notes, all lab orders and any communication to physician the day of visit.</p> <p>Document all interactions in EPIC including telephone notes in the form of SOAP notes or appropriate epic notes.</p> <p>Document all patient instructions and patient understanding or demonstration appropriately in Epic.</p> <p>Use Teach Back Method.</p> <p>Forward all notes to the appropriate physician and/ or other disciplines involved in the patient's care.</p>
OBJ R1.1.8	(Cognitive - Applying) Demonstrate responsibility to patients	Taught and Evaluated	<p>Attend clinic daily from 0800-1700 or when clinic responsibilities end.</p> <p>Devise strategies to maximize the delivery of patient care within a limited time frame and be able to prioritize work load for the day to provide the best patient care. Maintain clinic flow by seeing each patient in a timely manner.</p> <p>Ensure visibility to patient care team by maintaining an active presence in clinic.</p> <p>For all patients, ensure all identified medication-related issues are resolved by the end of the day.</p> <p>If cannot be resolved, ensure that any outstanding issues are communicated to the preceptor and/ or the PCP or if needed the physician on call prior to leaving for the day.</p> <p>Maintain accessibility by pager/ cell phone to follow up on items from the day if you must leave clinic.</p> <p>Participate in patient care assistance program (PAP); clinically and thoroughly reviewing each request.</p> <p>Prioritize patient care above all other tasks.</p>

<b>Goal R1.2</b>	<b>Ensure continuity of care during patient transitions between care settings</b>		
OBJ R1.2.1	(Cognitive - Applying) Manage transitions of care effectively	Taught and Evaluated	<p>Consult and fill out appropriate referrals in Epic for patient using appropriate ICD 10 codes and terminology (i.e. podiatry, ophthalmology, social work, etc.) under the supervision of an attending physician or by verbal order from the primary care physician. Contact all pharmacies or skilled nursing facility to assure appropriateness of medication list prior to a hospital follow up clinic visit and document all changes in epic prior to the visit.</p> <p>Document all referrals appropriately and notify primary physician appropriately.</p> <p>Ensure referrals have occurred.</p> <p>Explain to the patient the relevance of such referrals or tests in terms they can understand.</p> <p>Follow identified patients by phone in a timely manner.</p> <p>Order appropriate tests using appropriate ICD 10 codes and terminology under the supervision of an attending physician or by verbal order from the primary care physician (lab work, cardiac tests, sleep studies, etc.)</p> <p>Provide accurate and timely follow-up information when patients transfer to another facility, level of care, pharmacist, or provider.</p> <p>Serve as a liaison between pharmacy and all other staff to resolve any questions or problems with transitions of care from inpatient, to clinic and with regards to securing medications through UVA PAP or outpatient pharmacies through epic or page.</p>
<b>Goal R3.1</b>	<b>Demonstrate leadership skills</b>		
OBJ R3.1.2	(Cognitive - Applying) Apply a process of on-going self-evaluation and personal performance improvement	Taught and Evaluated	<p>Accurately summarizes strengths and areas for improvement.</p> <p>Participate in Friday follow up and feedback or if planned absence from clinic, the day before; otherwise immediately upon return.</p> <p>Perform timely, reflective, and qualitative self-evaluations.</p> <p>Seek and incorporate feedback from others.</p>
<b>Goal R4.1</b>	<b>Provide effective medication and practice-related education to patients, caregivers, health care professionals, students, and the public (individuals and groups)</b>		
OBJ R4.1.2	(Cognitive - Applying) Use effective presentation and teaching skills to deliver education	Taught and Evaluated	<p>Effectively facilitates audience participation, active learning, and engagement.</p> <p>Prepare and present an educational in-service to physician colleagues during Morning Report .</p> <ul style="list-style-type: none"> <li>o The topic for Morning Report should be chosen in the first 2 weeks of the rotation.</li> <li>o The presentation rough draft is due by the end of the 3rd week.</li> <li>o The final presentation must be turned in to the preceptor at least 48 hours prior to the scheduled session with physician colleagues to allow enough time for preceptor review and meaningful feedback.</li> </ul> <p>Prepare patient presentations daily and present these in the standard medical format. Provide 1-2 times weekly a brief presentation demonstrating knowledge in a particular disease state or drug (class).</p> <p>Presents at appropriate rate and volume and without distracting speaker habits.</p> <p>Provide concise, informative, and thorough case presentation, when assigned.</p>



<b>Goal R4.2</b>	<b>Effectively employs appropriate preceptor roles when engaged in teaching students, pharmacy technicians or fellow health care professionals</b>		
OBJ R4.2.1	(Cognitive - Analyzing) When engaged in teaching, select a preceptor role that meets learners' educational needs	Taught and Evaluated	Co-precepts another learner. Distinguish which preceptor role is applicable for the situation (direct instruction, modeling, coaching, facilitating).
OBJ R4.2.2	(Cognitive - Applying) Effectively employ preceptor roles, as appropriate	Taught and Evaluated	Coaches, including effective use of verbal guidance, feedback, and questioning, as needed. Facilitates, when appropriate, by allowing learner independence when ready and using indirect monitoring of performance. Instructs students, technicians (PAP), or others, as appropriate. Models skills, including "thinking out loud," so learners can "observe" critical thinking skills.

#### Evaluations:

	Evaluator	Evaluated	Timing
Summative Evaluation	All Preceptors	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed
ASHP Learning Experience Evaluation	Residents	Learning Experience	Ending and Quarterly if Needed
ASHP Preceptor Evaluation	Residents	All Preceptors of this Learning Experience	Ending and Quarterly if Needed
Summative Evaluation	Residents	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed

Faculty: Buscemi, Lindsey

**Site:**

University of Virginia Health System

**Status:** Active

Required

**Description:**

Infectious Diseases outpatient clinics is a learning experience at UVA Health System. The ID clinic consists of the Ryan White HIV Clinic, Hepatitis C Clinic, General ID Clinic, and Traveler's Clinic. The clinic is composed of a multidisciplinary team including attending physicians, ID fellows, medicine residents, medical students, pharmacists, mental health providers, social workers, nurses, counselors, and medical case managers. The Ryan White HIV Clinic cares for approximately 750 patients in Virginia living with HIV/AIDS.

The clinical pharmacist is responsible for ensuring safe and effective medication use for all patients seen within the clinic. Routine responsibilities include: patient education; reconciling medications; assisting with medication selection, prescription, and monitoring; and, for select patients, managing medication refills and filling pill boxes. The pharmacist will also provide drug information and education to healthcare professionals and clinic team members. The pharmacist is also involved with quality improvement projects with the Ryan White Quality Committee.

Clinic Hours/Services are as follows:

*Monday 8:00-5:00:* Hepatitis C clinic

*Tuesday, Wednesday 8:00-12:00:* HIV clinic

*Tuesday, Wednesday 1:00-5:00:* General ID/Traveler's clinic

*Thursday 8:00-5:00:* HIV clinic

*Friday 8:00-5:00:* General ID/Traveler's/C. diff clinic

Additionally, HIV patients can present to clinic or schedule in advance for a walk-in appointment anytime the clinic is open and providers are available.

**Disease States**

Common disease states in which the resident will be expected to gain proficiency through direct patient care experience for common diseases including, but not limited to:

- HIV/AIDS: Antiretroviral therapy, Opportunistic infection prophylaxis and treatment, Primary care, mental health, OB/GYN care, and health maintenance in patients infected with HIV, Nonadherence in the HIV population
- Hepatitis C
- Sexually transmitted infections
- Travel medicine
- Immunizations
- General infectious diseases: UTI, pneumonia, endocarditis, skin and soft tissue infections, bone and joint infections

Topic discussions and reading key articles will be used to help develop the resident's patient care skills for common disease states or unique cases presented in clinic.

During the learning experience the resident will focus on the goals and objectives outlined below by performing the activities that are associated with each objective. The resident will gradually assume responsibility for all of the patients within the assigned unit. The PGY1 resident must devise efficient strategies for accomplishing the required activities in a limited time frame.

Achievement of the goals of the residency is determined through assessment of ability to perform the associated objectives. The table below demonstrates the relationship between the activities and the goals/objectives assigned to the learning experience.

### **Expectation of Learners:**

#### **Preceptor Interaction**

A. Daily as needed

8:00-12:00 M-F: in clinic

1:00-4:00 M-F: available in office for topic discussions, case presentations, patient updates, etc.

B. Meetings resident are expected to attend:

-ID Case conference (*Monday 3:00-4:30 MR 2501*)

-ID Didactics (*Tuesday 12:00-1:00 MR 2501*)

-HIV/Immunosuppressed Didactics (*Thursday 12:00-1:00 MR 2501*)

-ID Journal Club (*Friday 12:00-1:00 MR 2501*)

-Antibiotic Utilization Committee meeting (*2nd Monday every other month 12:00-1:00*)

-Ryan White Quality Committee meeting if applicable

-Peer Coach trainings if applicable

-Ryan White team meetings (4th Friday of month 12:00-1:00 ID clinic conference room)

#### **Communication**

A. Daily during hours as listed above. Residents to prioritize questions and problems to discuss during scheduled meeting times as listed above.

B. E-mail: Residents are expected to read e-mails at the beginning, middle and end of each day at a minimum for ongoing communication. This is appropriate for routine, non-urgent questions and problems.

C. Office extension/Work Cell: Appropriate for urgent questions pertaining to patient care.

D. Pager: Residents to page preceptor for urgent/emergency situations pertaining to patient care

### **Expected progression of resident responsibility on this learning experience:**

(Length of time preceptor spends in each of the phases will be personalized based upon resident's abilities and timing of the learning experience during the residency training year)

**Day 1:** Preceptor to review learning activities and expectations with resident.

**Week 1:** The resident is expected to attend patient counseling sessions and scheduled patient visits alongside preceptor. In addition, the resident is responsible for triaging any drug information questions with the help of the preceptor.

**Week 2:** As the resident progresses, the expectation is to begin leading patient education sessions and responding to provider/team member questions with the preceptor available for oversight. After demonstrating competency through topic discussions and patient encounters, the resident is expected to become the primary clinic pharmacist with the preceptor in an observational role. For patient encounters, the preceptor will enter the patient's room with the resident but will allow the resident to direct the session..

**Weeks 3-5:** Each week the resident is expected to take over the responsibility of reviewing patients as they arrive to clinic, continuing to discuss identified problems with preceptor daily. The resident should independently interact with patients and clinic team members. The resident is also expected to operate as the clinical

pharmacist for the ID clinic when responding to all questions, consults, and requests, using the preceptor as a resource when necessary.

## **Evaluation**

The frequency of evaluations and corresponding documentation requirements can be found in the "Evaluations" grid at the end of each learning experience description.

- All evaluations are to be completed by the last day of the learning experience (and no more than one week after the conclusion of the experience).
- Evaluations are signed/ co-signed only after discussed in a summative evaluation meeting between the preceptor and resident.
- Resident self-evaluations are completed until objective R3.1.2 has been deemed by the RPD as ACHR
- Frequent, immediate, specific, and constructive verbal feedback regarding performance is provided to the resident throughout the rotation.

		<b>Activities</b>	
<b>Goal R1.1</b>	<b>In collaboration with the health care team, provide safe and effective patient care to a diverse range of patients, including those with multiple co-morbidities, high-risk medication regimens, and multiple medications following a consistent patient care process</b>		
OBJ R1.1.1	(Cognitive - Applying) Interact effectively with health care teams to manage patients' medication therapy	Taught and Evaluated	Be prepared to provide recommendations on assigned patients and answer drug information questions in a timely manner. Interact with patient's provider(s) in order to manage medication therapy.
OBJ R1.1.2	(Cognitive - Applying) Interact effectively with patients, family members, and caregivers	Taught and Evaluated	Interact and communicate with provider, patient, and family in a respectful and collaborative manner. Upholds ASPIRE values
OBJ R1.1.3	(Cognitive - Analyzing) Collect information on which to base safe and effective medication therapy	Taught and Evaluated	Collect pertinent information for each assigned patient from medical record and patient (as applicable) and record pertinent data on a patient monitoring form.
OBJ R1.1.4	(Cognitive - Analyzing) Analyze and assess information on which to base safe and effective medication therapy	Taught and Evaluated	Be prepared to discuss problems identified with preceptor prior to the patient's appointment. Identify any issues with medication therapy (ie, lack of indication, condition for which no medication is prescribed, suboptimal regimen, therapeutic duplication, adverse events, interactions, social/ financial barriers)

OBJ R1.1.5	(Cognitive - Creating) Design or redesign safe and effective patient-centered therapeutic regimens and monitoring plans (care plans)	Taught and Evaluated	Be prepared to discuss recommendations for addressing problems with preceptor prior to the patient's appointment Determine reasons for a patient's progress or lack of progress toward the stated health care goal and be prepared to adjust the therapeutic plan as needed Develop patient care plans that are supported by the Department of Health and Human Services, Infectious Diseases Society of America, International AIDS Society and American Association for the Study of Liver Diseases. For all patients, develop evidence-based, measurable, achievable therapeutic goals that take into consideration the patient's disease state(s), ethical issues, quality of life, goals of other interprofessional team members, and relevant patient-specific information including culture and preferences
OBJ R1.1.6	(Cognitive - Applying) Ensure implementation of therapeutic regimens and monitoring plans (care plans) by taking appropriate follow-up actions	Taught and Evaluated	Discuss recommendations with provider after getting approval from preceptor. Follow-up after each patient's appointment to ensure any agreed upon changes have been implemented.
OBJ R1.1.7	(Cognitive - Applying) Document direct patient care activities appropriately in the medical record or where appropriate	Taught and Evaluated	Document patient encounters appropriately in Epic, including all pertinent information Document pharmacy services accurately and completely into pharmacist spreadsheet Utilize EPIC i-Vents to communicate information relevant to transitions of care for clinic patients.
OBJ R1.1.8	(Cognitive - Applying) Demonstrate responsibility to patients	Taught and Evaluated	Ensure visibility to patient care team by maintaining an active presence in the clinic For all patients, ensure all identified medication-related issues are resolved by the end of the day. If cannot be resolved, ensure that any outstanding issues are communicated with the appropriate clinic team member Prioritizes patient care above all other tasks Resolves existing and potential medication-related problems until satisfactory resolution is obtained
<b>Goal R1.2</b>	<b>Ensure continuity of care during patient transitions between care settings</b>		
OBJ R1.2.1	(Cognitive - Applying) Manage transitions of care effectively	Taught and Evaluated	Communicate pertinent information with covering clinical pharmacist for patients admitted from clinic. Ensure accuracy of outpatient medication list prior to hospital admission or transfer of care
<b>Goal R3.1</b>	<b>Demonstrate leadership skills</b>		
OBJ R3.1.2	(Cognitive - Applying) Apply a process of on-going self-evaluation and personal performance improvement	Taught and Evaluated	Accurately summarizes strengths and areas for improvement Perform timely, reflective and qualitative self-evaluations. Seeks and incorporates feedback from others
<b>Goal R4.1</b>	<b>Provide effective medication and practice-related education to patients, caregivers, health care professionals, students, and the public (individuals and groups)</b>		
OBJ R4.1.1	(Cognitive - Applying) Design effective educational activities	Taught and Evaluated	Accurately defines learning needs (level, such as healthcare professional vs patient, and learning gaps) Plans use of teaching strategies that match learner needs (handouts, pictures)
OBJ R4.1.2	(Cognitive - Applying) Use effective presentation and teaching skills to deliver education	Taught and Evaluated	Effectively facilitate audience participation, active learning, and engagement Presents at appropriate rate and volume and without distracting speaker habits Provide concise, informative, and thorough case conference presentation, when assigned

OBJ R4.1.4	(Cognitive - Applying) Appropriately assess effectiveness of education	Taught and Evaluated	Employs teach-back method when providing education to patients Identifies ways to improve education-related skills Plans for follow-up educational activities to enhance/support/ensure goals were met, if needed
<b>Goal R4.2</b>	<b>Effectively employs appropriate preceptor roles when engaged in teaching students, pharmacy technicians or fellow health care professionals</b>		
OBJ R4.2.1	(Cognitive - Analyzing) When engaged in teaching, select a preceptor role that meets learners' educational needs	Taught and Evaluated	Co-precept another learner, when applicable Distinguishes which preceptor role is applicable for the situation (direct instruction, modeling, coaching, facilitating).
OBJ R4.2.2	(Cognitive - Applying) Effectively employ preceptor roles, as appropriate	Taught and Evaluated	Coaches, including effective use of verbal guidance, feedback, and questioning, as needed. Facilitates, when appropriate, by allowing learner independence when ready and using indirect monitoring of performance. Instructs students, staff members, or others, as appropriate. Models skills, including "thinking out loud," so learners can "observe" critical thinking skills.

#### Evaluations:

	Evaluator	Evaluated	Timing
Summative Evaluation	All Preceptors	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed
ASHP Preceptor Evaluation	Residents	All Preceptors of this Learning Experience	Ending and Quarterly if Needed
ASHP Learning Experience Evaluation	Residents	Learning Experience	Ending and Quarterly if Needed
Summative Evaluation	Residents	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed

Faculty: Lonabaugh, Kevin P.

**Site:**

University of Virginia Health System

**Status:** Active

Not Required

**Description:**

Pulmonary Clinics (Ambulatory Care) is a five week learning experience for PGY1 pharmacy residents in two outpatient pulmonary clinics and serves as one of the required ambulatory care rotations. This rotation provides the opportunity to provide pharmaceutical care for patients seen in the the Adult and Pediatric Cystic Fibrosis (CF) care centers at the University of Virginia.

The Adult and Pediatric CF Centers are nationally accredited by the Cystic Fibrosis Foundation and consist of large interdisciplinary teams with attending physicians, nurse practitioners, social workers, dietitians, respiratory therapists, psychologists, nursing staff, a pharmacy technician, and a clinical pharmacist. The clinics also frequently include medical students and residents as a part of their experiential training. These clinics strive to provide optimal care for complex patients with cystic fibrosis and see patients coming from across the entire western portion of the state of Virginia. The pediatric CF Center currently manages approximately 130 patients and the adult CF Center manages approximately 140 patients although that number is steadily growing thanks to improved survival in the cystic fibrosis population. As adults with CF are living longer, these patients develop many of the same comorbidities seen in a general population and often rely on the CF team for some aspects of their primary care.

The role of the pharmacist in the clinic is to serve as the medication expert on the interdisciplinary team. Patients are seen on the same day as their provider visit, however, thanks to a collaborative practice agreement, the pharmacist assists with the provision of chronic disease management including initiation of therapy, drug therapy monitoring and medication adjustment for diagnosed patients as well as patient/caregiver education. A unique aspect of this ambulatory experience is that the resident will be able to work with patients from birth to adulthood and gain greater skills related to the communication with pediatric patients of various developmental stages and their families. They will also have the opportunity to see the natural course of disease progression through their exposure to patients with more advanced disease. Experiences will include direct patient care, and quality improvement initiatives and experience in a unique specialty care setting.

**Disease States:**

The rotation will largely focus on the care of cystic fibrosis and its many complications (cystic fibrosis related diabetes, cystic fibrosis liver disease, chronic infections in cystic fibrosis, etc.). However, the rotation will also permits the resident to gain proficiency to many other common disease states and ambulatory related topics through direct patient care experience, topic discussions and / or case presentations including, but not limited to:

- Cardiovascular disorder
  - Hypertension, heart failure, hyperlipidemia
- Respiratory disorders
  - Asthma, Allergies
- Endocrinologic disorders
  - Diabetes ( including DM1, DM2, LADA, gestational DM), thyroid disorders, obesity
- Psychiatric/mental health disorders
  - Depression
  - Attention/Deficit Hyperactivity Disorder
- Immunizations
- Transitions of care

Topic discussions and reading key articles will be used to help develop the resident's patient care skills for common disease states or acquiring knowledge about diseases seen infrequently in clinic.

During the learning experience the resident will focus on the goals and objectives outlined below by performing the activities that are associated with each objective. The resident will gradually assume responsibility for all of the patients in clinic. The PGY1 resident must devise efficient strategies for accomplishing the required activities in a limited time frame.

Achievement of the goals of the residency is determined through assessment of ability to perform the associated objectives. The table below demonstrates the relationship between the activities and the goals/objectives assigned to the learning experience.

#### **Expectation of Learners:**

#### **Preceptor Interaction**

##### **Daily:**

8:00 – 9:00	Engage in clinical discussion regarding scheduled patients for the clinic session
9:00 – 12:00	Patient care activities
13:00 – 16:00	Patient care activities

**Select Monday Afternoons** - Adult Cystic Fibrosis Team Meetings

**Tuesdays** - Pediatric Cystic Fibrosis Clinic (Battle Building, 6th Floor)

**Select Wednesday Afternoons** - Cystic Fibrosis Learning Network (CFLN) Meetings

**Select Thursday Mornings** - Pediatric Grand Rounds

**Thursdays** - Adult Cystic Fibrosis Clinic (Primary Care Complex)

**Select Other Afternoons**- Scheduled topic discussions and presentations

**Friday Mornings** - Pediatric Cystic Fibrosis Clinic (Battle Building, 6th Floor)

**Friday Afternoons** - Feedback and follow-up



## **Communication:**

1. Daily scheduled meeting times: Residents to prioritize questions and problems to discuss during scheduled meeting times as listed above. Time may vary from day to day due to clinic.
2. E-mail: Residents are expected to read e-mails at the beginning, middle and end of each day at a minimum for ongoing communication. This is appropriate for routine, non-urgent questions and problems.
3. Work Cell Phone : Appropriate for urgent questions pertaining to patient care or other issues that may arise.
4. Pager: Residents to page preceptor using pager etiquette for FYI; Need Action ; or for urgent/emergency situations pertaining to patient care
5. Personal phone number: Provided to resident at time of learning experience for emergency issues.

## **Expected progression of resident responsibility on this learning experience:**

(Length of time preceptor spends in each of the phases will be personalized based upon resident's abilities, comfort, and timing of the learning experience during the residency training year)

**Day 1:** Preceptor to review learning activities and expectations with resident. Review and give resident clinic hours and days in various clinical activities.

**Week 1:** Resident to become familiar with shared SMART Phrases and Texts needed for note writing. Shadow patient interactions and become proficient with physical assessment. Transition to interviewing patient with preceptor present. Orally present patients to preceptor.

**Week 2:** Transition to taking on more patients and completing visits including ordering labs, prescriptions and providing clinical pharmacy services.

**Weeks 3-5:** Each week the resident is expected to take over the responsibility of seeing clinic patients working up more/most/all scheduled patients in a given day, continuing to discuss identified problems with the preceptor. Once the resident is able to take responsibility for all patients scheduled, the preceptor will no longer review notes but will continue to facilitate the resident as the pharmacist in clinic.

## **Evaluation**

The frequency of evaluations and corresponding documentation requirements can be found in the "Evaluations" grid at the end of each learning experience description.

- All evaluations are to be completed by the last day of the learning experience (and no more than one week after the conclusion of the experience).
- Evaluations are signed/ co-signed only after discussed in a summative evaluation meeting between the preceptor and resident.
- Resident self-evaluations are completed until objective R3.1.2 has been deemed by the RPD as ACHR.
- Frequent, immediate, specific, and constructive verbal feedback regarding performance is provided to the resident throughout the rotation.

		<b>Activities</b>	
<b>Goal R1.1</b>	<b>In collaboration with the health care team, provide safe and effective patient care to a diverse range of patients, including those with multiple co-morbidities, high-risk medication regimens, and multiple medications following a consistent patient care process</b>		
<b>OBJ R1.1.1</b>	(Cognitive - Applying) Interact effectively with health care teams to manage patients' medication therapy	Taught and Evaluated	<p>Be prepared to present each patient with recommendations to preceptor or healthcare provider if necessary. Format of presentation must be a formal medical presentation that includes all of the necessary pieces to gain consensus with the plan and is necessary for changes in therapy, adding new therapy, and ordering labs.</p> <p>Complete all clinic notes or communications to patient, provider, and staff in a timely manner.</p> <p>Devise strategies to maximize the delivery of patient care within a limited time frame and be able to prioritize work load for the day to provide the best patient care.</p> <p>Follow up on all ordered labs, record interventions if appropriate and contact the provider and/or patient within 24 hour period.</p> <p>In addition to scheduled patients, the resident be available for real time consultations with providers, staff, and patients and answer drug information questions through EPIC, phone calls, or pages.</p> <p>Maintain clinic flow by seeing or calling each patient in a timely manner.</p> <p>Participate actively in pulmonary clinics by reviewing each patient ahead of time to provide effective patient centered care.</p> <p>Participate in required meetings and function as the clinical pharmacist for all disciplines in clinic and the health system.</p> <p>Prepare and present educational inservice(s) to nursing and/or provider colleagues during the rotation.</p> <p>Represent ambulatory clinical pharmacy services in person, through EPIC or by phone.</p> <p>Utilize appropriate language and terminology when interacting with members of the health care team.</p> <p>Work closely with the dedicated CF pharmacy technician in order to determine appropriate mechanisms for improving patient access to medication.</p>
<b>OBJ R1.1.2</b>	(Cognitive - Applying) Interact effectively with patients, family members, and caregivers	Taught and Evaluated	<p>Demonstrate sensitivity and empathy to cultural differences, psychosocial issues, language barriers, literacy, and financial status.</p> <p>Incorporate motivational interviewing and assessment of readiness to learn to build patient confidence and help establish patient self-stated goals.</p> <p>Interact and communicate with patient and family/caregivers in a respectful and collaborative manner with careful attention to the developmental stage of pediatric patients.</p> <p>Perform medication reconciliation on patients referred to the clinical pharmacist.</p> <p>Provide medication counseling and education – new medications, medication compliance, appropriate device technique, appropriate injection technique, and immunizations if appropriate.</p> <p>Upholds ASPIRE values.</p> <p>Utilize effective listening skills through reflection, understanding, and repeating back what the patient says and understands.</p>

OBJ R1.1.3	(Cognitive - Analyzing) Collect information on which to base safe and effective medication therapy	Taught and Evaluated	<p>Collect pertinent information for each scheduled patient from medical records including labs, chart notes, pharmacy records, and financial status of patients prior to clinic.</p> <p>Engage in conversations with the pharmacy technician to get information about patient fill histories.</p> <p>Engage in dialogue with patients, providers, and/or staff to obtain information regarding patient's disease state or medication-related problem.</p> <p>Utilize and record pertinent data on a patient monitoring form (or resident's preferred patient information sheet) before, during, and after visit.</p>
OBJ R1.1.4	(Cognitive - Analyzing) Analyze and assess information on which to base safe and effective medication therapy	Taught and Evaluated	<p>Discuss medication-related problems identified with preceptor prior to or during clinic with appropriate prioritization of problem.</p> <p>Identify any issues with medication therapy (i.e., lack of indication, condition for which no medication is prescribed, suboptimal regimen, therapeutic duplication, adverse events, interactions, social/financial barriers, and adherence).</p> <p>Review and evaluate the literature with regards to patient cases discussed.</p> <p>Review articles assigned and be prepared for topic discussions as scheduled.</p>
OBJ R1.1.5	(Cognitive - Creating) Design or redesign safe and effective patient-centered therapeutic regimens and monitoring plans (care plans)	Taught and Evaluated	<p>Demonstrate ability to use Cystic Fibrosis Foundation (CFF), ADA, AACE, JNC8, ASCVD, CHEST and other appropriate guidelines for the care of clinic patients.</p> <p>Develop evidence-based, measurable, achievable therapeutic goals (SMART goals) that take into consideration the patient's disease state(s), ethical issues, quality of life, goals of other team members, and relevant patient-specific requests including culture and preferences.</p> <p>Discuss recommendations for addressing problems with preceptor prior to plan implementation with patient.</p> <p>Follow-up of detected drug therapy problems by alteration in therapy, initiation of new therapy, health education, referral to other sources of care and follow up of referrals, or other appropriate measures.</p> <p>Provide monitoring of serum drug concentrations including appropriate recommendations when indicated.</p> <p>Recommend immunizations as necessary.</p> <p>Understand and deliver care under the scope of practice of clinical pharmacist utilizing a collaborative practice agreement.</p>
OBJ R1.1.6	(Cognitive - Applying) Ensure implementation of therapeutic regimens and monitoring plans (care plans) by taking appropriate follow-up actions	Taught and Evaluated	<p>Document all patient instructions and patient understanding or demonstration appropriately in Epic.</p> <p>Follow-up to ensure medications, labs, and referrals have been signed in a timely manner.</p> <p>Forward all notes to the appropriate members of care team when necessary.</p> <p>Order appropriate labs when necessary and follow up on ordered labs in a timely manner.</p> <p>Order medications when indicated as outlined under collaborative practice agreement.</p> <p>Utilize teach back method to ensure understanding of therapeutic plan by patient and/or caregiver.</p> <p>Utilize verbal, written, demonstration, and actual models in educating patients and caregivers.</p>
OBJ R1.1.7	(Cognitive - Applying) Document direct patient care activities appropriately in the medical record or where appropriate	Taught and Evaluated	<p>Complete all clinic notes or communications to patient, provider, and staff in a timely manner.</p> <p>Document all patient instructions and patient understanding or demonstration appropriately in Epic utilizing appropriate note templates and appropriate level of detail.</p> <p>Forward all notes to the appropriate members of care team when necessary.</p>

OBJ R1.1.8	(Cognitive - Applying) Demonstrate responsibility to patients	Taught and Evaluated	<p>Ensure all identified medication-related issues have a plan to resolve the issue before the end of the encounter. If it cannot be resolved, ensure that any outstanding issues are communicated to the preceptor and/or provider if needed.</p> <p>Ensure visibility to patient care team by maintaining an active presence in clinic.</p> <p>Maintain accessibility by pager/ cell phone to follow up on items from the day if you must leave clinic.</p> <p>Prioritize patient care above all other tasks.</p> <p>Provide written instructions to patient regarding drug therapy changes during clinic visits.</p> <p>Use appropriate communication source to follow up with patient (phone call, office visit, secure messaging via EPIC).</p> <p>Utilize appropriate patient-friendly terminology and language during patient interactions.</p> <p>Utilize interpreter services appropriately during patient interactions.</p>
<b>Goal R1.2</b>	<b>Ensure continuity of care during patient transitions between care settings</b>		
OBJ R1.2.1	(Cognitive - Applying) Manage transitions of care effectively	Taught and Evaluated	<p>Assist in the appropriate monitoring of discharged patients completing intravenous antibiotics.</p> <p>Conduct medication reconciliation with patient and/or family/caregiver when appropriate.</p> <p>Provide accurate and timely follow-up information when patients transfer to another facility, level of care, pharmacist, or provider.</p> <p>Review chart and provide recommendations of other clinical interventions (i.e. social worker, RN care coordinator) during care transitions.</p> <p>Review chart and provide recommendations of possible medication related issues that may occur during care transitions.</p> <p>Serve as a liaison between pharmacy and all other staff to resolve any questions or problems with transitions of care with regards to securing medications through UVA outpatient pharmacies or patient assistance programs.</p>
<b>Goal R3.1</b>	<b>Demonstrate leadership skills</b>		
OBJ R3.1.2	(Cognitive - Applying) Apply a process of on-going self-evaluation and personal performance improvement	Taught and Evaluated	<p>Accurately summarizes strengths and areas for improvement.</p> <p>Complete all required self-evaluations.</p> <p>Participate in scheduled feedback sessions.</p> <p>Seeks and incorporates feedback from others.</p>
<b>Goal R4.1</b>	<b>Provide effective medication and practice-related education to patients, caregivers, health care professionals, students, and the public (individuals and groups)</b>		
OBJ R4.1.2	(Cognitive - Applying) Use effective presentation and teaching skills to deliver education	Taught and Evaluated	<p>Effectively facilitates audience participation, active learning, and engagement.</p> <p>Engage in review of patients scheduled and provide brief verbal overview of patients that resident is scheduled to engage with during that day.</p> <p>Prepare and present education inservice to nursing staff or providers regarding therapeutic drug topic of their choice (including handout for reference).</p> <p>Presents at appropriate rate and volume and without distracting speaker habits.</p> <p>Provide appropriate educational handouts to patients ensuring that patient can utilize the educational handout effectively.</p> <p>Provide concise, informative, and thorough case presentation, journal club, or other verbal presentation (when assigned).</p> <p>When engaging in patient care, utilize appropriate patient friendly language during discussions about drug therapy and chronic disease states.</p>

<b>Goal R4.2</b>	<b>Effectively employs appropriate preceptor roles when engaged in teaching students, pharmacy technicians or fellow health care professionals</b>		
OBJ R4.2.1	(Cognitive - Analyzing) When engaged in teaching, select a preceptor role that meets learners' educational needs	Taught and Evaluated	Distinguish which preceptor role is applicable for the situation (direct instruction, modeling, coaching, facilitating). Evaluate the situation in which teaching occurs and develop best approach to providing educational instruction.
OBJ R4.2.2	(Cognitive - Applying) Effectively employ preceptor roles, as appropriate	Taught and Evaluated	Facilitates learner independence when ready and using indirect monitoring of performance. Instruct students and other learners in an appropriate manner. Provide effective coaching to the learner to develop their clinical skill set. Utilize models that allow for development of critical thinking skills by the learner.

#### Evaluations:

	Evaluator	Evaluated	Timing
Summative Evaluation	All Preceptors	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed
ASHP Preceptor Evaluation	Residents	All Preceptors of this Learning Experience	Ending and Quarterly if Needed
ASHP Learning Experience Evaluation	Residents	Learning Experience	Ending and Quarterly if Needed
Summative Evaluation	Residents	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed

Faculty: Geyston, Jennifer

**Site:**

University of Virginia Health System

**Status:** Active

Not Required

**Description:**

Solid organ transplant clinic rotation is a five week learning experience for PGY1 pharmacy residents in outpatient solid organ transplant clinic and serves as one of the required ambulatory care rotations.

The ambulatory transplant clinical pharmacist primarily works with the kidney, pancreas, liver and lung transplant interdisciplinary teams. The pharmacist not only focuses on immunosuppression management but also on other complications and co-morbidities such as infection, hypertension, and diabetes management. The pharmacist sees patients as part of a multidisciplinary team consisting of a transplant nurse coordinator, pharmacist, dietitian, and attending (surgeon or medicine [nephrologist, hepatologist, pulmonologist]). The pharmacist makes recommendations regarding the initiation of therapy, drug therapy monitoring and medication adjustments for post-transplant patients in the immediate post-transplant setting and during the first clinic visit after any inpatient admission to the hospital.

The ambulatory pharmacist is part of transitions of care focus for transplant patients, continuing the care and education provided during the acute care setting during the outpatient setting. As a result, a significant focus is placed on patient/caregiver education with extensive time spent on reinforcing/repeating education that occurred during the transplant admission as well as providing additional education regarding ongoing medication updates. Additionally, medication adherence remains a focus seeking to minimize barriers to patients receiving their medications by ensuring all patients have a plan for getting their medications refilled by the first or second clinic visit after transplant. Pharmacist's recommendations are verbally communicated to the team members (LIP and nurse coordinator) and each patient encounter is documented utilizing a standardized progress note template in Epic.

The ambulatory pharmacist also sees pre-transplant patient on an as needed basis and completes the CMS required initial pre-transplant and pre-donor pharmacologic evaluations for all potential abdominal transplant recipients/donors and potential lung transplant recipients. The evaluations are completed in clinic and through chart review when requested outside of clinic appointments. The evaluations include medication concerns or considerations, like drug allergies or potential drug interactions. These considerations are documented in an Epic note and discussed at transplant selection meetings. The LIP and RN coordinator are immediately contacted if the pharmacist cannot clear for transplant.

The clinic pharmacist responds to all abdominal outpatient transplant drug information questions. Many times these questions are requested via email. The pharmacist also attends abdominal selection meetings weekly and all meetings focused on discussing patients post-transplant who are at risk due to post-transplant complications or other issues.

- Outpatient management of the abdominal transplant patient (kidney, liver, pancreas transplant) and lung transplant patients
- Immunosuppression management utilizing the UVA immunosuppression protocol for each respective organ
- Allograft function assessment
- Infection prophylaxis
- CMV, fungal, PJP prophylaxis
- Disease state management in the transplant recipient
  - Hypertension, diabetes, hyperlipidemia, anemia, thyroid disease, erectile dysfunction etc.

- Any disease states that patients may have been presented within the ambulatory setting. Topics listed above for disease state management post-transplant are not all inclusive and represent common disease states in transplant patients
- Immunization recommendations for pre- and post-transplant patients

During the learning experience, the resident will focus on the goals and objectives outlined below by performing the activities that are associated with each objective. The PGY2 transplant resident must devise efficient strategies for accomplishing the required activities in a limited time frame.

Topic discussions and reading key articles will be used to help develop the resident's patient care skills for common disease states or acquiring knowledge about diseases seen infrequently in clinic.

During the learning experience the resident will focus on the goals and objectives outlined below by performing the activities that are associated with each objective. The resident will gradually assume responsibility for all of the patients in clinic. The PGY1 resident must devise efficient strategies for accomplishing the required activities in a limited time frame.

Achievement of the goals of the residency is determined through assessment of ability to perform the associated objectives. The table below demonstrates the relationship between the activities and the goals/objectives assigned to the learning experience.

### **Expectation of Learners:**

#### **Preceptor Interaction**

##### **Daily:**

8:00 – 9:00	Engage in clinical discussion regarding scheduled patients for the clinic session
9:00 – 12:00	Patient care activities
13:00 – 16:00	Patient care activities

Schedule time daily with preceptor/transplant clinical pharmacist for patient updates, topic discussions, patient presentations, etc. with additional follow up interactions occurring in the afternoon to ensure completion of all necessary patient care related activities.

#### **Communication:**

1. Daily scheduled meeting times: Residents to prioritize questions and problems to discuss during scheduled meeting times as listed above.
2. E-mail: Residents are expected to read e-mails for ongoing communication. This is appropriate for routine, non-urgent questions and issues.
3. UVa iPhone/pager: Residents to page/text preceptor for urgent situations pertaining to patient care
4. Personal phone number: Provided to resident at time of learning experience for emergency issues.

#### **Expected progression of resident responsibility on this learning experience:**

Length of time preceptor spends in each of the phases will be personalized based upon resident's abilities and timing of the learning experience during the residency training year

**Day 1:** Preceptor to review learning activities and expectations with resident.

**Week 1:** The resident will learn to identify patients who need to be seen in clinic by following the standard work of the transplant pharmacist. The resident will observe the work flow in clinic and determine the best way to communicate with patients and providers. The resident will develop their own approach to patient care in clinic after observing the preceptor see many different pre- and post-transplant patients. Resident to become familiar

with shared Epic dotphrases and texts needed for note writing, as well as how to obtain and document a medication history as part of the visit.

**Week 2:** The resident will lead clinic visits with the preceptor observing

**Week 3 or 4:** The resident will begin to see patients independently while the preceptor is available in clinic to answer any questions that arise.

### **Evaluation**

The frequency of evaluations and corresponding documentation requirements can be found in the "Evaluations" grid at the end of each learning experience description.

- All evaluations are to be completed by the last day of the learning experience (and no more than one week after the conclusion of the experience).
- Evaluations are signed/ co-signed only after discussed in a summative evaluation meeting between the preceptor and resident.
- Resident self-evaluations are completed until objective R3.1.2 has been deemed by the RPD as ACHR
- Frequent, immediate, specific, and constructive verbal feedback regarding performance is provided to the resident throughout the rotation.



		<b>Activities</b>	
<b>Goal R1.1</b>	<b>In collaboration with the health care team, provide safe and effective patient care to a diverse range of patients, including those with multiple co-morbidities, high-risk medication regimens, and multiple medications following a consistent patient care process</b>		
<b>OBJ R1.1.1</b>	(Cognitive - Applying) Interact effectively with health care teams to manage patients' medication therapy	Taught and Evaluated	<p>Be prepared to present each patient with recommendations to preceptor or healthcare provider if necessary. Format of presentation must be a formal medical presentation that includes all of the necessary pieces to gain consensus with the plan and is necessary for changes in therapy, adding new therapy, and ordering labs</p> <p>Complete all clinic notes or communications to patient, provider, and staff in a timely manner</p> <p>Devise strategies to maximize the delivery of patient care within a limited time frame and be able to prioritize work load for the day to provide the best patient care</p> <p>Follow up on all ordered labs, record interventions if appropriate and contact the provider and/or patient within 24 hour period</p> <p>In addition to scheduled patients, the resident be available for real time consultations with providers, staff, and patients and answer drug information questions through EPIC, phone calls, or pages</p> <p>Maintain clinic flow by seeing or calling each patient in a timely manner</p> <p>Participate actively in transitions of care clinics by reviewing each patient ahead of time including assessing medication compliance to provide effective patient centered care</p> <p>Participate in required meetings and function as the clinical pharmacist for all disciplines in clinic and the health system</p> <p>Prepare and present educational inservice(s) to nursing and/or provider colleagues during the rotation</p> <p>Represent ambulatory clinical pharmacy services in person, through EPIC or by phone</p> <p>Utilize appropriate language and terminology when interacting with members of the health care team</p>
<b>OBJ R1.1.2</b>	(Cognitive - Applying) Interact effectively with patients, family members, and caregivers	Taught and Evaluated	<p>Demonstrate sensitivity and empathy to cultural differences, psychosocial issues, language barriers, literacy, and financial status</p> <p>Incorporate motivational interviewing and assessment of readiness to learn to build patient confidence and help establish patient self-stated goals</p> <p>Interact and communicate with patient and family/caregivers in a respectful and collaborative manner</p> <p>Provide medication counseling and education – new medications, medication compliance, appropriate device technique, appropriate injection technique, and immunizations if appropriate</p> <p>Upholds ASPIRE values</p> <p>Utilize effective listening skills through reflection, understanding, and repeating back what the patient says and understands</p>
<b>OBJ R1.1.3</b>	(Cognitive - Analyzing) Collect information on which to base safe and effective medication therapy	Taught and Evaluated	<p>Collect pertinent information for each scheduled patient from medical records including labs, chart notes, pharmacy records, and financial status of patients prior to clinic</p> <p>Engage in dialogue with patients, providers, and/or staff to obtain information regarding patient's disease state or medication-related problem</p> <p>Utilize and record pertinent data on a patient monitoring form (or resident's preferred patient information sheet) before, during, and after visit</p>

OBJ R1.1.4	(Cognitive - Analyzing) Analyze and assess information on which to base safe and effective medication therapy	Taught and Evaluated	<p>Discuss medication-related problems identified with preceptor prior to or during clinic with appropriate prioritization of problem</p> <p>Identify any issues with medication therapy (i.e., lack of indication condition for which no medication is prescribed, suboptimal regimen, therapeutic duplication, adverse events, interactions, social/financial barriers, and adherence)</p> <p>Review and evaluate the literature with regards to patient cases discussed</p> <p>Review articles assigned and be prepared for topic discussions as scheduled</p>
OBJ R1.1.5	(Cognitive - Creating) Design or redesign safe and effective patient-centered therapeutic regimens and monitoring plans (care plans)	Taught and Evaluated	<p>Develop evidence-based, measurable, achievable therapeutic goals (SMART goals) that take into consideration the patient's disease state(s), ethical issues, quality of life, goals of other team members, and relevant patient-specific requests including culture and preferences</p> <p>Discuss recommendations for addressing problems with preceptor prior to plan implementation with patient</p> <p>Follow-up of detected drug therapy problems by alteration in therapy, initiation of new therapy, health education, referral to other sources of care and follow up of referrals, or other appropriate measures</p> <p>Provide monitoring of serum drug concentrations including appropriate recommendations when indicated</p> <p>Understand and deliver care under the scope of practice of clinical pharmacist utilizing a collaborative practice agreement</p> <p>Update all immunization records and order immunizations as necessary</p>
OBJ R1.1.6	(Cognitive - Applying) Ensure implementation of therapeutic regimens and monitoring plans (care plans) by taking appropriate follow-up actions	Taught and Evaluated	<p>Document all patient instructions and patient understanding or demonstration appropriately in Epic</p> <p>Follow-up to ensure medications, labs, and referrals have been signed in a timely manner</p> <p>Forward all notes to the appropriate members of care team when necessary</p> <p>Order appropriate labs when necessary and follow up on ordered labs in a timely manner</p> <p>Order medications when indicated as outlined under collaborative practice agreement</p> <p>Utilize teach back method to ensure understanding of therapeutic plan by patient and/or caregiver</p> <p>Utilize verbal, written, demonstration, and actual models in educating patients and caregivers</p>
OBJ R1.1.7	(Cognitive - Applying) Document direct patient care activities appropriately in the medical record or where appropriate	Taught and Evaluated	<p>Complete all clinic notes or communications to patient, provider, and staff in a timely manner</p> <p>Document all patient instructions and patient understanding or demonstration appropriately in Epic utilizing appropriate note templates and appropriate level of detail</p> <p>Forward all notes to the appropriate members of care team when necessary</p>
OBJ R1.1.8	(Cognitive - Applying) Demonstrate responsibility to patients	Taught and Evaluated	<p>Ensure all identified medication-related issues have a plan to resolve the issue before the end of the encounter. If it cannot be resolved, ensure that any outstanding issues are communicated to the preceptor and/or provider if needed</p> <p>Ensure visibility to patient care team by maintaining an active presence in clinic</p> <p>Maintain accessibility by pager/ cell phone to follow up on items from the day if you must leave clinic</p> <p>Prioritize patient care above all other tasks</p> <p>Provide written instructions to patient regarding drug therapy changes during clinic visits</p> <p>Use appropriate communication source to follow up with patient (phone call, office visit, secure messaging via EPIC)</p> <p>Utilize appropriate patient-friendly terminology and language during patient interactions</p> <p>Utilize interpreter services appropriately during patient interactions</p>

<b>Goal R1.2</b>	<b>Ensure continuity of care during patient transitions between care settings</b>		
OBJ R1.2.1	(Cognitive - Applying) Manage transitions of care effectively	Taught and Evaluated	<p>Conduct medication reconciliation with patient and/or family/caregiver when appropriate</p> <p>Contact all pharmacies or skilled nursing facility to assure appropriateness of medication list prior to a hospital follow up or post-MI clinic visit and document all changes in EPIC prior to the visit</p> <p>Provide accurate and timely follow-up information when patients transfer to another facility, level of care, pharmacist, or provider</p> <p>Review chart and provide recommendations of other clinical interventions (i.e. social worker, family stress clinic, RN care coordinator) during care transitions</p> <p>Review chart and provide recommendations of possible medication related issues that may occur during care transitions</p> <p>Serve as a liaison between pharmacy and all other staff to resolve any questions or problems with transitions of care with regards to securing medications through UVA outpatient pharmacies or patient assistance programs</p>
<b>Goal R3.1</b>	<b>Demonstrate leadership skills</b>		
OBJ R3.1.2	(Cognitive - Applying) Apply a process of on-going self-evaluation and personal performance improvement	Taught and Evaluated	<p>Accurately summarizes strengths and areas for improvement</p> <p>Complete all required self-evaluations</p> <p>Participate in scheduled feedback sessions</p> <p>Seeks and incorporates feedback from others</p>
<b>Goal R4.1</b>	<b>Provide effective medication and practice-related education to patients, caregivers, health care professionals, students, and the public (individuals and groups)</b>		
OBJ R4.1.2	(Cognitive - Applying) Use effective presentation and teaching skills to deliver education	Taught and Evaluated	<p>Effectively facilitates audience participation, active learning, and engagement</p> <p>Engage in review of patients scheduled and provide brief verbal overview of patients that resident is scheduled to engage with during that day</p> <p>Prepare and present education inservice to nursing staff or providers regarding therapeutic drug topic of their choice (including handout for reference)</p> <p>Presents at appropriate rate and volume and without distracting speaker habits</p> <p>Provide appropriate educational handouts to patients ensuring that patient can utilize the educational handout effectively</p> <p>Provide concise, informative, and thorough case presentation, journal club, or other verbal presentation (when assigned)</p> <p>When engaging in patient care, utilize appropriate patient friendly language during discussions about drug therapy and chronic disease states</p>
<b>Goal R4.2</b>	<b>Effectively employs appropriate preceptor roles when engaged in teaching students, pharmacy technicians or fellow health care professionals</b>		
OBJ R4.2.1	(Cognitive - Analyzing) When engaged in teaching, select a preceptor role that meets learners' educational needs	Taught and Evaluated	<p>Distinguish which preceptor role is applicable for the situation (direct instruction, modeling, coaching, facilitating)</p> <p>Evaluate the situation in which teaching occurs and develop best approach to providing educational instruction</p>

OBJ R4.2.2	(Cognitive - Applying) Effectively employ preceptor roles, as appropriate	Taught and Evaluated	Facilitates learner independence when ready and using indirect monitoring of performance Instruct students and other learners in an appropriate manner Provide effective coaching to the learner to develop their clinical skill set Utilize models that allow for development of critical thinking skills by the learner
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#### Evaluations:

	Evaluator	Evaluated	Timing
Summative Evaluation	All Preceptors	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed
ASHP Preceptor Evaluation	Residents	All Preceptors of this Learning Experience	Ending and Quarterly if Needed
ASHP Learning Experience Evaluation	Residents	Learning Experience	Ending and Quarterly if Needed

Faculty: Dunn, Steven

**Site:**

University of Virginia Health System

**Status:** Active

Required

**Description:**

The Coronary Care Unit (CCU) is a 10-bed intensive care unit and a 29 bed acute cardiology step-down unit. CCU pharmacists directly participate with interdisciplinary rounds with both the heart failure and general CCU attending physicians, cardiology fellows, residents, and nursing staff and verify all medication orders for clinical and operational accuracy. Additionally, CCU pharmacists monitor all drug therapy and provide pharmacy admission and discharge services. This 5-week rotation critical care rotation also provides experience in the management of patients with ischemic cardiac disease, heart failure, arrhythmias, hyperlipidemia, and other cardiovascular related issues.

**Core content** that will be covered by patient experiences, assigned readings, and/or topic discussions that includes, but is not limited to the following:

- Acute Coronary Syndromes
- Acute and Chronic Heart Failure
- Ventricular and Atrial arrhythmias
- Post-PCI Management
- Hyperlipidemia
- Cardiac Circulatory Support Devices (intra-aortic balloon pumps, left ventricular assist devices, etc.)
- Hypertensive Urgencies and Emergencies

Topic discussions and reading key articles will be used to help develop the resident's patient care skills for common disease states or acquiring knowledge about diseases seen infrequently on the service.

During the learning experience the resident will focus on the goals and objectives outlined below by performing the activities that are associated with each objective. The resident will gradually assume responsibility for all of the patients within the assigned unit. The PGY1 resident must devise efficient strategies for accomplishing the required activities in a limited time frame.

Achievement of the goals of the residency is determined through assessment of ability to perform the associated objectives. The table below demonstrates the relationship between the activities and the goals/objectives assigned to the learning experience.

**Expectation of Learners:**

**Preceptor Interaction**

- A. Daily multi-disciplinary rounds beginning at 0730
- B. Daily patient presentations/discussions (post-rounds ideally before lunch)
- C. Topic discussions and/or journal article review 3-5 times per week.

**Communication:**

- A. Daily interaction: Residents are to prioritize questions and problems to be discussed with preceptor. Resident is responsible for asking questions to ensure a full understanding of medication-related problems.
- B. E-mail: Residents are expected to appropriately manage emails each day at a minimum for ongoing communication.
- C. UVa iPhone/Pager: Residents to page preceptor for urgent/emergency situations pertaining to patient care.
- D. Contact phone number(s): Provided to resident at time of learning experience for emergency issues.

**Expected progression of resident responsibility on this learning experience:**

(Length of time preceptor spends in each of the phases will be personalized based upon resident's abilities and timing of the learning experience during the residency training year)

Day 1: Preceptor to review learning activities and expectations with resident.

Day 2-3: Resident to work up to caring for all of the team's patients by Day 3. Preceptor to attend and participate in team rounds with resident the first day, modeling pharmacist's role on the health care team. Afterwards the preceptor will be present in the CCU towards the beginning of rounds to address any questions the resident has

Week 1-2: Resident to begin to round independently and meet with preceptor daily to review patients care plans.

Weeks 3-5: Each week the resident is expected to take over greater responsibility as the ICU pharmacist and become fully integrated in the ICU interdisciplinary team. The resident will

continue to discuss care plans with preceptor daily. The preceptor will continue to facilitate the resident as the pharmacist on the team.

## Evaluation

The frequency of evaluations and corresponding documentation requirements can be found in the "Evaluations" grid at the end of each learning experience description.

- All evaluations are to be completed by the last day of the learning experience (and no more than one week after the conclusion of the experience).
- Evaluations are signed/ co-signed only after discussed in a summative evaluation meeting between the preceptor and resident.
- Resident self-evaluations are completed until objective R3.1.2 has been deemed by the RPD as ACHR
- Frequent, immediate, specific, and constructive verbal feedback regarding performance is provided to the resident throughout the rotation.

		<b>Activities</b>	
<b>Goal R1.1</b>	<b>In collaboration with the health care team, provide safe and effective patient care to a diverse range of patients, including those with multiple co-morbidities, high-risk medication regimens, and multiple medications following a consistent patient care process</b>		
<b>OBJ R1.1.1</b>	(Cognitive - Applying) Interact effectively with health care teams to manage patients' medication therapy	Taught and Evaluated	Attend and actively participate in daily rounds (0730) with attending physicians, nurses, residents, and medical students. Establish position as vital member of team and develop a good rapport with members of the team by showing respect, demonstrating sound clinical knowledge, and assuming accountability for clinical pharmacy services to the team Exhibit professional maturity, judgment, responsibility, and dedication in all work and communication with health-care members and patients Provide timely and evidence-based medication information to physicians, nurses, and patients.
<b>OBJ R1.1.2</b>	(Cognitive - Applying) Interact effectively with patients, family members, and caregivers	Taught and Evaluated	Interact and communicate with team, patient, and family in a respectful and collaborative manner. Uphold ASPIRE values.

OBJ R1.1.3	(Cognitive - Analyzing) Collect information on which to base safe and effective medication therapy	Taught and Evaluated	Construct a list of medication-related problems through daily review of the CCU patient profiles. Consult with other members of the multidisciplinary team taking care of patients as needed. Evaluate information from the electronic medical record, bedside charts, and from daily patient presentations on rounds. Evaluate relevant information including laboratory values, cardiac procedures, and imaging which impact pharmacotherapy from the electronic medical record, bedside charts, and from daily patient presentations on rounds. When appropriate, communicate with the patient to gather information (i.e. allergy information, home medications/regimens, education, etc.)
OBJ R1.1.4	(Cognitive - Analyzing) Analyze and assess information on which to base safe and effective medication therapy	Taught and Evaluated	Continually re-evaluate the active problem list and monitoring plan for all patients to assess progress toward therapeutic goals. Ensure patient care plans are supported by primary literature and appropriate professional organization practice guidelines such as ACC/AHA. Provide daily review of patient medication profiles emphasizing the following areas: indication; appropriateness of dose/route/selection; elimination of therapeutic duplication; detection of drug-drug, drug-food or drug-allergy interactions. Review articles assigned and be prepared for topic discussions as scheduled.
OBJ R1.1.5	(Cognitive - Creating) Design or redesign safe and effective patient-centered therapeutic regimens and monitoring plans (care plans)	Taught and Evaluated	Appropriately use, recommend and interpret laboratory data to assist in the patient care. Consider the patients physical, psychosocial state, and financial ability to adhere to a particular medication regimen upon discharge. Develop a pharmacologic regimen based on supporting medical literature. Discuss and design the appropriate "targets" desired to achieve with respect to monitored medications based on a particular disease state or condition. Evaluation of all medical regimens for appropriateness and cost-effectiveness. Provide comprehensive therapeutic drug monitoring for aminoglycosides, digoxin, lidocaine, procainamide, vancomycin, and warfarin. Make adjustments as needed and inform the patient's healthcare provider. Provide comprehensive therapeutic drug monitoring for aminoglycosides, digoxin, lidocaine, procainamide, vancomycin, and warfarin. Make adjustments as needed and inform the patient's healthcare provider.
OBJ R1.1.6	(Cognitive - Applying) Ensure implementation of therapeutic regimens and monitoring plans (care plans) by taking appropriate follow-up actions	Taught and Evaluated	Become familiar with the resources currently available for teaching patients and caregivers. Develop and effectively communicate a plan for monitoring patient outcome parameters for all therapeutic recommendations. Understand when appropriate laboratory values/serum concentrations need to be ordered/measured.



OBJ R1.1.7	(Cognitive - Applying) Document direct patient care activities appropriately in the medical record or where appropriate	Taught and Evaluated	Choose appropriate and relevant information to document therapeutic interventions using the I-Vent tool in Epic. Document therapeutic interventions, allergies, adverse drug reactions and medication errors in the current electronic database. Employ I-Vents and pharmacist notes to communicate important medication plans with other staff potentially on other shifts. Monitor for and report Adverse Drug Reactions and medication related BeSafe Events (BSE's). Participate in documentation of patient medication histories when appropriate, including information concerning current and previous drug therapy, drug allergies, drug induced adverse effects, noncompliance and prescription/illicit drug misuse/abuse. Use factual information only when documenting interventions. Write pharmacist notes for communication of critical information when appropriate.
OBJ R1.1.8	(Cognitive - Applying) Demonstrate responsibility to patients	Taught and Evaluated	Address any medication problems identified as soon as possible only if the PGY-1 resident is confident in his/her recommendation Effectively prioritize daily responsibilities such that patient care is the first priority Maintain an active presence in the unit throughout the day. Pass-off outstanding issues to off-hour pharmacist coverage when appropriate Resolve all outstanding medication related problems by the end of the day
<b>Goal R1.2</b>	<b>Ensure continuity of care during patient transitions between care settings</b>		
OBJ R1.2.1	(Cognitive - Applying) Manage transitions of care effectively	Taught and Evaluated	Analyze and select the most pertinent information to pass along to colleagues regarding patients being transferred off the CCU service. Participate in discharge planning for patients, including the selection of the most appropriate and cost-effective therapies for patients Provide pharmacotherapeutic information to the other health care professionals (i.e. physicians, nurses, pharmacists) when the patient is transferred from one service to another or one setting to another (i.e. inpatient to outpatient); thorough hand off of care
<b>Goal R3.1</b>	<b>Demonstrate leadership skills</b>		
OBJ R3.1.2	(Cognitive - Applying) Apply a process of on-going self-evaluation and personal performance improvement	Taught and Evaluated	Accurately summarizes strengths and areas for improvement Complete all required self-evaluations Seeks and incorporates feedback from others
<b>Goal R4.1</b>	<b>Provide effective medication and practice-related education to patients, caregivers, health care professionals, students, and the public (individuals and groups)</b>		
OBJ R4.1.2	(Cognitive - Applying) Use effective presentation and teaching skills to deliver education	Taught and Evaluated	Provide education as requested to the multidisciplinary CCU team Provide patient presentations in standard medical format (CC, HPI, PMH, FH, SH, Allergies/meds, ROS, PE, Labs/cultures, Radiology).

<b>Goal R4.2</b>	<b>Effectively employs appropriate preceptor roles when engaged in teaching students, pharmacy technicians or fellow health care professionals</b>		
OBJ R4.2.1	(Cognitive - Analyzing) When engaged in teaching, select a preceptor role that meets learners' educational needs	Taught and Evaluated	Co-precept a pharmacy student Demonstrate the stages of learning that are associated with each of the preceptor roles while serving as preceptor to a pharmacy student. Distinguishes which preceptor role is applicable for the situation (direct instruction, modeling, coaching, facilitating).
OBJ R4.2.2	(Cognitive - Applying) Effectively employ preceptor roles, as appropriate	Taught and Evaluated	Coaches, including effective use of verbal guidance, feedback, and questioning, as needed. Facilitates, when appropriate, by allowing learner independence when ready and using indirect monitoring of performance. Instructs students, technicians, or others, as appropriate. Models skills, including "thinking out loud," so learners can "observe" critical thinking skills.
<b>Goal E5.1</b>	<b>Participate in the management of medical emergencies</b>		
OBJ E5.1.1	(Cognitive - Applying) Exercise skill as a team member in the management of medical emergencies according to the organization's policies and procedures	Taught and Evaluated	Adhere to ACLS guidelines as appropriate during medical emergencies. Completes appropriate emergency response iVent (code 12, Sepsis alert, etc) inclusive of pertinent details after each event Demonstrate understanding of ACLS training and principles of medical emergencies. Ensure initiation of appropriate antimicrobial therapy or other medications as needed for SIRS/Sprint alert patients Provide efficient and evidence-based pharmacy services during medical emergencies while functioning independently as an emergency response pharmacist. Respond to Code 12 calls as scheduled Respond to SIRS/Sprint alerts during rotation hours for your patients

#### Evaluations:

	Evaluator	Evaluated	Timing
Summative Evaluation	All Preceptors	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed
ASHP Learning Experience Evaluation	Residents	Learning Experience	Ending and Quarterly if Needed
ASHP Preceptor Evaluation	Residents	All Preceptors of this Learning Experience	Ending and Quarterly if Needed
Summative Evaluation	Residents	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed

Faculty: Hedrick, Amanda; Hockman, Rebecca H.; Partlow, Karen L.

**Site:**

University of Virginia Health System

**Status:** Active

Required

**Description:****General Description**

The Medical Intensive Care Unit (MICU) rotation serves as one of options for the required critical care rotation within the PGY1 pharmacy residency program. The rotation allows for the provision of pharmaceutical care to complex critically ill adults with multiple medical problems. The MICU service averages 20-30 critically ill medicine patients. The MICU service is divided into two simultaneously rounding groups, each comprised of an attending physician [double board certified in pulmonary and critical care medicine], a pulmonary/critical care physician fellow, two medical resident provider teams, a clinical nurse practitioner team, clinical pharmacy, bedside nursing, and clinical nutrition. Exposure to a variety of disease states and pharmacotherapy management experiences occurs during the rotation. The practice resident is immediately integrated into the multidisciplinary service. As the pharmacy resident progresses and gains experience, patient load is increased throughout the rotation. The resident rounds with the team daily and assumes responsibility and accountability for all pharmacotherapy management issues for their assigned patients.

Clinical pharmacists, including residents, in the MICU are responsible for ensuring safe and effective medication use for all patients admitted to the team. Routine responsibilities include: participating in MICU rounds; pharmacokinetic drug monitoring and participating in the formal PK consult service; prospective pharmacotherapy recommendations focusing on, but not limited to the following: sedation/analgesia/delirium management, anti-infective therapies, medication adjustment for organ dysfunction, and anticoagulation; drug information; order verification; and education to healthcare professionals as well as patients and caregivers, if requested.

**Disease States/ Core content:** to be covered via patient experiences, assigned reading material, discussions or reading materials, and/or case presentations include but are not limited to:

- Hemodynamic support using inotropic/vasoactive agents
- ICU analgesia
- ICU agitation/sedation
- ICU delirium
- Neuromuscular blockade
- Pharmacokinetics in critically ill patients
- Sepsis Continuum from systemic inflammatory response syndrome (SIRS) to septic shock
- Multiple organ dysfunction and oxygen delivery in critically ill patients
- Fluid and electrolyte imbalance/replacement in critically ill patients

- Acute kidney insufficiency
- Disseminated intravascular coagulation (DIC)
- Variety of infectious diseases (a few common examples- Catheter-Related Blood Stream Infections, Hospital and Ventilator Associated Pneumonia, Community-Acquired Pneumonia, etc.)
- Acute respiratory distress syndrome (ARDS)
- Acute alcohol withdrawal
- Diabetic ketoacidosis (DKA)
- Hypertensive emergency
- Acute gastrointestinal bleeding
- Acute COPD exacerbation
- Acute overdoses (ex: tricyclic antidepressants, acetaminophen, miscellaneous)
- ICU prophylaxis issues: Gastrointestinal stress ulcer prophylaxis, venous thrombosis prophylaxis

Topic discussions and reading key articles will be used to help develop the resident's patient care skills for common disease states or acquiring knowledge about diseases seen infrequently on the service.

During the learning experience the resident will focus on the goals and objectives outlined below by performing the activities that are associated with each objective. The resident will gradually assume responsibility for all of the patients within the assigned unit. The PGY1 resident must devise efficient strategies for accomplishing the required activities in a limited time frame.

Achievement of the goals of the residency is determined through assessment of ability to perform the associated objectives. The table below demonstrates the relationship between the activities and the goals/objectives assigned to the learning experience.

#### **Expectation of Learners:**

#### **Preceptor Interaction**

**Mon-Wed and Fri 08:00** Rounding with MICU team

**Thurs 07:30** Rounding with MICU team

**Daily:** Schedule time with preceptor for reviewing patient cases and care plans, topic discussions, etc.

#### **Communication:**

- Daily scheduled meeting times: Residents to prioritize questions and problems to discuss during scheduled meeting times as listed above.
- E-mail: Residents are expected to read e-mails for ongoing communication. This is appropriate for routine, non-urgent questions and issues.
- UVA iPhone/Pager: Residents to page/text or call preceptor for urgent/emergency situations pertaining to patient care. Residents to page/text preceptor for non-urgent issues pertaining to patient care or workflow/scheduling issues.

- Personal phone number: Provided to resident at time of learning experience if unavailable by UVA iPhone/pager.

### **Expected progression of resident responsibility on this learning experience:**

(Length of time preceptor spends in each of the phases will be personalized based upon resident's abilities and timing of the learning experience during the residency training year)

Day 1: Preceptor to review learning activities and expectations with resident.

Week 1: Resident to work up one provider team's patients and present to preceptor daily. Preceptor to attend and participate in team rounds with resident, modeling pharmacist's role on the health care team.

Week 2: Resident to work up one provider team's patients and the NP team's patients and discuss problems with preceptor daily. Preceptor to attend team rounds with resident, coaching the resident to take on more responsibilities as the pharmacist on the team.

Weeks 3-5: Each week the resident is expected to take over the responsibility of working up more of the team's patients, continuing to discuss identified problems with preceptor daily. Once the resident is able to take responsibility for all patients assigned to the team, the preceptor will no longer attend team rounds, but will continue to facilitate the resident as the pharmacist on the team.

### **Evaluation**

The frequency of evaluations and corresponding documentation requirements can be found in the "Evaluations" grid at the end of each learning experience description.

- All evaluations are to be completed by the last day of the learning experience (and no more than one week after the conclusion of the experience).
- Evaluations are signed/ co-signed only after discussed in a summative evaluation meeting between the preceptor and resident.
- Resident self-evaluations are completed until objective R3.1.2 has been deemed by the RPD as ACHR
- Frequent, immediate, specific, and constructive verbal feedback regarding performance is provided to the resident throughout the rotation.

		<b>Activities</b>	
<b>Goal R1.1</b>	<b>In collaboration with the health care team, provide safe and effective patient care to a diverse range of patients, including those with multiple co-morbidities, high-risk medication regimens, and multiple medications following a consistent patient care process</b>		
OBJ R1.1.1	(Cognitive - Applying) Interact effectively with health care teams to manage patients' medication therapy	Taught and Evaluated	<p>Ensure visibility and availability to patient care team by maintaining an active presence on the unit throughout the work day.</p> <p>Establish position as a vital member of the team and develop a good rapport with members of the team by showing respect and demonstrating maturity, sound clinical knowledge and responsibility for recommendations and actions</p> <p>Participate in daily morning rounds with assigned MICU team and maintain a presence in the unit throughout the work day</p> <p>Provide medication information to physicians, nurses and patients</p>
OBJ R1.1.2	(Cognitive - Applying) Interact effectively with patients, family members, and caregivers	Taught and Evaluated	<p>Interacts and communicates with team, patient, and family in a respectful and collaborative manner.</p> <p>Upholds ASPIRE values</p>
OBJ R1.1.3	(Cognitive - Analyzing) Collect information on which to base safe and effective medication therapy	Taught and Evaluated	<p>Examine the patient related information from the electronic medical record [(EMR) including but not limited to laboratory parameters, microbiology, all notes, flowsheets, etc.], from rounds and from outside admission sources to identify medication related issues</p> <p>Use an organized patient care monitoring system with the following characteristics: readily retrievable; current patient problem list and associated medication therapy, past medical history, allergies, medications prior to admission; medication monitoring needs and follow up of medication related issues.</p>
OBJ R1.1.4	(Cognitive - Analyzing) Analyze and assess information on which to base safe and effective medication therapy	Taught and Evaluated	<p>Analyze patient medication profiles daily emphasizing the following areas: indication; appropriateness of dose/route/selection; elimination of therapeutic duplication; detection of drug-drug, drug-food or drug-allergy interactions</p> <p>Be prepared to discuss problems identified with preceptor prior to, during or after patient care rounds based on: 1) acuity of issue and 2) schedule of preceptor and resident</p> <p>Discuss patient related issues daily with preceptor in a manner that reflects acuity of problems, logical flow, and focus on pharmaceutical care.</p> <p>Identify all problems that may require drug therapy or may occur secondary to drug treatment</p> <p>Prioritize problems by acuity and pertinence to the ICU setting and resolve problems in order of acuity</p>

OBJ R1.1.5	(Cognitive - Creating) Design or redesign safe and effective patient-centered therapeutic regimens and monitoring plans (care plans)	Taught and Evaluated	<p>Assess all patient specific factors and laboratory parameters to determine potential reasons for the occurrence of adverse outcomes or unattained therapeutic goals</p> <p>Assess patient cares needs for referral to consult services and make the recommendation to MICU team LIP to contact the appropriate consult services</p> <p>Be prepared to discuss problems identified with preceptor prior to, during or after patient care rounds based on: 1) acuity of issue and 2) schedule of preceptor and resident</p> <p>Demonstrate awareness and flexibility of the rapidly changing ICU environment and the ability to re-prioritize and change patient care regimens/plans with the rapidly changing MICU population</p> <p>Develop therapeutic regimens and monitoring plans such that care priority is based on acuity and pertinence to the ICU setting.</p> <p>For all patients, develop evidence-based, measurable, achievable therapeutic goals that take into consideration the patient's disease state(s), ethical issues, quality of life, goals of other interprofessional team members, and relevant patient-specific information including culture and preferences</p>
OBJ R1.1.6	(Cognitive - Applying) Ensure implementation of therapeutic regimens and monitoring plans (care plans) by taking appropriate follow-up actions	Taught and Evaluated	<p>Assure the understanding of members of the multidisciplinary team, as it pertains to the plan at hand</p> <p>Communicate clearly and collaboratively and achieve team consensus with the recommendations</p> <p>Develop and effectively communicate therapeutic regimens and care plans for monitoring patient outcome parameters for all therapeutic recommendations with the ICU team</p> <p>Justify recommendations with the best available evidenced based data</p>
OBJ R1.1.7	(Cognitive - Applying) Document direct patient care activities appropriately in the medical record or where appropriate	Taught and Evaluated	<p>Document interventions using EPIC I – vents</p> <p>Document PK Consult Service Progress notes using EPIC templates and pursuant to the departmental PK Policy and procedure</p> <p>Select appropriate and pertinent information to document therapeutic interventions, allergies, adverse drug reactions and medication errors in the EMR</p> <p>Use only factual information (no emotion) when documenting in progress notes, interventions or anywhere in the patient's EMR</p>
OBJ R1.1.8	(Cognitive - Applying) Demonstrate responsibility to patients	Taught and Evaluated	<p>For all patients, ensure all identified medication-related issues are resolved by the end of the day. If cannot be resolved, ensure that any outstanding issues are communicated to evening pharmacy prior to leaving for the day</p> <p>Prioritize patient care above all other tasks</p> <p>Serve as a liaison between pharmacy and the nursing/medical staff to coordinate any distributive issues not resolved by the inpatient pharmacy</p>
<b>Goal R1.2</b>	<b>Ensure continuity of care during patient transitions between care settings</b>		
OBJ R1.2.1	(Cognitive - Applying) Manage transitions of care effectively	Taught and Evaluated	<p>Provide accurate and timely follow-up information when patients transfer to another facility, level of care, pharmacist, or provider</p>
<b>Goal R3.1</b>	<b>Demonstrate leadership skills</b>		
OBJ R3.1.2	(Cognitive - Applying) Apply a process of on-going self-evaluation and personal performance improvement	Taught and Evaluated	<p>Accurately summarizes strengths and areas for improvement</p> <p>Complete timely, reflective, and qualitative self-evaluations.</p> <p>Develop a schedule to effectively manage rotation responsibilities with other residency responsibilities (i.e. MUE project, research project, etc.).</p> <p>Seeks and incorporates feedback from others</p>

<b>Goal R4.1</b>	<b>Provide effective medication and practice-related education to patients, caregivers, health care professionals, students, and the public (individuals and groups)</b>		
OBJ R4.1.2	(Cognitive - Applying) Use effective presentation and teaching skills to deliver education	Taught and Evaluated	Effectively facilitates audience participation, active learning, and engagement Presents at appropriate rate and volume and without distracting speaker habits Provide an in-service to the MICU team – The in-service should be presented in a 20-30 minute time frame, and a handout must be prepared (the handout may be the PowerPoint Slide presentation). The topic may be presented from the written handout or as a PowerPoint slide presentation. Provide concise, informative, and thorough case conference presentation, when assigned
<b>Goal R4.2</b>	<b>Effectively employs appropriate preceptor roles when engaged in teaching students, pharmacy technicians or fellow health care professionals</b>		
OBJ R4.2.1	(Cognitive - Analyzing) When engaged in teaching, select a preceptor role that meets learners' educational needs	Taught and Evaluated	Co-precepts another learner Distinguish which preceptor role is applicable for the situation (direct instruction, modeling, coaching, facilitating).
OBJ R4.2.2	(Cognitive - Applying) Effectively employ preceptor roles, as appropriate	Taught and Evaluated	Coaches, including effective use of verbal guidance, feedback, and questioning, as needed. Facilitates, when appropriate, by allowing learner independence when ready and using indirect monitoring of performance. Instructs students, technicians, or others, as appropriate. Models skills, including "thinking out loud," so learners can "observe" critical thinking skills.
<b>Goal E5.1</b>	<b>Participate in the management of medical emergencies</b>		
OBJ E5.1.1	(Cognitive - Applying) Exercise skill as a team member in the management of medical emergencies according to the organization's policies and procedures	Taught and Evaluated	Respond to SIRS/Sprint alerts during rotation hours for your patients Serve as the code pharmacist for any codes that occur during the assigned code duty. Serve as the code pharmacist for any unit codes.

#### Evaluations:

	Evaluator	Evaluated	Timing
Summative Evaluation	All Preceptors	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed
ASHP Learning Experience Evaluation	Residents	Learning Experience	Ending and Quarterly if Needed
ASHP Preceptor Evaluation	Residents	All Preceptors of this Learning Experience	Ending and Quarterly if Needed
Summative Evaluation	Residents	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed



Faculty: Palazzolo, Nicole S.

**Site:**

University of Virginia Health System

**Status:** Active

Required

**Description:**

Neonatal Intensive Care (NICU) is a five week learning experience in critical care for pharmacy residents. The NICU is a 51 bed level 4 NICU. The unit is divided into a higher level of care, Neonatal Intensive Care (NICU) and Intermediate Care Nursery (ICN). These are divided by location: NICU is pods A, B and C while the ICN is pods D, E, F, G and H. There are three unit teaching teams: resident NICU team, nurse practitioner NICU team and resident ICN team. Each of the teaching teams includes an attending physician, a PGY1, PGY2 or PGY3 medical resident or nurse practitioner, a primary care nurse, dietician, and a clinical pharmacist. The clinical pediatric pharmacist rounds daily with the NICU resident team and as needed with the nurse practitioner NICU team but is responsible for all NICU and ICN patients.

The patient population includes both premature infants and term babies with underlying disease. The NICU is involved in several investigational drug studies and is capable of providing an advanced level of care with therapies such as extracorporeal membrane oxygenation (ECMO) and inhaled nitric oxide.

**Role of Pharmacist**

NICU pharmacists are responsible for ensuring safe and effective medication use for all patients admitted to the unit. Routine responsibilities include: rounding with the medical teams, medication optimization recommendations, drug information and education, order verification, therapeutic drug monitoring, handoff of care to other pediatric pharmacists, and total parenteral nutrition (TPN) verification.

**Disease States**

Common disease states in which the resident will be expected to gain proficiency through direct patient care experience for common diseases including, but not limited to:

- Apnea of prematurity
- Chronic lung disease
- Congenital heart disease
- Drug Administration Issues
- Electrolyte imbalances
- Extracorporeal membrane oxygenation (ECMO)
- Intraventricular hemorrhage
- Neonatal abstinence syndrome
- Necrotizing enterocolitis
- Neonatal meningitis
- Nutrition – parenteral and enteral
- Pain and sedation management
- Persistent pulmonary hypertension
- Respiratory distress syndrome
- Retinopathy of prematurity
- Seizures
- Sepsis

Topic discussions and reading key articles will be used to help develop the resident's patient care skills for common disease states or acquiring knowledge about diseases seen infrequently on the service. During the learning experience the resident will focus on the goals and objectives outlined below by performing the activities that are associated with each objective. The resident will gradually assume responsibility for all of

the patients within the assigned unit. The PGY1 resident must devise efficient strategies for accomplishing the required activities in a limited time frame.

Achievement of the goals of the residency is determined through assessment of ability to perform the associated objectives. The table below demonstrates the relationship between the activities and the goals/objectives assigned to the learning experience.

### **Expectation of Learners:**

#### **Preceptor Interaction**

Daily:

8:30 – 11:00 Rounds (September-June, rounds on Thursdays start at 9:00).

8:00 – 4:30 Preceptor available on the unit for questions. Will schedule time daily to review and present select patients, topic discussions and reviewing progress note, etc.

#### **Communication:**

A. Daily scheduled meeting times: Residents to prioritize questions and problems to discuss during scheduled meeting times.

B. E-mail: Residents are expected to read e-mails for ongoing communication. This is appropriate for routine, non-urgent questions and problems.

C. Work cell phone: Appropriate for urgent questions pertaining to patient care.

D. Pager: Residents to page preceptor for urgent situations pertaining to patient care

E. Personal phone number: Provided to resident at time of learning experience for emergency issues.

#### **Expected progression of resident responsibility on this learning experience:**

(Length of time preceptor spends in each of the phases will be personalized based upon resident's abilities and timing of the learning experience during the residency training year)

*Day 1:* Preceptor to review learning activities and expectations with resident.

*Week 1:* Resident to work up approximately 1/2 of the ICU (Pods A, B,C) patients covered by the medical resident team and present to preceptor daily. Preceptor to attend and participate in team rounds with resident, modeling pharmacist's role on the health care team.

*Week 2:* Resident to work up all of the ICU (Pods A, B,C) patients covered by the medical resident team and discuss problems with preceptor daily. Preceptor to attend team rounds with resident as needed, coaching the resident to take on more responsibilities as the pharmacist on the team.

*Weeks 3-5:* Each week the resident is expected to take over the responsibility of working up more of the NICU patients (start to cover all NICU beds rounding with both medical residents and nurse practitioners) and assist with ICN patients. Resident will continue to discuss identified problems with preceptor daily. Once the resident is able to take responsibility for all NICU (pods A,B, C) patients assigned to the team, the preceptor will no longer attend team rounds, but will continue to facilitate the resident as the pharmacist on the team.

		<b>Activities</b>	
<b>Goal R1.1</b>	<b>In collaboration with the health care team, provide safe and effective patient care to a diverse range of patients, including those with multiple co-morbidities, high-risk medication regimens, and multiple medications following a consistent patient care process</b>		
<b>OBJ R1.1.1</b>	(Cognitive - Applying) Interact effectively with health care teams to manage patients' medication therapy	Taught and Evaluated	Answer medication-related questions and review patient charts for ICN Be prepared to provide recommendations on assigned patients and answer drug information questions in a timely manner. Participate in daily rounds with NICU team.
<b>OBJ R1.1.2</b>	(Cognitive - Applying) Interact effectively with patients, family members, and caregivers	Taught and Evaluated	Interacts and communicates with team, patient, and family in a respectful and collaborative manner. Provides appropriate and informative medication counseling to family upon request Upholds ASPIRE values.

OBJ R1.1.3	(Cognitive - Analyzing) Collect information on which to base safe and effective medication therapy	Taught and Evaluated	Collect pertinent information for each assigned patient from medical record, patient's nurse, and patient (as applicable) every morning for assigned patients. Construct a system for recording and organizing information that will facilitate identification of medication-related issues and provide structure for patient case presentations.
OBJ R1.1.4	(Cognitive - Analyzing) Analyze and assess information on which to base safe and effective medication therapy	Taught and Evaluated	Be prepared to discuss problems identified and solutions with preceptor prior to or after rounds. Confirm the appropriateness of all medications based on patient weight, age, developmental stage, and clinical condition. Identify any issues with medication therapy (i.e., lack of indication, condition for which no medication is prescribed, suboptimal regimen, therapeutic duplication, adverse events, interactions, social/financial barriers) Recognize issues related to age-based differences in laboratory values, vital signs, and medication pharmacokinetics/pharmacodynamics Suggest alternatives for medications lacking suitable pediatric dosage form and appropriate IV concentrations and infusion rates
OBJ R1.1.5	(Cognitive - Creating) Design or redesign safe and effective patient-centered therapeutic regimens and monitoring plans (care plans)	Taught and Evaluated	Be prepared to discuss patient care recommendations with preceptor prior to or after rounds. For all patients, develop evidence-based, measurable, achievable therapeutic goals that take into consideration the patient's disease state(s), ethical issues, quality of life, goals of other interprofessional team members, and relevant patient-specific information including culture and preferences Utilize appropriate pediatric references as well as primary literature to guide all recommendations
OBJ R1.1.6	(Cognitive - Applying) Ensure implementation of therapeutic regimens and monitoring plans (care plans) by taking appropriate follow-up actions	Taught and Evaluated	Discuss recommendations with NICU team, after getting approval from preceptor if necessary. Follow-up after rounds to ensure any agreed upon changes have been implemented.
OBJ R1.1.7	(Cognitive - Applying) Document direct patient care activities appropriately in the medical record or where appropriate	Taught and Evaluated	Document interventions and clinical pass-offs using ivents, pharmacy notes, email and verbal sign-out.
OBJ R1.1.8	(Cognitive - Applying) Demonstrate responsibility to patients	Taught and Evaluated	Ensure visibility to patient care team by maintaining an active presence on the unit If cannot be resolved in reasonable timeframe by end of day, ensure that any outstanding issue is communicated to evening pharmacist. Prioritize patient care above all other tasks Resolve existing and potential medication-related problems until satisfactory resolution is resolved.
<b>Goal R1.2</b>	<b>Ensure continuity of care during patient transitions between care settings</b>		
OBJ R1.2.1	(Cognitive - Applying) Manage transitions of care effectively	Taught and Evaluated	Assist NICU team members with medication-related discharge planning and recommendations Provide accurate and timely follow-up information when patients transfer to another facility, level of care, pharmacist, or provider
<b>Goal R3.1</b>	<b>Demonstrate leadership skills</b>		
OBJ R3.1.2	(Cognitive - Applying) Apply a process of on-going self-evaluation and personal performance improvement	Taught and Evaluated	Accurately summarizes strengths and areas for improvement Complete all required self-evaluations Seeks and incorporates feedback from others

<b>Goal R4.1</b>	<b>Provide effective medication and practice-related education to patients, caregivers, health care professionals, students, and the public (individuals and groups)</b>		
OBJ R4.1.2	(Cognitive - Applying) Use effective presentation and teaching skills to deliver education	Taught and Evaluated	Effectively facilitates audience participation, active learning, and engagement Presents at appropriate rate and volume and without distracting speaker habits Provide concise, informative, and thorough topic discussion, journal club, patient presentations, and case conference presentation, when assigned.
<b>Goal R4.2</b>	<b>Effectively employs appropriate preceptor roles when engaged in teaching students, pharmacy technicians or fellow health care professionals</b>		
OBJ R4.2.1	(Cognitive - Analyzing) When engaged in teaching, select a preceptor role that meets learners' educational needs	Taught and Evaluated	Co-precepts another learner, when applicable Distinguish which preceptor role is applicable for the situation (direct instruction, modeling, coaching, facilitating).
OBJ R4.2.2	(Cognitive - Applying) Effectively employ preceptor roles, as appropriate	Taught and Evaluated	Coaches, including effective use of verbal guidance, feedback, and questioning, as needed. Facilitates, when appropriate, by allowing learner independence when ready and using indirect monitoring of performance. Instructs students, technicians, or others, as appropriate. Models skills, including "thinking out loud," so learners can "observe" critical thinking skills.
<b>Goal E5.1</b>	<b>Participate in the management of medical emergencies</b>		
OBJ E5.1.1	(Cognitive - Applying) Exercise skill as a team member in the management of medical emergencies according to the organization's policies and procedures	Taught and Evaluated	Attend any neonatal or pediatric code events with the pediatric clinical pharmacists during rounds or when working in the patient care area. Respond to SPRINT/SIRS Alerts for assigned patients. Serve as the code pharmacist for any in unit codes. Serve as the code pharmacist for any codes that occur during assigned code duty.

#### Evaluations:

	Evaluator	Evaluated	Timing
Summative Evaluation	All Preceptors	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed
ASHP Learning Experience Evaluation	Residents	Learning Experience	Ending and Quarterly if Needed
ASHP Preceptor Evaluation	Residents	All Preceptors of this Learning Experience	Ending and Quarterly if Needed
Summative Evaluation	Residents	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed

Faculty: Bledsoe, Kathleen

**Site:**

University of Virginia Health System

**Status:** Active

Required

**Description:****General Description**

The Nerancy Neuro Intensive Care Unit (NNICU) elective rotation provides a five-week experience in critical care of neurological and neurosurgical patients. The NNICU is a 12-bed unit which provides care for critically ill neurosurgical, neurology, and occasionally, otolaryngology/head & neck surgery patients. The resident will become fully integrated into the ICU interdisciplinary team, round with the team on a daily basis, and focus on management of drug therapy in critically ill patients.

The clinical pharmacist is responsible for ensuring safe and effective medication use for all patients admitted to the team. Routine responsibilities include: optimization of therapeutic regimens based on patient-specific disease states, therapeutic drug monitoring, reconciling medications for all patients admitted to the team, and addressing formal consults for non-formulary drug requests, . The pharmacist will also provide drug information and education to healthcare professionals as well and patients and caregivers.

**Core content** to be covered via patient experiences, discussion or reading materials, and/or case presentations include but are not limited to:

- Cerebrovascular disorders, including ischemic and hemorrhagic stroke
- Central nervous system (CNS) infections
- Electrolyte disorders of CNS origin
- Myasthenia gravis and myasthenic crisis
- Guillian-Barre syndrome
- Death by neurologic criteria
- Spinal cord injury
- Traumatic brain injury

Topic discussions and reading key articles will be used to help develop the resident's patient care skills for common disease states or acquiring knowledge about diseases seen infrequently on the service.

During the learning experience the resident will focus on the goals and objectives outlined below by performing the activities that are associated with each objective. The resident will gradually assume responsibility for all of the patients within the assigned unit. The PGY1 resident must devise efficient strategies for accomplishing the required activities in a limited time frame.

Achievement of the goals of the residency is determined through assessment of ability to perform the associated objectives. The table below demonstrates the relationship between the activities and the goals/objectives assigned to the learning experience.

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#### **Expectation of Learners:**

#### **Preceptor Interaction**

##### **Daily:**

8:30 Rounding with ICU, general neurology, stroke neurology teams before breaking off for ICU rounds

Schedule time daily with preceptor for topic discussions, reviewing patient cases and care plan, etc.

#### **Communication:**

- Daily scheduled meeting times: Residents to prioritize questions and problems to discuss during scheduled meeting times as listed above.
- E-mail: Residents are expected to read e-mails for ongoing communication. This is appropriate for routine, non-urgent questions and issues.
- UVa iPhone/pager: Residents to page/text preceptor for urgent situations pertaining to patient care

#### **Expected progression of resident responsibility on this learning experience:**

(Length of time preceptor spends in each of the phases will be personalized based upon resident's abilities and timing of the learning experience during the residency training year)

Day 1: Preceptor to review learning activities and expectations with resident.

Week 1: Resident to work up to caring for all of the team's patients by the end of week one. Preceptor to attend and participate in team rounds with resident, modeling pharmacist's role on the health care team.

Week 2: Resident to begin to round independently and meet with preceptor daily to review patients care plans.

Weeks 3-5: Each week the resident is expected to take over greater responsibility as the ICU pharmacist and become fully integrated in the ICU interdisciplinary team. The resident will continue to discuss care plans with preceptor daily. The preceptor will continue to facilitate the resident as the pharmacist on the team.

## **Evaluation**

The frequency of evaluations and corresponding documentation requirements can be found in the "Evaluations" grid at the end of each learning experience description.

- All evaluations are to be completed by the last day of the learning experience (and no more than one week after the conclusion of the experience).
- Evaluations are signed/ co-signed only after discussed in a summative evaluation meeting between the preceptor and resident.
- Resident self-evaluations are completed until objective R3.1.2 has been deemed by the RPD as ACHR
- Frequent, immediate, specific, and constructive verbal feedback regarding performance is provided to the resident throughout the rotation.

		<b>Activities</b>	
<b>Goal R1.1</b>	<b>In collaboration with the health care team, provide safe and effective patient care to a diverse range of patients, including those with multiple co-morbidities, high-risk medication regimens, and multiple medications following a consistent patient care process</b>		
OBJ R1.1.1	(Cognitive - Applying) Interact effectively with health care teams to manage patients' medication therapy	Taught and Evaluated	Attend interdisciplinary rounds daily (0830 and approximately 1530) with attending physicians, residents, and medical students and maintain presence in the unit throughout the workday. Establish position as vital member of team and develop a good rapport with members of the team by showing respect and demonstrating sound clinical knowledge and responsibility for recommendations and actions. Provide medication information to physicians, nurses, and patients. Respond to drug information questions as they arise from healthcare providers.
OBJ R1.1.2	(Cognitive - Applying) Interact effectively with patients, family members, and caregivers	Taught and Evaluated	Interacts and communicates with team, patient, and family in a respectful and collaborative manner. Upholds ASPIRE values.

OBJ R1.1.3	(Cognitive - Analyzing) Collect information on which to base safe and effective medication therapy	Taught and Evaluated	Actively participate in multidisciplinary rounds to gather additional patient information not readily available in the EMR. Examine patient's electronic medical record (EMR), laboratory parameters, flow chart, and any other information in the electronic medical record to fully understand the clinical condition and response to therapy and determine pertinent information necessary to resolve medication related problems. Use an organized system for patient data collection that allows for easy retrieval of information, previous therapies, ongoing issues, etc.
OBJ R1.1.4	(Cognitive - Analyzing) Analyze and assess information on which to base safe and effective medication therapy	Taught and Evaluated	Analyze patient medication profiles daily with emphasis on the following areas: Indication; Appropriateness of dose/route/selection; Elimination of therapeutic duplication; Detection of drug-drug, drug-food or drug-allergy interactions. Continually re-evaluate the active problem list and monitoring plan for all patients to assess progress toward therapeutic goals. Review and evaluate the literature with regards to patients cases discussed. Review articles assigned and be prepared for topic discussions as scheduled.
OBJ R1.1.5	(Cognitive - Creating) Design or redesign safe and effective patient-centered therapeutic regimens and monitoring plans (care plans)	Taught and Evaluated	Appraise the necessity of sub-specialty consults and recommend as appropriate and the need to consult with other members of the interdisciplinary team. Determine reasons for a patient's progress or lack of progress toward the stated health care goal, recognizing that patient needs change quickly in critically ill patients and be prepared to adjust the therapeutic plan as needed. Develop patient care plans that are supported by appropriate professional organization practice guidelines such as SCCM, IDSA, and NCS. For all patients, develop evidence-based, measurable, achievable therapeutic goals that take into consideration the patient's disease state(s), ethical issues, quality of life, goals of other interprofessional team members, and relevant patient-specific information including culture and preferences.
OBJ R1.1.6	(Cognitive - Applying) Ensure implementation of therapeutic regimens and monitoring plans (care plans) by taking appropriate follow-up actions	Taught and Evaluated	Prepare and effectively communicate therapeutic regimens and care plans for monitoring patient outcome parameters for all therapeutic recommendations with the ICU team. Produce evidence to support such recommendations and demonstrate cost effectiveness when making recommendations. Use good interpersonal and collaborative skills to achieve consensus from the care team regarding recommendations.
OBJ R1.1.7	(Cognitive - Applying) Document direct patient care activities appropriately in the medical record or where appropriate	Taught and Evaluated	Choose appropriate and relevant information to document therapeutic interventions (Ivents), allergies, adverse drug reactions and medication errors in the electronic medical record. Distinguish the most appropriate method for documenting clinical activities (ivent, progress note). Report only factual information when documenting interventions.
OBJ R1.1.8	(Cognitive - Applying) Demonstrate responsibility to patients	Taught and Evaluated	Ensure visibility/availability to patient care team by maintaining an active presence on the unit. For all patients, ensure all identified medication-related issues are resolved by the end of the day. If cannot be resolved, ensure that any outstanding issues are communicated to on-coming pharmacist prior to leaving for the day/weekend. Serve as liaison between pharmacy and nursing/medical staff to coordinate any distributive issues not resolved by the inpatient pharmacy.



<b>Goal R1.2</b>	<b>Ensure continuity of care during patient transitions between care settings</b>		
OBJ R1.2.1	(Cognitive - Applying) Manage transitions of care effectively	Taught and Evaluated	Provide accurate and timely follow-up information when patients transfer to another facility, level of care, pharmacist, or provider.
<b>Goal R3.1</b>	<b>Demonstrate leadership skills</b>		
OBJ R3.1.2	(Cognitive - Applying) Apply a process of on-going self-evaluation and personal performance improvement	Taught and Evaluated	Accurately summarizes strengths and areas for improvement. Complete timely, reflective, and qualitative self-evaluations. Seeks and incorporates feedback from others.
<b>Goal R4.1</b>	<b>Provide effective medication and practice-related education to patients, caregivers, health care professionals, students, and the public (individuals and groups)</b>		
OBJ R4.1.2	(Cognitive - Applying) Use effective presentation and teaching skills to deliver education	Taught and Evaluated	Effectively facilitates audience participation, active learning, and engagement. Prepare and present an educational inservice/project on a relevant topic pertaining to pharmacy and the NNICU to members of the healthcare team (nursing, physicians, or pharmacy and/or medical students). Presents at appropriate rate and volume and without distracting speaker habits. Provide concise, informative, and thorough case conference presentation, when assigned.
<b>Goal R4.2</b>	<b>Effectively employs appropriate preceptor roles when engaged in teaching students, pharmacy technicians or fellow health care professionals</b>		
OBJ R4.2.1	(Cognitive - Analyzing) When engaged in teaching, select a preceptor role that meets learners' educational needs	Taught and Evaluated	Co-precepts another learner. Distinguishes which preceptor role is applicable for the situation (direct instruction, modeling, coaching, facilitating).
OBJ R4.2.2	(Cognitive - Applying) Effectively employ preceptor roles, as appropriate	Taught and Evaluated	Coaches, including effective use of verbal guidance, feedback, and questioning, as needed. Facilitates, when appropriate, by allowing learner independence when ready and using indirect monitoring of performance. Instructs students, technicians, or others, as appropriate. Models skills, including "thinking out loud," so learners can "observe" critical thinking skills.
<b>Goal E5.1</b>	<b>Participate in the management of medical emergencies</b>		
OBJ E5.1.1	(Cognitive - Applying) Exercise skill as a team member in the management of medical emergencies according to the organization's policies and procedures	Taught and Evaluated	Respond to SPRINT/SIRS alerts for assigned patients. Serve as the code pharmacist for an code events in the NNICU. Serve as the code pharmacist for any codes that occur during the assigned code duty.

#### Evaluations:

	Evaluator	Evaluated	Timing
Summative Evaluation	All Preceptors	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed
ASHP Learning Experience Evaluation	Residents	Learning Experience	Ending and Quarterly if Needed
ASHP Preceptor Evaluation	Residents	All Preceptors of this Learning Experience	Ending and Quarterly if Needed

Summative Evaluation	Residents	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed
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Faculty: Lunsford, Kelly J.

**Site:**

University of Virginia Health System

**Status:** Active

Required

**Description:**

The Pediatric Intensive Care Unit (PICU) rotation is a five-week critical care rotation for pharmacy residents. The focus of this rotation is the provision of complete pharmaceutical care services to the PICU patient population. The PICU is a 15 bed medical/surgical tertiary care unit divided into two services: PICU and Cardiac Intensive Care (CICU). The patients range in age from newborns to young adults. In addition to trauma and general medical cases, the most frequent admissions to the PICU team are for postoperative care following neurosurgical procedures, orthopedic surgery, or solid organ transplantation. The CICU team follows patients after cardiac surgery, as well as infants and children with cardiac failure or arrhythmias. The PICU is the only regional provider of pediatric extracorporeal membrane oxygenation (ECMO).

Pediatric clinical pharmacists and pharmacy residents are responsible for ensuring safe and effective medication use for all patients admitted to the team. Routine responsibilities include: rounding with the PICU and CICU teams, pharmacokinetic drug monitoring, anticoagulation, drug information, order verification, appropriate hand off of care for patients transferring to other units, and education to healthcare professionals as well as patients and caregivers, if requested.

**Disease States**

Common disease states and topic areas in which the resident will be expected to gain proficiency through direct patient care experience include, but are not limited to:

- Pediatric Trauma
- Postoperative Care
  - o Analgesia and sedation in the critically ill child
  - o Antimicrobial use following surgery
  - o Anticoagulation in infants and children
- Pediatric Infectious Diseases
  - o Management of sepsis and septic shock, meningitis, pneumonia, endocarditis, and skin and soft tissue infections
  - o Methods to reduce or eliminate hospital-acquired infections
- Acute asthma exacerbations
- Diabetic Ketoacidosis
- Status Epilepticus
- Toxic ingestions

- Management of fluids and nutrition
- Management of acute kidney injury
- Initial management of pediatric patients with a solid organ transplant
- Developmental pharmacology, pharmacokinetics, and pharmacodynamics

Topic discussions and reading key articles will be used to help develop the resident's patient care skills for common disease states or acquiring knowledge about diseases seen infrequently on the service.

During the learning experience the resident will focus on the goals and objectives outlined below by performing the activities that are associated with each objective. The resident will gradually assume responsibility for all of the patients within the assigned rounding service. The PGY1 resident must devise efficient strategies for accomplishing the required activities in a limited time frame.

Achievement of the goals of the residency is determined through assessment of ability to perform the associated objectives. The table below demonstrates the relationship between the activities and the goals/objectives assigned to the learning experience.

#### **Expectation of Learners:**

#### **Schedule and Preceptor Interaction**

##### **Rounds**

8:00-12:00, depending on patient census and acuity; rounds start at 9:00 on Thursdays from September-June

Pediatric Grand Rounds: 8:00-9:00 am on Thursdays starting the first week of September and ending the second week of June

##### **Preceptor Meetings**

Week 1: Daily on rounds; one-on-one patient summary with time for questions following rounds

Weeks 2-5: Three to five meetings per week for the resident to present patients

#### **Communication:**

A. Scheduled meeting times: Residents to prioritize questions and problems to discuss during scheduled meeting times as listed above.

B. E-mail: Residents are expected to read e-mails at the beginning, middle and end of each day at a minimum for ongoing communication. This is appropriate for routine, non-urgent questions and problems.

- C. iPhone/Pager: Resident to page or text preceptor for urgent questions pertaining to patient care.
- D. Pediatric pharmacy and pediatric team member contact information provided for back-up or emergencies.

**Expected progression of resident responsibility on this learning experience:**

(Length of time preceptor spends in each of the phases will be personalized based upon resident's abilities and timing of the learning experience during the residency training year)

Week 1: Resident will round with the preceptor. The first day will include an orientation to the service and adequate time for the resident to become familiar with the patients. The remainder of the week, the resident and preceptor will work together during rounds to ensure that the resident is trained in order verification, team workflow and standard work, the preparation of a daily sign-out, and documentation/communication of his/her work via ivents.

Weeks 2-5: Each week the resident is expected to take over the responsibility of working up more of the team's patients, continuing to discuss identified problems with preceptor daily. Once the resident is able to take responsibility for all patients assigned to the team, the preceptor will no longer attend team rounds, but will continue to facilitate the resident as the pharmacist on the team.

**Evaluation**

The frequency of evaluations and corresponding documentation requirements can be found in the "Evaluations" grid at the end of each learning experience description.

- All evaluations are to be completed by the last day of the learning experience (and no more than one week after the conclusion of the experience).
- Evaluations are signed/ co-signed only after discussed in a summative evaluation meeting between the preceptor and resident.
- Resident self-evaluations are completed until objective R3.1.2 has been deemed by the RPD as ACHR
- Frequent, immediate, specific, and constructive verbal feedback regarding performance is provided to the resident throughout the rotation.

			Activities
<b>Goal R1.1</b>	<b>In collaboration with the health care team, provide safe and effective patient care to a diverse range of patients, including those with multiple co-morbidities, high-risk medication regimens, and multiple medications following a consistent patient care process</b>		
OBJ R1.1.1	(Cognitive - Applying) Interact effectively with health care teams to manage patients' medication therapy	Taught and Evaluated	Be prepared to provide recommendations on assigned patients and answer drug information questions in a timely manner. Participate in daily rounds with the PICU team.
OBJ R1.1.2	(Cognitive - Applying) Interact effectively with patients, family members, and caregivers	Taught and Evaluated	Interact and communicate with team, patient, and family in a respectful and collaborative manner. Obtain admitting medication histories and perform medication reconciliation. Uphold ASPIRE values.
OBJ R1.1.3	(Cognitive - Analyzing) Collect information on which to base safe and effective medication therapy	Taught and Evaluated	Collect pertinent information for each assigned patient from medical record, patient's nurse, and patient's family (as applicable) every morning for assigned patients. Confirm the appropriateness of all medications based on patient weight, age, developmental stage, and clinical condition. Construct a system for recording and organizing this information that will facilitate identification of medication-related issues and provide a structure for patient case presentations.
OBJ R1.1.4	(Cognitive - Analyzing) Analyze and assess information on which to base safe and effective medication therapy	Taught and Evaluated	Be prepared to discuss problems identified with preceptor or other members of the pediatric clinical pharmacy team as they are identified, with follow-up during case presentations. Identify any issues with medication therapy (ie, lack of indication, condition for which no medication is prescribed, suboptimal regimen, therapeutic duplication, adverse events, interactions, social/financial barriers). Perform order verification for assigned patients. Recognize issues related to age-based differences in laboratory values, vital signs, and medication pharmacokinetics and pharmacodynamics. Suggest alternatives for medications lacking a suitable pediatric dosage form and appropriate IV concentrations.
OBJ R1.1.5	(Cognitive - Creating) Design or redesign safe and effective patient-centered therapeutic regimens and monitoring plans (care plans)	Taught and Evaluated	Be prepared to discuss recommendations for addressing problems with preceptor prior to or after morning rounds with PICU and CICU teams. For all patients, develop evidence-based, measurable, achievable therapeutic goals that take into consideration the patient's age, weight, disease state(s), ethical issues, quality of life, goals of other interprofessional team members, and relevant patient-specific information including culture and family preferences. Utilize appropriate pediatric dosing references as well as current primary literature to guide all recommendations.
OBJ R1.1.6	(Cognitive - Applying) Ensure implementation of therapeutic regimens and monitoring plans (care plans) by taking appropriate follow-up actions	Taught and Evaluated	Discuss recommendations with PICU and CICU teams after getting approval from preceptor. Follow-up after rounds to ensure any agreed upon changes have been implemented.
OBJ R1.1.7	(Cognitive - Applying) Document direct patient care activities appropriately in the medical record or where appropriate	Taught and Evaluated	Communicate important information on medications and monitoring plans with other pediatric pharmacists and document interventions using events. Write Progress Notes when needed to support verbal communication and provide details for complex recommendations.

OBJ R1.1.8	(Cognitive - Applying) Demonstrate responsibility to patients	Taught and Evaluated	Ensure that any outstanding issues are communicated to evening pharmacist prior to leaving for the day. Ensure visibility to patient care team by maintaining an active presence on the unit. Prioritize patient care above all other tasks. Resolve existing and potential medication-related problems until satisfactory resolution is obtained.
<b>Goal R1.2</b>	<b>Ensure continuity of care during patient transitions between care settings</b>		
OBJ R1.2.1	(Cognitive - Applying) Manage transitions of care effectively	Taught and Evaluated	Ensure that all medication orders are appropriate before patients are transferred out of the PICU. Provide accurate and timely follow-up information when patients transfer to another facility, level of care, pharmacist, or provider. Provide daily sign-out to other members of the pediatric pharmacy team.
<b>Goal R3.1</b>	<b>Demonstrate leadership skills</b>		
OBJ R3.1.2	(Cognitive - Applying) Apply a process of on-going self-evaluation and personal performance improvement	Taught and Evaluated	Accurately summarize strengths and areas for improvement. Perform timely, reflective, and qualitative self-evaluations assigned. Seek and incorporate feedback from others.
<b>Goal R4.1</b>	<b>Provide effective medication and practice-related education to patients, caregivers, health care professionals, students, and the public (individuals and groups)</b>		
OBJ R4.1.2	(Cognitive - Applying) Use effective presentation and teaching skills to deliver education	Taught and Evaluated	Effectively facilitate audience participation, active learning, and engagement. Present at appropriate rate and volume and without distracting speaker habits. Provide a concise, informative, and thorough case conference presentation or PICU teaching conference, when assigned.
<b>Goal R4.2</b>	<b>Effectively employs appropriate preceptor roles when engaged in teaching students, pharmacy technicians or fellow health care professionals</b>		
OBJ R4.2.1	(Cognitive - Analyzing) When engaged in teaching, select a preceptor role that meets learners' educational needs	Taught and Evaluated	Co-precept another learner, when applicable. Distinguish which preceptor role is applicable for the situation (direct instruction, modeling, coaching, facilitating).
OBJ R4.2.2	(Cognitive - Applying) Effectively employ preceptor roles, as appropriate	Taught and Evaluated	Coach, including effective use of verbal guidance, feedback, and questioning, as needed. Facilitate, when appropriate, by allowing learner independence when ready and using indirect monitoring of performance. Instruct students, technicians, or others, as appropriate. Model skills, including "thinking out loud," so learners can "observe" critical thinking skills.
<b>Goal E5.1</b>	<b>Participate in the management of medical emergencies</b>		
OBJ E5.1.1	(Cognitive - Applying) Exercise skill as a team member in the management of medical emergencies according to the organization's policies and procedures	Taught and Evaluated	Attend any neonatal or pediatric code events with the pediatric clinical pharmacists during rounds or when working in the patient care area.

Evaluations:

	Evaluator	Evaluated	Timing
Summative Evaluation	All Preceptors	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed
ASHP Learning Experience Evaluation	Residents	Learning Experience	Ending and Quarterly if Needed
ASHP Preceptor Evaluation	Residents	All Preceptors of this Learning Experience	Ending and Quarterly if Needed
Summative Evaluation	Residents	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed



Faculty: Volles, David F.

**Site:**

University of Virginia Health System

**Status:** Active

Required

**Description:**

The Surgical-Trauma Intensive Care Unit (STICU) rotation is a five week critical care rotation for pharmacy residents. The focus of this rotation is the provision of complete pharmaceutical care to the STICU patient population. The STICU is a 16 bed intensive care unit for critically ill general surgery, solid organ transplant, , and trauma patients. The most frequent postoperative admissions are for abdominal surgery procedures, vascular procedures, urology procedures, orthopedic procedures, liver transplant patients and trauma injury patients. The pharmacy resident would become integrated into the multidisciplinary team and make rounds with the STICU team which generally consists of an attending physician, 2-3 physician house-staff residents, a nurse practitioner LIP, respiratory therapists, and nurses.

Clinical pharmacists and pharmacy residents are responsible for ensuring safe and effective medication use for all patients admitted to the STICU team. Routine responsibilities include: rounding with the STICU multidisciplinary team, optimization of therapeutic regimens based on patient-specific disease states, medication reconciliation, pharmacokinetic drug monitoring, anticoagulation monitoring, drug information, order verification, appropriate hand off of care for patients transferring to other units, and education to healthcare professionals as well as patients and caregivers, if requested.

**Core Content:**

Common topics in which the resident will be expected to gain proficiency through direct participation include but are not limited to:

- Post-operative infectious complications
- Venous thrombosis prophylaxis
- Gastrointestinal stress ulcer prophylaxis
- Glycemic control in the intensive care unit
- ICU analgesia, sedation, and neuromuscular blockade
- Sepsis and inflammatory response syndrome (SIRS)
- Shock and related syndromes
- Nutritional support for critically ill surgical patients

- Pharmacokinetics in critically ill patients
- Fluid balance and acid / base disorders
- Fistulas and Ileus

Topic discussions and reading key articles will be used to help develop the resident's patient care skills for common disease states or acquiring knowledge about diseases seen infrequently on the service.

During the learning experience the resident will focus on the goals and objectives outlined below by performing the activities that are associated with each objective. The resident will gradually assume responsibility for all of the patients within the assigned unit. The PGY1 resident must devise efficient strategies for accomplishing the required activities in a limited time frame.

Achievement of the goals of the residency is determined through assessment of ability to perform the associated objectives. The table below demonstrates the relationship between the activities and the goals/objectives assigned to the learning experience.

#### **Expectation of Learners:**

#### **Preceptor Interaction**

- A. Daily multi-disciplinary rounds at 08:00
- B. Daily patient presentations/discussions
- C. Topic discussions and/or journal article review 3-5 times per week.

#### **Communication:**

- A. Daily interaction: Residents are to prioritize questions and problems to be discussed with preceptor. Resident is responsible for asking questions to ensure a full understanding of medication-related problems.
- B. E-mail: Residents are expected to appropriately manage emails each day at a minimum for ongoing communication.
- C. UVa iPhone/Pager: Residents to page preceptor for urgent/emergency situations pertaining to patient care.
- D. Contact phone number(s): Provided to resident at time of learning experience for emergency issues.

#### **Expected progression of resident responsibility on this learning experience:**

(Length of time preceptor spends in each of the phases will be personalized based upon resident's abilities and timing of the learning experience during the residency training year)

Day 1: Preceptor to review learning activities and expectations with resident.

Week 1: Resident to work up to caring for all of the team's patients by the end of week one. Preceptor to attend and participate in team rounds with resident, modeling pharmacist's role on the health care team.

Week 2: Resident to begin to round independently and meet with preceptor daily to review patients care plans.

Weeks 3-5: Each week the resident is expected to take over greater responsibility as the ICU pharmacist and become fully integrated in the ICU interdisciplinary team. The resident will continue to discuss care plans with preceptor daily. The preceptor will continue to facilitate the resident as the pharmacist on the team.

### Evaluation

The frequency of evaluations and corresponding documentation requirements can be found in the "Evaluations" grid at the end of each learning experience description.

- All evaluations are to be completed by the last day of the learning experience (and no more than one week after the conclusion of the experience).
- Evaluations are signed/ co-signed only after discussed in a summative evaluation meeting between the preceptor and resident.
- Resident self-evaluations are completed until objective R3.1.2 has been deemed by the RPD as ACHR
- Frequent, immediate, specific, and constructive verbal feedback regarding performance is provided to the resident throughout the rotation.

		<b>Activities</b>	
<b>Goal R1.1</b>	<b>In collaboration with the health care team, provide safe and effective patient care to a diverse range of patients, including those with multiple co-morbidities, high-risk medication regimens, and multiple medications following a consistent patient care process</b>		
OBJ R1.1.1	(Cognitive - Applying) Interact effectively with health care teams to manage patients' medication therapy	Taught and Evaluated	Attend and actively participate in daily multidisciplinary STBICU rounds serving as the clinical pharmacist for the STBICU service Compare the roles of each member of the STBICU team and justify the need for a pharmacist as a member of the multidisciplinary team. Establish position as vital member of team and develop a good rapport with members of the team by showing respect and demonstrating sound clinical knowledge and responsibility for recommendations and actions. Integrate elements of professional maturity, judgment, responsibility, and dedication in all work and communication with health-care members and patients. Respond to drug information questions as they arise from healthcare providers. Use good interpersonal skills and collaborative skills to achieve consensus from the care team regarding recommendations.
OBJ R1.1.2	(Cognitive - Applying) Interact effectively with patients, family members, and caregivers	Taught and Evaluated	Interact and communicate with team, patient, and family in a respectful and collaborative manner. Uphold ASPIRE values.
OBJ R1.1.3	(Cognitive - Analyzing) Collect information on which to base safe and effective medication therapy	Taught and Evaluated	Construct a list of medication-related problems through daily review of the STBICU patient profiles. Consult with other members of the multidisciplinary team taking care of patients as needed. Develop a system for organizing each patient's medication information, focusing on grouping drugs by therapeutic class as well as monitoring parameters for determining efficacy and safety. Evaluate information from the electronic medical record, bedside charts, and from daily patient presentations on rounds.
OBJ R1.1.4	(Cognitive - Analyzing) Analyze and assess information on which to base safe and effective medication therapy	Taught and Evaluated	Provide a daily review of the STBICU patient medication profiles emphasizing the following areas: indication; appropriateness of dose/route/selection; elimination of therapeutic duplication; detection of drug-drug, drug-food or drug-allergy interaction Review articles assigned and be prepared for topic discussions as scheduled.

OBJ R1.1.5	(Cognitive - Creating) Design or redesign safe and effective patient-centered therapeutic regimens and monitoring plans (care plans)	Taught and Evaluated	<p>Assemble a monitoring plan based on the appropriate use of laboratory parameters, serum concentrations, and patient's response to therapy.</p> <p>Continually re-evaluate the active problem list and monitoring plan for all patients to assess progress towards therapeutic goals.</p> <p>Design a therapeutic regimen that is considerate of the patient's physical, mental, emotional, and financial ability to adhere to such regimen before making a recommendation.</p> <p>Develop an individualized therapeutic regimens supported by medical literature; utilizing primary and tertiary references, consensus statements and guidelines such as SCCM, IDSA, and NCS whenever possible.</p> <p>Evaluate factors that may contribute to the unreliability of monitoring results (e.g., patient-specific factors, timing of monitoring tests, equipment errors, and pathophysiology of critically ill patients.)</p> <p>Evaluate the differences in pharmacokinetic parameters between patients ICU patients and patients not in the ICU.</p> <p>Generate alternative therapeutic recommendations and monitoring plans when adverse outcomes occur or the therapeutic goal is not achieved.</p> <p>Initiate medication regimens and monitoring plans while adhering to Formulary restrictions of medications used on the service.</p> <p>Provide comprehensive therapeutic drug monitoring for aminoglycosides, vancomycin, antiarrhythmic agents, digoxin, antiepileptic agents, tacrolimus, heparin, enoxaparin, direct thrombin inhibitors, warfarin, and other drugs requiring serum drug monitoring.</p>
OBJ R1.1.6	(Cognitive - Applying) Ensure implementation of therapeutic regimens and monitoring plans (care plans) by taking appropriate follow-up actions	Taught and Evaluated	<p>Develop and effectively communicate a plan for monitoring patient outcome parameters for all therapeutic recommendations.</p> <p>Explain the appropriate "target levels" that is desired with respect to monitored medications and specific disease states and conditions.</p> <p>Produce evidence to support such recommendations and demonstrate cost effectiveness when making recommendations</p> <p>Use good interpersonal skills and collaborative skills to achieve consensus from the care team regarding recommendations.</p>
OBJ R1.1.7	(Cognitive - Applying) Document direct patient care activities appropriately in the medical record or where appropriate	Taught and Evaluated	<p>Choose appropriate and relevant information to document therapeutic interventions using the I-Vent tool in Epic.</p> <p>Employ I-Vents and pharmacist notes to communicate important medication plans with other staff potentially on other shifts.</p> <p>Use factual information only when documenting interventions.</p> <p>Write pharmacist notes for communication of critical information when appropriate.</p>

OBJ R1.1.8	(Cognitive - Applying) Demonstrate responsibility to patients	Taught and Evaluated	<p>Assist in verification of patient medication orders in order to expedite availability to nursing.</p> <p>Develop a system to ensure urgent patient care issues are given the highest priority.</p> <p>Develop strategies for accomplishing multiple tasks within a 5 week rotation, including balancing patient care activities with projects and seminars.</p> <p>Evaluate patients who may benefit from the expertise of a consulting service or whose needs can't be met by a pharmacist.</p> <p>Prepare a plan and communicate with the respective pharmacy representatives on those consultative services in order to make sure plan is executed appropriately.</p> <p>Prioritize daily tasks such that patient care is the first priority and issues at hand are passed along to the preceptor or someone else if not resolved.</p> <p>Resolve any outstanding medication problem by the end of the work day.</p>
<b>Goal R1.2</b>	<b>Ensure continuity of care during patient transitions between care settings</b>		
OBJ R1.2.1	(Cognitive - Applying) Manage transitions of care effectively	Taught and Evaluated	<p>Analyze and select the most pertinent information to pass along to colleagues regarding patients being transferred off the STICU service.</p> <p>Ensure medication orders are correct and that the patient medication administration record accurately reflects the current therapeutic plan prior to transfer.</p> <p>Provide direct communication to the clinical pharmacist who be receiving this patient onto their service and perform a direct "handoff of care".</p>
<b>Goal R3.1</b>	<b>Demonstrate leadership skills</b>		
OBJ R3.1.2	(Cognitive - Applying) Apply a process of on-going self-evaluation and personal performance improvement	Taught and Evaluated	<p>Accurately summarizes strengths and areas for improvement</p> <p>Perform timely, qualitative and reflective self-evaluations.</p> <p>Seeks and incorporates feedback from others</p>
<b>Goal R4.2</b>	<b>Effectively employs appropriate preceptor roles when engaged in teaching students, pharmacy technicians or fellow health care professionals</b>		
OBJ R4.2.1	(Cognitive - Analyzing) When engaged in teaching, select a preceptor role that meets learners' educational needs	Taught and Evaluated	<p>Co-precept a pharmacy student.</p> <p>Demonstrate the stages of learning that are associated with each of the preceptor roles while serving as preceptor to a pharmacy student.</p> <p>Distinguishes which preceptor role is applicable for the situation (direct instruction, modeling, coaching, facilitating).</p>
OBJ R4.2.2	(Cognitive - Applying) Effectively employ preceptor roles, as appropriate	Taught and Evaluated	<p>Coaches, including effective use of verbal guidance, feedback, and questioning, as needed.</p> <p>Facilitates, when appropriate, by allowing learner independence when ready and using indirect monitoring of performance.</p> <p>Instructs students, technicians, or others, as appropriate.</p> <p>Models skills, including "thinking out loud," so learners can "observe" critical thinking skills.</p>

<b>Goal E5.1</b>	<b>Participate in the management of medical emergencies</b>		
OBJ E5.1.1	(Cognitive - Applying) Exercise skill as a team member in the management of medical emergencies according to the organization's policies and procedures	Taught and Evaluated	Adhere to ACLS guidelines as appropriate during medical emergencies Completes appropriate emergency response iVent (code 12, Sepsis alert, etc) inclusive of pertinent details after each event Ensure initiation of appropriate antimicrobial therapy or other medications as needed for SIRS/Sprint alert patients Function independently in the role of an emergency response pharmacist Respond to Code 12 calls as scheduled Respond to SIRS/Sprint alerts during rotation hours for your patients

#### Evaluations:

	Evaluator	Evaluated	Timing
Summative Evaluation	All Preceptors	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed
ASHP Learning Experience Evaluation	Residents	Learning Experience	Ending and Quarterly if Needed
ASHP Preceptor Evaluation	Residents	All Preceptors of this Learning Experience	Ending and Quarterly if Needed
Summative Evaluation	Residents	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed

Faculty: Morrisette, Matthew J.; Sesler, Jefferson M.

**Site:**

University of Virginia Health System

**Status:** Active

Not Required

**Description:**

The Thoracic Cardiovascular Surgery (TCV) rotation is a five week elective critical care rotation. The focus of this rotation is the provision of complete pharmaceutical care to the TCV patient population. The TCV is a 18-bed unit, which is comprised of two units, 4 North and TCV west. It provides care for all postoperative cardiovascular and thoracic surgery patients. The most frequent admissions include coronary bypass and valvular surgical procedures, ascending aortic aneurysms repairs, aortic dissection management, abdominal aortic aneurysms, heart and lung transplantation patients. Patient volume ranges from 10 -20 patients.

TCV pharmacists work collaboratively with the TCV multidisciplinary team, which consists of an intensivist attending, nurse practitioners or physician assistants, pharmacists, nurses, and respiratory therapists, to ensure the most effective, safe, and appropriate medication therapy management for this critically ill population.

**Core Content:**

Common topics in which the resident will be expected to gain proficiency through direct participation include but are not limited to:

- Cardiac artery bypass graft surgery
  - Anti-platelet therapy
  - Glycemic control
  - On versus off pump
  - Minimally invasive surgery
  - Postoperative atrial fibrillation
- Valve surgery
- Acute aortic dissection and hypertensive emergency management
- Ventricular assist devices and related issues
- Thoracic surgery
- Vascular surgery
- Hemodynamics and vasopressors
- Post-operative infectious complications
- Surgical antibiotic prophylaxis
- Venous thrombosis prophylaxis
- Gastrointestinal stress ulcer prophylaxis
- ICU analgesia, sedation, and neuromuscular blockade



- Sepsis and inflammatory response syndrome (SIRS)
- Cardiogenic shock and related syndromes
- Pharmacokinetics in critically ill patients
- Fluid balance and acid/base disorders
- Pain management in the surgical patient

Topic discussions and reading key articles will be used to help develop the resident's patient care skills for common disease states or acquiring knowledge about diseases seen infrequently on the service.

During the learning experience, the resident will focus on the goals and objectives outlined below by performing the activities that are associated with each objective. The resident will gradually assume responsibility for all of the patients within the assigned unit. The PGY1 resident must devise efficient strategies for accomplishing the required activities in a limited time frame.

Achievement of the goals of the residency is determined through assessment of ability to perform the associated objectives. The table below demonstrates the relationship between the activities and the goals/objectives assigned to the learning experience.

#### **Expectation of Learners:**

#### **Preceptor Interaction**

- A. 0800 Rounding with multi-disciplinary rounds
- B. Daily patient presentations/discussions
- C. Topic discussion and/or journal article review 3-5 times per week

#### **Communication:**

- A. Daily scheduled meeting times: Residents to prioritize questions and problems to discuss during scheduled meeting times as listed above.
- B. E-mail: Residents are expected to read e-mails for ongoing communication. This is appropriate for routine, non-urgent questions and issues.
- C. UVa iPhone/pager: Residents to page/text preceptor for urgent situations pertaining to patient care
- D. Personal phone number: Provided to resident at time of learning experience for emergency issues.

### **Expected progression of resident responsibility on this learning experience:**

Length of time preceptor spends in each of the phases will be personalized based upon resident's abilities and timing of the learning experience during the residency training year

Week 1: Resident to work up to caring for all of the team's patients by the end of week one. Preceptor to attend and participate in team rounds with resident, modeling pharmacist's role on the health care team.

Week 2: Resident to begin to round independently and meet with preceptor daily to review patients care plans.

Weeks 3-5: Each week the resident is expected to take over greater responsibility as the ICU pharmacist and become fully integrated in the ICU interdisciplinary team. The resident will continue to discuss care plans with preceptor daily. The preceptor will continue to facilitate the resident as the pharmacist on the team.

### **Evaluation**

The frequency of evaluations and corresponding documentation requirements can be found in the "Evaluations" grid at the end of each learning experience description.

- All evaluations are to be completed by the last day of the learning experience (and no more than one week after the conclusion of the experience).
- Evaluations are signed/ co-signed only after discussed in a summative evaluation meeting between the preceptor and resident.
- Resident self-evaluations are completed until objective R3.1.2 has been deemed by the RPD as ACHR
- Frequent, immediate, specific, and constructive verbal feedback regarding performance is provided to the resident throughout the rotation.

		<b>Activities</b>	
<b>Goal R1.1</b>	<b>In collaboration with the health care team, provide safe and effective patient care to a diverse range of patients, including those with multiple co-morbidities, high-risk medication regimens, and multiple medications following a consistent patient care process</b>		
OBJ R1.1.1	(Cognitive - Applying) Interact effectively with health care teams to manage patients' medication therapy	Taught and Evaluated	Attend and actively participate in daily multidisciplinary TCV rounds serving as the clinical pharmacist for the TCV service. Be prepared to provide recommendations on assigned patients and answer medication information questions in a timely manner. Compare the roles of each member of the TCV team and justify the need for a pharmacist as a member of the multidisciplinary team. Establish position as vital member of team and develop a good rapport with members of the team by showing respect and demonstrating sound clinical knowledge and responsibility for recommendations and actions. Integrate elements of professional maturity, judgment, responsibility, and dedication in all work and communication with health-care members and patients. Use good interpersonal skills and collaborative skills to achieve consensus from the care team regarding recommendations.
OBJ R1.1.2	(Cognitive - Applying) Interact effectively with patients, family members, and caregivers	Taught and Evaluated	Interacts and communicates with team, patient, and family in a respectful and collaborative manner. Upholds ASPIRE values.
OBJ R1.1.3	(Cognitive - Analyzing) Collect information on which to base safe and effective medication therapy	Taught and Evaluated	Consult with other members of the multidisciplinary team taking care of patients as needed. Develop an organized system for patient data collection that allows for easy retrieval of information, previous therapies, and ongoing issues. Evaluate information from the electronic medical record (laboratory parameters, flow chart), bedside charts, and from daily patient presentations on rounds to fully understand clinical condition and response to therapy.
OBJ R1.1.4	(Cognitive - Analyzing) Analyze and assess information on which to base safe and effective medication therapy	Taught and Evaluated	Continually re-evaluate the active problem list and monitoring plan for all patients to assess progress toward therapeutic goals. Provide a daily review of the TCV patient medication profiles emphasizing the following areas: indication, appropriateness of dose/route/selection, elimination of therapeutic duplication, and detection of drug-drug, drug-food or drug-allergy interaction.

OBJ R1.1.5	(Cognitive - Creating) Design or redesign safe and effective patient-centered therapeutic regimens and monitoring plans (care plans)	Taught and Evaluated	<p>Appraise the necessity of sub-speciality consults and recommend as appropriate and the need to consult with other members of the interdisciplinary team.</p> <p>Assemble a monitoring plan based on the appropriate use of laboratory parameters, serum concentrations, and patient's response to therapy.</p> <p>Determine reasons for a patient's progress or lack of progress toward the stated health care goal, recognizing that patient's needs change quickly in critical ill patients and be prepared to adjust the therapeutic plan as needed.</p> <p>Ensure patient care plans are supported by primary literature and appropriate professional organization practice guidelines (utilizing primary and tertiary references, consensus statements and guidelines such as found in ATS, AHA, SCCM, IDSA, CID whenever possible).</p> <p>Evaluate factors that may contribute to the unreliability of monitoring results (e.g., patient-specific factors, timing of monitoring tests, equipment errors, and pathophysiology of critically ill patients.)</p> <p>Evaluate the differences in pharmacokinetic parameters between patients ICU patients and patients not in the ICU.</p> <p>For all patients, develop evidence-based, measurable, achievable therapeutic goals that take into consideration the patient's disease state(s), ethical issues, quality of life, goals of other interprofessional team members, and relevant patient-specific information including culture and preferences.</p> <p>Provide comprehensive therapeutic drug monitoring for aminoglycosides, vancomycin, antiarrhythmic agents, digoxin, antiepileptic agents, tacrolimus, heparin, enoxaparin, direct thrombin inhibitors, warfarin, and other drugs requiring serum drug monitoring.</p>
OBJ R1.1.6	(Cognitive - Applying) Ensure implementation of therapeutic regimens and monitoring plans (care plans) by taking appropriate follow-up actions	Taught and Evaluated	<p>Develop and effectively communicate a plan for monitoring patient outcome parameters for all therapeutic recommendations.</p> <p>Explain the appropriate "target levels" that is desired with respect to monitored medications and specific disease states and conditions.</p> <p>Produce evidence to support such recommendations and demonstrate cost effectiveness when making recommendations.</p> <p>Use good interpersonal skills and collaborative skills to achieve consensus from the care team for patient care recommendations.</p>
OBJ R1.1.7	(Cognitive - Applying) Document direct patient care activities appropriately in the medical record or where appropriate	Taught and Evaluated	<p>Choose appropriate and relevant information to document therapeutic interventions using the I-Vent tool in Epic.</p> <p>Employ I-Vents, Pharmacy handoffs, and pharmacy notes to communicate important medication plans with other staff potentially on other shifts.</p> <p>Use factual information only when documenting interventions.</p> <p>Use Pharmacist handoff or sign-out tool for communication of critical information when appropriate.</p>

OBJ R1.1.8	(Cognitive - Applying) Demonstrate responsibility to patients	Taught and Evaluated	<p>Assist in verification of patient medication orders in order to expedite availability to nursing.</p> <p>Develop a system to ensure urgent patient care issues are given the highest priority.</p> <p>Ensure visibility/availability to patient care team by maintaining an active presence on the unit.</p> <p>Evaluate patients who may benefit from the expertise of a consulting service or whose needs can't be met by a pharmacist.</p> <p>Prepare a plan and communicate with the respective pharmacy representatives on those consultative services in order to make sure a plan is executed properly.</p> <p>Prioritize daily tasks such that patient care is the first priority and issues at hand are passed along to the preceptor or someone else if not resolved.</p> <p>Resolve any outstanding medication problem by the end of the work day, however, if unable to be resolved, ensure outstanding issues are communicated to the evening pharmacist prior to leaving for the day.</p> <p>Serve as liaison between pharmacy and nursing/medical staff to coordinate any distributive issues not resolved by the inpatient pharmacy.</p>
<b>Goal R1.2</b>	<b>Ensure continuity of care during patient transitions between care settings</b>		
OBJ R1.2.1	(Cognitive - Applying) Manage transitions of care effectively	Taught and Evaluated	<p>Ensure medication orders are correct and that the patient medication administration record accurately reflects the current therapeutic plan prior to transfer.</p> <p>Obtain admitting medication histories and perform medication reconciliation as requested.</p> <p>Provide accurate and timely follow-up information when patients transfer to another facility, level of care, pharmacist, or provider.</p> <p>Provide direct communication to the clinical pharmacist who be receiving this patient onto their service and perform a direct "handoff of care".</p>
<b>Goal R3.1</b>	<b>Demonstrate leadership skills</b>		
OBJ R3.1.2	(Cognitive - Applying) Apply a process of on-going self-evaluation and personal performance improvement	Taught and Evaluated	<p>Accurately summarizes strengths and areas for improvement.</p> <p>Perform timely, reflective, and qualitative self-evaluations.</p> <p>Seeks and incorporates feedback from others.</p>
<b>Goal R4.1</b>	<b>Provide effective medication and practice-related education to patients, caregivers, health care professionals, students, and the public (individuals and groups)</b>		
OBJ R4.1.2	(Cognitive - Applying) Use effective presentation and teaching skills to deliver education	Taught and Evaluated	<p>Effectively facilitates audience participation, active learning, and engagement.</p> <p>Provide concise, informative, and thorough case conference presentation, when assigned.</p>
<b>Goal R4.2</b>	<b>Effectively employs appropriate preceptor roles when engaged in teaching students, pharmacy technicians or fellow health care professionals</b>		
OBJ R4.2.1	(Cognitive - Analyzing) When engaged in teaching, select a preceptor role that meets learners' educational needs	Taught and Evaluated	<p>Co-precepts another learner.</p> <p>Demonstrate the stages of learning that are associated with each of the preceptor roles while serving as preceptor to a pharmacy student.</p> <p>Distinguishes which preceptor role is applicable for the situation (direct instruction, modeling, coaching, facilitating).</p>

OBJ R4.2.2	(Cognitive - Applying) Effectively employ preceptor roles, as appropriate	Taught and Evaluated	Coaches, including effective use of verbal guidance, feedback, and questioning, as needed. Facilitates, when appropriate, by allowing learner independence when ready and using indirect monitoring of performance. Instructs students, technicians, or others, as appropriate. Models skills, including "thinking out loud," so learners can "observe" critical thinking skills.
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**Evaluations:**

	Evaluator	Evaluated	Timing
Summative Evaluation	All Preceptors	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed
ASHP Preceptor Evaluation	Residents	All Preceptors of this Learning Experience	Ending and Quarterly if Needed
ASHP Learning Experience Evaluation	Residents	Learning Experience	Ending and Quarterly if Needed
Summative Evaluation	Residents	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed

Faculty: Burns, Emily; McLlarky, Timothy; Roth, Mary

**Site:**

University of Virginia Health System

**Status:** Active

Required

**Description:**

The Acute Care Cardiology rotation is one of the required 5 week general medicine rotations. The Acute Care Cardiology service is a multidisciplinary team who cares for patients with a variety of cardiac conditions. The team is comprised of interns, upper-level medicine residents, a fellow, and an attending cardiologist. The team, nursing, social worker, case manager, and pharmacist take part in bedside care using the "Rounding With Heart" model. Typically, the team will care for 15-20 patients on the adult acute care cardiac floor (4 East, Central, and West). The clinical pharmacist provides comprehensive pharmacy services to the Acute Care Cardiology team, which includes participation in rounds and contributing to the medication related care plan, clinical verification of medication orders, and provision of discharge pharmacy services.

Pharmacists on the Acute Care Cardiology service are responsible for ensuring safe and effective medication use for all patients admitted to the team. Routine responsibilities include: pharmacokinetic drug monitoring, anticoagulation, drug information, order verification, discharge planning/care coordination, and education to healthcare professionals as well as patients and caregivers, if requested. Residents rotating in this practice area serve as the patient care pharmacist for their assigned patients with oversight by the preceptors(s).

**Disease States**

Common disease states in which the resident will be expected to gain proficiency through direct patient care experience include but are not limited to:

- *Acute coronary syndromes (ACS): non-ST-elevation myocardial infarctions (NSTEMI), unstable angina (UA)*
- *Stable coronary artery disease*
- *Hyperlipidemia*
- *Infective endocarditis*
- *Heart failure: heart failure with reduced ejection fraction (HFrEF), heart failure with preserved ejection fraction (HFpEF)*
- *Arrhythmias: Atrial Fibrillation, Atrial Flutter, Supraventricular Tachycardia*

Topic discussions and assigned readings are utilized for the development of the resident's patient care skills for common disease states. Additional reading or tasks may be assigned to help the resident acquire knowledge about diseases seen infrequently on the service if pertinent to patients on service.

During the learning experience the resident will focus on the goals and objectives outlined below by performing the activities that are associated with each objective. The resident will gradually assume responsibility for all of the patients within the assigned unit. The PGY1 resident must devise efficient strategies for accomplishing the required activities in a limited time frame.

Achievement of the goals of the residency is determined through assessment of ability to perform the associated objectives. The table below demonstrates the relationship between the activities and the goals/objectives assigned to the learning experience.

#### **Expectation of Learners:**

#### **Preceptor Interaction**

**Daily:**      08:30 – 09:00 Meet preceptor prior to rounds to discuss patients  
                 09:00 – 10:00 ACS "Rounding with Heart" round 1  
                 10:00 – 11:00              ACS "Rounding with Heart" round 2

Schedule time daily with preceptor for topic discussions, reviewing progress notes, patient updates, etc

#### **Communication:**

- A. Daily scheduled meeting times: Residents to prioritize questions and problems to discuss during scheduled meeting times as listed above.
- B. E-mail: Residents are expected to read e-mails at the beginning, middle and end of each day at a minimum for ongoing communication. This is appropriate for routine, non-urgent questions and problems.
- C. iPhone/Pager: Resident to page or text preceptor for urgent questions pertaining to patient care.
- D. Personal phone number: Provided to resident at time of learning experience for emergency issues.

#### **Expected progression of resident responsibility on this learning experience:**

(Length of time preceptor spends in each of the phases will be personalized based upon resident's



abilities and timing of the learning experience during the residency training year)

Day 1 or prior: Preceptor to review learning activities and expectations with resident.

Week 1: Resident to work up a portion of the team's patients (number to be determined by preceptor and resident) and present to preceptor daily. Preceptor to attend and participate in team rounds with resident, modeling pharmacist's role on the health care team.

Weeks 2-5: Each week the resident is expected to take over the responsibility of working up more of the team's patients, continuing to discuss identified problems with preceptor daily. Once the resident is able to take responsibility for all patients assigned to the team, the preceptor will no longer attend team rounds, but will continue to facilitate the resident as the pharmacist on the team.

### **Evaluation**

The frequency of evaluations and corresponding documentation requirements can be found in the "Evaluations" grid at the end of each learning experience description.

- All evaluations are to be completed by the last day of the learning experience (and no more than one week after the conclusion of the experience).
- Evaluations are signed/ co-signed only after discussed in a summative evaluation meeting between the preceptor and resident.
- Resident self-evaluations are completed until objective R3.1.2 has been deemed by the RPD as ACHR
- Frequent, immediate, specific, and constructive verbal feedback regarding performance is provided to the resident throughout the rotation.

		<b>Activities</b>	
<b>Goal R1.1</b>	<b>In collaboration with the health care team, provide safe and effective patient care to a diverse range of patients, including those with multiple co-morbidities, high-risk medication regimens, and multiple medications following a consistent patient care process</b>		
OBJ R1.1.1	(Cognitive - Applying) Interact effectively with health care teams to manage patients' medication therapy	Taught and Evaluated	Actively participate in "Rounding With Heart" rounding model. Be prepared to provide recommendations on assigned patients and answer drug information questions in a timely manner. Establish position as vital member of team and develop a good rapport with members of the team by showing respect, demonstrating sound clinical knowledge, and assuming accountability for clinical pharmacy services to the team. Exhibit professional maturity, judgment, responsibility, and dedication in all work and communication with health-care members and patients.

OBJ R1.1.2	(Cognitive - Applying) Interact effectively with patients, family members, and caregivers	Taught and Evaluated	Demonstrate empathy and cultural competence. Interact and communicate with team, patient, and family in a respectful and collaborative manner. Provide patient/family medication education for new medications and/or at discharge. Uphold ASPIRE values. Uses patient specific effective communication skills (e.g., clear, concise, accurate).
OBJ R1.1.3	(Cognitive - Analyzing) Collect information on which to base safe and effective medication therapy	Taught and Evaluated	Collect pertinent information for each assigned patient from medical record, patient's nurse, and patient (as applicable) every morning for assigned patients and record pertinent data on a patient monitoring form or in EPIC. Demonstrate ability to self-initiate subspecialty consultations for complex medication issues. Maintain an organized system for collecting patient data that allows for easy retrieval and/or presentation of pertinent information to the preceptor or others, including a problem list.
OBJ R1.1.4	(Cognitive - Analyzing) Analyze and assess information on which to base safe and effective medication therapy	Taught and Evaluated	Anticipate therapeutic dilemmas and formulate appropriate alternatives. Assess patient-specific factors that may impact selection of pharmacotherapy. Assess the mechanism of action, pharmacoeconomics, pharmacogenomics, indications, contraindications, interactions, adverse reactions, and therapeutics of medications and specialized nutrition support used in cardiology. Be prepared to discuss problems identified with preceptor prior to or after patient rounds (time to be determined by preceptor). Identify any issues with medication therapy (ie, lack of indication, condition for which no medication is prescribed, suboptimal regimen, therapeutic duplication, adverse events, interactions, social/ financial barriers). Provide timely verification of medications orders for the Acute Care Cardiology service-line during rounds.
OBJ R1.1.5	(Cognitive - Creating) Design or redesign safe and effective patient-centered therapeutic regimens and monitoring plans (care plans)	Taught and Evaluated	Anticipate patient-specific physical and/or cognitive limitations, financial ability to adhere with medication regimen at discharge, and convey recommendations/concerns to appropriate health care providers. Appropriately use, recommend and interpret laboratory data to assist in patient care. Be prepared to discuss recommendations for addressing problems with preceptor prior to or after morning rounds with team. Develop comprehensive therapeutic drug monitoring plans for agents including but not limited to aminoglycosides, digoxin, vancomycin, and warfarin. For all patients, develop evidence-based, measurable, achievable therapeutic goals that take into consideration the patient's disease state(s), ethical issues, quality of life, goals of other interprofessional team members, and relevant patient-specific information including culture and preferences. Recommend optimization in therapy as indicated and inform the patient's healthcare providers as appropriate. Synthesize evidence-based pharmacotherapeutic recommendations using credible primary literature, guidelines, and consensus statements as appropriate.

OBJ R1.1.6	(Cognitive - Applying) Ensure implementation of therapeutic regimens and monitoring plans (care plans) by taking appropriate follow-up actions	Taught and Evaluated	<p>Communicate patient-specific regimens and monitoring plans to relevant members of the health care team and ensure the plan is effectively implemented.</p> <p>Discuss recommendations with ACS team after getting approval from preceptor, if required by preceptor.</p> <p>Educate patients and caregivers, when appropriate, including information on medication therapy, adverse effects, compliance, appropriate use, handling, and medication administration.</p> <p>Follow-up after rounds to ensure any agreed upon changes have been implemented.</p> <p>Monitor results and evaluate response.</p> <p>Perform medication order entry (when physician otherwise occupied or therapy will otherwise be delayed), order verification, and order clarification on assigned patients.</p>
OBJ R1.1.7	(Cognitive - Applying) Document direct patient care activities appropriately in the medical record or where appropriate	Taught and Evaluated	<p>Autonomously document inpatient interventions using iVents, pharmacy dashboard, and EPIC handoff tool.</p> <p>Construct medication histories when appropriate, including information concerning current and previous drug therapy, drug allergies, drug-induced adverse effects, noncompliance and prescription/illicit drug misuse/abuse.</p> <p>Document discharge education notes.</p> <p>Use only factual information when documenting interventions.</p> <p>Write pharmacist notes for communication of critical information when appropriate.</p>
OBJ R1.1.8	(Cognitive - Applying) Demonstrate responsibility to patients	Taught and Evaluated	<p>Ensure visibility to patient care team by maintaining an active presence on the unit.</p> <p>For all patients, ensure all identified medication-related issues are resolved by the end of the day. If cannot be resolved, ensure that any outstanding issues are communicated to evening pharmacist prior to leaving for the day.</p> <p>Notify and communicate with preceptor regarding absences or interruptions in direct patient care activities to arrange service coverage.</p> <p>Plan activities and/or pharmacotherapy interventions based on patient acuity.</p> <p>Prioritize patient care above all other tasks.</p> <p>Prioritize workload appropriately.</p> <p>Resolve existing and potential medication-related problems until satisfactory resolution is obtained.</p>
<b>Goal R1.2</b>	<b>Ensure continuity of care during patient transitions between care settings</b>		
OBJ R1.2.1	(Cognitive - Applying) Manage transitions of care effectively	Taught and Evaluated	<p>Coordinate patient access to medications through the UVA Patient Assistance Program, UVA Outpatient Pharmacy/Meds to Beds program, and/or other outpatient pharmacies.</p> <p>Provide accurate and timely follow-up information when patients transfer to another facility, level of care, pharmacist, or provider.</p> <p>Provide hand-off to accepting team's pharmacist(s) during transitions of care.</p> <p>Serve as a liaison between pharmacy and all other health care providers to streamline transitions of care, both between different levels of acuity within the hospital and in preparation for discharge to the outpatient setting.</p>
<b>Goal R3.1</b>	<b>Demonstrate leadership skills</b>		
OBJ R3.1.2	(Cognitive - Applying) Apply a process of on-going self-evaluation and personal performance improvement	Taught and Evaluated	<p>Accurately summarize strengths and areas for improvement.</p> <p>Perform timely, reflective, and qualitative self-evaluations.</p> <p>Seek and incorporate feedback from others.</p>

<b>Goal R4.1</b>	<b>Provide effective medication and practice-related education to patients, caregivers, health care professionals, students, and the public (individuals and groups)</b>		
OBJ R4.1.2	(Cognitive - Applying) Use effective presentation and teaching skills to deliver education	Taught and Evaluated	Effectively facilitate audience participation, active learning, and engagement. Present at appropriate rate and volume and without distracting speaker habits. Provide a concise, informative, and thorough case conference presentation, when assigned.
<b>Goal R4.2</b>	<b>Effectively employs appropriate preceptor roles when engaged in teaching students, pharmacy technicians or fellow health care professionals</b>		
OBJ R4.2.1	(Cognitive - Analyzing) When engaged in teaching, select a preceptor role that meets learners' educational needs	Taught and Evaluated	Assess pharmacy student performance and provide feedback to primary preceptor. Co-precept another learner, when applicable. Distinguish which preceptor role is applicable for the situation (direct instruction, modeling, coaching, facilitating). Evaluate student assignments in conjunction with primary preceptor. Identify educational needs of APPE students on rotation and tailor learning activities to maximize student engagement and learning opportunities.
OBJ R4.2.2	(Cognitive - Applying) Effectively employ preceptor roles, as appropriate	Taught and Evaluated	Coach and evaluate, including effective use of verbal guidance, feedback, and questioning, as needed. Effectively employ a layered learning model by using the four precepting roles (instructing, modeling, coaching, and facilitating) when interacting with pharmacy students on rotation. Facilitate, when appropriate, by allowing learner independence when ready and using indirect monitoring of performance. In conjunction with the primary preceptor, organize and facilitate topic discussions or other active learning activities for pharmacy students on rotation. Instruct students, technicians, or others, as appropriate. Model skills, including "thinking out loud," so learners can "observe" critical thinking skills.
<b>Goal E5.1</b>	<b>Participate in the management of medical emergencies</b>		
OBJ E5.1.1	(Cognitive - Applying) Exercise skill as a team member in the management of medical emergencies according to the organization's policies and procedures	Taught and Evaluated	Respond to and attend all emergency alerts (overhead pages, sepsis alerts, etc.) on assigned patients or communicate with unit-based pharmacist and preceptor if unable to attend. Respond to medical emergencies such as cardiac arrests and sepsis alerts on assigned cardiology patients.

#### Evaluations:

	Evaluator	Evaluated	Timing
Summative Evaluation	All Preceptors	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed
ASHP Preceptor Evaluation	Residents	All Preceptors of this Learning Experience	Ending and Quarterly if Needed
ASHP Learning Experience Evaluation	Residents	Learning Experience	Ending and Quarterly if Needed
Summative Evaluation	Residents	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed



Faculty: Madden, Thomas R.; Smith, Annie

**Site:**

University of Virginia Health System

**Status:** Active

Required

**Description:****General Description**

Acute care neurology serves as one of the five week e general medicine learning experiences in the PGY1 pharamcy residency program. The primary patient population includes general neurology, epilepsy, and stroke. The general neurology and stroke team each consist of an attending, chief resident, 2 PGY2 neurology residents and 2 PGY1 residents and medical students.

The neurology clinical pharmacists are fully integrated into the general neurology and stroke teams, round on a daily basis, attend stroke codes, and focus on management of drug therapy in patients with multiple medical problems. Neurology clinical pharmacists and the pharmacy residents are responsible for: ensuring safe and effective medication use for all patients admitted to the team. Routine responsibilities include: pharmacokinetic drug monitoring, anticoagulation, drug information, order verification, discharge planning/care coordination, and education to healthcare professionals as well as patients and caregivers, if requested.

**Disease States**

Common disease states in which the resident will cover through direct patient care experience, case presentations, interdisciplinary teaching, and/or discussion for common diseases including, but not limited to:

- Seizure disorders
- Stroke
  - o Ischemic, hemorrhagic, dural venous sinus thrombosis, subarachnoid hemorrhage
- Autoimmune disorders of the nervous system
  - o Guillain-Barre, chronic inflammatory demyelinating polyneuropathy, myasthenia gravis,

## myopathies

- Headache/migraine disorders
- Endocrinologic disorders
  - o Diabetes Mellitus, thyroid disorders
- Infectious diseases
  - o UTI, pneumonia, endocarditis, sepsis, skin and soft tissue infections, bone and joint infections, meningitis
- Thromboembolic disorders

Topic discussions and reading key articles will be used to help develop the resident's patient care skills for common disease states or acquiring knowledge about diseases seen infrequently on the service.

During the learning experience the resident will focus on the goals and objectives outlined below by performing the activities that are associated with each objective. The resident will gradually assume responsibility for all of the patients within the assigned rounding service. The PGY1 resident must devise efficient strategies for accomplishing the required activities in a limited time frame.

Achievement of the goals of the residency is determined through assessment of ability to perform the associated objectives. The table below demonstrates the relationship between the activities and the goals/objectives assigned to the learning experience.

### **Expectation of Learners:**

### **Preceptor Interaction: Daily**

- Before 8:00 Pre-rounds (preceptor available for questions during this time)
- 8:00 – 11:00 General neurology/stroke teaching rounds
- Schedule time daily with preceptor for topic discussions, reviewing progress notes, patient updates, etc

### **Communication:**

- Daily scheduled meeting times: Residents to prioritize questions and problems to discuss during scheduled meeting times as listed above.
- E-mail: Residents are expected to read e-mails at the beginning, middle and end of each day at a minimum for ongoing communication. This is appropriate for routine, non-urgent questions and problems.
- iPhone/Pager: Resident to page or text preceptor for urgent questions pertaining to patient care.

### **Expected progression of resident responsibility on this learning experience:**

(Length of time preceptor spends in each of the phases will be personalized based upon resident's abilities and timing of the learning experience during the residency training year)

- Day 1: Preceptor to review learning activities and expectations with resident.
- Week 1: Resident to work up a portion of the team's patients (number to be determined by preceptor and resident) and present to preceptor daily. Preceptor to attend and participate in team rounds with resident, modeling pharmacist's role on the health care team.
- Weeks 2-5: Each week the resident is expected to take over the responsibility of working up more of the team's patients, continuing to discuss identified problems with preceptor daily. Once the resident is able to take responsibility for all patients assigned to the team, the preceptor will no longer attend team rounds, but will continue to facilitate the resident as the pharmacist on the team.

### **Other rotation expectations**

- Attend SIRS/SPRINT alerts on assigned patients or communicate with unit-based clinical pharmacist and preceptor if unable to attend
- Attend stroke codes on all floors except the emergency department

### **Evaluation**

The frequency of evaluations and corresponding documentation requirements can be found in the "Evaluations" grid at the end of each learning experience description.

- All evaluations are to be completed by the last day of the learning experience (and no more than one week after the conclusion of the experience).
- Evaluations are signed/ co-signed only after discussed in a summative evaluation meeting between the preceptor and resident.
- Resident self-evaluations are completed until objective R3.1.2 has been deemed by the RPD as ACHR.
- Frequent, immediate, specific, and constructive verbal feedback regarding performance is provided to the resident throughout the rotation.



			Activities
<b>Goal R1.1</b>	<b>In collaboration with the health care team, provide safe and effective patient care to a diverse range of patients, including those with multiple co-morbidities, high-risk medication regimens, and multiple medications following a consistent patient care process</b>		
OBJ R1.1.1	(Cognitive - Applying) Interact effectively with health care teams to manage patients' medication therapy	Taught and Evaluated	Be prepared to provide recommendations on assigned patients and answer drug information questions in a timely manner. Develop a rapport with both teams and nursing staff while maintaining a presence on the unit throughout the day (8:00 AM to 4:00 PM). Participate in daily rounds with the general neurology or stroke team (8:00 AM to 11:00 AM). Respond to all drug information questions from healthcare providers in a timely manner.
OBJ R1.1.2	(Cognitive - Applying) Interact effectively with patients, family members, and caregivers	Taught and Evaluated	Interact and communicate with team, patient, and family in a respectful and collaborative manner. Uphold ASPIRE values.
OBJ R1.1.3	(Cognitive - Analyzing) Collect information on which to base safe and effective medication therapy	Taught and Evaluated	Collect pertinent information for each assigned patient from medical record, patient's nurse, and patient (as applicable) every morning for assigned patients and record pertinent data on a patient monitoring form.
OBJ R1.1.4	(Cognitive - Analyzing) Analyze and assess information on which to base safe and effective medication therapy	Taught and Evaluated	Be prepared to discuss problems identified with preceptor prior to or after patient rounds (time to be determined by preceptor). Identify any issues with medication therapy (ie, lack of indication, condition for which no medication is prescribed, suboptimal regimen, therapeutic duplication, adverse events, interactions, social/financial barriers). Perform medication order verification, and order clarification on assigned patients. Review and evaluate literature as it pertains to patient cases and topic discussion.
OBJ R1.1.5	(Cognitive - Creating) Design or redesign safe and effective patient-centered therapeutic regimens and monitoring plans (care plans)	Taught and Evaluated	Be prepared to discuss recommendations for addressing problems with preceptor prior to or after morning rounds with team. For all patients, develop evidence-based, measurable, achievable therapeutic goals that take into consideration the patient's disease state(s), ethical issues, quality of life, goals of other interprofessional team members, and relevant patient-specific information including culture and preferences.
OBJ R1.1.6	(Cognitive - Applying) Ensure implementation of therapeutic regimens and monitoring plans (care plans) by taking appropriate follow-up actions	Taught and Evaluated	Follow-up after rounds to ensure any agreed upon changes have been implemented. Prepare and effectively communicate recommendations to the general neurology and stroke team.
OBJ R1.1.7	(Cognitive - Applying) Document direct patient care activities appropriately in the medical record or where appropriate	Taught and Evaluated	Choose appropriate and relevant information to document therapeutic interventions (Ivents), allergies, adverse drug reactions and medication errors in the electronic medical record. Distinguish the most appropriate method for documenting clinical activities (ivent, progress note).
OBJ R1.1.8	(Cognitive - Applying) Demonstrate responsibility to patients	Taught and Evaluated	Ensure visibility to patient care team by maintaining an active presence on the unit. For all patients, ensure all identified medication-related issues are resolved by the end of the day. If cannot be resolved, ensure that any outstanding issues are communicated to evening pharmacist prior to leaving for the day. Prioritize patient care above all other tasks. Resolve existing and potential medication-related problems until satisfactory resolution is obtained.

<b>Goal R1.2</b>	<b>Ensure continuity of care during patient transitions between care settings</b>		
OBJ R1.2.1	(Cognitive - Applying) Manage transitions of care effectively	Taught and Evaluated	Provide accurate and timely follow-up information when patients transfer to another facility, level of care, pharmacist, or provider.
<b>Goal R3.1</b>	<b>Demonstrate leadership skills</b>		
OBJ R3.1.2	(Cognitive - Applying) Apply a process of on-going self-evaluation and personal performance improvement	Taught and Evaluated	Accurately summarize strengths and areas for improvement. Provide timely, reflective, and qualitative self-evaluations. Seek and incorporate feedback from others.
<b>Goal R4.1</b>	<b>Provide effective medication and practice-related education to patients, caregivers, health care professionals, students, and the public (individuals and groups)</b>		
OBJ R4.1.2	(Cognitive - Applying) Use effective presentation and teaching skills to deliver education	Taught and Evaluated	Effectively facilitate audience participation, active learning, and engagement. Prepare and present an educational project/presentation on a relevant topic pertaining to pharmacy. Present at appropriate rate and volume and without distracting speaker habits. Provide concise, informative, and thorough case conference presentation, when assigned.
<b>Goal R4.2</b>	<b>Effectively employs appropriate preceptor roles when engaged in teaching students, pharmacy technicians or fellow health care professionals</b>		
OBJ R4.2.1	(Cognitive - Analyzing) When engaged in teaching, select a preceptor role that meets learners' educational needs	Taught and Evaluated	Co-precept another learner, when applicable. Distinguish which preceptor role is applicable for the situation (direct instruction, modeling, coaching, facilitating).
OBJ R4.2.2	(Cognitive - Applying) Effectively employ preceptor roles, as appropriate	Taught and Evaluated	Coach, including effective use of verbal guidance, feedback, and questioning, as needed. Facilitate, when appropriate, by allowing learner independence when ready and using indirect monitoring of performance. Instruct students, technicians, or others, as appropriate. Model skills, including "thinking out loud," so learners can "observe" critical thinking skills.
<b>Goal E5.1</b>	<b>Participate in the management of medical emergencies</b>		
OBJ E5.1.1	(Cognitive - Applying) Exercise skill as a team member in the management of medical emergencies according to the organization's policies and procedures	Taught and Evaluated	Attend stroke codes on all floors except the emergency department. Respond to SPRINT/SIRS Alerts for assigned patients.

#### Evaluations:

	Evaluator	Evaluated	Timing
Summative Evaluation	All Preceptors	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed
ASHP Preceptor Evaluation	Residents	All Preceptors of this Learning Experience	Ending and Quarterly if Needed
ASHP Learning Experience Evaluation	Residents	Learning Experience	Ending and Quarterly if Needed
Summative Evaluation	Residents	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed



Faculty: Mcllarky, Jillian S.

**Site:**

University of Virginia Health System

**Status:** Active

Required

**Description:**

Internal Medicine serves as a required, five-week general medicine learning experience for PGY1-pharmacy residents. On the 3rd floor, there are six General Medicine (GM) teaching teams as well as three hospitalist teams. Each of the GM teaching teams includes an attending physician, 1 PGY2 or PGY3 medical resident, 1 or 2 PGY1 medical interns, 2 or more PY3 or PY4 medical students, and a clinical pharmacist. Each hospitalist team includes an attending physician, a PY4 medical student, and a clinical pharmacist. The pharmacy resident will become fully integrated into one of the GM interdisciplinary teams, round on a daily basis, and focus on management of drug therapy in patients with multiple medical problems.

Internal medicine pharmacists are responsible for ensuring safe and effective medication use for all patients admitted to the team. Routine responsibilities include: pharmacokinetic drug monitoring, anticoagulation management, drug information, order verification, discharge planning/care coordination, and education to healthcare professionals as well as patients and caregivers. Residents rotating in this practice area serve as the patient care pharmacist for their assigned patients with oversight by the internal medicine preceptor(s) and therefore will be expected to fulfill the above responsibilities.

**Disease States**

Common disease states in which the resident will be expected to gain proficiency through direct patient care experience for include, but are not limited to:

- Renal disorders
  - Acute kidney insufficiency, chronic kidney disease, end-stage renal disease
- Respiratory disorders
  - COPD, asthma, cystic fibrosis
- Endocrine disorders
  - Diabetes mellitus, thyroid disorders
- Infectious diseases
  - UTI, pneumonia, endocarditis, sepsis, skin and soft tissue infections, bone and joint infections, meningitis

- Thromboembolic disorders
- Cardiac diseases
  - Atrial fibrillation, congestive heart failure
- Rheumatologic and autoimmune disorders
- Pain management
  - Sickle cell disease, neuropathy

Topic discussions and reading key articles will be used to help develop the resident's patient care skills for common disease states or acquiring knowledge about diseases seen infrequently on the service.

During the learning experience, the resident will focus on the goals and objectives outlined below by performing the activities that are associated with each objective. The resident will gradually assume responsibility for all of the patients within the assigned rounding service. The PGY1 resident must devise efficient strategies for accomplishing the required activities in a limited time frame.

Achievement of the goals of the residency is determined through assessment of ability to perform the associated objectives. The table below demonstrates the relationship between the activities and the goals/objectives assigned to the learning experience.

#### **Expectation of Learners:**

##### **Preceptor Interaction**

##### **Daily:**

Before 8:30 Pre-rounds (preceptor available for questions during this time)

8:30 – 10:15 GM teaching rounds

10:15 – 10:45 GM multi-disciplinary care coordination rounds (with social worker, case manager, nurses, physicians)

11:00 – Preceptor available for questions regarding rounding follow up, transitions work, and/or counseling

##### **Communication:**

1. Daily scheduled meeting times: Residents to prioritize questions and problems to discuss during scheduled meeting times as listed above.
2. E-mail: Residents are expected to read e-mails at the beginning, middle, and end of each day at a minimum for ongoing communication. This is appropriate for routine, non-urgent questions and problems.
3. iPhone/Pager: Resident to page or text preceptor for urgent questions pertaining to patient care.
4. Personal phone number: Provided to resident at time of learning experience for emergency issues.

##### **Expected progression of resident responsibility on this learning experience:**

(Length of time preceptor spends in each of the phases will be personalized based upon resident's abilities and timing of the learning experience during the residency training year)

Day 1: Preceptor to review learning activities and expectations with resident.

Week 1: Resident to work up a portion of the team's patients (number to be determined by preceptor and resident) and present to preceptor daily. Preceptor to attend and participate in team rounds with resident, modeling pharmacist's role on the health care team.

Weeks 2-5: Each week the resident is expected to take over the responsibility of working up more of the team's patients, continuing to discuss identified problems with preceptor daily. Once the resident is able to take responsibility for all patients assigned to the team, the preceptor will no longer attend team rounds, but she will continue to facilitate the resident as the pharmacist on the team.

Other rotation expectations:

- Attend SIRS/SPRINT alerts on assigned patients or communicate with unit-based clinical pharmacist and preceptor if unable to attend
- Perform medication order entry (when physician otherwise occupied or therapy will otherwise be delayed), order verification, and order clarification on assigned patients
- Obtain admitting medication histories and perform medication reconciliation as requested
- Perform discharge medication counseling as requested

### **Evaluation**

PharmAcademic will be used for documentation of scheduled evaluations (see chart below). Evaluations will be signed in PharmAcademic following a meeting between the preceptor and resident.

- Frequent, immediate, specific, and constructive verbal feedback regarding performance will be provided to the PGY1 resident throughout the five week rotation in both formal and informal ways.
  - The resident should expect at least 2 formal evaluation sessions at the midpoint and end of the rotation.
- Summative evaluations: This evaluation summarizes the resident's performance throughout the learning experience. Specific comments should be included to provide the resident with information they can use to improve their performance in subsequent learning experiences.
- Preceptor and Learning Experience evaluations must be completed by the last day of the learning experience.

**What**

**Who**

**When**

Summative

Preceptor

End of week 5

Preceptor/Learning Experience Evaluation

Resident

End of week 5

		<b>Activities</b>	
<b>Goal R1.1</b>	<b>In collaboration with the health care team, provide safe and effective patient care to a diverse range of patients, including those with multiple co-morbidities, high-risk medication regimens, and multiple medications following a consistent patient care process</b>		
OBJ R1.1.1	(Cognitive - Applying) Interact effectively with health care teams to manage patients' medication therapy	Taught and Evaluated	Be prepared to provide recommendations on assigned patients and answer drug information questions in a timely manner. Participate in daily rounds with assigned GM team.
OBJ R1.1.2	(Cognitive - Applying) Interact effectively with patients, family members, and caregivers	Taught and Evaluated	Interact and communicate with team, patient, and family in a respectful and collaborative manner. Uphold RISE values.
OBJ R1.1.3	(Cognitive - Analyzing) Collect information on which to base safe and effective medication therapy	Taught and Evaluated	Collect pertinent information for each assigned patient from medical record, patient's nurse, and patient (as applicable) every morning for assigned patients and document data and thought process in the RX Handoff tool in Epic.
OBJ R1.1.4	(Cognitive - Analyzing) Analyze and assess information on which to base safe and effective medication therapy	Taught and Evaluated	Be prepared to discuss problems identified with preceptor prior to or after patient rounds (time to be determined by preceptor). Identify any issues with medication therapy (ie, lack of indication, condition for which no medication is prescribed, suboptimal regimen, therapeutic duplication, adverse events, interactions, social/financial barriers).
OBJ R1.1.5	(Cognitive - Creating) Design or redesign safe and effective patient-centered therapeutic regimens and monitoring plans (care plans)	Taught and Evaluated	Be prepared to discuss recommendations for addressing problems with preceptor prior to or after morning rounds with team. For all patients, develop evidence-based, measurable, achievable therapeutic goals that take into consideration the patient's disease state(s), ethical issues, quality of life, goals of other interprofessional team members, and relevant patient-specific information including culture and preferences.
OBJ R1.1.6	(Cognitive - Applying) Ensure implementation of therapeutic regimens and monitoring plans (care plans) by taking appropriate follow-up actions	Taught and Evaluated	Discuss recommendations with GM team after getting approval from preceptor, if required by preceptor. Follow-up after rounds to ensure any agreed upon changes have been implemented.
OBJ R1.1.7	(Cognitive - Applying) Document direct patient care activities appropriately in the medical record or where appropriate	Taught and Evaluated	Document counseling activities using notes. Document interventions using iVents. Document medication histories using notes.
OBJ R1.1.8	(Cognitive - Applying) Demonstrate responsibility to patients	Taught and Evaluated	Ensure visibility to patient care team by maintaining an active presence on the unit. For all patients, ensure all identified medication-related issues are resolved by the end of the day. If cannot be resolved, ensure that any outstanding issues are communicated to evening pharmacist prior to leaving for the day. Prioritize patient care above all other tasks. Resolve existing and potential medication-related problems until satisfactory resolution is obtained.

<b>Goal R1.2</b>	<b>Ensure continuity of care during patient transitions between care settings</b>		
OBJ R1.2.1	(Cognitive - Applying) Manage transitions of care effectively	Taught and Evaluated	Assist case manager and LIPs with medication-related discharge planning needs and recommendations. Provide accurate and timely follow-up information when patients transfer to another facility, level of care, pharmacist, or provider. Provide referrals to patient assistance program when needed. Work with pharmacy technician to resolve insurance-related barriers to discharge.
<b>Goal R3.1</b>	<b>Demonstrate leadership skills</b>		
OBJ R3.1.2	(Cognitive - Applying) Apply a process of on-going self-evaluation and personal performance improvement	Taught and Evaluated	Accurately summarize strengths and areas for improvement. Complete all required self-evaluations. Seek and incorporate feedback from others.
<b>Goal R4.1</b>	<b>Provide effective medication and practice-related education to patients, caregivers, health care professionals, students, and the public (individuals and groups)</b>		
OBJ R4.1.2	(Cognitive - Applying) Use effective presentation and teaching skills to deliver education	Taught and Evaluated	Effectively facilitate audience participation, active learning, and engagement. Present at appropriate rate and volume and without distracting speaker habits. Provide concise, informative, and thorough case conference presentation, when assigned.
<b>Goal R4.2</b>	<b>Effectively employs appropriate preceptor roles when engaged in teaching students, pharmacy technicians or fellow health care professionals</b>		
OBJ R4.2.1	(Cognitive - Analyzing) When engaged in teaching, select a preceptor role that meets learners' educational needs	Taught and Evaluated	Co-precept another learner, when applicable. Distinguish which preceptor role is applicable for the situation (direct instruction, modeling, coaching, facilitating).
OBJ R4.2.2	(Cognitive - Applying) Effectively employ preceptor roles, as appropriate	Taught and Evaluated	Coach, including effective use of verbal guidance, feedback, and questioning, as needed. Facilitate, when appropriate, by allowing learner independence when ready and using indirect monitoring of performance. Instruct students, technicians, or others, as appropriate. Model skills, including "thinking out loud," so learners can "observe" critical thinking skills.
<b>Goal E5.1</b>	<b>Participate in the management of medical emergencies</b>		
OBJ E5.1.1	(Cognitive - Applying) Exercise skill as a team member in the management of medical emergencies according to the organization's policies and procedures	Taught and Evaluated	Respond to medical emergencies such as cardiac arrests and sepsis alerts on assigned internal medicine patients.

#### Evaluations:

	Evaluator	Evaluated	Timing
Summative Evaluation	All Preceptors	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed
ASHP Preceptor Evaluation	Residents	All Preceptors of this Learning Experience	Ending and Quarterly if Needed
ASHP Learning Experience Evaluation	Residents	Learning Experience	Ending and Quarterly if Needed



Summative Evaluation	Residents	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed
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Faculty: Bidwell, Kate; Griggs, Danielle; Jenkins, Matthew T.; Spoelhof, Brian

**Site:**

University of Virginia Health System

**Status:** Active

Required

**Description:**

**General Description:** The practice management and policy rotation is a required 5 week rotation in the PGY1- Pharmacy residency program. Through this experience, residents will be involved in departmental leadership meetings, daily departmental operations, and supporting the Pharmacy and Therapeutics (P&T) Committee and its subcommittees to standardize practices and improve overall safety and optimization of the medication use process.

**Role of Pharmacist:** The role of pharmacists in practice management and policy is to serve as a pharmacy practice leader in the advancement of pharmacy services and optimal medication use processes. The pharmacist integrates into the pharmacy leadership team and functions as an extension of the team. The pharmacist provides comprehensive, unbiased, evidenced-based medication information, coordination of the activities of the Pharmacy and Therapeutics (P&T) Committee and its subcommittees, coordination of medication use evaluations and quality improvement initiatives, manages the Formulary and drug utilization patterns to determine opportunities for guideline development, manages drug shortages and recalls, develop departmental/hospital policies/protocols to standardize practices, and improve overall safety of the medication use process.

**Core Content Topics will include:**

- Supply Chain Management
- Principles of Financial Management
- Human Resources
- Information Technology and Automation
- Regulatory, Accreditation and Legal Requirements (TJC Medication Management standard, CMS Conditions of Participation)
- Principles of Leadership, Leadership Styles & Frames
- ASHP Best Practices,
- Clinical Services Management
- Ambulatory Services Management
- Emotional Intelligence
- Contract Pharmacy/340B Pricing
- Decision Traps
- Pharmacy and Therapeutics Committee/ Formulary management
- Drug shortage and recall management
- Drug utilization and guideline/protocol/policy development

**Meetings the resident MUST attend include:**

- Patient Safety & Quality Committee
- Medication Use Safety and Informatics Committee (MUSIC)
- Daily Huddles
- Managers' Meeting
- Pharmacy and Therapeutics Committee (P&T)
- Pre- and post-P&T Committee meetings
- Applicable P&T subcommittee meeting(s)
- Drug shortage meeting (weekly); drug shortage huddles

**Projects/Assignments:**

- Will vary based on time of year and departmental needs
- Resident will select and present an article from an appropriate journal at the Practice Management Journal club
- New business plan assignment at end of week 1 with presentation by end of week 5
- Completion of a drug class review, monograph, and/or policy review for P&T Committee
- Conduct, analyze, and present results of a medication use evaluation

Other meetings will be assigned by the preceptor of the week.

Topic discussions and reading key articles will be used to help develop the resident's skills for common pharmacy practice/ management topics.

During the learning experience the resident will focus on the goals and objectives outlined below by performing the activities that are associated with each objective. The PGY1 resident must devise efficient strategies for accomplishing the required activities in a limited time frame.

Achievement of the goals of the residency is determined through assessment of ability to perform the associated objectives. The table below demonstrates the relationship between the activities and the goals/objectives assigned to the learning experience.

**Expectation of Learners:****Preceptor Interaction:**

The resident will split time between the pharmacy management preceptors and med use strategy team to complete all learning objectives, assignments, and projects. The hours and projects will be provided by the preceptors at the beginning of the rotation.

**Communication:**

1. Daily interaction: Residents are to prioritize tasks throughout the day to ensure timelines are met. Resident is responsible for asking questions to ensure a full understanding of project/task in order to be successful.
2. E-mail: Residents are expected to appropriately manage emails each day at a minimum for ongoing communication.
3. Contact phone number(s): Provided to resident at time of learning experience for emergency issues.

**WEEKLY Schedule:** M-F 08:00 – 17:30

- Rotation schedule is outlined to achieve time in both practice management and policy areas. Interaction with leadership team members will occur during practice management rotation time.
- Address any conflicts between schedules ahead of time
- Request permissions to Preceptor Outlook calendars

### **Expected progression of resident responsibility on this learning experience:**

(Length of time preceptor spends in each of the phases will be personalized based upon resident's abilities and timing of the learning experience during the residency training year)

Day 1: Preceptor to review learning activities and expectations with resident.

Weeks 1-5: Resident will work with various members of the practice management and medication management teams throughout the rotation. The time allocated to each manager/ director will vary depending upon the resident's interests, career goals, and the project work that needs to be completed during the rotation. Preceptors will model and coach initially and will progress to facilitation allowing the resident the opportunity to identify solutions to ongoing problems and to have ownership of their assigned projects.

Week 2-5: During time with med strategy team, resident will serve as primary responder to CL Medication Management emails, phone-calls, and walk-in queries. The resident will participate in drug shortage meetings and huddles and assist with shortage management plans. Med strategy pharmacist will serve as backup support. Resident will attend meetings on behalf of pharmacy leaders and provide coverage as needed as integrated member of leadership team.

### **Evaluation**

The frequency of evaluations and corresponding documentation requirements can be found in the "Evaluations" grid at the end of each learning experience description.

- All evaluations are to be completed by the last day of the learning experience (and no more than one week after the conclusion of the experience).
- Evaluations are signed/ co-signed only after discussed in a summative evaluation meeting between the preceptor and resident.
- Resident self-evaluations are completed until objective R3.1.2 has been deemed by the RPD as ACHR
- Frequent, immediate, specific, and constructive verbal feedback regarding performance is provided to the resident throughout the rotation.

### **PRACTICE MANAGEMENT and POLICY ROTATION**

\*Practice management time will be spent with identified preceptors each week, subject to schedules, meetings, and pertinent topics. MUP time will be spent in the MUP office to accomplish learning objectives and completing rotation assignments.

		<b>Activities</b>	
<b>Goal R2.1</b>	<b>Demonstrate ability to manage formulary and medication-use processes, as applicable to the organization</b>		
OBJ R2.1.1	(Cognitive - Creating) Prepare a drug class review, monograph, treatment guideline, or protocol	Taught and Evaluated	<p>Actively participate in, serve as support for the P&amp;T Committee and its subcommittees.</p> <p>Develop/update medication use guidelines/protocols/departmental procedures as needed with input from key stakeholders.</p> <p>Prepare a drug monograph or therapeutic class review based upon analysis of evidence-based treatment guidelines and other appropriate literature sources that includes medication error potential, role of the drug in therapy (critical issues), reimbursement expectations, and pharmacoeconomic considerations.</p> <p>Prepare draft of build sheet for Epic ERX, P&amp;T Forum newsletter submission, and applicable section of P&amp;T Committee meeting minutes for assigned drug monograph/class review.</p> <p>Present a drug monograph or therapeutic class review to the P&amp;T Committee or appropriate subcommittee.</p>
OBJ R2.1.2	(Cognitive - Applying) Participate in a medication-use evaluation	Taught and Evaluated	<p>Conduct a medication use evaluation to identify areas for improvement in the medication use system.</p> <p>Implement recommendations across various systems as needed (Epic, Talyst, Pyxis, etc.).</p> <p>Present a summary of recommendations to the appropriate committee.</p>
OBJ R2.1.3	(Cognitive - Analyzing) Identify opportunities for improvement of the medication-use system	Taught and Evaluated	<p>Design, implement, and maintain safe and compliant practices for the storage, dispensing, administration, and security of pharmaceuticals, including but not limited to the Annual Formulary Review.</p> <p>Evaluate non-Formulary requests for appropriateness and subsequent approval, determine if a non-formulary drug should be procured, oversee procurement (if necessary), and communicate appropriate information to all stakeholders involved in care of the patient.</p> <p>Participate in drug shortage management by participating/facilitating weekly drug shortage meetings/huddles, evaluating potential disruptions in supply, forming management plans, communicating shortage statuses and management plans, and updating applicable shortage resources.</p> <p>Perform/ facilitate updates to the various systems as needed (Epic, Talyst, Pyxis, online formulary, etc.). for agent(s) assigned drug monograph/class review and for shortages.</p>
OBJ R2.1.4	(Cognitive - Applying) Participate in medication event reporting and monitoring	Taught and Evaluated	<p>Fully investigate one Be Safe event (medication error related to prescribing, verification, dispensing, or administration) reported and solve to root, if applicable.</p> <p>Report an ADE to ISMP, FDA, and pharmaceutical manufacturer using the National Medication Error Reporting Program online reporting system, if applicable.</p>
<b>Goal R3.2</b>	<b>Demonstrate management skills</b>		
OBJ R3.2.1	(Cognitive - Understanding) Explain factors that influence departmental planning	Taught and Evaluated	<p>Distinguish and explain factors that influence departmental planning, including: Basic principles of management/ Financial management/ Accreditation, legal, regulatory, and safety requirements/ Facilities design/ Human resources/ Culture of the organization/ The organization's political and decision-making structure.</p> <p>Explains how management principles may impact departmental planning.</p>

OBJ R3.2.2	(Cognitive - Understanding) Explain the elements of the pharmacy enterprise and their relationship to the health care system	Taught and Evaluated	Describes the governance of the healthcare system and leadership roles. Explains changes to laws and regulations (e.g. value-based purchasing, consumer-driven healthcare, reimbursement models) related to medication use. Explains external quality metrics and how they are developed, abstracted, reported, and used. Identifies appropriate resources to keep updated on trends and changes within pharmacy and healthcare.
OBJ R3.2.3	(Cognitive - Applying) Contribute to departmental management	Taught and Evaluated	Actively participate in daily leadership huddle. Actively participate in real-time problem solving (A3) for at least one quality/safety issue. Resolve (with the assistance of operations/ clinical team) management of staff call outs/ shortages.
OBJ R3.2.4	(Cognitive - Applying) Manages one's own practice effectively	Taught and Evaluated	Accurately summarize strengths and areas for improvement. Balance longitudinal requirements including meetings to ensure that these do not interfere with rotation assignments. Complete all task/ projects by the assigned deadline. Demonstrate effective time management. Develop a system for staying current with pertinent and timely literature related to pharmacy practice and leadership.

#### Evaluations:

	Evaluator	Evaluated	Timing
Summative Evaluation	All Preceptors	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed
ASHP Preceptor Evaluation	Residents	All Preceptors of this Learning Experience	Ending and Quarterly if Needed
ASHP Learning Experience Evaluation	Residents	Learning Experience	Ending and Quarterly if Needed
Summative Evaluation	Residents	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed

Faculty: Barton, Virginia

**Site:**

University of Virginia Health System

**Status:** Active

Not Required

**Description:**

Medication Safety is an elective rotation in the PGY1 pharmacy residency program. Medication safety is a fundamental responsibility of all members of the profession of pharmacy. For a medication safety program to succeed, however, it is essential that there be an innovative leader to set a vision and direction, identify opportunities to improve the medication-use system, and lead implementation of error-prevention strategies.

**Role of the pharmacist:**

The medication safety leader's role includes responsibility for leadership, medication safety expertise, influencing practice change, research, and education. ASHP believes that because of their training, knowledge of the medication-use process, skills, and abilities, pharmacists are uniquely qualified to fill the roles and meet the responsibilities of the medication safety leader in hospitals and health systems.

**Core Content Topics will include:**

Common topics in which the resident will be expected to gain proficiency through direct participation or topic discussion include but are not limited to:

- Be Safe/Lean Methodology
- Medication distribution process and technology integration
- Relative strength of various medication safety strategies
- Just Culture and its application to culture of safety and reporting
- Using data from systems to assess compliance
- Uses for self-reported data as qualitative information

**Meetings the resident MUST attend include:**

- Patient Safety and Quality Committee
- Medication Use Safety and Informatics Committee (MUSIC) meetings- Controlled Substance Oversight and Nursing Pharmacy Practice
- Pediatric Triad (subgroup of MUSIC)
- Infusion BSE investigation workgroup

During the learning experience the resident will focus on the goals and objectives outlined below by performing the activities that are associated with each objective. The PGY1 resident must devise efficient strategies for accomplishing the required activities in a limited time frame.

Achievement of the goals of the residency is determined through assessment of ability to perform the associated objectives. The table below demonstrates the relationship between the activities and the goals/objectives assigned to the learning experience.

**Expectation of Learners:**

## **Preceptor Interaction**

Daily:

-

## **Communication:**

1. Daily interaction: Residents are to prioritize tasks throughout the day to ensure timelines are met. Resident is responsible for asking questions to ensure a full understanding of project/task in order to be successful.
2. E-mail: Residents are expected to appropriately manage emails each day at a minimum for ongoing communication.
3. Contact phone number(s): Provided to resident at time of learning experience for emergency issues.

**WEEKLY Schedule:** M-F 08:00 – 16:30

## **Expected progression of resident responsibility on this learning experience:**

(Length of time preceptor spends in each of the phases will be personalized based upon resident's abilities and timing of the learning experience during the residency training year)

Day 1: Preceptor to review learning activities, rotation calendar, expectations, and policies and procedures with resident.

Week 1 and thereafter: Resident reviews some BSE events with preceptor guidance/support, and learns coding process, as well as when and who to consult for systems related information (Epic, Talyst, Pyxis). Independence and problem-solving skills are expected to progress throughout the duration of the rotation

Week 2 and thereafter: The resident will provide initial review of events reported in Be Safe Events electronic reporting system, for review with Medication Safety Pharmacist, and perform coding of all medication/Fluid events that are reported.

Week 4 and 5: The resident will serve as the facilitator of Pediatric Triad meeting

## **Evaluation**

The frequency of evaluations and corresponding documentation requirements can be found in the "Evaluations" grid at the end of each learning experience description.

- All evaluations are to be completed by the last day of the learning experience (and no more than one week after the conclusion of the experience).
- Evaluations are signed/ co-signed only after discussed in a summative evaluation meeting between the preceptor and resident.
- Resident self-evaluations are completed until objective R3.1.2 has been deemed by the RPD as ACHR
- Frequent, immediate, specific, and constructive verbal feedback regarding performance is provided to the resident throughout the rotation.



			Activities
<b>Goal R2.1</b>	<b>Demonstrate ability to manage formulary and medication-use processes, as applicable to the organization</b>		
OBJ R2.1.1	(Cognitive - Creating) Prepare a drug class review, monograph, treatment guideline, or protocol	Taught and Evaluated	Develop/update medication use guidelines/protocols/departmental procedures as needed with input from key stakeholders using the required institutional and/or departmental format. Prepare a drug monograph or therapeutic class review based upon analysis of evidence-based treatment guidelines and other appropriate literature sources that includes medication error potential, role of the drug in therapy (critical issues), reimbursement expectations, and pharmacoeconomic considerations. Prepare draft of build sheet for Epic ERX, P&T Forum newsletter submission, and applicable section of P&T Committee meeting minutes for assigned drug monograph/class review. Present a drug monograph or therapeutic class review to the P&T Committee or appropriate subcommittee.
OBJ R2.1.3	(Cognitive - Analyzing) Identify opportunities for improvement of the medication-use system	Taught and Evaluated	Review internal medication error reports and near-miss events to identify opportunities for improvement. Review internal medication error reports and near-miss events to identify opportunities for improvement. Review sources of information external to the institution to identify institutional opportunities for improvement.
OBJ R2.1.4	(Cognitive - Applying) Participate in medication event reporting and monitoring	Taught and Evaluated	Report an ADE to ISMP, FDA, and pharmaceutical manufacturer using the National Medication Error Reporting Program online reporting system, if applicable. Review and revise institutional policies related to adverse drug reactions (ADR) and medication error reporting. Serve as the lead pharmacy team member in investigating Be Safe events (medication error related to prescribing, verification, dispensing, or administration) reported and solve to root, if applicable.
<b>Goal R3.1</b>	<b>Demonstrate leadership skills</b>		
OBJ R3.1.1	(Cognitive - Applying) Demonstrate personal, interpersonal, and teamwork skills critical for effective leadership	Taught and Evaluated	Communicate effectively verbally and in writing using terminology appropriate for the intended group. Demonstrate effective time management. Recognize the understanding of perspectives of various team members/ health care professionals. Uphold ASPIRE values.
OBJ R3.1.2	(Cognitive - Applying) Apply a process of on-going self-evaluation and personal performance improvement	Taught and Evaluated	Accurately summarize strengths and areas for improvement. Actively seek and incorporate feedback from others. Develop a system for staying current with pertinent and timely medication safety literature. Perform timely, reflective and qualitative self-assessments.
<b>Goal R3.2</b>	<b>Demonstrate management skills</b>		
OBJ R3.2.1	(Cognitive - Understanding) Explain factors that influence departmental planning	Taught and Evaluated	Review Institutional Workplan to identify medication safety improvement priorities.
OBJ R3.2.3	(Cognitive - Applying) Contribute to departmental management	Taught and Evaluated	Actively participate in real-time problem solving (A3) for quality/safety issues. Communicate significant safety events to pharmacy leadership in SBAR format.
OBJ R3.2.4	(Cognitive - Applying) Manages one's own practice effectively	Taught and Evaluated	Balance longitudinal requirements including meetings to ensure that these do not interfere with rotation assignments. Complete all task/ projects by the assigned deadline.

**Evaluations:**

	Evaluator	Evaluated	Timing
Summative Evaluation	All Preceptors	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed
ASHP Preceptor Evaluation	Residents	All Preceptors of this Learning Experience	Ending and Quarterly if Needed
ASHP Learning Experience Evaluation	Residents	Learning Experience	Ending and Quarterly if Needed
Summative Evaluation	Residents	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed

Faculty: Adams, Amy P.; Luedtke, Kyle; Thornton, Kara

**Site:**

University of Virginia Health System

**Status:** Active

Not Required

**Description:**

The Investigational Drug Services (IDS) rotation is an elective option in the PGY1 pharmacy residency program. UVA's IDS (IDS) supports all clinical drug-related research conducted by investigators at the University of Virginia Health System. UVA operates 2 investigational drug pharmacies; one in inpatient pharmacy complex serving clinical trial needs for all disciplines except adult oncology; and the other in the Emily Couric Clinical Cancer Center serving clinical trial needs for adult oncology. PGY1 resident rotations will primarily take place in the inpatient IDS area.

The role of the IDS pharmacist is to assure safe and efficient conduct of clinical drug trials including compliance with federal, state, and Joint Commission requirements regarding investigational drugs. Activities of the IDS pharmacists include: assistance with protocol development, randomization schemes, blinding methodologies, development of educational materials/in-service training for patients and staff, preparation of oral, rectal, topical, and parenteral dosage forms and matching placebo, appropriate storage according to FDA guidelines, limited access and security of study drug, maintenance and control of investigational drug inventories, collection of all patient drug returns and reconciliation, maintenance of Drug Accountability Records and all study related files, participation in final close-out of the study protocol with the sponsor, return of all used and unused study drug to the sponsor, drug destruction policies in place to destroy expired or used drug on site, participation in FDA, NCI, NIH and pharmaceutical sponsor audits, storage of all closed clinical study records for up to 15 years after closure, and preparation of study specific physician order forms and order sets for inpatient and clinic orders.

**Core Content**

Common topics in which the resident will be expected to gain proficiency through direct participation or topic discussion include but are not limited to:

- Preparation of protocol specific binders which include pharmacist information sheets, drug accountability forms, and protocol specific drug information
- Evaluating appropriateness and feasibility of clinical trials involving drug therapy for the IRB-HSR
- Providing pharmacy support for clinical trials which includes budgeting, randomizations, compounding IV products, dispensing of investigational agents per protocol and inventory management
- Information resource for investigators as well as the pharmacy staff for all aspects of clinical trials
- Participation in committees in order to monitor the safety of investigator initiated clinical trials
- Balancing UVA SOC/SOPs, state and federal regulations with how sponsors anticipate a trial will be administered
- Clinical review of patients to determine if treatment parameters for specific clinical trials have

been met and aiding in treatment modifications if needed

### **Required meetings**

The resident is expected to participate in the following meetings, as they occur during rotation:

- IRB
- PRC
- DSMC
- IDS Pharmacy Monthly Meeting
- Interim Monitoring Visits
- Site Initiation Visits
- Site Selection Visits
- Clinical Trial Meetings
- IDS Staff Meetings or Huddles

### **Goals and Objectives**

During the learning experience, the resident will focus on the goals and objectives outlined below by performing the activities that are associated with each objective. The resident will gradually assume responsibility for all of the patients within the assigned unit. The PGY1 resident must devise efficient strategies for accomplishing the required activities in a limited time frame.

Achievement of the goals of the residency is determined through assessment of ability to perform the associated objectives. The table below demonstrates the relationship between the activities and the goals/objectives assigned to the learning experience.

### **Expectation of Learners:**

## **Preceptor Interaction**

**Daily:**Residents will work with technician and pharmacist colleagues in their assigned areas. Service colleagues will provide feedback to the resident as needed and to the designated preceptor.

## **Communication:**

1. Daily times: Residents work with IDS pharmacists, technicians, and supervisory staff to prioritize assignments and address current issues related to their assigned duties. Residents may work with the Principle Investigator and/or their study teams as determined or agreed to by preceptor (s).
2. E-mail: Residents are expected to read applicable staffing-related e-mails each day at a minimum for ongoing communication. This is appropriate for routine, non-urgent questions and problems.
3. Pager: If directed by on-site personnel, residents should utilize the Help Chain for urgent/emergency situations pertaining to patient care
4. Personal phone number: Provided to resident at time of learning experience for emergency issues.

## **Expected progression of resident responsibility on this learning experience:**

Day 1: Preceptor to orient resident to practice area, rotation expectations, and learning activities.

Week 1: Resident to work with each team member to understand roles, responsibilities, and daily duties. Resident to complete all IRB training modules and is assigned at least one clinical trial protocol to complete protocol specific binders which include pharmacist information sheets, drug accountability forms, and protocol specific drug information.

Week 3: Resident to oversee at least one study monitor visit and actively participate in the meetings as assigned.

Weeks 3-5: Resident to independently complete assigned clinical trial protocol, evaluate at least 2 clinical trials for appropriateness and feasibility for the HSR-IRB, provide pharmacy support for clinical trials, and serve as a resource to investigators, study coordinators, and other pharmacy staff.

## **Evaluation**

The frequency of evaluations and corresponding documentation requirements can be found in the "Evaluations" grid at the end of each learning experience description.

- All evaluations are to be completed by the last day of the learning experience (and no more than one week after the conclusion of the experience).
- Evaluations are signed/ co-signed only after discussed in a summative evaluation meeting between the preceptor and resident.
- Resident self-evaluations are completed until objective R3.1.2 has been deemed by the RPD as ACHR
- Frequent, immediate, specific, and constructive verbal feedback regarding performance is provided to the resident throughout the rotation.

		<b>Activities</b>	
<b>Goal R1.3</b>	<b>Prepare, dispense, and manage medications to support safe and effective drug therapy for patients</b>		
OBJ R1.3.1	(Cognitive - Applying) Prepare and dispense medications following best practices and the organization's policies and procedures	Taught and Evaluated	<p>Appropriately applies concepts and policies related to federal and state regulations for Investigational Drugs as well as other guidelines that are used for practice. Communicates effectively with team (pharmacy and non-pharmacy) during patient dosing. Effectively communicates with study staff, pharmacy staff, and sponsors as necessary during set up and during active dosing.</p> <p>Follow IDS procedures to set up new studies. Such studies may include sponsored trials, cooperative group trials and investigator-initiated studies. Follows established standards for handling non-UVA study medications.</p> <p>Maintains accuracy and confidentiality of patients' protected health information (PHI).</p> <p>Prepares medication following IDS standard procedures and following the organization's policies and procedures and applicable professional standards, including: When required, accurately calibrates equipment./ Ensuring solutions are appropriately concentrated, without incompatibilities, stable, and appropriately stored./ Adheres to appropriate safety and quality assurance practices. / Prepares labels that conform to the health system's policies and procedures and Investigational product needs./ Medication contains all necessary and/or appropriate ancillary labels. /Inspects the final medication before dispensing.</p>
OBJ R1.3.3	(Cognitive - Applying) Manage aspects of the medication-use process related to oversight of dispensing	Taught and Evaluated	<p>Appropriately follows organizational procedures for a new clinical trial order and the randomization and/or documentation required for that clinical trial as described in protocol binders.</p> <p>As available, explores issues relating to Investigational Product sourcing and appropriateness for use in humans and in specific populations and determines requirements for use during study.</p> <p>Check the accuracy of the work of pharmacy technicians, clerical personnel, pharmacy students, and others according to applicable laws and institutional policies.</p> <p>Effectively prioritize work load and organize work flow. Monitors patients for modification needs and follows up as needed with appropriate team</p> <p>Promote safe and effective investigational drug use on a day-to-day basis.</p> <p>Review assigned protocols and develop dispensing procedures, documentation needed, order set for submission for a new study and ensure variables needed for study specific needs are met.</p> <p>Trace drug accountability errors, as available, to determine cause, correct the errors and develop an action plan to avoid the error in the future. If no errors are available, discuss historical events for perspective.</p>
<b>Goal R2.1</b>	<b>Demonstrate ability to manage formulary and medication-use processes, as applicable to the organization</b>		
OBJ R2.1.3	(Cognitive - Analyzing) Identify opportunities for improvement of the medication-use system	Taught and Evaluated	<p>Design, implement, and maintain safe and compliant practices for the storage, dispensing, administration, and security of investigational products.</p> <p>Utilize sources of information external to the institution to identify institutional opportunities for improvement</p>

OBJ R2.1.4	(Cognitive - Applying) Participate in medication event reporting and monitoring	Taught and Evaluated	As available, fully investigate Be Safe event (medication error related to prescribing, verification, dispensing, or administration) reported and solve to root. Report an SAE, AE to appropriate authority IRB, FDA, etc., as appropriate. Review CFR and other Investigational Drug guidelines and regulations, protocol, as well as institutional policies related to adverse drug reactions (ADR), Serious Adverse Event (SAE) and Adverse Event (AE) and medication error reporting.
<b>Goal R3.1</b>	<b>Demonstrate leadership skills</b>		
OBJ R3.1.1	(Cognitive - Applying) Demonstrate personal, interpersonal, and teamwork skills critical for effective leadership	Taught and Evaluated	Communicates effectively with team members Exhibits responsibility for assigned schedule Represents IDS and department of pharmacy professionally in all communication with study personnel, sponsors, monitors, etc Upholds ASPIRE values.
OBJ R3.1.2	(Cognitive - Applying) Apply a process of on-going self-evaluation and personal performance improvement	Taught and Evaluated	Accurately summarizes strengths and areas for improvement Complete all required self-evaluations Seeks and incorporates feedback from others
<b>Goal R3.2</b>	<b>Demonstrate management skills</b>		
OBJ R3.2.4	(Cognitive - Applying) Manages one's own practice effectively	Taught and Evaluated	Complete all assigned projects/tasks in a timely manner and by predetermined deadlines; if deadlines cannot be met the resident shall proactively communicate with preceptors to determine if an alternate timeline is feasible and the resident shall lead/facilitate all elements of the project/task until completion. Coordinates longitudinal requirements, including meetings, to ensure that these do not interfere with rotation assignments. Prioritize IDS tasks so that tasks are completed and follow up is communicated in a timely manner. Take primary responsibility in serving as primary IDS pharmacist (ie, be the first contact for telephone, monitor visits, off-hours coverage, etc).
<b>Goal R4.1</b>	<b>Provide effective medication and practice-related education to patients, caregivers, health care professionals, students, and the public (individuals and groups)</b>		
OBJ R4.1.3	(Cognitive - Applying) Use effective written communication to disseminate knowledge	Taught and Evaluated	Develop and provide educational material to staff when needed. Develop set of written documents for each assigned study for set up Provide complete, thorough, and professionally written communication in all correspondences, including email communication, ensuring transparency and follow up occur.

#### Evaluations:

	Evaluator	Evaluated	Timing
Summative Evaluation	All Preceptors	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed
ASHP Preceptor Evaluation	Residents	All Preceptors of this Learning Experience	Ending and Quarterly if Needed
ASHP Learning Experience Evaluation	Residents	Learning Experience	Ending and Quarterly if Needed
Summative Evaluation	Residents	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed





Faculty: Chabot, Mark P.; Fiebert, James

**Site:**

University of Virginia Health System

**Status:** Active

Not Required

**Description:**

The Pharmacy Informatics (PI) rotation is an elective 5-week rotation in the PGY1-Pharmacy residency program. PI is responsible for analysis of and support for multiple pharmacy information and automation systems, with a focus on developing clinical decision support and data solutions related to the electronic health record. The PI team consists of 1 manager, 4 pharmacists, and 4 technicians.

**Core Content**

Common topics in which the resident will be expected to gain proficiency through direct participation/ topic discussion include but are not limited to:

- Interaction between pharmacy technology systems and the importance of interfaces
- Automated dispensing cabinet (ADC) maintenance and optimization
- CPOE system optimization
- New medication onboarding
- Data analytics
- Pharmacy workflow and the importance of technology
- Customer service and problem management

Topic discussions and reading key articles will be used to help develop the resident's knowledge of pharmacy informatics.

During the learning experience the resident will focus on the goals and objectives outlined below by performing the activities that are associated with each objective. The resident will gradually assume responsibility for tasks within the pharmacy informatics group. The PGY1 resident must devise efficient strategies for accomplishing the required activities in a limited time frame.

**Expectation of Learners:**

### **Preceptor Interaction**

*Daily:* Interaction with the preceptor will occur on a daily basis and times will be based upon a schedule determined at the beginning of the rotation

### **Communication**

A. Daily interaction: Residents are to prioritize tasks throughout the day to ensure timelines are met. Resident is responsible for asking questions to ensure a full understanding of project/task in order to be successful.

B. E-mail: Residents are expected to appropriately manage emails each day at a minimum for ongoing communication

C. Contact phone number(s): Provided to resident at time of learning experience for emergency issues.

### **Expected progression of resident responsibility on this learning experience**

(Length of time preceptor spends in each of the phases will be personalized based upon resident's abilities and timing of the learning experience during the residency training year)

*Day 1:* Preceptor to review learning activities and expectations with resident.

*Week 2:* Learn the pharmacy automation systems used by UVA and how they interact with each other. Observe the maintenance and troubleshooting of our pharmacy automation systems.

*Week 3-4:* With the help of the preceptor or designated pharmacy IT employee, work hands on with the maintenance and troubleshooting of the pharmacy automation systems.

*Weeks 5:* Resident should be able to independently handle or appropriately triage most IT issues with limited assistance.

### **Other expectations for the rotation**

Review assigned articles and be prepared for topic discussion as scheduled

Attend meetings as assigned by the preceptor

		<b>Activities</b>	
<b>Goal R2.1</b>	<b>Demonstrate ability to manage formulary and medication-use processes, as applicable to the organization</b>		
OBJ R2.1.3	(Cognitive - Analyzing) Identify opportunities for improvement of the medication-use system	Taught and Evaluated	After reviewing the pharmacy technology interface map, explain what systems connect and by what means Interview members of the pharmacy IT team regarding various technologies Observe a pharmacy workflow and identify at least one possible improvement involving technology Using pre-rotation knowledge of the pharmacy department, deduce possible opportunities for improvement of pharmacy automation (preceptor discussion) Using the knowledge gained during the rotation, examine other improvements that could be made with our pharmacy automation (preceptor discussion)
<b>Goal R2.2</b>	<b>Demonstrate ability to evaluate and investigate practice, review data, and assimilate scientific evidence to improve patient care and/or the medication-use system</b>		
OBJ R2.2.1	(Cognitive - Analyzing) Identify changes needed to improve patient care and/or the medication-use system	Taught and Evaluated	Characterize opportunities for improvement within one of our automation systems Review the assigned pharmacy automation optimization project and articulate how it will improve patient safety
OBJ R2.2.2	(Cognitive - Creating) Develop a plan to improve the patient care and/or the medication-use system	Taught and Evaluated	Develop a review and implementation plan for the assigned pharmacy automation optimization project

OBJ R2.2.3	(Cognitive - Applying) Implement changes to improve patient care and/or the medication-use system	Taught and Evaluated	Implement any improvements that are discovered in the review of the assigned pharmacy automation optimization project
OBJ R2.2.4	(Cognitive - Evaluating) Assess changes made to improve patient care or the medication-use system	Taught and Evaluated	Compare and contrast the elements of the assigned pharmacy informatics initiative using pivot tables and graphs
OBJ R2.2.5	(Cognitive - Creating) Effectively develop and present, orally and in writing, a final project report	Taught and Evaluated	Develop a presentation of the assigned pharmacy automation optimization project and present findings and recommendations to appropriate staff
<b>Goal R3.2</b>	<b>Demonstrate management skills</b>		
OBJ R3.2.3	(Cognitive - Applying) Contribute to departmental management	Taught and Evaluated	Actively collaborate with the pharmacy IT team to respond to trouble tickets/phone calls Actively participate in the day-to-day maintenance of our pharmacy technology systems Lead a topic discussion regarding a pharmacy informatics subject Review literature regarding the automated systems and technology (assigned articles and readings)

### Evaluations:

	Evaluator	Evaluated	Timing
Summative Evaluation	All Preceptors	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed
ASHP Preceptor Evaluation	Residents	All Preceptors of this Learning Experience	Ending and Quarterly if Needed
ASHP Learning Experience Evaluation	Residents	Learning Experience	Ending and Quarterly if Needed
Summative Evaluation	Residents	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed

Faculty: Bidwell, Kate; Dougherty, Kayla; Spoelhof, Brian

**Site:**

University of Virginia Health System

**Status:** Active

Not Required

**Description:**

The Advanced Medication Use Policy (MUP) rotation is an elective rotation in the PGY1-Pharmacy residency program. The role of the pharmacist in MUP is to provide comprehensive, unbiased, evidenced-based medication information, coordinate of the activities of the Pharmacy and Therapeutics (P&T) Committee and its subcommittees, coordinate of the medication use evaluation program and other quality improvement initiatives, manage the Formulary and non-Formulary requests, manage drug shortages and recalls, assess drug utilization patterns to determine opportunities for guideline development, develop departmental/hospital policies/protocols to standardize practices and improve overall safety of the medication use process, and educate staff regarding medication use policy guidelines and Formulary changes.

**Core Content:**

Common topics in which the resident will be expected to gain proficiency through direct participation or topic discussion include but are not limited to:

- Pharmacy and Therapeutics Committee/ Formulary management
- Strategic planning
- Drug utilization initiatives and guideline development
- Prospective drug shortage management
- Independent response to drug information requests from all sources
- Pharmacoeconomics

**Required meetings**

The resident is expected to participate in:

- MUP team meetings
- Drug shortage meeting (weekly)
- P&T Committee meeting (4th Friday of each month from 12-1 PM)
- Pre- and post-P&T Committee meetings
- All P&T subcommittee meeting(s)

During the learning experience, the resident will focus on the goals and objectives outlined below by performing the activities that are associated with each objective. The PGY1 resident must devise efficient strategies for accomplishing the required activities in a limited time frame.

Achievement of the goals of the residency is determined through assessment of ability to perform the associated objectives. The table below demonstrates the relationship between the activities and the

goals/objectives assigned to the learning experience.

**Expectation of Learners:**

**Preceptor Interaction**

Daily – Official Service hours are 8:00-4:30. However, assignments and required meetings may extend beyond the hours stated above.

**Communication:**

1. Daily interaction: Residents are to prioritize tasks throughout the day to ensure timelines are met. Resident is responsible for asking questions to ensure a full understanding of project/task in order to be successful. Residents are responsible for ensuring adequate handoff of information has been shared with appropriate persons such that resolution to any problem or question is not delayed.
2. E-mail: Residents are expected to appropriately manage emails each day at a minimum for ongoing communication.
3. Contact phone number(s): Provided to resident at time of learning experience for emergency issues.

**Expected progression of resident responsibility on this learning experience:**

(Length of time preceptor spends in each of the phases will be personalized based upon resident's abilities and timing of the learning experience during the residency training year)

Day 1: Preceptor to review learning activities, rotation calendar, expectations, and policies and procedures with resident.

Week 1 and thereafter: The resident will serve as the facilitator of drug shortage meetings including taking the lead on shortage management plans when needed. The resident will be the primary responder to all shortage related items

Week 2 and thereafter: The resident will identify and implement various quality improvement, cost savings initiatives, and respond to drug information question. The preceptor will coach the resident on work flow.

Week 4 and 5: The resident will continue to implement various projects but will do so independently with minimal preceptor involvement. The preceptor will facilitate in identifying goals for the rotations.

			Activities
<b>Goal R1.3</b>	<b>Prepare, dispense, and manage medications to support safe and effective drug therapy for patients</b>		
OBJ R1.3.2	(Cognitive - Applying) Manage aspects of the medication-use process related to formulary management	Taught and Evaluated	2. Through evaluation of ASHP best practices and internal processes, compare and contrast the UVA process with those external to the organization. 4. Perform/ facilitate updates to the various systems as needed (Epic, Talyst, Pyxis, online formulary, etc.) for prospective strategic changes. Actively support the P&T Committee and all subcommittees. Participate in drug shortage management by participating/facilitating weekly drug shortage meetings/huddles, evaluating potential disruptions in supply, forming management plans, communicating shortage statuses and management plans, and updating applicable shortage resources. In cases of severe shortage, identify stake holders.
<b>Goal R2.1</b>	<b>Demonstrate ability to manage formulary and medication-use processes, as applicable to the organization</b>		
OBJ R2.1.1	(Cognitive - Creating) Prepare a drug class review, monograph, treatment guideline, or protocol	Taught and Evaluated	Develop/update medication use guidelines/protocols/departamental procedures as needed with input from key stakeholders using the required institutional and/or departamental format. Prepare a drug monograph or therapeutic class review based upon analysis of evidence-based treatment guidelines and other appropriate literature sources that includes medication error potential, role of the drug in therapy (critical issues), reimbursement expectations, and pharmacoeconomic considerations. Prepare draft of build sheet for Epic ERX, P&T Forum newsletter submission, and applicable section of P&T Committee meeting minutes for assigned drug monograph/class review. Present a drug monograph or therapeutic class review to the P&T Committee or appropriate subcommittee.
OBJ R2.1.2	(Cognitive - Applying) Participate in a medication-use evaluation	Taught and Evaluated	Conduct a medication use evaluation to identify areas for improvement in the medication use system. Identify needs for a medication use evaluation in implementing a new change. If appropriate, as time allows, perform an evaluation of utilization to ensure compliance to resident implemented programs Implement recommendations across various systems as needed (Epic, Talyst, Pyxis, etc.). Present a summary of recommendations to the appropriate committee.
OBJ R2.1.3	(Cognitive - Analyzing) Identify opportunities for improvement of the medication-use system	Taught and Evaluated	Identify and implement cost savings opportunity. Using Premier and other tools to identify a cost savings opportunity. Utilize the appropriate route(s) of communication to match the targeted audience and the characteristics of the information to be communicated.
<b>Goal R3.1</b>	<b>Demonstrate leadership skills</b>		
OBJ R3.1.1	(Cognitive - Applying) Demonstrate personal, interpersonal, and teamwork skills critical for effective leadership	Taught and Evaluated	Demonstrates understanding of perspectives of various health care professionals. Ensure thorough handoff/follow up is provided when necessary. Uphold ASPIRE values

<b>Goal R3.2</b>	<b>Demonstrate management skills</b>		
OBJ R3.2.4	(Cognitive - Applying) Manages one's own practice effectively	Taught and Evaluated	Complete all assigned projects/tasks in a timely manner and by predetermined deadlines; if deadlines cannot be met the resident shall proactively communicate with preceptors to determine if an alternate timeline is feasible and the resident shall lead/facilitate all elements of the project/task until completion. Take primary responsibility in serving as a medication use policy pharmacist (ie, be the first contact for telephone, CL med management emails, and walk-in queries). The resident will be expected to reach out to key stake holders and ensure projects are completed without the direct involvement of the preceptor
<b>Goal R4.1</b>	<b>Provide effective medication and practice-related education to patients, caregivers, health care professionals, students, and the public (individuals and groups)</b>		
OBJ R4.1.3	(Cognitive - Applying) Use effective written communication to disseminate knowledge	Taught and Evaluated	Develop and provide educational material to staff when needed. Properly reference all materials when preparing written documents and presentations. Provide complete, thorough, and professionally written communication in all correspondences, including email communication, ensuring transparency and follow up occur.

#### Evaluations:

	Evaluator	Evaluated	Timing
Summative Evaluation	All Preceptors	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed
ASHP Preceptor Evaluation	Residents	All Preceptors of this Learning Experience	Ending and Quarterly if Needed
ASHP Learning Experience Evaluation	Residents	Learning Experience	Ending and Quarterly if Needed

### **Research Project**

Longitudinal projects completed by all PGY1 and direct patient care PGY2 residents throughout the year where results are projected to be publishable. PGY1 projects will be presented at the UNC Research in Education and Practice Symposium (REPS) conference and PGY2 projects will be presented at a national meeting and/or a UVA Research Conference. Final reports must be submitted in manuscript style and approved by the Project Advisor and Program Director.

Pursuit of publication in a peer-reviewed journal is an expectation for this project. Residents should discuss potential target journals and order of authorship with their project preceptors early in the research process. After selection of a target journal for manuscript submission, each resident should develop a timeline (in conjunction with project preceptors) to longitudinally craft a manuscript, in the appropriate style for the target journal, as project elements are finalized and completed (background, methods, data collection, data analysis, etc.). This timeline should anticipate submission of an initial manuscript draft to the target journal at the conclusion of the residency year. As a result, early submission of a draft to project preceptors with adequate time for multiple rounds of feedback and revision should be anticipated.

Note: A 'Poster Tips and Tricks' session is currently scheduling during the regular Core Curriculum time on 9/17/2020. This session is mandatory for all residents. An additional guidance document is available in the red orientation folder. This session will be useful for highlighting key points when presenting methodology and results succinctly in either poster or slide format.

**Project Advisor:** The primary advisor assumes responsibility for the conduct and completion of the research project and has the final authority for its direction. This is the person to contact for day-to-day questions, advice, and review of first draft materials. Recognize, however, that it is the resident's responsibility to communicate with all project preceptors as necessary/appropriate. The resident is expected to take ownership of the project's execution, including ensuring meeting project deadlines, at minimum, as outlined in the 'Important Dates to Remember' document.

### **Expectations of Residents**

- This is your project, so become the content expert. While your preceptor may choose to provide a foundational article or two, a comprehensive literature evaluation is expected upon beginning any research project. Creating an annotated bibliography is often helpful during this stage of the research project (O:\DRUGINFO\Resident Resources Folder\Research\Research Projects\Research Project Resources). Note how others write their background/methods/results/discussion and think about how your project might be similar or different.
- Start with a research hypothesis and articulate a clear purpose.
- Provide documentation of CITI training to RPD/Residency Coordinator.
- Take ownership of your project. Schedule at least quarterly meetings with project committee (well in advance). It is very likely meetings will be required more frequently. Meetings are resident-run, where methodology, results, data analysis, etc. are presented and discussed. The resident should be prepared with specific questions for the group.
- Secure permission from all authors and establish appropriate order of authorship prior to submitting research for presentation/publication.
- During sign-up for research presentations, ensure that your research advisor (preferably) or another collaborator can be present.
- Attend research presentations of all other residents.
- Residents must complete IRB closing or continuation paperwork prior to the end of the residency year.
- Provide all project data/documents to the research advisor before leaving e.g. data collection forms, spreadsheets, abstracts, posters, manuscripts. These can be uploaded to your electronic notebook.
- Meet deadlines with high quality work at the beginning of the business day (rough drafts are not accepted). Note that some programs have more aggressive timelines in order to meet abstract deadlines for national meetings (e.g. PGY2 oncology, transplant).

### **Expectations of Advisors**

- Assist in design, conduct, and ultimate destination of project and results.
- Assist in selecting order of authorship. This should be determined upon selection of co-investigators.
- Help to reduce or eliminate barriers to progress e.g. differences of opinion about the direction of a project
- In general, will attempt to return critique of draft materials within 2 business days. However, this may be challenging if a preceptor is an advisor for multiple projects with similar deadlines or has multiple other concurrent commitments. Please plan accordingly.



- Attend all resident presentations to the Research Workgroup. Another collaborator must be present in the event that the advisor is unavailable.

### **Residency Advisory Committee (RAC) Research Workgroup**

Members coordinate and oversee resident research. All projects must be reviewed and approved by this group prior to formal presentation outside the department, unless the resident's project is exempt from review by the Research Workgroup. This is accomplished during pre-scheduled presentations during which a project preceptor must be present. Please pay close attention to these dates with your advisors/collaborators since rescheduling in the event of a conflict will not be accommodated in the absence of unforeseen extenuating circumstances. Failure to obtain approval from the Research Workgroup may jeopardize its presentation outside the institution and therefore graduation from the program.

The 'Important Dates to Remember' checklist (available electronically at \\hscs-share1\central\DRUGINFO\Resident Resources Folder\Research) contains a series of dates held for presentation of various research components to the RAC Research Workgroup. All residents are expected to attend (even if not scheduled to present) to support each other and hear feedback that may apply to projects apart from those being presented. Expectations for these presentations summarized below:

October/November:	<p>Present your background and methods in PowerPoint format in no more than 10 minutes.</p> <p>The methods presented should be the culmination of modifications to your proposal made following feedback from primary project preceptors. Slides should succinctly present the purpose of the project, how objectives you have selected align with this purpose, and how selected primary and secondary outcomes relate to these objectives. You should also present a plan for identifying patients, the number of patients you wish to, data elements you plan to collect, and a basic plan for data analysis.</p> <p>Feedback from the Research Workgroup will focus on optimizing the presented methods to suit the purpose of the project and maximize the likelihood of useful results.</p>
March:	<p>Present background, methods, and results in PowerPoint format in no more than 10 minutes.</p> <p>The background and methods have been previously presented in whole. This presentation should include enough background information and succinct methodology to orient those in attendance to the project (similar to the expectations for platform presentation).</p> <p>The Research Workgroup will focus feedback on optimizing the presentation of results. Data collection and analysis must be complete prior to your scheduled presentation date.</p>
April/May:	<p>These sessions are a formal rehearsal for UNC REPS. Presentations will be delivered without interruption by the audience, timed to ensure they are appropriate length, and should be practiced and polished.</p>

### **Manuscripts/Posters: Tips for success**

- Update your literature search and revise target journal, if necessary.
- Format with your target journal in mind.
- Create "dummy" tables/figures and complete them as you analyze data.
- Use of SPSS is highly encouraged
- For residents taking posters to conferences other than ASHP Midyear, consider printing the poster and taking it personally rather than shipping it to the meeting
- Publication is always encouraged; however, residents who do not pursue publication by the end of the residency year should not expect to be listed as the first author should the remaining co-investigators choose to submit the manuscript subsequently.
- Please see the Poster/Platform presentation tips document included in your red orientation folder for relevant information.

## Additional Resources

- UVA StatLab: <http://data.library.virginia.edu/statlab/consulting/>
- SPSS support: Nate Hedrick, Brian Spoelhof
  - Reach out for technical assistance with SPSS. Direct questions regarding appropriate methodology, data collection, and data analysis to your primary project preceptors.
- Poster templates from prior residents and projects completed in SBAR format (O:\DRUGINFO\Resident Resources Folder\Research\Poster Information)
- Uniform Requirements for Manuscripts Submitted to Biomedical Journals. New Engl J Med 1997; 336:309-16.
- ASHP Foundation Residency Research Tips:  
[http://www.ashpfoundation.org/MainMenuCategories/ResearchResourceCenter/FosteringYoungInvestigators/ResidencyResearchTips\\_1.aspx](http://www.ashpfoundation.org/MainMenuCategories/ResearchResourceCenter/FosteringYoungInvestigators/ResidencyResearchTips_1.aspx)

Faculty: McCarthy, Michelle W.

**Site:**

University of Virginia Health System

**Status:** Active

Required

**Description:**

Each resident will conduct a residency project. The residents will be provided with a suggested list of topics early in the residency year. Residents will work with a pharmacist preceptor team to complete the project by all of the assigned deadlines. Project results are required to be presented in platform format at the regional residency conference (UNC REPS) and at Pharmacy Research Day. The project methodology and results will be written in manuscript format suitable for submission to a peer-reviewed biomedical journal. The project write-up will be submitted to the preceptor, residency program director, and department director. Guidelines for the project manuscript are provided in appendix A. Project results may also be presented to institutional committees, if appropriate.

During the learning experience the resident will focus on the goals and objectives outlined below by performing the activities that are associated with each objective. The resident will assume responsibility for the design, implementation and completion of the project. The PGY1 resident must devise efficient strategies for accomplishing the required activities in the allotted time frame.

Achievement of the goals of the residency is determined through assessment of ability to perform the associated objectives. The table below demonstrates the relationship between the activities and the goals/objectives assigned to the learning experience.

**Expectation of Learners:**

## Preceptor Interaction

-Defined by project preceptor.

-Routine/ scheduled meetings between the resident and the project preceptor are ideal and allow for ongoing feedback/ resolution of issues.

## Communication

A. E-mail: E-mails are appropriate for routine, non-urgent questions and problems Residents are expected to routinely read e-mails for ongoing communication. Appropriate planning and adherence to predetermined presentation deadlines will prevent project-related emergencies.

B. Personal phone number: Provided to resident for emergency issues.

## Expected progression of resident responsibility on this learning experience

*Day 1:* Resident Research Committee to review learning activities and expectations with resident. This will be further enforced by the specific project preceptor on the first resident-preceptor meeting following project selection.

*Quarter 1:* The resident will design their project with the coaching from their preceptor/ research team.

*Quarters 2-4:* The resident will take responsibility for all required elements of the project with facilitation by the preceptor/ project team.

## Evaluation

PharmAcademic will be used for documentation of scheduled evaluations (see chart below). Evaluations will be signed in PharmAcademic following a meeting between the preceptor and resident.

Summative evaluations: This evaluation summarizes the resident's performance throughout the learning experience. Specific comments should be included to provide the resident with information they can use to improve their performance in subsequent learning experiences. Preceptor and Learning Experience evaluations must be completed by the last day of the learning experience.

		Activities	
Goal R2.2	Demonstrate ability to evaluate and investigate practice, review data, and assimilate scientific evidence to improve patient care and/or the medication-use system		
OBJ R2.2.1	(Cognitive - Analyzing) Identify changes needed to improve patient care and/or the medication-use system	Taught and Evaluated	Conduct an efficient and effective literature search/ best practices gap analysis. Select a project from the list approved by the Research Committee.

OBJ R2.2.2	(Cognitive - Creating) Develop a plan to improve the patient care and/or the medication-use system	Taught and Evaluated	Develop project proposal and data collection form. Develops a sound research question realistic for time frame. Identify the key stakeholders (departmental and organization) who must provide approval for project.
OBJ R2.2.3	(Cognitive - Applying) Implement changes to improve patient care and/or the medication-use system	Taught and Evaluated	Change is implemented fully. Collects data as required by project design. Demonstrates appropriate assertiveness in presenting pharmacy concerns, solutions, and interests to external stakeholders. Effectively communicates any changes in medication formulary, medication usage, or other procedures to appropriate parties. Follows timeline and milestones established with preceptor/ project team. Gains necessary commitment and approval for implementation. Implements the project as specified in its design.
OBJ R2.2.4	(Cognitive - Evaluating) Assess changes made to improve patient care or the medication-use system	Taught and Evaluated	Accurately and appropriately develops plan to address opportunities for additional changes. Accurately and fully evaluate outcome of change. Accurately assess the impact, including sustainability if applicable, of the project. Correctly identify modifications or if additional changes are needed. Include operational, clinical, economic, and humanistic outcomes of patient care. Use Continuous Quality Improvement (CQI) principles to assess success of implementation of change, if applicable.
OBJ R2.2.5	(Cognitive - Creating) Effectively develop and present, orally and in writing, a final project report	Taught and Evaluated	Prepare project write-up in manuscript style that completely describes project background, methodology, results, and conclusions. Present as a platform at the regional residency conference (UNC REPS). Present during assigned/ scheduled Research Committee sessions.
<b>Goal R3.1</b>	<b>Demonstrate leadership skills</b>		
OBJ R3.1.1	(Cognitive - Applying) Demonstrate personal, interpersonal, and teamwork skills critical for effective leadership	Taught and Evaluated	Meet all deadlines associated with project. Routinely communicates progress with preceptor.
OBJ R3.1.2	(Cognitive - Applying) Apply a process of on-going self-evaluation and personal performance improvement	Taught and Evaluated	Accurately summarizes strengths and areas for improvement. Complete all required self-evaluations. Seeks and incorporates feedback from others.
<b>Goal R3.2</b>	<b>Demonstrate management skills</b>		
OBJ R3.2.4	(Cognitive - Applying) Manages one's own practice effectively	Taught and Evaluated	Accurately assess successes and areas for improvement in managing one's own practice. Is prepared for all project team/ preceptor and Research Committee meetings. Sets and meets realistic goals and timelines.
<b>Goal R4.1</b>	<b>Provide effective medication and practice-related education to patients, caregivers, health care professionals, students, and the public (individuals and groups)</b>		
OBJ R4.1.3	(Cognitive - Applying) Use effective written communication to disseminate knowledge	Taught and Evaluated	Use correct grammar, punctuation, and spelling

#### Evaluations:

	Evaluator	Evaluated	Timing
Summative Evaluation	All Preceptors	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed

ASHP Learning Experience Evaluation	Residents	Learning Experience	Ending and Quarterly if Needed
ASHP Preceptor Evaluation	Residents	All Preceptors of this Learning Experience	Ending and Quarterly if Needed
Summative Evaluation	Residents	Each Resident Taking this Learning Experience	25.00%
Summative Evaluation	Residents	Each Resident Taking this Learning Experience	50.00%

Title of Project (14-point)

By (12-point)

Resident name, Pharm.D. (12-point)

Postgraduate Year X-YY Residency Project (14-point)

Submitted to the Department of Pharmacy,  
The University of Virginia Health, in partial fulfillment of the  
Requirements for the Postgraduate Year X-YY Residency (12-point)

20XX-20YY (14-point)

Approved by: (12-point)

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Project Advisor

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Date

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Residency Program Director

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Date

The final manuscript should be in a format suitable for publishing in a peer-reviewed journal. Text should be double-spaced in 12-point font. Pages should be numbered on the bottom right corner of the pages.

### **Introduction (bold, 12-point)**

The introduction should include background information on the project. Citations should be notated using superscripts. The last sentence should state the purpose of the project.

### **Methods**

This section should begin with a statement that the project was approved by the Institutional Review Board. Inclusion and exclusion criteria, data collected, etc., should be included in this section.

### **Results**

A summary of results should be included in this section, followed by figures and tables. Figures and tables should not repeat information in the text. Bar graphs should be in black and white only and not contain gray shading as filler or background; distinctive fillings should be used instead (eg, white or solid black, stripes, cross-hatching, dots). Three-dimensional figures and pie graphs are not acceptable for inclusion. This section should be a written expansion of the results presented at Eastern States Conference, ie, results should not be copied and pasted from presentation slides or posters.

### **Discussion**

Include interpretation of your results and how your findings apply to practice. Additionally, elaborate on the similarities and differences between your study design and results compared to other studies. Provide limitations regarding your study.

### **Conclusion**



The final take home point of the project should be succinctly stated. Put the work that you did into perspective, assess generalizability, and consider its clinical implications. Speculate a little, but not too much. Finally, consider the question, "What next?"

## **References**

References should be numbered in the order that they are used throughout the paper, starting on a new page consistent with Uniform Requirements for Manuscripts Submitted to Biomedical Journals

(<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3142758/>.)

For additional information, please see:

Welch HG. Preparing manuscripts for submission to medical journals: Paper Trail.

Effective Clinical Practice. May/ June 1999

(<http://ecp.acponline.org/mayjun99/papertrail.htm>)

Faculty: McCarthy, Michelle W.

**Site:**

University of Virginia Health System

**Status:** Active

Required

**General Description:**

Each resident will conduct a quality improvement project (QIP) in partnership with another PGY1 resident. The residents will be provided with a suggested list of topics early in the residency year. Residents will work with a clinical pharmacist preceptor and a quality coach to complete the project by all of the assigned deadlines. QIP results are required to be presented in poster format at the annual Vizient Pharmacy Council Resident Poster Session, the UVA research day, or alternate professional venue. The project methodology and results will be written in SBAR format (or format requested by the committee) suitable for presentation at Pharmacy and Therapeutics (P&T), other appropriate organizational committee, UBL or to service line leaders. Examples of for the SBAR write ups are provided at: O:\DRUGINFO\Resident Resources Folder\Research

**Role(s) of Pharmacist(s):**

The role of the pharmacist is to form a multidisciplinary team to create and implement data-driven quality improvement projects that support departmental and organizational initiatives.

**Expectations of Residents:**

During the learning experience the resident will focus on the goals and objectives outlined below by performing the activities that are associated with each objective. The resident will assume responsibility for the design, implementation and completion of the quality improvement project. The PGY1 resident must devise efficient strategies for accomplishing the required activities in the allotted time frame.

Achievement of the goals of the residency is determined through assessment of ability to perform the associated objectives. The table below demonstrates the relationship between the activities and the goals/objectives assigned to the learning experience.

**Preceptor Interaction**

Project preceptor and residents will meet as needed to support project development and progression. Each resident team will also receive support from the Quality coaches regarding project design and poster development.

**Communication:**

- A. E-mail: Residents are expected to read e-mails regularly for ongoing communication. Appropriate planning and adherence to predetermined project deadlines will prevent project-related emergencies.
- B. Personal phone number: Provided to resident at time of learning experience for emergency issues.

**Progression of Residents:**

Expected progression of resident responsibility on this learning experience:

Day 1: Resident Quality Coaches to review learning activities and expectations with resident. This will be further enforced by the specific project preceptor on the first resident-preceptor meeting following project selection.

Quarter 1: The resident will research relevant literature regarding the problem with the coaching from their preceptor. The resident will organize and lead: Team formation, data collection, development of problem/aim statements, application of decision analysis tools, and selection of intervention for PDSA cycle #1.

Quarter 2: With preceptor and coach facilitation, the resident will independently complete the majority of the project including change implementation, data collection, result analysis, and poster development.

Quarters 3/4: With preceptor/coach facilitation, the resident will independently complete the final project requirements including SBAR write up and presentation to the appropriate institutional committee.

		<b>Activities</b>	
<b>Goal R2.2</b>	<b>Demonstrate ability to evaluate and investigate practice, review data, and assimilate scientific evidence to improve patient care and/or the medication-use system</b>		
OBJ R2.2.1	(Cognitive - Analyzing) Identify changes needed to improve patient care and/or the medication-use system	Taught and Evaluated	Conduct an thorough literature review on the topic. Identify the rationale behind the QIP (why does the question need to be answered, what is important about this topic) Select a QIP from the list approved by the Quality Coaches.
OBJ R2.2.2	(Cognitive - Creating) Develop a plan to improve the patient care and/or the medication-use system	Taught and Evaluated	Develop a method for data collection that will assist in identifying the problem Develop an appropriate problem statement and corresponding aim statement Develop metrics that can be measured to assess the success of the change to the process or outcome in question
OBJ R2.2.3	(Cognitive - Applying) Implement changes to improve patient care and/or the medication-use system	Taught and Evaluated	Collects data as required by project design Demonstrates appropriate assertiveness in presenting pharmacy concerns, solutions, and interests to external stakeholders. Develop process map, run charts, Pareto charts, cause and effect diagrams, priority matrix, or other decision analysis tools as appropriate. Effectively communicates any changes in medication formulary, medication usage, or other procedures to appropriate parties. Identify the change to implement for a PDSA cycle
OBJ R2.2.4	(Cognitive - Evaluating) Assess changes made to improve patient care or the medication-use system	Taught and Evaluated	Assess the success of the intervention using control charts Conclusions/recommendations: If not yet at goal per the AIM statement, repeat steps of the PDSA cycle to implement the next change if time permits Identify key stakeholders to plan and communicate the PDSA cycle proposed change Set up the appropriate control charts for data

OBJ R2.2.5	(Cognitive - Creating) Effectively develop and present, orally and in writing, a final project report	Taught and Evaluated	Create and submit abstract for QIP presentation at Vizient Pharmacy Council Resident Poster Session Prepare write-up describing QPI methodology and results for presentation to the P&T (or other appropriate committee, UBL, or service line leaders)in SBAR format (or format designated by committee) Present as a poster that includes results/ conclusions/ future directions for presentation at the Vizient Pharmacy Council Pharmacy Council Resident Poster Session
<b>Goal R3.1</b>	<b>Demonstrate leadership skills</b>		
OBJ R3.1.1	(Cognitive - Applying) Demonstrate personal, interpersonal, and teamwork skills critical for effective leadership	Taught and Evaluated	Routinely communicates progress with preceptor Use correct grammar, punctuation, and spelling in all written communication
OBJ R3.1.2	(Cognitive - Applying) Apply a process of on-going self-evaluation and personal performance improvement	Taught and Evaluated	Accutately summarizes strengths and areas for improvement Complete all required self-evaluations Seeks and incorporates feedback from others
<b>Goal R3.2</b>	<b>Demonstrate management skills</b>		
OBJ R3.2.4	(Cognitive - Applying) Manages one's own practice effectively	Taught and Evaluated	Accurately assess successes and areas for improvement in managing one's own practice. Follows timeline and milestones established with preceptor/ project team Is prepared for all project team/ preceptor and Quality Coach meetings Sets and meets realistic goals and timelines

#### Evaluations:

	Evaluator	Evaluated	Timing
Summative Evaluation	All Preceptors	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed
ASHP Learning Experience Evaluation	Residents	Learning Experience	Ending and Quarterly if Needed
ASHP Preceptor Evaluation	Residents	All Preceptors of this Learning Experience	Ending and Quarterly if Needed
Summative Evaluation	Residents	Each Resident Taking this Learning Experience	33.00%
Summative Evaluation	Residents	Each Resident Taking this Learning Experience	67.00%

**Important Dates to Remember Checklist – Research Project  
2020-2021**

Research project	Date due	Comments
<input type="checkbox"/> Project proposal to advisor	Friday, October 2	
<input type="checkbox"/> Present project design/methods to RAC Research Workgroup	Thursday, October 22 Monday, October 26 Wednesday, October 28 Thursday, October 29	<p>Present your background and methods in PowerPoint format in no more than 10 minutes. Feedback from the Research Committee will focus on optimizing the methods to suit the purpose of the project and maximize the likelihood of useful results.</p> <p>All residents should attend (even if not scheduled to present) to support each other and hear feedback that may apply to projects apart from the one being presented.</p>
<input type="checkbox"/> Abstract to advisor + RPD	Monday, March 2	
<input type="checkbox"/> Presentation of data to RAC Research Workgroup	Thursday, March 4 Thursday, March 11 Thursday, March 18 Monday, March 22 Wednesday, March 24	<p>Present background, methods and results PowerPoint format in no more than 10 minutes.</p> <p>The Research Committee will focus feedback on optimizing the presentation of results. Data collection and analysis will need to be complete prior to your scheduled presentation date to make the most of these sessions.</p> <p>All residents should attend (even if not scheduled to present) to support each other and hear feedback that may apply to projects apart from the one being presented.</p>
<input type="checkbox"/> Final abstract submitted to UNC REPS	TBD	
<input type="checkbox"/> Project manuscript draft to preceptors	Monday, April 13	<p>Discuss a target journal with your preceptors in anticipation of creating a manuscript. The manuscript should be formatted in a manner appropriate for submission to the target journal for publication.</p> <p>This deadline is for a complete draft of the manuscript, as all data collection, analysis, and conclusions should be complete. Though this is the initial manuscript deadline on this list, recognize that sections can/should be completed longitudinally with other project deadlines (purpose/background, methods, results/conclusions). Consider creating your own timeline to avoid attempting to write the entire manuscript at once to meet this deadline.</p>
<input type="checkbox"/> Formal practice sessions to preceptors/staff	Thursday, April 29 Thursday, May 6 Thursday, May 13	<p>Formal practice sessions should be considered a rehearsal for the actual presentation at UNC REPS. Presentations will be delivered without interruption by the audience, timed to ensure they are of appropriate length, and should be practiced and polished.</p> <p>All residents should attend (even if not scheduled to present) to support each other and hear feedback that may apply to projects apart from the one being presented.</p>

<input type="checkbox"/> UNC REPS	May 18 and 19	
<input type="checkbox"/> Final manuscript to advisor, RPD, and saved to portfolio	Monday, May 25	
<input type="checkbox"/> Presentation of project results during Pharmacy Research Day	TBD	
<input type="checkbox"/> Complete IRB closing or continuation paperwork.	Before June 26	

**All deadlines are at the beginning of the business day. At least one advisor must attend each presentation. It is the responsibility of the resident to communicate with their advisor when they are expected to present to the research committee and ensure that their advisor is able to participate. If their advisor is not able to participate and/or they have a conflict with their assigned date, they need to schedule time with the research committee chairs and their advisor to discuss options for alternative dates/times.**

Faculty: Hedrick, Amanda; Hedrick, J. N.; Holian, Angela; Lonabaugh, Kevin P.; Lynch PharmD, Lia; Madden, Thomas R.; Morris, Hannah; Morrisette, Matthew J.

**Site:**

University of Virginia Health System

**Status:** Active

Required

**Description:**

Residents contribute to the distributive and clinical patient care mission of the department throughout the year during their service commitment. The commitment is 16 hours (Saturday and Sunday) every other week. Service is provided in the following areas: IV Room, Inpatient, and Clinical Verification. Each resident will be provided with an individualized schedule that identifies their shift and practice area. The resident shall report to the shift/area as assigned. Through this commitment, residents work independently in pharmacist shifts to support the patient care mission of the Department of Pharmacy Services and the University of Virginia Medical Center.

Residents are assigned a service preceptor for the duration of the year. This individual routinely meets with the resident and solicits feedback from all pharmacists and technicians who work with the residents during their service commitment for completion of the required evaluations.

**Expectation of Learners:**

During the learning experience, the resident will focus on the goals and objectives outlined below by performing the activities that are associated with each objective. Achievement of the goals of the residency is determined through assessment of ability to perform the associated objectives.

**Preceptor Interaction**

*Daily:* Residents will with technician and pharmacist colleagues in their assigned areas (see pharmacy schedule for shifts). Service colleagues will provide feedback to the resident as needed and to the designated preceptor at least quarterly.

**Communication**

A. Daily times: Residents work with pharmacists, technicians, and supervisory staff to prioritize questions and problems related to their assigned duties. For problems/ questions that cannot be answered by on-site staff, residents shall the departmental Help Chain to assist with resolution.

B. E-mail: Residents are expected to read applicable staffing-related e-mails each day at a minimum for ongoing communication. This is appropriate for routine, non-urgent questions and problems.

C. Pager: If directed by on-site personnel, residents should utilize the Help Chain for urgent/emergency situations pertaining to patient care

D. Personal phone number: Provided to resident at time of learning experience for emergency issues.

**Expected progression of resident responsibility on this learning experience**

(Length of time preceptor spends in each of the phases will be personalized based upon resident's abilities and timing of the learning experience during the residency training year). Residents staff independently ONLY after successfully completing orientation and pharmacist trainer sign-off on all three training checklists.

*Day 1:* RPD/Clinical Manager/ Preceptor to review learning activities and expectations with resident.

*Thereafter:* The resident assumes responsibilities as the pharmacist in the assigned area. Residents are always assigned to work with other team members who can model/ coach/ or facilitate optimal practice standards.

			Activities
<b>Goal R1.3</b>	<b>Prepare, dispense, and manage medications to support safe and effective drug therapy for patients</b>		
OBJ R1.3.1	(Cognitive - Applying) Prepare and dispense medications following best practices and the organization's policies and procedures	Taught and Evaluated	<p>Adheres to appropriate safety and quality assurance practices</p> <p>Considering complete patient-specific information</p> <p>Correctly interpret appropriateness of a medication order before preparing or permitting the distribution of the first dose</p> <p>Determining an appropriate solution to an identified problem</p> <p>Ensures the patient receives medication on time</p> <p>Ensures the patient receives the medication(s) as ordered. Ensures the integrity of medication dispensed</p> <p>Ensuring solutions are appropriately concentrated, without incompatibilities, stable, and appropriately stored</p> <p>Ensuring that the solution is implemented</p> <p>Identifying existing or potential drug therapy problems</p> <p>Identifying, clarifying, verifying, and correcting any medication order errors</p> <p>Inspects the final medication before dispensing</p> <p>Maintains accuracy and confidentiality of patients' protected health information (PHI)</p> <p>Medication contains all necessary and/or appropriate ancillary labels</p> <p>Obtains agreement on modifications to medication orders when acting in the absence of, or outside, an approved protocol or collaborative agreement</p> <p>Prepares labels that conform to the health system's policies and procedures</p> <p>Prepares medication using appropriate techniques and following the organization's policies and procedures and applicable professional standards</p> <p>Provides any necessary written and/or verbal counseling</p> <p>Securing consensus from the prescriber for modifications to therapy</p> <p>When dispensing medication products, follows the organization's policies and procedures</p> <p>When required, accurately calibrates equipment</p>
OBJ R1.3.2	(Cognitive - Applying) Manage aspects of the medication-use process related to formulary management	Taught and Evaluated	<p>Follows Closed Formulary policy and ensures Medication Use Policy approval for all non-formulary requests</p> <p>When approved, ensures non-formulary medications are dispensed, administered, monitored, and documented in a manner that ensures patient safety</p>
OBJ R1.3.3	(Cognitive - Applying) Manage aspects of the medication-use process related to oversight of dispensing	Taught and Evaluated	<p>Check accuracy of medications dispensed, including correct patient identification, medication, dosage form, label, dose, number of doses, expiration dates, and properly repackaged and relabeled medications, including compounded medications (sterile and nonsterile)</p> <p>Check the accuracy of the work of pharmacy technicians, clerical personnel, pharmacy students, and others according to applicable laws and institutional policies</p> <p>Effectively prioritize work load and organize work flow</p> <p>Promote safe and effective drug use on a day-to-day basis</p> <p>Utilizes Pyxis and Talyst technology to aid in decision-making and increase safety</p>
<b>Goal R3.1</b>	<b>Demonstrate leadership skills</b>		
OBJ R3.1.1	(Cognitive - Applying) Demonstrate personal, interpersonal, and teamwork skills critical for effective leadership	Taught and Evaluated	<p>Communicates effectively with team members</p> <p>Exhibits responsibility for assigned schedule</p>



OBJ R3.1.2	(Cognitive - Applying) Apply a process of on-going self-evaluation and personal performance improvement	Taught and Evaluated	Accurately summarizes strengths and areas for improvement Complete all required self-evaluations Seeks and incorporates feedback from others
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**Evaluations:**

	Evaluator	Evaluated	Timing
Summative Evaluation	All Preceptors	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed
ASHP Learning Experience Evaluation	Residents	Learning Experience	Ending and Quarterly if Needed
ASHP Preceptor Evaluation	Residents	All Preceptors of this Learning Experience	Ending and Quarterly if Needed
Summative Evaluation	Residents	Each Resident Taking this Learning Experience	25.00%
Summative Evaluation	Residents	Each Resident Taking this Learning Experience	50.00%

Faculty:

**Site:**

University of Virginia Health System

**Status:** Active

Required

**Description:**

Each resident will provide a 1 hour ACPE-accredited continuing education presentation to pharmacists (Seminar) and a 30 minute ACPE-accredited continuing education presentation to technicians (Tech Talk). Residents will identify a pharmacist preceptor for presentation dependent upon the topic selected. Compliance with all ACPE requirements such as developing measurable learning objectives, incorporating active learning, and providing post-presentation assessment questions is mandatory. More specific information and deadlines can be found in the Presentation Guidelines.

During the learning experience the resident will focus on the goals and objectives outlined below by performing the activities that are associated with each objective. The resident will assume responsibility for the development and execution of the presentations. The PGY1 resident must devise efficient strategies for accomplishing the required activities in the allotted time frame.

Achievement of the goals of the residency is determined through assessment of ability to perform the associated objectives. The table below demonstrates the relationship between the activities and the goals/objectives assigned to the learning experience.

**Expectation of Learners:**

### **Preceptor Interaction**

Residents and their presentation preceptors will meet as needed to support presentation development and appropriate progression.

#### Communication:

A. E-mail: E-mails are appropriate for routine, non-urgent questions and problems Residents are expected to routinely read e-mails for ongoing communication. Appropriate planning and adherence to predetermined presentation deadlines will prevent presentation-related emergencies.

B. Personal phone number: Provided to resident for emergency issues.

### **Expected progression of resident responsibility on this learning experience**

*Day 1:* Presentation guidelines, learning activities and expectations are shared with the resident. In the first month of the residency, presentation dates are selected by the collective group of residents. The primary preceptor role used will be facilitation.

*At least 60 days before the first scheduled presentation:* The resident will identify a topic and appropriate preceptor. †

*At least 50 days before the first scheduled presentation:* The resident will develop a title and objectives and receive approval from their preceptor. Once approved by preceptor, the title and objectives must be provided to the VCU/ UVA Media Specialist for submission to the VCU Office of Continuing Education.

*At least 45 days before the first scheduled presentation:* Presenter and preceptor CV and conflict of interest form must be submitted to the VCU Office of Continuing Education.

*4 weeks prior to the first scheduled presentation:* Outline (in MS Word) to preceptor OR Preliminary slides + content (not just headings)

*At least 30 days prior to the first scheduled presentation:* The final draft (a well researched, proof-read, and complete version)‡ of your slides must be uploaded into the VCU CE portal.

*1-2 weeks prior to the first scheduled presentation:* Practice with friends/ family/ preceptor/ advisor

*1 week prior to the first scheduled:* Submit audience-assessment questions and the rationale for the correct/ incorrect responses to VCU/ UVA Media Specialist. NOTE: these questions are different than the audience response questions that you embed within your presentation.

*At the conclusion of the presentation:* Complete and submit the Faculty Attestation Document to the VCU CE Office.

All materials are due at the beginning of the business day. Some topics may require additional preparation. Feel free to turn in materials prior to the deadlines.

† Please note – it may take 1-2 weeks to find a topic on which you would like to dedicate the time and energy to prepare a presentation.

‡ The final draft is not YOUR first draft, but a document that allows your preceptor to provide input that will allow you to refine and perfect the content of the handout and delivery of the presentation.

		<b>Activities</b>	
<b>Goal R3.1</b>	<b>Demonstrate leadership skills</b>		
OBJ R3.1.2	(Cognitive - Applying) Apply a process of on-going self-evaluation and personal performance improvement	Taught and Evaluated	Accurately summarizes strengths and areas for improvement Complete all required self-evaluations Meet all deadlines associated with project Routinely communicates progress with preceptor Seeks and incorporates feedback from others Use correct grammar, punctuation, and spelling in all written communication

<b>Goal R4.1</b>	<b>Provide effective medication and practice-related education to patients, caregivers, health care professionals, students, and the public (individuals and groups)</b>		
OBJ R4.1.1	(Cognitive - Applying) Design effective educational activities	Taught and Evaluated	Develop and incorporate audience-assessment and active learning techniques Develop measurable educational objectives (3-5 for each presentation) that correspond with the appropriate cognitive level of Bloom's taxonomy. Includes accurate citations and relevant references, and adheres to applicable copyright laws. Selects content that is relevant, thorough, evidence-based (using primary literature where appropriate), and timely, and reflects best practices.
OBJ R4.1.2	(Cognitive - Applying) Use effective presentation and teaching skills to deliver education	Taught and Evaluated	Captures and maintains learner/audience interest throughout the presentation Effectively uses audio-visuals and handouts to support learning activities. Exercise skill in the operation of audio-visual equipment. Provide presentations that are clear, grammatically correct, and free from slang and dialects. Summarizes important points at appropriate times throughout presentations. Transitions smoothly between concepts.
OBJ R4.1.4	(Cognitive - Applying) Appropriately assess effectiveness of education	Taught and Evaluated	Obtain and incorporate audience feedback into subsequent presentation. Utilize audience-assessment questions to determine audience understanding of one's topic.

#### Evaluations:

	Evaluator	Evaluated	Timing
Summative Evaluation	All Preceptors	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed
ASHP Preceptor Evaluation	Residents	All Preceptors of this Learning Experience	Ending and Quarterly if Needed
ASHP Learning Experience Evaluation	Residents	Learning Experience	Ending and Quarterly if Needed
Summative Evaluation	Residents	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed

**UVA Health  
Department of Pharmacy  
Speaker Requirements and Timeline for Continuing Education Presentations**

Each resident will provide a 1 hour ACPE-accredited continuing education presentation to pharmacists (Seminar) and all PGY1 residents will provide a 30 minute ACPE-accredited continuing education presentation to technicians (Tech Talk).

Residents must identify a pharmacist preceptor for each presentation (seminar and tech talk). The selected preceptor is dependent upon the topic chosen.

Compliance with all ACPE requirements such as developing measurable learning objectives, incorporating active learning, and providing post-presentation assessment questions is mandatory. For ideas of active learning strategies, [go here](#).

The purpose of the seminar presentation is to critically evaluate the literature, answering a specific question or clinical controversy. Residents are encouraged to avoid seminar topics that have been presented in the department in the previous 12-18 months, unless new or emerging literature exists.

Seminar presentations should:

- Be current and relevant to practice
- Be pharmacy and treatment-focused
- Be heavily referenced
- Have a formal question and answer session at the end of the presentation
- Answer a clinical question or controversy (discuss a change in practice)
- Present the evidence behind why a patient is managed a particular way
  - Evaluate primary literature rather than solely guidelines
- Be 40-50 minutes in duration with an additional 10 minutes for questions at the end

Seminar presentations should NOT:

- Be a patient case presentation only
- Be solely a presentation on the guidelines, but rather the landmark data that developed the guidelines—OK to discuss new guidelines, but ensure that the background evidence is the focus

The required steps and associated timelines are as follows:

- ☐ Once the CE presentation dates are selected, Andrew Richards/ CE resident will set up every resident in the [VCU Cloud CE Portal](#) so that you can submit select materials to the portal.
- ☐ At least 60 days before your scheduled presentation, identify your topic and preceptor. Notify Andrew Richards AND Michelle McCarthy of your preceptor so that the learning experience can be scheduled in PharmAcademic.
- ☐ At least 45 days before your scheduled presentation, develop your objectives and your title and

provide to Andrew Richards/ CE resident to upload into the CE portal.

**Pharmacist Objectives:** Using the template below, develop 3-5 objectives for your presentation

- **Discuss** the new treatment options/ standards of care for patients.
- **Summarize** new standards of practice, expert opinion, and/or legislature changes
- **Describe changes to** current laws and regulations
- Review basic physiology and pharmacology as related to the topic being presented
- **Review** treatment options available including patient characteristics/ emerging literature that makes some preferred over others

**Technician Objectives:** Using the template below, develop 3 objectives for your presentation

- **Define** new medication storage/ preparation/ distribution requirements
- **Identify** current laws, regulations, and best practices related to medication storage/ preparation/distribution
- **Review** basic pharmacology as related to the topic being presented

☐ At least 45 days before your presentation, complete the conflict of interest (COI) form in the portal. Your preceptor will also need to complete the COI form in the portal.

☐ At least 30 days before your presentation, provide your slide presentation Michelle McCarthy who will review your slides to ensure they meet requirements for CE.

- Slide number 2 MUST always look like this:

## Disclosure

- The Planning Committee Members disclose the following relevant financial relationships:
  - [Name, Degree] – Nothing to disclose or has the following relevant relationships to disclose: list relationship and company (ex. Consultant – Abbvie)
  - [Name, Degree] – Nothing to disclose or has the following relevant relationships to disclose: list relationship and company (ex. Consultant – Abbvie)
- The Presenting Faculty Member(s) disclose the following relevant financial relationships: **(be sure to include preceptors for PGY presenters)**
  - [Name, Degree] – Nothing to disclose or has the following relevant relationships to disclose: list relationship and company (ex. Consultant – Abbvie)
  - [Name, Degree] – Nothing to disclose or has the following relevant relationships to disclose: list relationship and company (ex. Consultant – Abbvie)
- No commercial support was used in the development and implementation of this activity

- The final slide should always be for “Questions”

☐ EVERY presentation should include active learning. For example patient cases, a pre/post quiz, and/or audience response questions are embedded **throughout the content**. The general rule of thumb is 1 active learning activity every 15 minutes to keep the audience engaged.

Faculty: McCarthy, Michelle W.

**Site:**

University of Virginia Health System

**Status:** Active

Not Required

**Description:**

Residents have the option of enrolling in the Teaching and Learning Certificate (TLC) Program that is offered in conjunction with the Virginia Commonwealth University (VCU) School of Pharmacy and the University of Virginia Pharmacy Residency Program. Once enrolled, the resident has 10-12 months to complete all requirements. Additional details and all programmatic requirements are found in the TLC syllabus. The majority of the TLC requirements are completed through activities at the VCU SOP, UVA VCU campus, required residency presentations, and through attendance at presentations given by others and independent reflection.

The role of the pharmacist in a teaching and learning certificate program is to support pharmacy learners (P3 and P4 students, and PGY1 residents) and the educational mission of our department. Pharmacist educators are vital to sustain and grow the profession of pharmacy.

During the learning experience the resident will focus on the goals and objectives outlined below by performing the activities that are associated with each objective. The resident will assume responsibility for completion of the TLC in the allotted time period. The PGY1 resident must devise efficient strategies for accomplishing the required activities in the allotted time frame.

Achievement of the goals of the residency is determined through assessment of ability to perform the associated objectives. The table below demonstrates the relationship between the activities and the goals/objectives assigned to the learning experience.

**Expectation of Learners:**

## Preceptor Interaction

On a quarterly basis, the resident and preceptor will meet to discuss their TLC progress. The preceptor is routinely available for any questions related to TLC requirements.

## Communication

A. E-mail: Residents are expected to read e-mails regularly. Appropriate planning and adherence to predetermined TLC deadlines will prevent certificate-related emergencies.

B. Cell phone: For urgent/emergency situations and provided at the beginning of the residency year.

## Expected progression of resident responsibility on this learning experience

*Day 1:* Preceptor to TLC syllabus, checklist, learning activities and expectations with resident.

*Quarter 1:* The resident will identify their didactic lecture; required residency presentations and TA responsibilities for the Foundations Lab will be scheduled

*Quarters 2-4:* The resident will take responsibility for all required elements of the TLC with facilitation by the preceptor.

## Evaluation

The frequency of evaluations and corresponding documentation requirements can be found in the "Evaluations" grid at the end of each learning experience description.

- All evaluations are to be completed by the last day of the learning experience or quarterly for experiences that are longer than 12 weeks in duration (and no more than one week after the conclusion of the experience).
- Evaluations are signed/ co-signed only after discussed in a summative evaluation meeting between the preceptor and resident.
- Resident self-evaluations are completed until objective R3.1.2 has been deemed by the RPD as ACHR
- Frequent, immediate, specific, and constructive verbal feedback regarding performance is provided to the resident throughout the TLC.

		<b>Activities</b>	
<b>Goal R4.1</b>	<b>Provide effective medication and practice-related education to patients, caregivers, health care professionals, students, and the public (individuals and groups)</b>		
OBJ R4.1.1	(Cognitive - Applying) Design effective educational activities	Taught and Evaluated	Create didactic lecture that incorporates active learning techniques. Develop learner centered measurable educational objectives. Obtain feedback from learners to incorporate into future activities.



OBJ R4.1.2	(Cognitive - Applying) Use effective presentation and teaching skills to deliver education	Taught and Evaluated	Attend presentations provided by others and complete 2 reflections that identify effective teaching and presentation skills that you would incorporate into your future presentations. Serve as TA in the P3 Foundations Lab as scheduled.
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**Evaluations:**

	Evaluator	Evaluated	Timing
Summative Evaluation	All Preceptors	Each Resident Taking this Learning Experience	Ending and Quarterly if Needed
ASHP Preceptor Evaluation	Residents	All Preceptors of this Learning Experience	Ending and Quarterly if Needed
ASHP Learning Experience Evaluation	Residents	Learning Experience	Ending and Quarterly if Needed
Summative Evaluation	Residents	Each Resident Taking this Learning Experience	25.00%

## Teaching and Learning Certificate Program 2020-2021

### Program Coordinators

#### *VCU Coordinator*

Craig Kirkwood, PharmD.  
Associate Professor, School of Pharmacy  
Assistant Director for Pharmacotherapy Services  
Phone: (804) 828-6609  
craig.kirkwood@vcuhealth.org

#### *Site Coordinator*

[Site coordinators listed in Appendix A](#)

### Rational for the Program

Many residents graduating from the pharmacy residency programs will choose careers with teaching responsibilities. The purpose of the VCU Teaching and Learning Certificate program is to provide formal training that prepares pharmacy residents for this educator role in both the experiential and didactic settings.

### Program Objectives

Participants in this program, upon its completion, will be able to do the following:

1. Describe basic concepts in current pedagogical theory pertaining to pharmacy education
2. Devise a plan for effective teaching within the didactic and experiential settings to achieve clearly defined student outcomes
3. Compare and contrast teaching methods used in the large classroom and small group settings
4. Develop an approach to implement instruction within the didactic and experiential settings, including distance learning
5. Participate in and evaluate the current VCU method to assess educational activities
6. Compose a teaching philosophy that clarifies one's own purpose and goals related to teaching
7. Identify strategies for continued self-improvement related to pharmacy education

### Text and Other Resources

A text for this program is not required, although residents will have reading assignments.

### Program Structure and Requirements

The program is centrally coordinated by the VCU Coordinator who works with each site coordinator. The site coordinators are responsible for the progress of the resident(s) at their respective site and will conduct the final portfolio assessment. They will coordinate specific teaching activities during the year in concert with course coordinators at the VCU School of Pharmacy for didactic instruction, and the residency program directors and preceptors at their specific site for experiential teaching. Residents must complete all of the following activities, at a satisfactory level of performance, to receive a program certificate at the conclusion of the residency year. The completion of the program is expected in one residency year.

#### **1. Attend and participate in teaching-related educational seminars**

Teaching and learning seminar topics generally address three processes: 1) planning for effective teaching, 2) implementing teaching and learning, and 3) assessing student learning. Residents must attend at least 83% (i.e., 10/12 equivalent) of the sessions. The sessions will be held in late July and early January, with possibly other sessions during the year if necessary per faculty schedules. These sessions will be interactive discussions and residents may be expected to complete a reading or other assignment related to the topic beforehand. The sequence of topics with potential session leaders for 2020-21 is presented in Appendix F.

#### **2. Co-precept at least one (1) Advance Pharmacy Practice Experience (APPE) student**

The site coordinators will work with their residency program directors and preceptors to determine the best rotation(s) for experiential teaching. The resident will have one "APPE co-precepting" month, where he/she co-precepts up to two students. PGY1 residents will not be independent "preceptors-of-record" nor "co-preceptors of record" but will perform co-precepting responsibilities. If sufficient student availability and schedules permit while meeting residency requirements, the resident may co-precept for a second rotation.

The supervising preceptor (preceptor-of-record) will provide instructional guidance to the resident throughout the APPE co-precepting rotation experience. In addition to completing the standard APPE evaluation form, the supervising preceptor will evaluate the resident using the "Experiential Teaching Evaluation Form," provided in Appendix C. The preceptor will utilize available feedback from the student(s) in the resident's evaluation. The co-precepting resident will place a copy of each evaluation and comments in his/her teaching portfolio.

Other experiential teaching activities relevant to the Teaching and Learning Certificate Program include active involvement in IPPE experiences. Residents may participate in IPPE activities at their site. These and other teaching activities, and associated evaluations, are to be included in the resident's teaching portfolio under "Experiential teaching."

### **3. Deliver instruction and participate in a minimum of six (6) Foundations course sessions**

Residents' will provide instruction at the VCU School of Pharmacy, or involve VCU Pharmacy P1-P3 students at other sites, in six Foundations (skills lab) sessions. These will occur in two or more of the Foundations series courses. The structure and content will be developed by the respective Foundations course coordinator(s). The topic and date/time of these Foundations course sessions will be determined by resident preference ranking and, due to COVID-19, many of these sessions will be conducted through distance learning. When Foundations sessions return to the Smith Building, residents' travel to Richmond will be accommodated with two sessions in one day when possible. Residents may participate in additional Foundations courses. The feedback form for Foundations Courses participation is included as Appendix D.

### **4. Design and deliver one (1) continuing education program presentation**

Each resident will follow the expectations set forth at his/her site for their continuing education (CE) program presentation. The presentation should be to a large audience and be ACPE-approved. CE presentations will be assessed by the site coordinator and the resident's program director (and/or a site-specific CE coordinator if applicable). The resident will place a copy of all completed CE evaluation forms (or a complete summary including the comments for each session) in his/her teaching portfolio. Variation in the completion of the CE requirement (e.g., not ACPE-approved) must be approved in advance by the VCU Coordinator.

### **5. Design and deliver three (3) journal club reviews or case conference discussions for residents and pharmacy preceptors**

Each resident will follow the expectations established at his/her site for case conference and journal club program presentations. Journal club and case conference presentations will be assessed by the resident's program director or site coordinator (and/or any site-specific conference coordinator if applicable). The resident will place a copy of each completed evaluation form (or a complete summary including comments for each session) in his/her teaching portfolio. Variation in the completion of this requirement must be approved in advance by the VCU Coordinator.

### **6. Attend two (2) contact hours of didactic lecture provided by different faculty members**

To assist in the development of a resident's teaching style, residents will attend lectures (or similar learning experiences) conducted by experienced faculty members. Residents will identify lectures to attend with input from their site coordinator. The resident will gain approval of the faculty member to attend the lecture when appropriate. The resident will forward the following information to the site coordinator via e-mail for each lecture:

1. Educational topic and learning environment (e.g., traditional lecture vs. active learning; live or asynchronous)
2. Course/venue and location
3. Date and time of lecture
4. Faculty member being observed

Preference is for lectures at the VCU School of Pharmacy; however, lectures in another educational venue, including a medical department grand rounds or a CE program outside of VCU, are acceptable if identified and approved by the site coordinator *a priori*.

Upon completion of each lecture (or similar learning experience), the resident will write a one-page reflection paper describing what he/she learned from the experience. The goal of this activity is to reflect on the learning environment and the effectiveness of the chosen educational strategy. This is NOT to be a review of the lecture or session, nor a critique of the faculty member. For example, the resident should consider what captured the audience's attention and how an aspect of the presentation could be improved. When possible, residents are encouraged to discuss with the faculty member why he/she selected specific teaching strategies. When completed, the resident will e-mail the reflection paper to the site coordinator and place a copy in his/her teaching portfolio.

### **7. Develop and deliver a minimum of one (1) contact hour of didactic lecture – **HIGHLY RECOMMENDED****

**This element is not required, but highly recommended.** Residents' lectures (or similar educational experiences) may occur at the VCU School of Pharmacy or alternative sites associated with the resident's organization (and involve VCU Pharmacy P1-P3 students or

other audiences - if at the VCU School of Pharmacy, a lecture will be selected from a list pre-determined for the residents by the faculty). Each resident's lecture topic will be approved by his/her site coordinator and residency program director. For each lecture, the resident will identify a content advisor if one is not pre-assigned. The resident will submit the lecture/session materials (e.g., slides, handouts, exam questions) to the content advisor for review and approval in advance, and in agreement with a defined timeline. For many lectures in various programs, especially for Fall courses, the lecture content may be predetermined in preparation for the starting semester.

The resident will submit the following information for the lecture to the site coordinator and their residency program director after a topic and content advisor have been identified:

1. Education topic (i.e., actual title) and learning environment (e.g., traditional lecture or active learning; live or asynchronous)
2. Course and location
3. Date and time of lecture
4. Lecture content advisor

The lecture content advisor will attend and evaluate the lecture using the "Didactic Teaching Evaluation Form" provided in Appendix B. Additionally, the resident's program director (or the site coordinator or the course coordinator) will attend and complete another evaluation form. At the conclusion of the lecture, the content advisor and program director (or site coordinator or course coordinator) will provide feedback to the resident. Students will evaluate residents according to each course's evaluation policy. The site or course coordinator will forward any students' evaluations or a summary to the resident when available. The resident will place a copy of all evaluations in his/her teaching portfolio.

## **8. Compose and submit a teaching portfolio for formal review**

A teaching portfolio is more than a simple compilation of teaching activities. In addition to providing a teaching philosophy, it illustrates successful teaching and learning in different settings. It documents the depth and breadth of the resident's teaching ability as well as reflection and growth. The expectations for the teaching portfolio, and its utility for determining success in the program, are provided in Appendix E. The portfolio will include the following, which should be presented as outlined in a separate table of contents page for the resident's actual portfolio:

1. Statement of teaching philosophy [note: resident must not paraphrase or quote others]
2. Didactic instruction (include didactic lecture here, if completed)
  - Learning objectives and examination questions (where appropriate)
  - Evaluations (faculty members and students)
3. Experiential teaching
  - Supporting materials
  - Evaluations (faculty members and students)
4. Foundations course instruction
  - Supporting materials
  - Evaluations (faculty members and students)
5. Continuing education program
  - Supporting materials
  - Evaluation (faculty members/preceptors, students, and fellow residents)
6. Journal club and case conference programs
  - Supporting materials
  - Evaluation (faculty members/preceptors, students, and fellow residents)
7. Other teaching activities (e.g., IPPE participation, other pertinent programs)
  - Supporting materials
  - Evaluation (faculty members, students, and fellow residents)
8. Reflection statements related to observed teaching by others

A teaching portfolio binder with hard copies, or an electronic version with file copies, of the aforementioned documents will be prepared. The overall performance of the resident in the program will be evaluated using Appendix E. Final portfolios are due no later than June 5, 2021.

Appendix A: VCU Teaching and Learning Certificate Program  
**Site Coordinators, 2020-21** v2 7/20/20

Site	Coordinator	Email
VCU Health System	Dr. Tammy Nguyen	Tammy.nguyen@vcuhealth.org
UVA Health System	Dr. Michelle McCarthy	MM4TM@hscmail.mcc.virginia.edu
VAMC-Richmond	Dr. Jenny Phung	Jenny. Phung@va.gov
VAMC-Hampton Roads	Dr. Jamie Cook	Jamie.Cook@va.gov
Sentara-Norfolk General	Dr. Neil Davis	NXDAVIS2@sentara.com
Sentara-Martha Jefferson	Dr. Meg Taylor	MNTAYLOR@sentara.com
Bon Secours – Memorial	Dr. Chelsea Zavilla	Chelsea_Zavilla@bshsi.org
HCA – CJW	Dr. Megan Sarashinsky	Megan.Sarashinsky@HCAhealthcare.com
Riverside Health System	Dr. Brad Heidenthal	Bradley.Heidenthal@rivhs.com

Appendix B: VCU Teaching and Learning Certificate Program  
**Didactic Teaching Evaluation Form**

Resident: \_\_\_\_\_

Date: \_\_\_\_\_

Topic/Course: \_\_\_\_\_

Evaluator: \_\_\_\_\_

☐ Traditional lecture

☐ Active learning environment (describe)

Rate the following variables using this scale (provide written comments on the reverse side):

1 = Unsatisfactory    2 = Needs improvement    3 = Satisfactory    4 = Exceeds expectations    5 = Superior

<b>Objectives</b>						
Defined knowledge/skill to be acquired by learner	1	2	3	4	5	NA
Used active words to specify a measurable outcome	1	2	3	4	5	NA
Specified a target level of desired achievement	1	2	3	4	5	NA
<b>Presentation</b>						
Clear and related to objectives	1	2	3	4	5	NA
Targeted to audience	1	2	3	4	5	NA
Included sufficient background for the learner	1	2	3	4	5	NA
Included a manageable amount of pertinent information	1	2	3	4	5	NA
Had a structured flow and logical order	1	2	3	4	5	NA
Utilized principles of evidence-based medicine & deductive reasoning	1	2	3	4	5	NA
Provided relevant information that learners can apply to practice	1	2	3	4	5	NA
Included an accurate conclusion and summarized important points	1	2	3	4	5	NA
Adequately answered learners questions	1	2	3	4	5	NA
<b>Style</b>						
Captured audience's attention	1	2	3	4	5	NA
Delivered at an adequate speed	1	2	3	4	5	NA
Altered voice tone and used inflection	1	2	3	4	5	NA
Maintained eye contact with audience	1	2	3	4	5	NA
Avoided over-reliance on notes	1	2	3	4	5	NA
Used transitional statements	1	2	3	4	5	NA
Minimized distracting behaviors/gestures	1	2	3	4	5	NA
<b>Handout and Visual Aids</b>						
Materials well organized	1	2	3	4	5	NA
Materials added benefit to presentation	1	2	3	4	5	NA
Slides added value to presentation	1	2	3	4	5	NA
Font and color scheme were appropriate; no typographical errors	1	2	3	4	5	NA
References provided on presentation materials	1	2	3	4	5	NA
<b>Questions and Answers</b>						
Questions repeated for audience clarification	1	2	3	4	5	NA
Provided clear/concise answers	1	2	3	4	5	NA
Answers added to audience comprehension	1	2	3	4	5	NA
Provided answers demonstrated extent of knowledge	1	2	3	4	5	NA

Appendix C: VCU Teaching and Learning Certificate Program  
**Experiential Teaching Evaluation Form**

Resident: \_\_\_\_\_ Date: \_\_\_\_\_

Rotation: \_\_\_\_\_ Evaluator: \_\_\_\_\_

Resident served as Preceptor-of-Record

☐ Yes ☐ No

Rate the following variables using this scale (provide written comments on the reverse side):

1 = Unsatisfactory 2 = Needs improvement 3 = Satisfactory 4 = Exceeds expectations 5 = Superior

<b>Professionalism</b>					
Reliable and dependable	1	2	3	4	5
Punctual	1	2	3	4	5
Effectively used time and prioritizes responsibilities	1	2	3	4	5
Respective and cooperative	1	2	3	4	5
Accepted and applied instructive feedback	1	2	3	4	5
Not judgmental	1	2	3	4	5
Communicated assertively	1	2	3	4	5
Diplomatic	1	2	3	4	5
Demonstrated confidence	1	2	3	4	5
<b>Teaching</b>					
Expectations clearly communicated	1	2	3	4	5
Schedule provided to students (daily/weekly activities)	1	2	3	4	5
Arranged the necessary learning opportunities to meet objectives	1	2	3	4	5
Clearly communicated knowledge to the students	1	2	3	4	5
Served as a pharmacy practice role model	1	2	3	4	5
Gave feedback on a regular basis	1	2	3	4	5
Available when the students needed him/her	1	2	3	4	5
Displayed interest in the students	1	2	3	4	5
Displayed enthusiasm for teaching	1	2	3	4	5
Displayed dedication to teaching	1	2	3	4	5
Encouraged self-directed learning	1	2	3	4	5
Provided constructive feedback to students	1	2	3	4	5

Comments or suggestions: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Appendix D: VCU Teaching and Learning Certificate Program  
**Foundations Course Teaching Evaluation Form**

Resident: \_\_\_\_\_ Date: \_\_\_\_\_

Topic: \_\_\_\_\_ Evaluator: \_\_\_\_\_

Rate the following variables using this scale (provide written comments on the reverse side):

1 = Unsatisfactory    2 = Needs improvement    3 = Satisfactory    4 = Exceeds expectations    5 = Superior

<b>Professionalism</b>					
Punctual	1	2	3	4	5
Effectively used time and prioritizes responsibilities	1	2	3	4	5
Respective and cooperative	1	2	3	4	5
Accepted and applied instructive feedback	1	2	3	4	5
Not judgmental	1	2	3	4	5
Communicated assertively	1	2	3	4	5
Demonstrated confidence	1	2	3	4	5
<b>Teaching</b>					
Clearly communicated knowledge to the students	1	2	3	4	5
Served as a pharmacy practice role model	1	2	3	4	5
Gave feedback on a regular basis	1	2	3	4	5
Available when the students needed him/her	1	2	3	4	5
Displayed interest in the students	1	2	3	4	5
Provided constructive feedback to students	1	2	3	4	5
<b>Presentation</b>					
Provided relevant information that learners can apply to practice	1	2	3	4	5
Included an accurate conclusion and summarized important points	1	2	3	4	5
Adequately answered learners questions	1	2	3	4	5
<b>Style</b>					
Captured audience's attention	1	2	3	4	5
Altered voice tone and used inflection	1	2	3	4	5
Maintained eye contact with audience	1	2	3	4	5
Avoided over-reliance on notes	1	2	3	4	5
Minimized distracting behaviors/gestures	1	2	3	4	5
<b>Questions and Answers</b>					
Questions repeated for audience clarification	1	2	3	4	5
Provided clear/concise answers	1	2	3	4	5
Answers added to audience comprehension	1	2	3	4	5
Provided answers demonstrated extent of knowledge	1	2	3	4	5

Comments or suggestions: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



Appendix E: Teaching and Learning Certificate Program  
Portfolio and Resident Evaluation

Resident: \_\_\_\_\_

Date: \_\_\_\_\_

☐ Midpoint (optional) ☐ Final

Evaluator: \_\_\_\_\_

Rate the following variables using this scale (provide written comments on the reverse side):

1 = Unsatisfactory    2 = Needs improvement    3 = Satisfactory    4 = Exceeds expectations    5 = Superior

Teaching and Learning Portfolio					
The portfolio is arranged in a clear and concise manner	1	2	3	4	5
The teaching philosophy is clear, concise, reflective, and summarizes the resident's personal approach to teaching, as well as identifies strategies for self-improvement	1	2	3	4	5
The chronology of teaching activities is clear	1	2	3	4	5
Provided teaching materials (learning objectives, slides, handouts, exam questions, student interactions, etc.) reflect the teaching philosophy	1	2	3	4	5
The portfolio documents the depth and breadth of the teaching	1	2	3	4	5
The portfolio shows reflection and growth	1	2	3	4	5
Certificate Program Completion					
Based on the portfolio documentation, resident completed requirements	YES		NO		

Evaluative Notes:

Comments or Suggestions:

Appendix F: VCU Teaching and Learning Certificate Program  
**Session Schedule, 2020-21** v2 7/20/20

Date	Time	Topic	Speaker	Location
7/21	2:00 PM	Introduction to the Teaching & Learning Certificate	Dr. Craig Kirkwood	Zoom
7/21	2:05 PM	Learners as Teachers - Learning Climate	Dr. Laura Frankart and Team	Zoom
7/21	3:30 PM	Learners as Teachers - Communication of Goals	Dr. Laura Frankart and Team	Zoom
7/22	2:00 PM	Learners as Teachers - Promotion of Understanding and Retention	Dr. Laura Frankart and Team	Zoom
7/22	3:30 PM	Learners as Teachers - Evaluation and Feedback	Dr. Laura Frankart and Team	Zoom
7/22	5:00 PM	Technology and Application to Teaching	Ms. Katie Shedden	Zoom
7/24	10:00 AM	Welcome	Dean Joe DiPiro	Zoom
7/24	10:05 AM	Developing a Teaching Philosophy and Portfolio	Dr. Rucha Bond	Zoom
7/24	10:15 AM	Experiential Education	Dr. Rucha Bond and Ms. Wanda Coffey	Zoom
7/24	11:30 AM	Continuing Education Requirements - Objectives	Dr. Evan Sisson	Zoom
1/8	PM or AM	Progression in the Teaching & Learning Certificate	Dr. Craig Kirkwood	Smith 225
1/8	PM or AM	The Scholarship of Teaching	Dr. Krista Donohoe	Smith 225
1/8	PM or AM	Careers in Academia	Dr. Leigh Anne Gravatt	Smith 225
1/8	PM or AM	How to Publish	Dr. Denise Lowe	Smith 225



## **TEACHING AND LEARNING CERTIFICATE PROGRAM CHECKLIST**

Many residents graduating from the pharmacy residency programs will choose careers that include teaching responsibilities. The purpose of the VCU Teaching and Learning Certificate program is to provide formal training to prepare pharmacy residents to assume this educator role in both the experiential and didactic setting.

**Please utilize this checklist to ensure that you have met all of the requirements.**

- **Teaching and Learning Seminars-** *must attend at least 83% of the sessions.*

Date	Session	Presenter	Date	Session	Presenter
7/21/20	Learners as Teachers - Learning Climate	Laura Frankart	7/24/20	Experiential Education	Wanda Coffey
7/21/20	Learners as Teachers - Communication of Goals		7/24/20	Continuing Education Requirements - Objectives	Evan Sisson
7/22/20	Learners as Teachers - Promotion of Understanding and Retention				
7/22/20	Learners as Teachers - Evaluation and Feedback				
7/22/20	Technology and Application to Teaching	Katie Shedden			
7/24/20	Developing a Teaching Philosophy and Portfolio	Rucha Bond			

- **Develop and deliver a minimum 1 contact hour of didactic lecture**  
*(Portfolio should include lecture materials (slides/ handouts) and evaluations)*

Date & Time	Lecture Topic	Course Location	Learning Environment	Content Advisor

- **Deliver instruction and participate in a minimum of six (6) Foundations course sessions.** *Portfolio should include the feedback form for Foundations Courses.*

Date & Time	Title	Course name and #


- **Design and deliver one (1) Continuing Education (CE) Presentation**

*Portfolio should include the announcement, slides, and copies of completed evaluation forms.*

Date & Time	Title	ACPE CE #	Audience

- **Design and deliver three (3) journal club reviews or case conference discussions for residents and pharmacy preceptors-**

*Portfolio should include announcement, handout, and completed evaluation forms.*

Date & Time	Activity	Title
	Case conference / Journal club	
	Case conference / Journal club	
	Case conference / Journal club	

- **Attend two (2) contact hours of didactic lecture provided by different faculty members-**

*When completed, the resident will e-mail the reflection paper to the site coordinator and place a copy in his/her teaching portfolio.*

Date & Time	Lecture topic	Course & location	Traditional lecture or Active learning?	Faculty member being observed
			Traditional / Active	
			Traditional / Active	

- **Co-precept (or precept) at least one (1) Advance Pharmacy Practice Experience (APPE) student; include any IPPE student oversight**

*Portfolio should include evaluation by preceptor / student.*

APPE Student's Name	Learning Experience	Learning Experience Dates

- **Compose and submit a teaching portfolio for formal review which includes:**
  - **TLC Syllabus**
  - **TLC Checklist**
  - **Teaching philosophy**
  - **Reflections**
  - **Documentation of teaching activities (as described above)**
    - **Didactic**
    - **Experiential**
    - **CE**
    - **Journal club ad case conferences**
    - **Other activities**

**Portfolio submitted to \_\_\_\_\_ on \_\_\_\_\_**

**\*\*Refer to syllabus for more detailed instructions\*\***



## Writing a teaching philosophy: An evidence-based approach

**F**ull-time faculty members seeking promotion or tenure are not the only people asked to write a teaching philosophy. Growing numbers of newly hired or junior faculty members and postgraduate year 1 or year 2 pharmacy residents are asked to prepare one as part of interview, employment, or residency requirements.<sup>1,2</sup> Formulating a teaching philosophy is a reflective writing assignment whereby teachers describe, analyze, and justify their teaching methods and consider areas for improvement.<sup>3</sup> Determining and articulating one's teaching, learning, and assessment beliefs in order to craft a teaching philosophy may be difficult, and many people do not know where to begin.<sup>2,4</sup>

This article describes nine evidence-based steps to use in structuring a teaching philosophy and should help new practitioners writing a teaching philosophy for the first time, as well as those making revisions or updates.<sup>5</sup> These nine steps align with a scholarly teaching framework suggested by Glassick and colleagues and the Academic Affairs Committee of the American Association of Colleges of Pharmacy, which emphasizes increased accountability in student learning in accordance with six standards of scholarly work.<sup>6-9</sup> Using these steps when writing a personal teaching philosophy will allow the writer to expand beyond simply describing teaching beliefs and methods.

### Step 1—Prepare an introduction.

The first step in writing a teaching philosophy is to start with an introduction that goes beyond a few sentences flatly forecasting that a discussion of teaching beliefs will follow. Instead, one intriguing strategy is to hook the audience by explaining why teaching was chosen as a career and some favorite aspects of teach-

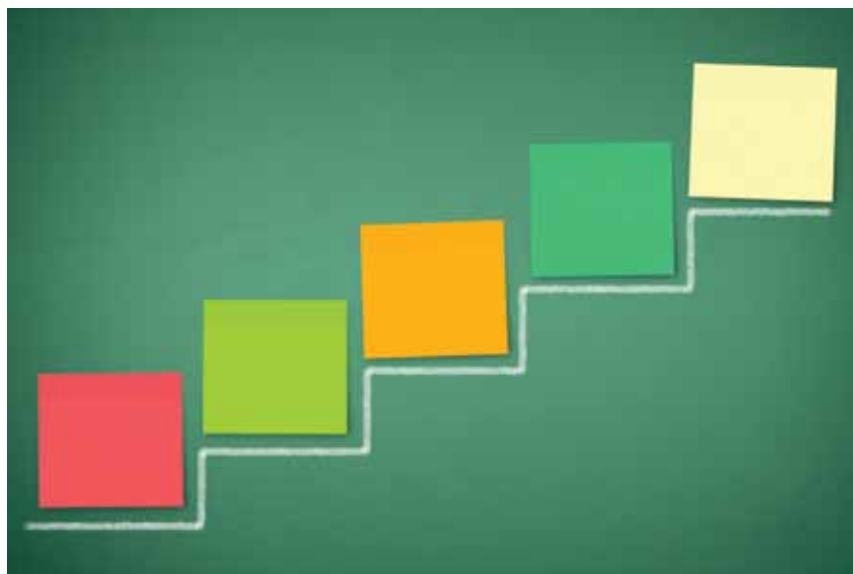
ing. Another engaging option is to discuss an influential teaching encounter or mentor. The introductory section should end with a smooth transition to the next, most important, section.

### Step 2—Describe teaching beliefs.

Achieving the second step of the writing process requires practitioners to self-evaluate and codify their own beliefs, which is often easier said than done. Many burgeoning educators, especially those with very limited teaching experience or formal training, may experience particular difficulty in this step because their beliefs may not yet be clearly formed or strongly held. A good way to

begin is by listing, in simple terms, how students learn best and associated effective teaching strategies. Additional assistance in articulating teaching beliefs can be found by searching the literature of educational psychology in areas such as learning theories (e.g., behaviorism, cognitivism, constructivism), effective teaching principles (e.g., active learning, problem-based learning, cooperative learning), motivation (internal or external), and tenets of scholarly teaching: clear goals, adequate preparation, appropriate methods, significant results, effective presentation, and reflective critique.<sup>8</sup> These theories, strategies, and principles can serve as a solid foundation for a teaching belief system.

In our experience, the most common mistake in this step of crafting a teaching philosophy is trying to describe teach-



*The New Practitioners Forum column features articles that address the special professional needs of pharmacists early in their careers as they transition from students to practitioners. Authors include new practitioners or others with expertise in a topic of interest to new practitioners. AJHP readers are invited to submit topics or articles for this column to the New Practitioners Forum, c/o Jill Haug, 7272 Wisconsin Avenue, Bethesda, MD 20814 (301-664-8821 or [newpractitioners@ashp.org](mailto:newpractitioners@ashp.org)).*



ing beliefs by simply listing a string of buzzwords related to teaching and learning (e.g., “active learning,” “high expectations,” “peer learning,” “mentoring”) and then abruptly ending the description without elaborating on those concepts in a manner that best reflects the already stated teaching and learning beliefs and then transitions smoothly to the next section.

**Step 3—Explain the importance of beliefs.** The third step in crafting a well-formulated teaching philosophy is to explain how the educator’s beliefs enhance students’ learning—why each belief is important for developing students’ knowledge, skills, and attitudes and how it contributes to their success in the profession. Through this step, the writer expands on the philosophical underpinnings of the belief system to clearly convey how he or she perceives the value of each teaching concept directly as it relates to the learners.

**Step 4—Provide evidence based on educational theory.** In the fourth step of the process, the educator further expands the explanation of the importance of the teaching beliefs elaborated in step 3, supporting them by citing evidence from the professional literature compiled from journals such as *Academic Medicine*, *New England Journal of Medicine*, *American Journal of Health-System Pharmacy*, *American Journal of Pharmaceutical Education*, and *Journal of Educational Psychology*. This step grounds those beliefs in the science of teaching, establishes legitimacy, and supports best practices.

**Step 5—Describe teaching methods.** Once the teaching beliefs have been systematically described and justified, it is crucial to explain how they translate into teaching success when carried out during the actual education of students. This explanation should specifically describe the teaching methods employed (perhaps with illustrative anecdotes) and how the educator’s broad teaching strategy (i.e., the manner in which the methods are applied) has evolved over time.

**Step 6—Describe methods of learning assessment.** Closely related to the teaching method description, this

step entails describing how the effectiveness of each teaching method is assessed in order to demonstrate student learning in a fashion that relates directly to the stated teaching beliefs. This specific description of assessment methods should include examples or collected data illustrating improved student learning as a direct result of the teaching belief or strategy (e.g., a description of the outcomes of student assessments). Detailed information on the assessment strategies used and the evidence gathered to show their positive impact are often missing from written teaching philosophies. Taking this step helps demonstrate alignment among the teaching beliefs, how they are applied, and how their impact is assessed, which are all essential elements of effective teaching.

**Step 7—Provide a feedback summary.** Individuals preparing teaching portfolios are often unsure of how to document the student evaluations of the teaching they receive and, unfortunately, some instructors merely present such results in raw-data form. Instead, it is far better to quantitatively and qualitatively evaluate student evaluations and use the results as evidence of eliciting—and heeding—student feedback to validate the teaching philosophy on an ongoing basis. For completeness, feedback from multiple sources (e.g., peers, course coordinators, students, self-ratings) about the educator’s ability to translate beliefs into effective teaching practices should be summarized and included in the teaching philosophy statement. All efforts should be made to quantify teaching success with hard data in order to illustrate the use of evidence-based best practices.

**Step 8—Prepare a strong conclusion.** The teaching philosophy should end with a conclusion that not only summarizes the educator’s belief system but also highlights future goals and teaching directions related to those beliefs. Just as a compelling statement should start with an intriguing hook, so it should end with a forceful and persuasive summation to tie together the concepts presented and leave the reader with a lasting favorable impression.

**Step 9—Provide a reference list.** When the professional literature and

other supportive evidence are mentioned in a written statement of teaching philosophy, it is important to list the sources of such evidence in a formal reference list.

**Closing notes.** Adherence to these nine steps in creating a statement of teaching philosophy will, in and of itself, benefit the writer by the use of evidence to support one’s teaching beliefs and methods and may increase the overall length of the teaching philosophy. Moreover, while some practitioners may assume that the statement must be limited to a one- or two-page document, that is not the case. Satisfactorily describing teaching beliefs and philosophy—including literature citations supporting the beliefs and teaching and assessment methods, as well as data gathered about outcomes and learner and peer feedback—may require additional pages; if the information is pertinent, concisely presented, and well organized, a three- to five-page document will not be considered excessively long.

Above all, it is important to remember that the teaching philosophy is a perpetual work in progress. As the practitioner gains more teaching experience, discusses teaching with colleagues, continues to read relevant literature, and continually reflects on personal practice activities and the insights gained during those activities, the teaching philosophy must be periodically revisited and revised.<sup>5</sup>

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Department: Department of Pharmacy Services

Policy No: A26

Revised Date: September 2020

Approved By: Pharmacy Emergency Response Committee; Pharmacy Leadership Group

**A. TITLE: EMERGENCY RESPONSE: CODE 12 / STAT PHARMACIST**

**B. POLICY:**

A pharmacist shall respond to all adult and pediatric code 12 events on all shifts to improve organization of medication administration, to enhance speed and accuracy of medication preparation, to provide necessary drug information, and to assure proper patient specific use of medication. A pharmacist (stat pharmacist) shall respond when requested for urgent or emergent situations that do not require the presence of the code 12 team but do require immediate assistance with medication procurement or use.

**C. APPLICABLE PROCEDURES:**

1. Pharmacist Response:

a. Primary Code 12 Pharmacist or Resident Code 12 Pharmacist:

- 1) Expectation: Clinical pharmacists from select teams and PGY1 and PGY2 pharmacy residents rotate responsibility for primary code 12 response and will respond to all codes, with the exception of perinatal and neonatal team, called in all areas.
- 2) Vocera Smartbadge Devices:
  - i. Pharmacy Code Team Smartbadge (PIC 1507)
  - ii. Adult Code Team RX 1 Smartbadge
- 3) Supplies:
  - i. Supplemental code 12 bag with Personal Protective Equipment (PPE) Pack or Appropriate PPE
- 4) Coverage Schedule:
  - i. Weekdays: From Monday to Friday, the assigned resident code 12 pharmacist will serve as the primary code 12 pharmacist and will cover code 12 responses from 07:30-15:30. After 15:30, the devices and bag will be handed-off to the assigned evening shift clinical pharmacist who will respond to all codes from 15:30-22:30. After 22:30, the Smartbadges and bag will be handed off

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to the overnight clinical pharmacist who will respond to all codes called from 22:30-07:30 the following morning.

- ii. Weekends and Holidays: The assigned primary code 12 pharmacist will cover code 12 responses from 07:30-15:30. After 15:30, the devices and bag will be handed-off to the assigned evening shift clinical pharmacist who will respond to all codes from 15:30- 22:30. After 22:30, the Smartbadges and bag will be handed off to the overnight clinical pharmacist who will respond to all codes called from 22:30-07:30 the following morning.

b. STAT Pharmacist:

- 1) Expectation: The primary code 12 pharmacist (or pharmacy resident code 12 pharmacist, when scheduled) also acts as the “stat pharmacist” and is responsible for physically responding to any direct pages for the stat pharmacist and assisting with emergent non-code 12 events. The stat pharmacist phone must be carried by the covering code 12 pharmacist at all times.
- 2) Device:
  - i. Pharmacist STAT phone
  - ii. Backup Charger
- 3) Coverage Schedule:
  - i. Weekdays (Monday through Friday 7:30-15:30): The PGY1 pharmacy resident code 12 pharmacist is responsible for responding to direct stat pharmacist phone calls from the MET nurse and assisting as needed.
  - ii. All other times: The primary code 12 pharmacist is responsible for responding to direct stat pharmacist phone calls from the MET nurse and assisting as needed.

c. Code 12 Pharmacist Preceptor or Backup Code 12 Pharmacist:

- 1) Expectation: Select clinical pharmacists and select PGY2 pharmacy residents rotate responsibility for backup code 12 response and will be prepared to respond to all codes, with the exception of perinatal and neonatal team, called in all areas. From Monday to Friday, the assigned code 12 pharmacist preceptor will precept the resident code 12 pharmacist during code 12 responses from 07:30-15:30.

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- 2) Vocera Smartbadge Devices:
  - i. Pharmacy Code Team 2 Smartbadge (PIC 1633)
  - ii. Adult Code Team RX 2 Smartbadge
- 3) Supplies:
  - i. Supplemental code 12 bag with Personal Protective Equipment (PPE) Pack or Appropriate PPE
- 4) Coverage Schedule:
  - i. Weekdays: From Monday to Friday, the assigned code 12 pharmacist preceptor will precept the resident code 12 pharmacist during code 12 responses from 07:30-15:30. After 15:30, the devices and bag will be handed-off to the assigned evening shift critical care clinical pharmacist who will respond to ICU code 12 events and serve as the backup code 12 pharmacist for non-ICU codes from 15:30- 22:30. After 22:30, the backup Smartbadges and bag will be either handed off to the overnight emergency department pharmacist or turned off at the discretion of the overnight emergency department pharmacist, who will respond to emergency department codes and serve as the backup code 12 pharmacist for inpatient codes called from 22:30-07:30 the following morning.
  - ii. Weekends and Holidays: The assigned backup code 12 pharmacist will respond to ICU code 12 events and serve as the backup code 12 pharmacist for non-ICU codes from 7:30-15:30. After 15:30, the devices and bag will be handed-off to the assigned evening shift critical care clinical pharmacist who will respond to ICU code 12 events and serve as the backup code 12 pharmacist for non-ICU codes from 15:30- 22:30. After 22:30, the backup Smartbadges and bag will be either handed off to the overnight emergency department pharmacist or turned off at the discretion of the overnight emergency department pharmacist, who will respond to emergency department codes and serve as the backup code 12 pharmacist for inpatient codes called from 22:30-07:30 the following morning.

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- 5) Communication: The backup code 12 pharmacist will provide backup to the primary code 12 pharmacist as needed based on direct communication with the primary code 12 pharmacist.
- d. The primary code 12 pharmacist will provide response to all codes to assure coverage, and on applicable shifts will communicate with the clinical pharmacist directly covering the patient as soon as possible. Clinical pharmacists will respond to codes in their areas and relieve the primary code 12 pharmacist whenever possible. Once coverage is confirmed the primary code 12 pharmacist may leave. There should be no more than 2 pharmacists at a code at any time.
- e. The Chairperson of Pharmacy Emergency Response Committee, or designee (i.e. team scheduler) is responsible for assuring that code 12 coverage is assigned for all shifts.
- f. On a weekday, if no PGY1 resident is available to serve as pharmacy resident code 12 pharmacist, the clinical pharmacist assigned the code 12 pharmacist preceptor response role will respond to all codes, stat pharmacist requests, and will carry the supplemental code bag, Smartbadges, and stat pharmacist phone.

## 2. Code 12 Pharmacist Responsibilities:

- a. Primary Code 12 Pharmacist/ PGY1 Pharmacy Resident Code 12 Pharmacist:
  - 1) Retrieve devices and supplies directly from previous shift
  - 2) Check that devices and supplies are adequate and in-date (including battery life, PPE pack supplies, and supplementary bag medication expiration dates)
  - 3) Respond to all test pages on both Smartbadge devices in a timely manner
  - 4) Respond immediately to bedside for all adult, pediatric, ICU code 12 pages, stat pages to bedside, and all requests via STAT phone with pharmacist supplemental bag.
  - 5) During a code 12 event, identify the code team leader who is directing the resuscitative effort. This individual is responsible for ordering or clarifying medication orders. The pharmacist will inform code team personnel of their presence and will assume responsibility for the code cart.

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- 6) Prepare and appropriately label all medications requested by the code team leader. This shall include prefilled syringes as well as those medications requiring compounding. The pharmacist shall assure the appropriate drug, dose, diluent, route, and administration guidelines are utilized for each medication. Refer to the appropriate pediatric or adult infusion reference guide on the code cart for concentration and appropriate diluents of infusions.
  - 7) Identify the code team member who is administering medications and use closed-loop communication for medication hand off.
  - 8) Provide necessary supplies from the code cart
  - 9) Provide drug information where appropriate to include:
    - i. Drug dosage recommendations
    - ii. Drug selection
    - iii. IV admixture compatibilities
    - iv. IV administration guidelines
  - 10) Provide information regarding medications administered as needed to assist the individual responsible for documentation during the resuscitation.
  - 11) Assure the availability of medications ordered for administration and coordinate the delivery of medications from the pharmacy if necessary
  - 12) Handoff all supplies and devices directly to the next shift. Supplies should be refurbished prior to hand off.
- b. Code 12 Pharmacist Preceptor / Backup Code Pharmacist
- 1) Retrieve devices and supplies directly from previous shift
  - 2) Check that devices and supplies are adequate and in-date (including battery life, PPE pack supplies, and supplementary bag medication expiration dates)
  - 3) Respond to all test pages on both Smartbadge devices in a timely manner
  - 4) If serving as a code 12 pharmacist preceptor: respond immediately to bedside for all adult, pediatric, ICU code 12 pages, stat pages to bedside, and all requests via STAT phone with pharmacist supplemental bag. Serve as a backup for the PGY1 resident, and provide them feedback following the event.

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- 5) If serving as the backup code 12 pharmacist: Communicate directly with the primary code 12 pharmacist for all code 12 events to determine level of assistance required.
- 6) Handoff all supplies and devices directly to the next shift. Supplies should be refurbished prior to hand off.

### 3. Scheduling

- a. PGY 1 and designated PGY 2 residents will self-schedule throughout the year in equally divided blocks of time, generally on a weekly rotation
  - 1) Once the schedule is finalized, this schedule will be added to Staff Ready. Once this final schedule is added to Staff Ready, any necessary changes are the responsibility of the individual resident to find appropriate coverage and request a schedule update to reflect the change
- b. Team-based clinical pharmacist code coverage will be assigned on a weekly rotating basis in Staff Ready
  - 1) Once this final schedule is added to Staff Ready, any necessary changes are the responsibility of the individual assigned clinical pharmacist to find appropriate coverage and request a schedule update to reflect the change

### 4. Training and Certification

- a. Departmental Training and Certification
  - 1) All clinical pharmacists with direct patient care responsibilities participate in departmental code 12 training.
  - 2) Training will be offered periodically throughout the year. New pharmacists meeting criteria for training must attend the first program offered after the start of their employment. No pharmacist shall respond to codes until they completed departmental training. Mandatory departmental code 12 training for new employees includes the following:
    - i. Pharmacists with prior emergency response experience (e.g. ACLS certification, response during previous residency or employment):



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1. Participation in the pharmacy orientation lecture for code 12 response
    2. Successful completion of the code 12 written exam. If unsuccessful, one-on-one remediation with the code 12 educator and test reexamination will occur within 2 weeks
    3. Pharmacy department mock code session (to be completed as soon as possible after start of employment)
    4. CBL entitled “AHA ACLS and Anaphylaxis Management Review”
  - ii. Pharmacists with limited or no prior emergency response experience shall additionally be required to complete:
    1. Participation in one Life Support Learning Center (LSLC) “full team code 12 / ACLS practice” session OR unit-based multidisciplinary mock code session
- b. Maintaining Code 12 Competency Training
  - 1) Participation in mock code 12 practical sessions is required twice per year (departmental mock code training sessions, Life Support Learning Center mock code sessions, unit-based mock code sessions, or recertification of ACLS). One noted exception is the pediatric clinical pharmacist team members, who are required to participate in one pharmacy department mock code practical session and one pediatric team mock code session. The Chair of Pharmacy Emergency Response Committee, or designee, will maintain documentation of competency for pharmacists.
  - 2) CBL review of ACLS algorithms (“AHA ACLS and Anaphylaxis Management Review”) is required to be completed at minimum every 2 years
- c. Certification in Basic Life Support (BLS) is required for all pharmacists
- d. Advanced Cardiac Life Support (ACLS) certification is required for all clinical pharmacists who provide direct patient care in adult critical care areas including select pharmacy teams responsible for pharmacist code 12 coverage and bedside response per Medical Center Policy No. 0265. ACLS certification is encouraged, but not required for all other pharmacists. Other advanced certification requirements are described by Medical Center Policy No. 0265.

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5. The Chairperson of Pharmacy Emergency Response Committee, or designee, will serve as the Pharmacy Department representative to the Medical Center Emergency Response Committee.

## D. RELATED DOCUMENTS: Pharmacy Department Code Coverage Schedule

Shift Time (*30 min clinical flex)	Primary Code 12 Pharmacist or Resident Code 12 Pharmacist			Primary Pharmacist Checklist	Code 12 Pharmacist Preceptor or Backup Code 12 Pharmacist	Code 12 Pharmacist Preceptor or Backup Code 12 Pharmacist Checklist
Monday to Friday Day shift:  7:30 AM to 3:30 PM	<b>Adult Inpatient Codes:</b> <b>Notification:</b> <ul style="list-style-type: none"> <li>Adult acute care codes are always paged to device (RX1, RX2)</li> </ul> <b>Expected Response:</b> <ul style="list-style-type: none"> <li>Resident Code 12 RPh always responds as Primary Code 12 RPh</li> </ul> <b>Expected Communication:</b> <ul style="list-style-type: none"> <li>Resident Code 12 RPh always communicates with Code 12 RPh Preceptor</li> </ul>	<b>Special Populations: Adult ICU Patients</b> <b>Notification:</b> <ul style="list-style-type: none"> <li>Adult ICU does not routinely page out all codes</li> <li>Once paged, will page device 1507</li> </ul> <b>Expected Response:</b> <ul style="list-style-type: none"> <li>Resident Code 12 RPh always responds as Primary Code 12 RPh</li> </ul> <b>Expected Communication:</b> <ul style="list-style-type: none"> <li>Resident Code 12 RPh always communicates with Code 12 RPh Preceptor</li> <li>Resident Code 12 RPh should also notify covering ICU RPh for awareness</li> </ul>	<b>Special Populations: Pediatric Patients</b> <b>Notification:</b> <ul style="list-style-type: none"> <li>Pediatric codes are always paged to device (1507; 1633)</li> </ul> <b>Expected Response:</b> <ul style="list-style-type: none"> <li>Resident Code 12 RPh always responds as Primary Code 12 RPh</li> </ul> <b>Expected Communication:</b> <ul style="list-style-type: none"> <li>Resident Code 12 RPh always communicates with Code 12 RPh Preceptor</li> <li>Resident Code 12 RPh should also notify covering PICU RPh for awareness</li> </ul>	<b>Resident or Primary Code 12 Pharmacist Must Have:</b> <input type="checkbox"/> Personal PPE Pack / Appropriate PPE <input type="checkbox"/> Two Vocera Smartbadges with adequate battery charge: <input type="checkbox"/> Pharmacy Code Team (Badge 1507): Receives adult ICU code pages, pediatric code pages, & STAT pages <input type="checkbox"/> Badge Adult Code Team RX 1: Receives adult inpatient code pages <input type="checkbox"/> STAT phone with adequate battery charge (and backup charger pack) <input type="checkbox"/> Supplementary code bag with adequate, in-date supplies <input type="checkbox"/> Establish phone contact with Preceptor/Backup Code RPh at the start of each shift for awareness	Team-based rotation for Code 12 Pharmacist Preceptor as assigned in Staff Ready	<b>Preceptor or Backup Code 12 Pharmacist Must Have:</b> <input type="checkbox"/> Personal PPE Pack / Appropriate PPE <input type="checkbox"/> Two Vocera Smartbadges with adequate battery charge: <input type="checkbox"/> Pharmacy Code Team 2 (Badge 1633): Receives adult ICU code pages, pediatric code pages, & STAT pages <input type="checkbox"/> Badge Adult Code Team RX 2: Receives adult inpatient code pages <input type="checkbox"/> Supplementary code bag with adequate, in-date supplies <input type="checkbox"/> Establish phone contact with Primary/Resident Code RPh at the start of each shift for awareness <input type="checkbox"/> Turn off backup badges at 10:30 PM and leave with Overnight Critical Care Clinical RPh
Evening shift or Weekend/Holiday shift:  3:30 PM to 10:30 PM	<b>Adult Inpatient Codes:</b> <b>Notification:</b> <ul style="list-style-type: none"> <li>Adult acute care codes are always paged to device (RX1, RX2)</li> </ul> <b>Expected Response:</b> <ul style="list-style-type: none"> <li>Primary Code 12 RPh always responds</li> </ul> <b>Usual Coverage (assigned in Staff Ready):</b> <ul style="list-style-type: none"> <li>Evenings: On-site Medicine or Surgery clinical RPh</li> <li>Weekends/Holidays: On-site Clinical Float, Medicine, Surgery, or Cardiology clinical RPh</li> </ul>	<b>Special Populations: Adult ICU Patients</b> <b>Notification:</b> <ul style="list-style-type: none"> <li>Adult ICU does not routinely page out all codes</li> <li>Once paged, will page device 1507</li> </ul> <b>Expected Response:</b> <ul style="list-style-type: none"> <li>Primary Code 12 RPh always responds initially</li> </ul> <b>AND</b> <ul style="list-style-type: none"> <li>Primary RPh MUST CALL ICU RPh (434-409-5503 or 434-882-5502) to discuss plan</li> <li>ICU RPh should relieve Primary Code 12 RPh as soon as possible after communication</li> </ul>	<b>Special Populations: Pediatric Patients (evenings AND all weekend shifts)</b> <b>Notification:</b> <ul style="list-style-type: none"> <li>Pediatric codes are always paged to device (1507; 1633)</li> </ul> <b>Expected Response:</b> <ul style="list-style-type: none"> <li>Primary Code 12 RPh always responds initially</li> </ul> <b>AND</b> <ul style="list-style-type: none"> <li>Primary RPh MUST CALL Pediatric Eve RPh (434-409-4720) to discuss plan</li> <li>Pediatric RPh should relieve Primary Code 12 RPh as soon as possible after communication</li> </ul>	<input type="checkbox"/> STAT phone with adequate battery charge (and backup charger pack) <input type="checkbox"/> Supplementary code bag with adequate, in-date supplies <input type="checkbox"/> Establish phone contact with Preceptor/Backup Code RPh at the start of each shift for awareness	<b>Monday to Friday Evening shift:</b> <ul style="list-style-type: none"> <li>ICU Evening: 434-409-5503 or 434-882-5502</li> </ul> <b>Day or Evening Weekend/Holiday shift:</b> <ul style="list-style-type: none"> <li>ICU D1: 434-882-5502</li> <li>or</li> <li>ICU Evening: 434-409-5503</li> </ul>	<input type="checkbox"/> Supplementary code bag with adequate, in-date supplies <input type="checkbox"/> Establish phone contact with Primary/Resident Code RPh at the start of each shift for awareness <input type="checkbox"/> Turn off backup badges at 10:30 PM and leave with Overnight Critical Care Clinical RPh
Overnight shift:  1030 PM to 7:30 AM	Overnight Critical Care Clinical Pharmacist • 434-882-5502				Overnight ED Clinical Pharmacist • 434-465-8694	

Initial Approval: 1/2011; Pharmacy Leadership Group

Revision History: 1/2011, 12/2017, 9/2020

## **University of Virginia Health Department of Pharmacy Services**

### **Requirements for Residency Graduation- PGY1 Pharmacy Residents**

- The resident is expected to have earned an assessment of “Achieved” for  $\geq 80\%$  the required objectives of the residency program. No objectives can have a final assessment of “Needs Improvement”.
- Completion of a quality project/ medication use evaluation (MUE) and presentation of results in SBAR format to the appropriate institutional committee.
- Completion of a research project with a final report submitted in manuscript style.
- Completion of at least: one seminar (ACPE-accredited continuing education session for pharmacists)
- Submission of a completed electronic notebook to the program director (at the conclusion of the program) that includes all presentation slides, posters, data collection forms, proposals, IRB documents, manuscripts, and quarterly reports.
- Provision of pharmacy staffing coverage as indicated on the Pharmacy Staffing Schedule.
- Submission of all evaluations, self-evaluations, and preceptor and learning experience evaluations for all concentrated and longitudinal experiences in PharmAcademic
- Platform presentation of research project at the regional residency conference.
- Poster presentation of MUE/ QP results at the at the Vizient Pharmacy Council Meeting Poster Session held in conjunction with the ASHP Midyear Clinical Meeting
- Completion of two journal club presentations for pharmacists, two presentations/ inservices to medical staff, and two presentations/ inservices to nursing or allied health professionals

### **Resident Expectations**

The resident reports to and is supervised by the rotation preceptor and the residency director/ coordinator. The resident is expected to abide by all policies and the values of the organization at all times.

1. Development of personal goals for the residency following an initial evaluation of career interests, prior experience, and areas of strength and weakness.
2. Compliance with rotation expectations:
  - a. meeting with the rotation preceptor to define individual goals and objectives for the rotation
  - b. completing assignments by the end of the rotation
  - c. scheduling routine meetings with rotation preceptor
  - d. informing the residency director of difficulties encountered in meeting goals and objectives or problems with preceptors
  - e. assuming responsibility of the rotation preceptor in his/her absence
  - f. preparing reflective self-evaluation, preceptor and learning experience evaluation at the conclusion of each rotation and quarterly for longitudinal requirements.
3. Timely communication regarding absences and requested leave; failure to inform the program director of an absence/ illness will result in disciplinary action.
4. Completion and submission of quarterly reports to residency program director
5. Documentation of GME requirements including duty hours in New Innovations
6. Provision of pharmacy staffing coverage as indicated on the Pharmacy Staffing Schedule
7. Provision of required presentations throughout the residency (see graduation requirements and rotation specific learning experience descriptions)
8. Completion of assigned residency administrative duties
9. Submission of an electronic notebook to the program director upon completion of the program. See “Notebook Requirements” for specific details
10. Attendance at the ASHP Midyear Clinical Meeting and regional residency conference (PGY1 only). Residents may attend other professional meetings if the staffing schedule permits.

**University of Virginia Health System  
Department of Pharmacy Services  
Residency Programs (PGY1 Pharmacy)**

Resident Name: \_\_\_\_\_

Program: \_\_\_\_\_

Year: \_\_\_\_\_

Requirements for PGY1 residency completion:

The resident is expected to have earned an assessment of "Achieved" for  $\geq 80\%$  the required objectives of the residency program. No objectives can have a final assessment of "Needs Improvement".

☐ % of objectives achieved: \_\_\_\_\_

Completion of quality improvement project (QIP) and presentation of results at the Vizient Pharmacy Council Meeting Poster Session held in conjunction with the ASHP Midyear Clinical Meeting and to the appropriate institutional committee

☐ QIP finalized and presented at \_\_\_\_\_ on \_\_\_\_\_

Completion of a research project with final report submitted in manuscript style and platform presentation at the regional residency conference

☐ Project manuscripts submitted and deemed final by primary project preceptor:  
\_\_\_\_\_ (signature of primary project preceptor OR email from preceptor to RPD verifying manuscript submission)

Submission of an electronic notebook to the program director (at the conclusion of the program) that includes all presentation slides, posters, data collection forms, proposals, IRB documents, & manuscripts.

☐ Validated by RPD or Coordinator

Completion and sign off of all evaluations, self-evaluations, and preceptor and learning experience evaluations for all concentrated and longitudinal experiences in PharmAcademic.

☐ Validated by RPD or Coordinator

Provision of 416 hrs of pharmacy staffing coverage as indicated on the Pharmacy Residency Staffing Schedule.

☐ Validated by Administrative Assistant/ Staff Ready/ Scheduling Task Force

Completion of 5 required rotations and 4 elective elective rotations.

☐ Validated by RPD or Coordinator

Completion of one ACPE accredited continuing education seminar.

☐ Validated by RPD or Coordinator

Completion of two journal club presentations for pharmacists, two presentations/ inservices to medical staff, and two presentations/ inservices to nursing or allied health professionals

☐ Validated by RPD or Coordinator

Documentation of all leave time in the residency leave database

☐ Validated by RPD or Coordinator

Documentation of all duty hours in New Innovations

☐ Validated by RPD or Coordinator

Signature of Resident: \_\_\_\_\_

Date: \_\_\_\_\_

Signature of RPD: \_\_\_\_\_

Date: \_\_\_\_\_

Signature of Coordinator: \_\_\_\_\_

Date: \_\_\_\_\_

**University of Virginia Health  
Department of Pharmacy Services  
Pharmacy Practice Residency  
Requirements for Residency Notebook**

The resident must maintain an electronic residency notebook as a complete record of the resident's program activities. The resident should begin to keep this ongoing notebook of activities from the first day of the program. The notebook is compiled on a shared drive (o:pharmacy/resident notebooks) and within the Files tab of PharmAcademic\* throughout the year.

At a minimum, the following O drive subfolders should be created and contain the following:

- Inservices and other projects- include any handouts/ slides / completed material for any rotation projects or presentations
- Miscellaneous – include completed graduation checklist and residency certificate
- Quality project- project proposal, data collection form, abstract, poster, and final SBAR
- Quarterly reports- for quarters 1, 2, 3, and 4
- Research project- project proposal, data collection form, IRB materials, slides for research committee presentation(s), abstract, slides for regional residency conference presentation, and final write-up in manuscript style
- Seminar- all materials submitted for CE processing (title, objectives, conflict of interest form, slides, faculty attestation form)
- Teaching and Learning Certificate – completion checklist, reflections, evaluation forms, portfolio, lecture slides,
- Tech Talk- all materials submitted for CE processing (title, objectives, conflict of interest form, slides, faculty attestation form)

\* File nomenclature for both the residency notebooks and PharmAcademic upload should be logical such that an outside reviewer understands the document they're opening. For example, "ACPE Accredited Seminar March 2019- flu update" instead of "Flu update slides version 18".

**University of Virginia Health  
Department of Pharmacy Services  
Pharmacy Residency Programs**

**Resident Quarterly Progress Report**

All residents will complete a quarterly progress report detailing their residency activities for the designated time period in the following areas:

- A Rotations completed
- B Service
- C Research
  - a. Project
  - b. Quality Improvement Project
- D Presentations –seminar, inservices, journal clubs
- E Professional Meetings/Committee meetings
- F Teaching certificate
- G Emergency responses
- H Administrative Duty/ Community Service
- I Progress towards areas for improvement noted on development plan
- J Progress towards residency, personal, and wellness goals
- K Other Activities
- L Summary/Goals for Next Quarter

The report should address progress made toward goals and objectives established at the beginning of the residency year. The quarterly report should also contain a chronological summary of the rotations completed by the resident as well as any comments the resident would like to propose regarding the residency program. The resident should sign and date the report prior to submission. Signature lines for the resident's advisor and program director(s) should also be included at the end of the report.

The resident will submit the quarterly report to the residency director by the dates designated below. The quarterly report will be reviewed by the residency directors and the resident's advisor and used to set goals for the upcoming quarters.

The report should be submitted to the program director and advisor AND uploaded to PharmAcademic in the "files" section.

**Report Submission Dates:**

First Quarter	7/1-9/30	October 1
Second Quarter	10/1-12/31	January 1
Third Quarter	1/1-3/31	April 1
Fourth Quarter	4/1-6/30	June 15

## Sample Quarterly Report

**University of Virginia Health System  
Department of Pharmacy Services  
Pharmacy Residency Programs**

**NAME**

**3rd Quarter Quarterly Report  
1/1 through 3/30**

**A Rotations completed**

*a. Rotation 4: Management*

i. Strengths/ weaknesses

1. During my management rotation I was able to assist Michelle throughout the residency application season. I was able to truly appreciate the time and organization it takes to make the application process and selection as smooth as possible. I thought I did a good job staying on top of tasks asked of me. I was also given the task of taking minutes during MUSIC meetings. During the first meeting my minutes were quite detailed. I improved upon my minute taking skills and was able to hand write minutes for the next scheduled meeting and was able to keep the detail, without having to write word for word all the information discussed.
2. One of my weaknesses during my management rotation was my ability to grasp all the financial concepts as well as managerial tactics. I was able to read the books assigned to me by Gary, but I found myself having to take notes on what I read because I did not always understand the underlying meaning. This rotation provided me insight into a world of pharmacy that I knew existed, but did not know all of the work they did behind the scenes to make a pharmacy division successful.

*b. Rotation 5: Pediatric Intensive Care Unit*

i. Strengths/weaknesses

1. By the end of my rotation, I was frequently turned to by the medical residents and fellows for dosing recommendations. My knowledge base in the pediatric setting has improved since my rotation in the neonatal ICU. I felt more comfortable making recommendations, especially by the end of the rotation. but I believe I functioned as a valuable member of the pharmacy pediatric team and helped to relieve some of the burden felt by the other pharmacists. During this transition, I realized how important it was to manage and check patient medication orders so that the other pediatric pharmacists did not have to also worry about the PICU patients. I was also available to help fix EPIC issues with the trigger list and relieve the pediatric pharmacists for breaks. It felt good to know that the pediatric pharmacists looked at me as a member of their team and valued my contribution, no matter how small the contribution. Hopefully this is another indication of my ability to collaborate and problem solve with other healthcare professionals.
2. I have a true passion for patient care and love what I do as a pharmacist. With that said, sometimes I need to tone down this excitement and take a step back. I do not want to lose my personality or love for my profession, but it all goes back to adapting your personality to mesh with the healthcare team. I do not want my excitement and independence to come across as over-confident because that is not at all how I feel or want to be portrayed. I formed good relationships with the other members of the team. They did look to me for advice and dosing recommendations for our patients' medications. I want to continue to build upon this great progress.



B Service (Staffing Component)

- a. I have finished my training in the IV room. By the end of my staffing requirements in the IV room, I became a reliable pharmacist in that setting. I was able to check IV medication orders and became more comfortable checking drip rates and compatibility.

C Teaching Certificate (if applicable)

- a. Since the new year, we have not had any meetings related to the teaching and learning certificate program. I have given a lecture at VCU and my seminar is counting towards my presentation requirements. I need to become better at organizing the work I have done towards this certificate program.

D Research

a. Quality Project

- i. Therapeutic outcomes and cost associated with high dose aldesleukin at an academic medical center, Kathy DeGregory, Pharm.D., BCOP
- ii. I finished my MUE write up for the Oncology work group (part of P & T) and presented it during their January meeting. The work group seemed very interested in the lack of continuity between the DRG codes assigned to patients receiving HD-IL2. I am happy with my results and the final product. This has been a great experience and look forward to my next MUE.

b. Project

- i. Evaluation of the use of dronabinol for the treatment of nausea/vomiting in post-operative neurosurgical patients, Kathleen Bledsoe, Pharm.D., BCPS
- ii. I have been busy collecting retrospective data for my project. I will have about 50 patients included in this analysis. Unfortunately, with the additional of EPIC, I was unable to collect prospective data. Many of the nursing staff felt overwhelmed with the go live and project. Kathleen and I also were feeling the effects of EPIC go live and were unable to completely dedicate our time and energy to the prospective portion of the project. Hopefully as the residency continues, I can collect the prospective data to provide insight to the usefulness of dronabinol for nausea and vomiting in the neurosurgical population.

E Presentations

- a. Seminar: I gave my seminar on XXX in February. Overall, it went well. I have good public speaking skills. I spoke clearly with enthusiasm and a dynamic tone throughout the presentation. I did, however, rely too much on my notes throughout the presentation. While I did not necessarily need them to help me throughout my talk, I used them more as a crutch to make sure I said everything just right. My goal for my next presentation is to not use notes at all, to avoid looking down too often. I need to continue to work on transitional sentences when moving from slide to slide and topic and topic. Also, I need to remember to have a good closing statement or two on my topic to avoid any hanging ideas. I did a good job in including the audience in participation. I had two patient cases for the audience to refer to when answering questions.
- b. Inservices: I gave a mini lecture to the residents in the PICU. My talk was on dexmedetomidine in the pediatric population. This provided a good overview of how we use the drug in the pediatric population and common dosing regimens. The residents seemed to enjoy the talk and had questions after the presentation. This was my first presentation given to medical doctors.
- c. Journal clubs:

F Meetings (meeting, date, reflections)

- a. I am a committee member of both the Regional Cancer Center Quality Committee and PICU Quality Team. During the PICU Quality Team meetings we discuss medication errors, respiratory issues, codes/deaths, and catheter associated blood stream infections. During the Regional Cancer Center Quality Committee meetings, we talk about a host of different topics such as new Welcome Packets for the new cancer center, quality reports (medications, discharge check lists), and EPIC. I was given my first assignment for this committee. I am to obtain information on the number of Beacon overrides that occurred in the infusion center as well as the number of medications that were charted/given to patients

before prescription verification by pharmacists over the last few months. Hopefully I will be obtaining the data soon to analyze and present at the May meeting.

G Code/ Emergency Responses

- a. I have been scheduled for 2 weeks of code coverage this quarter and have responded to one code in which pharmacist support was needed. I was very nervous on the inside but remained calm in the situation and assisted the team in obtaining needed medications for the patient. Following the code, the other pharmacist responder and I spent some additional time discussing different scenarios that could have occurred and how I would have contributed to them. I have also attended my one required mock code training session and found that to be very valuable.

H Administrative Duty/ Community Service/

- a. Administrative duty: **Student Success Facilitator:** I dedicated a lot of time during the fourth quarter to my job as student success facilitator. I conducted an APPE bootcamp, during which we practiced journal club presentations, patient case presentations, lab interpretation, working up patients, navigating EPIC, and patient presentations.
- b. Community service: **Society of Infectious Diseases Pharmacists Publications and Podcasts Committee:** As a member of the organization, I wrote a piece for Pharmacy Times on the epidemiology, prevention, and treatment of influenza, participate in committee planning for COVID-19 educational development, and am in the process of peer-reviewing articles written by other committee members

I Progress towards development plan areas for improvement.

- a. *Increase confidence in clinical pharmacist abilities:*
  - i. Activities to accomplish this include:
    1. *Collaborate with preceptors and other healthcare providers on residency rotations.* During the last couple of months, I have been working with different members of the medical team (i.e. doctors, nurses, pharmacists) to manage patient care in different way then previous rotations. As a pharmacist representing the management staff, I interacted with many people who are not strictly healthcare providers. I was able to collaborate with IT staff, EPIC employees, as well as doctors and nurses on different management projects. The different interactions allowed me to see a different side to pharmacy.
    2. *Prepare for and actively participate in daily direct patient care rounds to establish your role as the drug expert.* My pediatric ICU rotation put me back with the multidisciplinary team. By the end of my rotation, the team frequently looked to me to provide help in managing medication regimens. Their confidence in me provided positive reinforcement in my ability as a clinical pharmacist.
    3. *Seek opportunities to provide inservices to team members during clinical rotations.* While I did not give an inservice, I did give a mini lecture to residents during my PICU rotation. This allowed me to gain experience giving a lecture to medical doctors. I was able to cater my lecture to their needs as physicians, focusing more on dexmedetomidine's role in the pediatric world and which patient population is it indicated.
    4. *Review primary literature, treatment guidelines, and PSAP chapters that correlate to rotation discussions and patients.* Marcia did a great job providing discussions during my PICU rotation. I also had a student which allowed me to lead topic discussions. By leading topic discussions for a student, it encouraged me to review primary literature and be prepared for the following day.
    5. *Participate as a member of the code 12 team.* During this quarter, I was able to be an active participant in a couple of code 12 events. During these codes, I acted professionally and was able to provide assistance. Amanda was a great mentor and was able to actively teach me how to be an effective member of the code team.
  - b. *Improve written communication skills*
    - i. Activities to accomplish this include:
      1. *Complete DI rotation early in the residency year (rotation 3).* I completed my Drug Information rotation and believe this has made it easier for me to evaluate journal articles, write my MUE write up, and my project protocol.

2. *Submit at least 2 articles to the departmental newsletters.* I worked with Michelle in the Hoo's News for the Fall 2010 issue. This allowed me to work on a different type of written communication skill.
  3. *Participate in a peer-review of an article submitted for publication.* I participated in a peer-review of an article with Susan during my drug information rotation. I am hoping to participate in more peer-reviews throughout this residency year and next year.
  4. *Identify a topic suitable for publication; develop and submit a manuscript for publication.* I am hopeful to submit my project for publication, pending the results and applicability of the topic. I am working with Kathleen Bledsoe to evaluate the use of dronabinol for the treatment of nausea/vomiting in post-operative neurosurgical patients.
- c. *Improve time management skills*
- i. Activities to accomplish this include:
    1. *Set realistic and achievable deadlines.* Currently I have met all deadlines for projects, assignments, and readings. However, I am starting to get behind on my teaching and learning certificate and evaluations. With EPIC go live and now Eastern States approaching, I have not been as good with my time management skills.
    2. *Explore various tools to keep track of daily and longitudinal requirements (calendar, task list, etc).* Since being introduced to Microsoft Outlook, I have become a little more organized with tasks, deadlines, and meetings. While this tool has been useful, I am still starting to become stressed out with requirements for my residency.
    3. *Break longitudinal project requirements down into small digestible parts.* I need be better at breaking up longitudinal project requirements into small parts to make the overall deadlines seem more feasible. This will also help me from being too stressed with other assignments that are required of me.
    4. *Develop deadlines for completion of small parts of assignments that are prior to those assigned by the program director/ preceptor.* I have not developed my own deadlines for completion of small parts of assignments. This would have probably helped me stay on track with my project and prevented the bind that I am currently in.
    5. *Work closely with advisor, program director and longitudinal preceptors to provide frequent progress updates.* I believe I am working to achieve this activity. While working on my project, I frequently stay in contact with Kathleen to make sure we are both on the same page with respect to project design and desired outcomes. It has been much easier to stay on track with the project and I believe by my close contact with my advisor, I will not have to back track as I did with my MUE.
- J Progress towards personal and wellness goals
- a. Personal goal: **Set boundaries for personal and work time to maintain presence in the moment:** Again, the quarter was unique in that the state was under a stay-at-home order for the majority of the quarter. This prevented my ability to spend time with friends outside of work, which usually would have been when I focused on this goal. However, my time at home allowed me to pick up new hobbies and personal health habits, which helped me to maintain a balance between personal time and work even if I wasn't leaving the house.
  - b. Wellness goal: My wellness goal was originally to run a half marathon in under 2:00, which in retrospect was overly ambitious. I revised my goal to run a shorter race before the end of the year and to incorporate exercise more regularly into my life. I had planned to run a 10k in Richmond on March 28th and had formed a team with several of my coresidents to all run the race together. However, the race has now been postponed until the fall. During the spring I continued to run outside by myself and completed my own 10k in Charlottesville in ~63 minutes.
- K Summary/ Goals for next quarter: I have enjoyed this past quarter of my residency year. It is hard to believe that there is only one quarter left. Over the last few months I have become more disorganized and have fallen behind in my evaluations. I have always been one to work on my time management skills, but I have never been this behind before. My goal for this next quarter is to catch up on all my evaluations and organize all required notebooks. I do not want to be frantically putting together my residency and teaching and learning certificate notebooks. UVaHS made it through EPIC implementation with a few bumps along the way. I was able to help with cutover by entering medication

orders into EPIC. During the go-live week, I was verifying orders during PICU rounds and would help the pediatric pharmacy downstairs when needed during hard times. I felt like I was a true member of the pediatric team, rather than a resident during this time. My contribution hopefully took some of the burden off the other pediatric pharmacists during this rough transitions.

**University of Virginia Health  
Pharmacy Residency Programs**

**Expectations for Summative Evaluations by Residents and Preceptors**

Summative evaluations are a critical piece of feedback and communication to assist in the growth and development of resident, preceptors, and the residency program. In order for an evaluation to have the greatest value, the content needs to provide fundamental information regarding what was done well, constructive feedback for areas of improvement, and should be provided as close to the completion of the activity as possible. The following outlines the expectations for the content and timeliness of summative evaluations for the Uva Pharmacy Residency Programs.

**Timeliness:** All evaluations are expected to be completed in PharmAcademic within one week of the conclusion of an experience.

On a weekly basis, a member of our administrative support team will obtain an “overdue evaluations” report for all programs from PharmAcademic for submission to all program directors and CCing the direct supervisors of preceptors who are overdue on their submissions. Individuals who fail to meet timeliness expectations are subject to performance management processes.

Clinical pharmacists serving as preceptors will be granted 1 hour of administrative time per rotation to complete summative evaluations. It is the pharmacist’s responsibility to arrange coverage for this time and should seek assistance from the clinical coordinator, if necessary.

**Summative Evaluations of the Resident by the Preceptor:** Evaluations should be written so the resident knows what they did well and what they can improve upon. The evaluation should not list what the resident did, but how well they did it. The follow elements should be included for objectives evaluated:

1. Specific examples of how the resident is working to meet the objective. Describe what is it about the activity that indicated the resident in on track to achieving the objective.
2. If the resident has not yet achieved the objective, list what specifically the resident should do to achieve the objective.

Evaluations that do not include the above comments will be returned to the preceptor through the “send back for edits” feature in PharmAcademic.

**Summative Self-Evaluations by the Resident:** Self- reflection is an important skill for ongoing growth and lifelong learning. It is also a valuable tool for assessing agreement between resident and preceptor perception of progress toward reaching goals and objectives. At a minimum, residents should discuss the following as part of self-evaluation:

1. What did I do?
2. How well did I do it?
3. What did I learn?
4. What will I do differently next time?

Self-evaluations that do not include the above comments will be returned to the resident through the “send back for edits” feature in PharmAcademic.

**Summative Evaluations of the Preceptor by the Resident:** As our part of our commitment to lifelong learning and growth, preceptors welcome feedback from the residents as to how they can continue to challenge and guide residents through the residency. At a minimum, residents should address the following as part of the preceptor evaluations:

1. What were the preceptor roles that the preceptor most frequently utilized (from the 4 ASHP preceptor roles)?
2. What are the preceptor’s strengths?
3. What did I learn from this preceptor?
4. What could the preceptor do to make future experiences more valuable?

Preceptor-evaluations that do not include the above comments will be returned to the resident through the “send back for edits” feature in PharmAcademic.

**Summative Evaluations of the Learning Experience by the Resident:** In order to provide challenging and valuable learning experiences, the preceptors welcome feedback regarding the experience. At a minimum, the resident should address the following as part of the learning experience evaluations:

1. What was the most valuable aspect of this experience?
2. What did I learn from this experience?
3. What could be done in the future to make the learning experience better?

Learning experience evaluations that do not include the above comments will be returned to the resident through the “send back for edits” feature in PharmAcademic.

Developed: June 2016

Approved: Residency Oversight Committee

## **Principles of Self-Evaluation**

**Michelle McCarthy, Pharm.D., FASHP**

**Self-evaluation is thoroughly and HONESTLY answering the following four questions:**

- What did I do? (Do not focus on this as learning activities are fully described in the learning experience descriptions)
- How well did I do it?
- What did I learn?
- What will I do differently the next time?

Any self-evaluation submitted without substantive narrative associated with achievement of objectives will be rejected by the preceptor and program director and will require resubmission following appropriate revisions by the resident.

**Self-evaluation is not:**

- Focused on the performance or actions of others
- Focused only on opportunities
- Focused only on strengths/successes

**NOTE: This is an example of an appropriately reflective self-evaluation. However, the goals and objectives are from the old standard. Focus on the Narrative Commentary. Thanks!**

**Key: NI = Needs Improvement**

**SP = Satisfactory Progress**

**ACH = Achieved**

**Category 1: Goals Required by the Standard and Formally Taught and Evaluated in This Learning Experience**

EDUCATIONAL GOALS AND ASSOCIATED OBJECTIVES	NARRATIVE COMMENTARY	NI	SP	ACH
<b>Outcome R1: <i>Manage and improve the medication-use process.</i></b> Goal R1.5: Provide concise, applicable, comprehensive, and timely responses to requests for drug information from patients and health care providers. OBJ R1.5.4 Evaluate the usefulness of biomedical literature gathered.	I frequently provided thorough, well-researched answers to drug information questions, generally from healthcare providers. While the searches were comprehensive, it often took a long time to arrive at a final answer for relay back to the team. I hope to improve my efficiency with this in the future.		X	
OBJ R1.5.5 Formulate responses to drug information requests based on analysis of the literature.	I always tried to validate the answers to questions I was asked while on the infectious diseases rotation in the literature.		X	
OBJ R1.5.6 Provide appropriate responses to drug information questions that require the pharmacist to draw upon his or her knowledge base.	My pre-existing knowledge base about pharmacokinetic calculations was helpful in answering dosing questions for aminoglycoside antibiotics. Otherwise, my infectious diseases knowledge base is fairly limited, so I often had to look up answers to questions rather than relying on my knowledge base.		X	
<b>Outcome R2: <i>Provide evidence-based, patient-centered medication therapy management with interdisciplinary teams.</i></b> Goal R2.1: As appropriate, establish collaborative professional relationships with members of the health care team. OBJ R2.1.1 Implement a strategy that effectively establishes cooperative, collaborative, and communicative working relationships with members of interdisciplinary health care teams	I feel that I had personable, collaborative interactions with the infectious disease fellows, and appreciated their openness to pharmacy services. I enjoyed getting to work with physicians who are appreciative of pharmacy interventions and who do not see pharmacy as a gatekeeper to medications or a policeman to prescribing errors, but rather a valuable resource to be drawn from to hopefully lighten the load of patient care.		X	
Goal R2.2: Place practice priority on the delivery of patient-centered care to patients. OBJ R2.2.1 Choose and manage daily activities so that	Each day, I did my best to work up my patients as thoroughly as possible, though I do feel that not spending enough time just thinking about the big		X	



EDUCATIONAL GOALS AND ASSOCIATED OBJECTIVES	NARRATIVE COMMENTARY	NI	SP	ACH
they reflect a priority on the delivery of appropriate patient-centered care to each patient.	<b>picture of each patient limited my ability to sometimes gather the most relevant pieces of information in a timely fashion. Though I often stayed late after working hours, I frequently felt disappointed with myself that I hadn't thought to look up certain pertinent data for some patients, presumably because I was trying to be comprehensive, but forgetting to be thoughtful about which data are most relevant for each specific patient based on the organism and pathology of their illness.</b>			
Goal R2.4: Collect and analyze patient information. OBJ R2.4.1 Collect and organize all patient-specific information needed by the pharmacist to prevent, detect, and resolve medication-related problems and to make appropriate evidence-based, patient-centered medication therapy recommendations as part of the interdisciplinary team.	<b>I sometimes felt as though I was missing important pieces of data for my patients that I did not realize would be important until asked by my preceptor. I feel that remembering to think holistically about patients will help me with this in the future.</b>		<b>x</b>	
OBJ R2.4.2 Determine the presence of any of the following medication therapy problems in a patient's current medication therapy: <ol style="list-style-type: none"> <li>1. Medication used with no medical indication</li> <li>2. Patient has medical conditions for which there is no medication prescribed</li> <li>3. Medication prescribed inappropriately for a particular medical condition</li> <li>4. Immunization regimen is incomplete</li> <li>5. Current medication therapy regimen contains something inappropriate (dose, dosage form, duration, schedule, route of administration, method of administration)</li> <li>6. There is therapeutic duplication</li> <li>7. Medication to which the patient is allergic has been prescribed</li> <li>8. There are adverse drug or device-related events or potential for such events</li> <li>9. There are clinically significant drug-drug, drug-disease, drug-nutrient, or drug-laboratory test interactions or potential for</li> </ol>	<b>When regimens were fairly normal, I had little problems with being able to identify medication-related errors. When they became more complex, however, I did have some difficulty being able to successfully do this. I did a good job of identifying therapeutic duplication, but did not perform as well with timely identification of drug-drug interactions. I will need to remember to prioritize and remember to be more vigilant in patients who are on drug-interaction prone regimens (HIV meds).</b>		<b>x</b>	

EDUCATIONAL GOALS AND ASSOCIATED OBJECTIVES	NARRATIVE COMMENTARY	NI	SP	ACH
<p>such interactions</p> <p>10. Medical therapy has been interfered with by social, recreational, nonprescription, or nontraditional drug use by the patient or others</p> <p>11. Patient not receiving full benefit of prescribed medication therapy</p> <p>12. There are problems arising from the financial impact of medication therapy on the patient</p> <p>13. Patient lacks understanding of medication therapy</p> <p>14. Patient not adhering to medication regimen.</p>				
<p>OBJ R2.4.3 Using an organized collection of patient-specific information, summarize patients' health care needs.</p>	<p><b>I believe that overall, I did well with being able to summarize patients' healthcare needs, except when I was confused about the diagnosis.</b></p>		<p><b>x</b></p>	
<p>Goal R2.6: Design evidence-based therapeutic regimens.</p> <p>OBJ R2.6.1 Specify therapeutic goals for a patient incorporating the principles of evidence-based medicine that integrate patient-specific data, disease and medication-specific information, ethics, and quality-of-life considerations.</p>	<p><b>All of my recommendations and plans, and goals for patients are based on standards of care and the literature.</b></p>			<p><b>x</b></p>
<p>OBJ R2.6.2 Design a patient-centered regimen that meets the evidence-based therapeutic goals established for a patient; integrates patient-specific information, disease and drug information, ethical issues and quality-of-life issues; and considers pharmacoeconomic principles. .</p>	<p><b>I did not screen patients for pharmacoeconomic considerations, but I did see ethical and quality-of-life issues addressed when patients were being flogged with medications in spite of very grim prognoses.</b></p>		<p><b>X</b></p>	
<p>Goal R2.7: Design evidence-based monitoring plans.</p> <p>OBJ R2.7.1 Design a patient-centered, evidenced-based monitoring plan for a therapeutic regimen that effectively evaluates achievement of the patient-specific goals.</p>	<p><b>Sometimes, my monitoring strategy is too broad, and with a more targeted strategy, I might be able to improve my efficiency and make sure I always monitor the most appropriate things, rather than trying to look at everything.</b></p>		<p><b>X</b></p>	
<p>Goal R2.8: Recommend or communicate regimens and monitoring plans.</p> <p>OBJ R2.8.1 Recommend or communicate a patient-centered, evidence-based therapeutic regimen and corresponding monitoring plan to other members of the interdisciplinary team and patients in a way that is systematic, logical, accurate, timely, and</p>	<p><b>I did not get to make a lot of therapeutic recommendations to the ID consult team. I am not sure if this is because of the format of the rotation, or because I was not as adept at identifying issues that needed to be addressed in the realm of infectious diseases.</b></p>		<p><b>x</b></p>	

EDUCATIONAL GOALS AND ASSOCIATED OBJECTIVES	NARRATIVE COMMENTARY	NI	SP	ACH
secures consensus from the team and patient.				
Goal R2.9: Implement regimens and monitoring plans. OBJ R2.9.1 When appropriate, initiate the patient-centered, evidence-based therapeutic regimen and monitoring plan for a patient according to the organization's policies and procedures.	<b>I did monitor patients' regimens, labs, and microbiology on a daily basis, keeping in mind my sense of "oughtness" to each patient. I feel that I followed health system policy well in doing this.</b>		<b>x</b>	
OBJ R2.9.2 Use effective patient education techniques to provide counseling to patients and caregivers, including information on medication therapy, adverse effects, compliance, appropriate use, handling, and medication administration.	<b>While I did have the opportunity to provide education to caregivers and physicians, I did not have the same opportunity with patients.</b>		<b>X</b>	
Goal R2.10: Evaluate patients' progress and redesign regimens and monitoring plans. OBJ R2.10.1 Accurately assess the patient's progress toward the therapeutic goal(s).	<b>Redesigning and reassessing patient regimens was a daily part of my activities while on the infectious diseases rotation.</b>			<b>X</b>
OBJ R2.10.2 Redesign a patient-centered, evidence-based therapeutic plan as necessary based on evaluation of monitoring data and therapeutic outcomes.	<b>I believe that I was fairly vigilant about monitoring for labs or other patient data that would necessitate dosage changes (i.e. aminoglycoside pharmacokinetics).</b>			<b>X</b>
Goal R2.11: Communicate ongoing patient information. OBJ R2.11.1 When given a patient who is transitioning from one health care setting to another, communicate pertinent pharmacotherapeutic information to the receiving health care professionals.	<b>I had the opportunity to communicate with other pharmacists regarding ID issues with patients on their services, and to relay updates and pertinent information.</b>		<b>x</b>	
OBJ R2.11.2 Ensure that accurate and timely medication-specific information regarding a specific patient reaches those who need it at the appropriate time.	<b>While I feel that I was generally timely on the infectious diseases rotation, there were times when it took me a while to be able to sit down and do pharmacokinetic calculations or to answer drug information questions.</b>		<b>X</b>	
Goal R2.12: Document direct patient care activities appropriately. OBJ R2.12.1 Appropriately select direct patient-care activities for documentation.	<b>I did the least documentation on this rotation that I have done on any other rotation, simply because I did not make a lot of direct interventions myself.</b>		<b>X</b>	
OBJ R2.12.2 Use effective communication practices when documenting a direct patient-care activity.	<b>I believe that my communication style is usually effective in documentation.</b>		<b>X</b>	
OBJ R2.12.3 Explain the characteristics of exemplary documentation systems that may be used in the organization's environment.	<b>I am aware of ways that the current documentation system could be improved upon within my health system.</b>		<b>X</b>	
<b>Outcome R5: Provide medication and practice-related</b>	<b>I was very excited to finally have the opportunity to</b>		<b>x</b>	

EDUCATIONAL GOALS AND ASSOCIATED OBJECTIVES	NARRATIVE COMMENTARY	NI	SP	ACH
<i>education/training.</i> Goal R5.1 Provide effective medication and practice-related education, training, or counseling to patients, caregivers, health care professionals, and the public. OBJ 5.1.3 Use skill in the four preceptor roles employed in practice-based teaching (direct instruction, modeling, coaching, and facilitation).	precept a student. I really enjoyed teaching her pharmacokinetic calculations and providing her with an equation sheet to help with the process. I also enjoyed having her present patients to me when our primary preceptor was not present. It was very helpful to get the perspective of the person to whom patients are being presented. I spent a lot of time with the student and really enjoyed it thoroughly. I look forward to more opportunities for preceptorship.			

**Elective Program Goals Formally Taught and Formally Evaluated During This Learning Experience**

EDUCATIONAL GOALS AND ASSOCIATED OBJECTIVES	NARRATIVE COMMENTARY	NI	SP	ACH
<b><i>Outcome E7: Demonstrate additional competencies that contribute to working successfully in the health care environment.</i></b> Goal E7.2: Communicate effectively. OBJ E7.2.1 Use an understanding of effectiveness, efficiency, customary practice and the recipient's preferences to determine the appropriate type of, and medium and organization for, communication.	I believe that I still need to grow in confidence with my communication skills, but that otherwise, I communicate well.			X
OBJ E7.2.2 Speak clearly and distinctly in grammatically correct English or the alternate primary language of the practice site.	I spoke relatively clear and fairly grammatically correct English during this rotation.			X
OBJ E7.2.3 Use listening skills effectively in performing job functions.	I used listening skills effectively during my infectious disease rotation.			X

**COMMENTS:**

**Reflect upon your entering knowledge, skills, and abilities (KSAs) and the experiences that you've had over the residency year to respond to the following questions.**

Has the program prepared you for your next position? Please elaborate.

What KSAs did you improve as a result of residency training?

Were there KSAs that you expected to improve, but did not? Please elaborate.

What are your short-term (5 years) career goals?

What are your long term (10-20 years) career goals?

How has the program prepared you to meet your short term and long term career goals?

What are the three best things about the program?

If you were responsible for program decision making, what three things would you change to improve the program? Why?

Would you recommend the program to others? Please elaborate.



**UVA Health  
Department Of Pharmacy Services**

**PHARMACY RESIDENCY PROGRAMS  
POLICIES AND PROCEDURES  
2020-2021**

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GME also requires submission of a moonlighting form which can be found [here](#).

**UVA Health**  
**Department of Pharmacy Services**  
**Pharmacy Residency Programs**

The following policies and procedures apply to all pharmacy residency programs at the UVA Health Medical Center. The programs and program directors are as follows:

<b>Program</b>	<b>Program Director</b>
Postgraduate Year One (PGY1) Pharmacy	Michelle W. McCarthy, PharmD, FASHP
PGY1 Community Pharmacy	Justin Vesser, PharmD, MS
PGY2 Ambulatory Care Pharmacy	Donna White, RPh, CDE, BCACP
PGY2 Cardiology Pharmacy	Steven P. Dunn, PharmD, FAHA, FCCP, BCPS, BCCP
PGY2 Critical Care Pharmacy	Rebecca Hockman, PharmD, BCPS, BCCCP David Volles, PharmD, BCPS, BCCCP
PGY2 Emergency Medicine Pharmacy	Derek Burden, PharmD, BCPS
PGY1 Pharmacy/ PGY2 Health System Pharmacy Administration	PGY1: Michelle W. McCarthy, PharmD, FASHP PGY2: Matt Jenkins, PharmD, MS
PGY2 Infectious Diseases Pharmacy	Heather Cox Hall, PharmD, BCPS, BCIDP
PGY2 Oncology Pharmacy	Kathlene DeGregory, PharmD, BCOP
PGY2 Pediatric Pharmacy	Kelly Lunsford, PharmD, BCPPP
PGY2 Pharmacy Informatics	Mark Chabot, RPh, MHA, MBA
PGY2 Solid Organ Transplant Pharmacy	Jennifer Geyston, PharmD, BCPS



**UVA Health  
Department of Pharmacy Services  
Pharmacy Residency Programs**

**Residency Candidate Selection Process**

**Application Requirements:**

The applicant must be a highly motivated individual who desires to obtain advanced education and training leading to an enhanced level of professional practice.

PGY1 applicants must:

- Be enrolled in or a graduate of an ACPE-accredited advanced pharmacy program
- Be eligible for licensure in the Commonwealth of Virginia and licensed by September 1<sup>st</sup>

PGY2 applicants must:

- Be enrolled in or a graduate of an ACPE-accredited advanced pharmacy program
- Be eligible for licensure in the Commonwealth of Virginia and licensed by September 1<sup>st</sup>
- Be enrolled in or a graduate of an ASHP-accredited or ASHP candidate status PGY1 residency program

Applicants must upload to PhORCAS by the specified deadline the following†:

- Curriculum vitae that includes:
  - Completed and anticipated advanced pharmacy practice experience rotations
  - Leadership, organizational, and community service involvement
  - Research projects, presentations (verbal and poster), and publications (include doi and/or hyperlink)
- Letter of intent that explains your reasons for pursuing PGY1 residency at UVA and goals
- Official college of pharmacy transcript (minimum GPA to be considered is 3.0)
- **THREE** references from preceptors of three different rotations able to speak to clinical problem-solving in direct patient care experiences (not classroom). Specific requirements for the letters of recommendation can be found on the pharmacy residency website (see Application Requirements)

**Additional requirements for the PGY1 Pharmacy/PGY2 Health-System Pharmacy Administration and Leadership (HSPAL) + Master's Program**

- A fourth reference is required from an individual practicing in administration
- A GPA is required for entry into the Master's program; therefore, individuals from Pass/ Fail schools will not be considered

**For all programs, please note the following:**

- The UVA Health System Pharmacy Residency Program does not sponsor work visas.
- Those who attend/attended schools that are not ACPE-accredited will not be considered.
- The minimum pharmacy school GPA is 3.0.
- References should be from different rotation experiences.
- ALL materials must be submitted by the deadline posted in PhORCAS.

All rules and regulations of the ASHP residency matching program will be strictly followed.

**Selection of Candidates for On-site Interviews:**

- Members of the residency advisory committee will review applicants using program specific applicant selection rubrics (documents are housed on O:pharmacy/pharmacy\_res). The final selection of candidates for on-site interviews is the responsibility of the residency program director.
- Candidates with incomplete residency application files following the application deadline are not considered for on-site interviews.
- Approximately 6 candidates per available position are invited for on-site interviews.

**Interview and Evaluation of Candidates:**

- An on-site interview with the residency program director, departmental leadership, and residency preceptors is required.
- All persons participating in the interview process of residency candidates will complete a residency candidate rank list. A preliminary overall rank list will be developed from a composite of individual rank lists.
- At the conclusion of all on-site interviews, a candidate review session is held to discuss the preliminary rank list and the strengths and weaknesses of residency candidates. All persons involved in the interviewing process are invited to attend this meeting.
- The residency program director is responsible for submitting the Residency Advisory Committee-approved rank order list to the National Matching Service.

**A. SUBJECT:** Licensure and Documentation Policy

**B: EFFECTIVE DATE:** March 1, 2019

**C: POLICY**

The following “Licensure Policy” applies to all pharmacy trainees (residents) at the UVA Health.

**Definition:**

License: In-date, pharmacist license in the Commonwealth of Virginia.

PGY1 completion certificate: official documentation of successful graduation from the resident’s PGY1 program

**D: PROCEDURE**

1. Expectations for Licensure and Documentation

Every pharmacy resident is expected to have an in-date license as a pharmacist issued by the Commonwealth of Virginia’s Board of Pharmacy. Residents are expected to be licensed by the first day of the first clinical rotation of the residency program (mid-July). Orientation and training periods may be extended for residents who are not licensed during the orientation period.

Residents who are not licensed pharmacists in the Commonwealth of Virginia by September 1 will be dismissed from the program. Residents will provide a printed copy of their license for display within the appropriate pharmacy department (inpatient or outpatient).

Each PGY2 resident must produce the official PGY1 completion certificate by their contracted residency start date (July 1); failure to produce a certificate by the first day of the first rotation block (mid-July) will result in dismissal from the program. PGY1 completion certificates will be provided to the residency program coordinator; residents shall also upload a scanned copy to PharmAcademic™ and their individual electronic residency notebook.

**A. SUBJECT:** Leave or Request for Absence Policy

**B: EFFECTIVE DATE:** March 1, 2019

**C: POLICY**

**PURPOSE:**

The UVA Health shall seek to provide its residents/fellows (herein after “trainee”) with appropriate time off to ensure the trainees well-being and to conform to the American Society of Health-System Pharmacists (ASHP) and Accreditation Council for Graduate Medical Education (ACGME) regulations. Furthermore, time away from training must adhere to department program policies.

**PROCEDURE:**

The Pharmacy Department Policy on leaves of absence is consistent with the [GME Institutional Policy](#). All leave must be approved by the applicable preceptor and program director, communicated to the program coordinator, and documented within the pharmacy department Annual Professional Leave Request database. Any leave of absence resulting from a Disciplinary Action, an Administrative Leave, or any leave requiring an extension of the training period must be reported to the Office of Graduate Medical Education (GMEO).

**1) Leaves Available for All Trainees regardless of Duration of Employment**

**Unexcused Leave:** Defined as any absence not approved by the program director and properly documented within the departmental leave database. Disciplinary or remedial action from an unexcused leave shall be at the discretion of the program director.

**Vacation Leave:** Trainees are allowed up to 12 days of vacation time. Trainees should complete the Annual Professional Leave Request at least 1 week prior to the planned absence (unless approved by their program director).

**Holiday Leave:** Trainees receive 8 holidays that may be used for any of the following holidays in which the resident is not scheduled to work: Independence Day, Labor Day, Thanksgiving and the day after, Christmas Eve, Christmas Day and the day after, New Year’s Eve and New Year’s Day, and Memorial Day. Trainees shall work one major holiday (Thanksgiving and the day after, Christmas Eve and Christmas Day, New Year’s Eve and New Year’s Day) and the accompanying weekend in a distributive role during the residency year.

**Professional Leave:** Each trainee is granted professional leave for attendance at professional meetings (eg, ASHP Midyear Clinical Meeting, regional residency conference, or other comparable scientific meeting as determined by their program director). Trainees are also granted up to 5 days to participate in employment interviews. If more than 5 days are needed for interviews, vacation days must be used.

**Sick Leave:** Trainees may use up to 14 calendar days per year of paid sick leave. Those sick for 3 or more consecutive days must present a physician’s note to the Program Director and Coordinator. Additionally, leave that follows or proceeds vacation, holiday, or professional leave also require submission of a physician’s note. The Program Director/ Coordinator, applicable preceptor, and weekend supervisor (if applicable) MUST be immediately notified of any absence due to sickness. Exceptional cases will be considered on an individual basis. In this regard, up to 28 calendar days of additional paid leave time may be granted in cases of unusual illness or disability. Such additional leave would be granted through the Office of Graduate Medical Education only when the Program

Director, Designated Institutional Official (DIO), or Office of Graduate Medical Education deem it acceptable. Any leave time that exceeds the allotted 14 days must be made up.

**Military Leave:** The Health System shall provide the graduate medical trainee with the necessary time off from training if called upon by the government for service in the U.S. Armed Forces. For a trainee in good standing, re-entry into the program upon completion of any military time shall be guaranteed by the program in which the trainee was granted the leave of absence. The postgraduate level at which the trainee returns to the program shall be at the discretion of the Program Director. The total leave period must be approved by the Program Director and communicated to the Office of Graduate Medical Education.

**Administrative Leave** – The Health System provides Administrative Leave in accordance with [Medical Center Policy 0600](#).

## **2) Leaves Available to Trainees with Greater than One Year of Employment at UVA (Paid Parental Leave and Family and Medical Leave)**

Paid Parental Leave (PPL): PPL is available only to those employees who have been employed for at least 12 months and have worked at least 1,250 hours in the previous 12 months before the start of the leave.

- PPL provides eligible Trainees up to 8 weeks of consecutive paid leave within 6 months of the event (birth, adoption, or placement).
- PPL runs concurrently with FMLA (see below).
- PPL is separate from vacation and sick leave (i.e., trainees may take vacation time in addition to approved PPL time).
- PPL can be taken once in a 12 month period and only once per child.
- Trainees may use 4 additional weeks of leave beyond the 8 weeks of PPL utilizing FMLA. Trainees may either use remaining paid vacation or sick leave for those 4 weeks, or may elect to take them unpaid. Trainees must return to work at the end of the approved 12 weeks of PPL/FMLA time (8 weeks of PPL plus 4 additional weeks of FMLA time).
- PPL is requested through the Program Director and the GMEO and must be requested at least 3 months prior to the birth, adoption, or placement of a child, if possible. See worksheet and form at the end of this policy.
- If both parents are eligible trainees, both parents are eligible to take PPL. However, the GMEO requests that both parents not take simultaneous PPL if both parents are being trained in the same program.
- Unused PPL is forfeited.
- Birth mothers must obtain a return-to-work statement from their providers and present it to either Program Director, or GME Director upon returning to work.
- All leave must be made up.

### **Family and Medical Leave (FMLA):**

FMLA is available only to those employees who have been employed for at least 12 months and have worked at least 1,250 hours in the previous 12 months before the start of the leave.

- The FMLA grants up to 12 workweeks of family and medical leave of absence during any 12-month period in accordance with the FMLA to Eligible Employees who wish to take time off from work duties to fulfill family obligations relating directly to the birth of a child, adoption, and/or placement of a foster child in order to bond and care for the child ; to care for a child, spouse, or parent with a Serious Health Condition, as defined in this policy; or due to the employee's own Serious Health Condition or disability.
- Family and medical leave may not be used for a short-term period (incapacity requiring the absence of less than three calendar days), conditions for minor illnesses, and out-patient surgical procedures with expected brief recuperating periods. It does not provide for intermittent care of a child for commonplace illnesses (e. g., colds and flu).

- For further information about FMLA definitions and procedures, see the [Medical Center Human Resources Policy No. 600](#). The University complies with the Family and Medical Leave Act of 1993 (29 U.S.C. 2601 et seq., and Regulations 29 C.F.R Part 825).
- All leave must be made up.

### **3) Leave for trainees who are not eligible for Paid Parental Leave and FMLA**

Trainees who do not meet the PPL/FMLA eligibility requirements may take either maternity, paternity, or adoption leave as follows:

**Maternity Leave:** Maternity leave is granted as 4 paid, consecutive weeks of exceptional leave, plus any remaining unused annual sick leave or annual vacation time. The total leave period must be approved by the Program Director who must communicate this to the Office of Graduate Medical Education. All leave must be made up.

**Paternity Leave:** Paternity leave may be granted as one paid week (seven consecutive days) of exceptional leave, plus any remaining unused sick time or unused annual vacation time. The total leave period must be approved by the Program Director who must communicate this to the Office of Graduate Medical Education. All leave must be made up.

**Adoption Leave:** Adoption leave may be granted as 4 paid, consecutive weeks of exceptional leave for the primary care giver, plus any remaining unused sick time or unused annual vacation time. The total leave period must be approved by the Program Director who must communicate this to the Office of Graduate Medical Education. All leave must be made up.

### **4) Additional Time for Completing Residency Requirements:**

The program director and coordinator maintain responsibility for ensuring that absences incurred do not jeopardize the trainee's ability to attain the program's competency areas, goals, and objectives. Absences from any learning experience should not exceed 20% of the total time allotted to the experience. The program director and coordinator. Absences that extend beyond those allotted (described in this policy) must be made up. Prior to the end of the training program, the program director/ coordinator shall develop a plan describing how missed days will be made up. In the event that the time missed extends beyond the anticipated 12 month training program completion date, the institution may be requested to continue to pay all salary and fringe benefits during the extended appointment for a period of time not to exceed four (4) weeks. Beyond 4 weeks, the institution will fund neither the salary nor the fringe benefits of the trainee.

**Notification and Documentation:** All leave must be documented on Annual Professional Leave Request database. In the event of unexpected absences, the residency program director and coordinator, preceptor, and weekend supervisor (if applicable) MUST be notified immediately. Failure to notify all of the applicable individuals is considered unexcused leave and will result in disciplinary action.

Developed: May 2008

Updated: October 2013, October 2014, April 2016, December 2016, March 2019

Approved by: Residency Oversight Committee

Reviewed June 2017

**UVA Health  
Department of Pharmacy Services  
Pharmacy Residency Programs**

**Requirements for Graduation:**

**All programs:**

- The resident is expected to have earned an assessment of “Achieved” for  $\geq 80\%$  the required objectives of the residency program. No objectives can have a final assessment of “Needs Improvement”.
- Completion of a quality project/ medication use evaluation (MUE) and presentation of results in SBAR format to the appropriate institutional committee.
- Completion of a research project with a final report submitted in manuscript style.
- Completion of at least: one seminar (ACPE-accredited continuing education session for pharmacists),
- Submission of a completed electronic notebook to the program director (at the conclusion of the program) that includes all presentation slides, posters, data collection forms, proposals, IRB documents, manuscripts, and quarterly reports.
- Provision of pharmacy staffing coverage as indicated on the Pharmacy Staffing Schedule.
- Submission of all evaluations, self-evaluations, and preceptor and learning experience evaluations for all concentrated and longitudinal experiences in PharmAcademic

**PGY1 Pharmacy AND Community-Based Pharmacy: (in addition to the above)**

- Platform presentation of their research project at the regional residency conference.
- Poster presentation of MUE/ QP results at the at the Vizient Pharmacy Council Meeting Poster Session held in conjunction with the ASHP Midyear Clinical Meeting
- Completion of two journal club presentations for pharmacists, two presentations/ inservices to medical staff, and two presentations/ inservices to nursing or allied health professionals

**PGY2-Ambulatory Care Pharmacy**

- Submission of project abstract for the annual Society of General Internal Medicine or equivalent scientific meeting
- Poster presentation of the research project at the annual UVa Department of Medicine or Surgery Scholars/ Research Day

**PGY2-Cardiology Pharmacy**

- Submission of project abstract for the annual American College of Cardiology or equivalent scientific meeting
- Poster presentation of the research project at the annual UVa Department of Medicine or Surgery Scholars/ Research Day

**PGY2-Critical Care Pharmacy**

- Poster presentation of the research project at the UVa Department of Medicine Scholars/ Research Day or other comparable scientific meeting

**PGY2-Emergency Medicine Pharmacy**

- Poster presentation of research project at the annual UVa Department of Medicine or Surgery Scholars/ Research Day or other comparable scientific meeting
- Completion of two journal club presentations for ED clinical pharmacists, two presentations/in-services to medical staff, and two presentations/in-services to nursing staff

**PGY2-Health System Pharmacy Administration and Leadership**

- Poster presentation of the research project at the UVa Department of Medicine Scholars/Research Day or other comparable scientific meeting
- Poster presentation of MUE/ QP results at the at the Vizient Pharmacy Council Meeting Poster Session held in conjunction with the ASHP Midyear Clinical Meeting

- Presentation of final budget submission with detail to Hospital Administration at Senior Leadership Cabinet Meeting
- Completion of at least 1 Management Journal Club presentation

#### **PGY2-Infectious Diseases Pharmacy**

- Poster presentation of the research project at the UVa Department of Medicine Scholars/Research Day and/or the Annual Infectious Diseases and Biodefense Research Day
- Submission of 1) a manuscript to a biomedical journal or 2) an abstract to IDWeek™, ASM Microbe, or the SHEA Spring Conference
- Completion of one journal club for the ID clinical pharmacy team, one inservice for a non-ID clinical pharmacy team, two presentations/in-services for medical and/or microbiology staff

#### **PGY2-Oncology Pharmacy**

- Poster presentation of MUE/ QP results at the at the Vizient Pharmacy Council Meeting Poster Session held in conjunction with the ASHP Midyear Clinical Meeting or other suitable professional meeting (as determined by program director) or UVa department of medicine Scholars/Research day
- Submission of project abstract for the annual HOPA meeting trainee poster session
- Poster presentation of the research project at the annual HOPA meeting or the UVa Department of Medicine Scholars/ Research Day
- Completion of two journal club presentations for clinical oncology pharmacists, two presentations/ inservices to medical staff, and two presentations/ inservices to nursing or allied health professionals

#### **PGY2-Pediatrics Pharmacy**

- Completion of one journal club presentation for the pediatric clinical pharmacy team, two presentations to medical or nursing staff, and one presentation to the public (such as a patient/family support group) related to pediatric medication use in children
- Submission of abstract for the Pediatric Pharmacy Advocacy Group (PPAG) annual meeting residency platform presentation sessions and/or presentation of the research project at the UVa Children's Hospital Research Symposium

#### **PGY2-Pharmacy Informatics**

- Poster presentation of the research project at the UVa Department of Medicine Scholars/ Research Day or other comparable scientific meeting
- Certification in Epic Willow

#### **PGY2-Solid Organ Transplantation Pharmacy**

- Submission of project abstract for the annual American Society of Transplantation American Transplant Congress or equivalent scientific meeting
- Poster presentation of the research project at the annual American Transplant Congress meeting or the UVa Department of Medicine or Surgery Scholars/ Research Day
- Completion of the following presentations:
  - 2 Friday transplant conferences (audience of transplant MDs, NPs, RNs)
  - Annual abdominal transplant nursing core curriculum (immunology and pharmacology lectures)



**UVA Health  
Department of Pharmacy  
Pharmacy Residency Programs**

The following definitions are used for all programs to document resident performance as it relates to the required and elective ASHP residency program goals and objectives.

**Evaluation Definitions:**

- Needs improvement- the resident is not practicing at the expected level and specific practice modifications are needed
- Satisfactory Progress- the resident is practicing in a manner consistent with their level of experience; improvement was noted during the rotation, but the individual has not yet mastered this/ able to function as an independent practitioner.
- Achieved- the resident practices independently and has mastered the skill set. No further instruction or evaluation is required.
- Achieved for Residency (ACHR) - may only be designated by program directors based upon review and assessment of each individual resident's performance from summative evaluations and programmatic criteria. In instances where goals and objectives are taught and evaluated in multiple learning experiences, to be ACHR, an objective shall:
  - be rated as "achieved" in at least 2 experiences before being marked as ACHR; OR
  - be rated as "achieved" in the final scheduled evaluation.

A. SUBJECT: Performance Assessment, Dismissal, and Appeals

B. EFFECTIVE DATE: March 15, 2019

C. POLICY

The following "*Performance Assessment, Dismissal, and Appeals Process*" (hereinafter "*Performance and Dismissal Policy*") applies to all pharmacy residency trainees at the UVA Health (GME trainees). Performance and Dismissal Policy outlines the procedures for the assessment of residency performance as well criteria that would result in dismissal and the appeal process.

**Definition:**

*Deficiency:* inadequate acquisition of or performance in any of the core competency areas, as expected by the GME trainee's level of experience.

*Remediation:* A period of time at the discretion of the program director with advisement by the Pharmacy Residency Oversight Committee's recommendation imposed on a GME trainee to improve the competency area(s) of deficiency. Remediation can include repeating one or more rotations or participation in a special remedial program and will be no shorter than one month. Remediation per se is not appealable, but may be reportable. Adverse actions resulting from unsuccessful completion of remediation are appealable.

*Adverse Action:* Adverse actions may include suspension or dismissal of a GME Trainee from his or her training program. Adverse actions are generally reportable events and appealable.

*Reportable Events:* Those actions the program or institution must disclose to others upon request, including, but not limited to, future employers, privileging hospitals, and licensing.

D. PROCEDURE

**1. PERFORMANCE ASSESSMENT AND REVIEW OF GME TRAINEES**

GME trainees shall be evaluated in a timely manner during each rotation or similar educational assignment in alignment with the ASHP Residency Accreditation Standards and Regulations.

GME trainees' evaluations are submitted electronically into PharmAcademic™ within one week of the completion of each learning experience. Evaluations are accessible to the GME trainee, program director, and all necessary preceptors.

The program director has primary responsibility for monitoring the competence of the program's GME trainees, for determining attainment of graduation requirements, and, when necessary, imposing remediation or adverse action.

The program director must complete a graduation checklist for each GME trainee to document achievement of graduation requirements. Additionally, an end of program summative evaluation upon completion of training year is completed within New Innovations by the program director/ coordinator.

## **2. DEFICIENCY**

- 1) When one (or more) deficiency (ies) is/are identified, the program director issues the GME trainee a Letter of Deficiency and an updated development plan. The GME trainee must be informed in person of this decision and must be provided with a hard copy that includes the following:
  - a) A statement identifying the area(s) of deficiency
  - b) A plan for remediation including duration of remediation
  - c) Criteria by which successful remediation will be judged; and
  - d) Written notice that failure to meet the conditions of remediation could result in additional remediation, extended training, failure to graduate, and/or suspension or dismissal from the training program at any point during the remediation period, or at the conclusion of the remediation period.
- 2) The program director or designee must document that the meeting with the GME trainee occurred and that the trainee was provided with the letter of deficiency/ updated development plan. The Designated Institutional Official ("DIO") and Chair of the Residency Oversight Committee (ROC) must receive a copy of the letter of deficiency and updated development plan.
- 3) At the end of the remediation period, the ROC shall convene to determine if the remediation of the GME trainee was successful. If the GME trainee successfully completed the remediation, the program director shall notify the trainee of successful completions. Written documentation describing satisfactory completion of remediation must be included in the GME trainee's electronic residency files including PharmAcademic.
- 4) In the case of unsuccessful completion of the initial remediation, ROC must determine if further actions which may include extension of remediation, failure to graduate, suspension, or dismissal of the GME trainee from the program. If an adverse action is taken, the trainee must be given a copy of this policy which includes the appeals process. The DIO and GME Office must be notified of such decisions.
- 5) A letter of deficiency issued to a GME trainee constitutes notification that dismissal from the program can occur at any time or at the conclusion of the remediation. Dismissal prior to the conclusion of a remediation period may occur if the deficiency is repeated and jeopardizes patient safety and quality of patient care.

## **3. ADVERSE ACTIONS**

### **A. Suspension of Clinical Activities**

A GME Trainee may be suspended from clinical activities by his or her program director, department chair, the medical director of the clinical area to which the GME Trainee is assigned, the DIO, or the Chief Medical Officer. This action may be taken in any situation in which continuation of clinical activities by the GME Trainee is deemed potentially detrimental to UVA Health operations, including, but not limited to, jeopardizing patient safety or quality of patient care, suspension or loss of licensure, or debarment from

participation as a provider of services to Medicare and other federal programs' patients. Unless otherwise directed, a GME Trainee suspended from *clinical activities* may participate in non-clinical program activities (e.g., educational conferences).

A decision involving suspension of a GME Trainee's clinical activities must be reviewed within three (3) calendar days by the department chair (or his or her designee, e.g., Division Chief) to determine whether the GME Trainee may return to clinical activities and/or whether further action is warranted (including, but not limited to, counseling, remediation, fitness for duty evaluation, or summary dismissal).

#### D. Summary Suspension

A GME Trainee may be immediately suspended from clinical duties and all program activities by his or her program director, department chair, or DIO when 1) a GME Trainee demonstrates grossly unprofessional conduct, serious acts of incompetence, impairment, or falsified information; 2) a GME Trainee engages in criminal acts; 3) a GME Trainee is found noncompliant with UVA Health policies and/or federal health care program requirements ; 4) a GME Trainee becomes a threat to the safety and well-being of patients, other GME Trainees, faculty, other health care team members, or any other learners in clinical learning environments; or 5) GME Trainee is discovered to have been convicted of a crime related to the provision of health care items or services for which one may be excluded under 42 USC 1320a-7(a) (an "excludable crime" such as criminal offenses related to governmentally financed health care programs, including health care fraud, criminal abuse or neglect of patients, and/or felony controlled substance convictions related to the provision of health care).

A decision involving summary suspension from clinical duties and all program activities of a GME Trainee must be reviewed within three (3) calendar days by the department chair (or his or her designee) to determine whether the GME Trainee may return to some or all program activities and duties and/or whether further action is warranted (including, but not limited to, career or academic advising, remediation, fitness for duty evaluation, or dismissal). Summary suspension may be with or without pay at the discretion of the DIO.

#### E. Dismissal

A GME Trainee may be dismissed by the program director, department chair, or the DIO 1) at any time during or at the conclusion of remediation or 2) at the end of suspension period.

The GME Trainee must be notified in writing of the reason for dismissal and have an opportunity to respond to the action within 3 calendar days of notification before the dismissal is effective, and receive a copy of the GME Appeal Process described in this policy. The DIO and Department Chair (or designee) must also be notified of such action.

## 2. GME APPEAL PROCESS

A GME Trainee may appeal suspension, non-promotion, non-renewal of appointment, or dismissal as follows. Any questions about appealability shall be directed to the DIO.

#### A. GMEC Appeal

A GME Trainee may initiate an appeal by submitting a written notice of appeal to the DIO, within thirty (30) calendar days of the date of the appealable action (hereinafter

"adverse action") which may be extended for good cause. The DIO will convene an appeal panel consisting of 3 faculty members outside of the trainee's Department. The GME Trainee may request one of the three members appointed by the DIO be replaced by another physician including a trainee at a same or a higher training level within a GME training program. The GMEC appeal hearing will be held within thirty (30) calendar days following receipt of the notice of appeal. *A member of the GME Office must be present during this hearing.* The GME Trainee may have a faculty advocate appear and participate on the GME Trainee's behalf at the hearing. Prior to the hearing, the GME Trainee and program director must notify the chair of the appeal panel of the number of witnesses (if any) the GME Trainee expects to call and whether the GME Trainee will be accompanied by a faculty advocate and/or legal counsel.

At the appeal hearing, the program director (or designee) will present a statement in support of the adverse action and may present any relevant records, witnesses, or other evidence. The GME Trainee will have the right to present evidence, call and question witnesses, and make statements in defense of his or her position. Legal counsel may be present to provide advice and counsel to the GME Trainee, the Program, and the chair of appeal panel but counsel will not be permitted to actively participate in presentation of testimony, examination/cross-examination of witnesses, or oral arguments. A record of the hearing will be kept by the member of the GME Office present for the hearing, or by a professional legal reporter hired by the GME Office for this purpose. After presentation of evidence and arguments by both sides, the appeal panel will meet in closed session to consider the adverse action.

In its deliberations, the panel must accord deference to the recommendations of the Clinical Competency Committee. The panel's review shall be limited to: (a) compliance with applicable GME policies and procedures, and (b) whether there is sufficient evidence to support the recommendation of the program director or ROC.

The panel may uphold or reject the adverse action or may impose alternative actions, which may be more or less severe than the initial action. However, before rejecting the adverse action or imposing any alternative action, the panel must conclude that: (a) there was a failure to follow GME policies and that failure negatively affected the program's recommendation, and/or (b) that there is not substantial evidence to support the recommendation. The panel's decision must be submitted to the GME Trainee, the program director, chair of the department, and chair of the Clinical Competency Committee within ten (10) calendar days of the close of the hearing and copied to the DIO and the GME Office.

#### B. Appeal to the DIO

Either party may appeal the panel's decision to the DIO. The GME Trainee or program director must deliver a written appeal to the DIO within ten (10) calendar days of receipt of the notification of the action of the appeal panel. Either party must state as clearly and as fully as possible the reasons for seeking modification of the decision. The DIO will review the GME Trainee's training file, evidence presented during the appeal hearing, and any other relevant materials. The DIO will review the record submitted during the course of the appeal and may consider any other written material or oral testimony he or she deems relevant. The DIO's responsibilities are to:

- 1) Determine whether applicable University, department, and/or Medical Center policies were fairly and appropriately applied, and

- 2) Determine whether there is sufficient evidence to support the decision of the appeal panel. The DIO may uphold or reject the adverse action, may uphold or reject the decision of the appeal panel. The decision of the DIO will be submitted to the graduate medical trainee, the program director, Clinical Competency Committee Chair and the department chair within thirty (30) calendar days of the notice of appeal to the DIO. The decision of the DIO will be final within the University of Virginia.
- 3) If the DIO has a conflict, these responsibilities would fall to the Associate DIO; if both have a conflict, this responsibility would fall to the Vice-Chair of the GMEC.

### 3. OTHER CONSIDERATIONS

Documentation of the entire appeal will be maintained by the GME Office and becomes a part of the GME Trainee's permanent record.

External rules, regulations, or law governs mandatory reporting of problematic behavior or performance to licensing agencies or professional boards. The fact that such a report is made is not a matter which may give rise to the appeal process; only the adverse action as specified by this section is appealable. The reporting of an Adverse Action shall not be made the subject of an appeal. GME Trainees shall be aware that participation in the GME appeal process does not preclude investigation or action on the part of external entities.

Adapted from GME Policies No.5 and No. 32

ROC Revised/Approved: March 2019



## Office of Graduate Medical Education/Department of Pharmacy Services

A. SUBJECT: Learning and Working Environments for Trainees

B. EFFECTIVE DATE: May 16, 2018 (R)

C. REASONS FOR POLICY

The UVA Health (UVAH) strives to provide excellence, innovation and superlative quality in the care of patients, the training of health professionals, and the creation and sharing of health knowledge within a culture that promotes equity, diversity and inclusiveness. To promote these goals, the UVAH is committed to a safe and supportive learning and working environment for all members of its community. This policy outlines the responsibilities for Graduate Medical Education (GME) programs and the steps to be taken to ensure well-being and quality of clinical experiences and education of GME Trainees.

This policy shall apply to all GME Trainees at the UVAH. This policy is based upon ASHP's [Duty-Hour Requirements for Pharmacy Residencies](#).

Definition of Terms:

*One Day Off:* One continuous 24-hour period free from all administrative, clinical and educational activities.

*Fitness for Duty:* The GME Trainee is physically and mentally capable of safely performing the functions of his/her job. Fitness for Duty includes being free of alcohol and drugs that have not been legitimately prescribed and being free from impairment that affects job functioning due to a) use of prescription or nonprescription drugs, b) medical or emotional problems while enrolled in a UVA graduate medical training program, and/or c) fatigue.

*Internal Moonlighting:* Voluntary, compensated pharmacy-work (not related with training requirements) performed within the institution in which the GME Trainee is in training or at any of its related participating sites.

*External Moonlighting:* Voluntary, compensated pharmacy-work performed outside the institution where the GME Trainee is in training or at any of its related participating sites. Pharmacy residents are prohibited from external moonlighting.

## D. POLICY STATEMENT

### 1. GME Trainee Well-being

In the current health care environment, GME Trainees are at increased risk for burnout and depression. GME programs, in partnership with the Sponsoring Institution, are responsible to address GME trainees' well-being as they do to evaluate other aspects of GME Trainee competence. UVAH GME programs must:

- a) Make efforts to enhance the meaning that each GME Trainee finds in the experience of being a healthcare provider, including protecting time with patients, minimizing service obligations, providing administrative support, promoting progressive autonomy and flexibility, and enhancing professional relationships;
- b) Give attention to scheduling, work intensity, and work compression that impacts GME Trainee well-being;
- c) Evaluate workplace safety data and addressing the safety of GME Trainees;
- d) Establish programs and practices that encourage optimal GME Trainee well-being;
- e) Give attention to GME Trainee burnout, depression, and substance abuse;
- f) Educate faculty members and GME Trainees in identification of the symptoms of burnout, depression, and substance abuse among GME Trainees, including means to assist those who experience these conditions. GME Trainees and faculty members must also be educated to recognize those symptoms in themselves and how to seek appropriate care;
- g) Assist a GME Trainee to receive appropriate evaluation and care when a GME Trainee's Fitness for Duty is in question by following the Fitness for Duty protocols in Appendix A, which is incorporated into this Policy;
- h) Establish policies and procedures that ensure coverage of patient care in the event that a GME Trainee may be unable to perform their patient care responsibilities. These policies must be implemented without fear of negative consequences for the GME Trainee who is unable to provide the clinical work; and
- i) Promote and ensure confidentiality in the GME Trainee assessment process.

### 2. Fatigue Mitigation

It is expected that programs adopt fatigue mitigation processes and ensure that there are no negative consequences and/or stigma for using fatigue mitigation strategies. UVAH GME programs, in partnership with the sponsoring institution, must:

- a) Educate all faculty members and GME Trainees to recognize the signs of fatigue and sleep deprivation;
- b) Educate all faculty members and GME Trainees in alertness management and fatigue mitigation processes;
- c) Encourage GME Trainees to use fatigue mitigation processes to manage the potential negative effects of fatigue on patient care and learning;
- d) Ensure continuity of patient care, consistent with the program's policies and procedures in the event that a GME Trainee may be unable to perform their patient care responsibilities due to excessive fatigue; and



- e) Ensure adequate sleep facilities and safe transportation options for GME Trainees who may be too fatigued to safely return home.

### **3. Clinical Experience and Education**

Programs must design an effective program structure that is configured to provide GME Trainees with educational and clinical experience opportunities, as well as reasonable opportunities for rest and personal activities.

- a) Maximum hours of clinical and educational work per week  
Clinical and educational work hours must be limited to no more than 80 hours per week, averaged over a four-week period, inclusive of all in-house clinical and required educational activities, clinical work done from home, and all moonlighting.
- b) Mandatory time free of clinical work and education  
The program must design an effective program structure that is configured to provide GME Trainees with educational opportunities, as well as reasonable opportunities for rest and personal well-being.
  - GME Trainees should have eight hours off between scheduled work hours. There may be circumstances when GME Trainees choose to stay to care for their patients or return to the hospital with fewer than eight hours free of clinical experience and education. This must occur within the context of the 80-hour and the one-day-off-in-seven requirements
  - GME Trainees must have at least 14 hours free of clinical work and/or required educational activities after 24 hours of in-house call.
  - GME Trainees must be scheduled for a minimum of one day in seven free of clinical work and required education (when averaged over four weeks). At-home call cannot be assigned on these free days.
- c) Maximum clinical work and education period length  
Clinical and educational work periods for GME Trainees should not exceed 16 hours and must not exceed 24 hours of continuous scheduled clinical assignments.
  - Up to two hours of additional time may be used for activities related to patient safety, such as providing effective transitions of care, and/or GME Trainee education.
  - Additional patient care responsibilities must not be assigned to a GME Trainee during this time.
- d) Clinical and educational work hour exceptions
  - In rare circumstances, after handing off all other responsibilities, a GME Trainee may elect to remain or return to the clinical site, on their own initiative, in the following circumstances: 1) to continue to provide care to a single severely ill or unstable patient; 2) humanistic attention to the needs of a patient or family; or 3) to attend unique educational events.
  - These additional hours of care or education will be counted toward the 80-hour weekly limit.
  - UVAH GMEC does not grant any exceptions beyond 80 hours per week, averaged over a four-week period, inclusive of all in-house clinical and required educational activities, clinical work done from home, and all moonlighting.
- e) Moonlighting
  - Moonlighting must not interfere with the ability of the GME Trainee or other Trainees in the program to achieve the goals and objectives of the educational program, and

must not interfere with the GME Trainee's fitness for duty nor compromise patient safety.

- Time spent by GME Trainees in internal moonlighting must be counted toward the 80-hour maximum weekly limit.
- PGY1 residents are not permitted to moonlight.
- A GME Trainee who wishes to moonlight must follow the Moonlighting protocols outlined in Appendix B which is incorporated into this Policy.

## Appendix A: FITNESS FOR DUTY PROTOCOLS

### 1. Physical Impairment

- a) If a GME Trainee is suspected to have an infectious/communicable disease, he/she will be evaluated for infectious processes and/or referred to his/her medical provider for further evaluation. If indicated, the trainee must be placed off duty until cleared to return to work by Employee Health (See also Medical Center Policy No. 0091 "Infection Prevention and Control").
- b) If a GME Trainee suffers a physical impairment including, but not limited to, injury, illness, or fatigue that precludes effective patient care or the ability to perform his/her job, the trainee will be placed on medical ("sick") leave until able to return to work. For details on sick leave, see Graduate Medical Education Policy No. 3, Absence from Graduate Medical Training, "Sick Leave."

### 2. Mental Impairment and/or Impairment related to use of alcohol or drugs (See also Medical Center Policy No. 702 "Fitness for Duty")

- a) No GME Trainee may unlawfully manufacture, distribute, dispense, use, possess, sell, or be under the influence of alcohol, illegal drugs or any medications that impair performance while on Medical Center premises and while conducting business-related activities off Medical Center premises.
- b) The following applies when addressing concerns with GME Trainees whose performance and/or behavior brings into question their fitness for duty, necessary follow up, and return to duty.
  - i. GME Trainees must comply with all aspects of the Fitness for Duty evaluation (which may include drug and alcohol testing) or be subject to disciplinary action, up to and including termination. GME Trainees must also comply with all treatment recommendations resulting from a Fitness for Duty evaluation in order to be cleared to return to work.
  - ii. The GME Trainee's work performance is the basis for continued employment. When a program suspects impairment, whether due to emotional difficulty and/or drug/alcohol impairment, as the underlying cause for a trainee's poor performance, referral must be made immediately to the Faculty and Employee Assistance Program (FEAP). Participation in a treatment or rehabilitation program does not guarantee continued employment and will not necessarily prevent disciplinary action for violation of the GME and Medical Center policies.
  - iii. GME Trainees taking prescription medications or over-the-counter medications that impair their ability to work safely are subject to the conditions of this policy.
  - iv. GME Trainees who have the responsibility for on-call shifts must meet the Fitness for Duty standard during the entire on-call period.
- c) When there is concern that the GME trainee is not Fit for Duty, the trainee's supervisor, Program Director, Chairman, or the administrative representative on duty must follow the recommended steps outlined below:
  - i. Meet with the trainee and perform the following actions:
    - Remove the trainee from direct job duties and inform the trainee that he/she is relieved from duty at this time.
    - In private, state your concerns for the safety and well-being of the trainee. Obtain a witness for a confidential interaction with the trainee.

- ii. Consult with a representative of FEAP at 924-0000. Discuss any concerns about safety and ensure a plan is in place to provide support for the trainee.
  - iii. GME Trainees who are required to go to FEAP or Employee Health as directed by FEAP must be escorted by the trainee's supervisor, Program Director, or representative to the destination, and must remain for disposition. The trainee must be informed that failure to comply with this directive shall result in suspension and disciplinary action.
  - iv. Identify means for transporting the trainee safely home in collaboration with FEAP. Should the trainee become uncooperative contact Security or University Police, as appropriate.
  - v. The trainee's program director or his/her representative must document the incident with the trainee.
- d) The results of Fitness for Duty evaluations performed by qualified, licensed health care professionals shall be presumed to be valid. Results of the evaluation will be received by FEAP. The trainee shall be notified of the results of the evaluation by the evaluator and/or FEAP. Only necessary information shall be shared with the Coordinating Party.

After an evaluation, information given to the Program Director, Chairman, GME Office, shall be limited to whether the trainee may:

- i. Return to full duty;
  - ii. Not return to full duty, pending required follow-up action; or
  - iii. Return to modified duty that meets the evaluator's recommendations.
- e) Continued employment will be contingent upon compliance with conditions established by FEAP such as periodic testing, participation in professional counseling and treatment programs, re-assignment of duties for a specific period of time and/or continued performance of specified functions under more immediate supervision. Failure to comply may result in disciplinary action up to and including termination from employment. FEAP will coordinate with the Program Director and GME Office regarding return to work status.
- f) Acts or Threats of Violence and the Threat Assessment Team:  
The University has established a Threat Assessment Team ("TAT") with responsibility for implementing the University's assessment, intervention and action protocol in cases suggesting a potential risk of violence. All acts of violence, threats of violence or other seriously disruptive behaviors must be reported immediately to University Police and/or to the TAT.
- g) Confidentiality/Privacy of Fitness for Duty Evaluations:  
Under the Health Insurance Portability and Accountability Act (HIPAA), any document containing medical information about a trainee is considered a medical record and is regarded as confidential. Records of fitness for duty evaluations shall be treated as confidential medical records and maintained by FEAP or Employee Health, as appropriate. This information may be shared only when necessary to support treatment, business operations, and upon the execution of appropriate release by the individual trainee or as otherwise permitted or required by law. Trainees may obtain a copy of the medical report upon written request to FEAP or Employee Health.
- h) Suspension of Clinical Duties:  
The trainee's assignment of clinical duties may be suspended for suspicion of any impairment as outlined in this policy or for the following: refusal to undergo an evaluation, failure or refusal to stop practice after a recommendation has been made for treatment, refusal to comply with treatment recommendations, or non-compliance with required monitoring.

### 3. Responsibilities:

a) A GME trainee is responsible for:

- i. Coming to work Fit for Duty and performing job responsibilities in a safe, secure, productive, and effective manner during the entire time at work;
- ii. Notifying the Program Director or attending physician when not Fit for Duty;
- iii. Notifying the Program Director or attending physician when a co-worker is observed acting in a manner that indicates the co-worker may not be Fit for Duty;
- iv. Informing the Chairman or Designated Institutional Officer for further guidance, if the supervisor's behavior is the focus of concern. Threats or acts of violence should be reported immediately to the University Police Department by calling 911;

b) A supervisor, Program Director, or attending physician is responsible for:

- i. Monitoring the attendance, performance, and behavior of the trainees under his/her supervision;
- ii. Notifying FEAP and the Graduate Medical Education Office (or DIO) when a trainee is exhibiting behavior that suggests he/she may not be Fit for Duty;
- iii. Following this policy's procedures for documentation when presented with circumstances or knowledge that indicate that a trainee may be unfit for duty;
- iv. Maintaining the confidentiality of a trainee's medical record. (See Section 2.g above)

## **Appendix B: MOONLIGHTING PROTOCOLS**

1. Programs and departments may have policies which are more restrictive than the institutional policy. Programs must not require GME Trainees to engage in moonlighting activities.
  - a) PGY1 residents are not permitted to moonlight.
  - b) Moonlighting by pharmacy residents is limited to 16 hours/ month.
  - c) In order to minimize disruption to learning experiences, weekday shifts may not commence before 5 PM unless approved by RPD.
  - d) Moonlighting is prohibited during regularly scheduled work hours/responsibilities.
2. Should a GME Trainee be approved by his/her program director for moonlighting, then an application to moonlight must be submitted to the Graduate Medical Education Office (GMEO) no less than 60 days prior to the intended start date of the moonlighting activity. Applications will be referred to the DIO for review and approval. GME Trainees shall not begin moonlighting prior to receiving DIO approval.
3. Approval of moonlighting by DIO is subject to the program director's attestation that the proposed moonlighting does not interfere with the ability of the GME Trainee to achieve the goals and objectives of the required educational program, and that the GME Trainee is in good standing in his/her training program.
4. Approval for moonlighting may be valid for an academic year. Any granted moonlighting shall expire on the proposed ending date or June 30<sup>th</sup> each year, whichever comes first. A new application must be submitted at the beginning of each academic year.
5. The program director has primary responsibility to monitor fatigue levels of all GME Trainees participating in all moonlighting activities. Additionally, faculty members and GME Trainees must be educated to recognize the signs of fatigue and sleep deprivation and in alertness management and fatigue mitigation processes. Each GME programs must adopt policies to prevent and counteract potential negative effects of fatigue on patient care and learning.
6. Approval for moonlighting can be revoked at any point by the program director or DIO in any of the following cases. Reinstating the revoked approval for moonlighting is at the program director's discretion.
  - a) When it is determined that a GME Trainee's moonlighting activities negatively impact his/her ability to fulfill their clinical duties and patient care; or
  - b) When it is determined that a GME Trainee's moonlighting activities negatively impact the learning and working environment for other trainees in the program; or
  - c) When the GME Trainee is deemed unfit for clinical and/or non-clinical duties due to mental or physical impairment including injury, illness, and fatigue; or
  - d) When the program director or the program's Clinical Competency Committee issued a Letter of Deficiency to a GME Trainee; or
  - e) When the GME Trainee is suspended from his/her training program activities or clinical activities; or
  - f) When the GME Trainee is found to be non-compliant with the Medical Center and GME policies and regulations including, but not limited to, non-compliance with the mandatory NetLearning courses, flu-shot, TB-testing, and respiratory mask-fit deadlines; or
  - g) When the GME Trainee is found to be in Clinical and Educational Work Hours violation.
7. Time spent by trainees in any moonlighting activity must be counted towards the 80 hour Maximum Weekly Clinical and Educational Work Hours Limit. All moonlighting hours must be recorded in New Innovations as moonlighting hours in addition to the Clinical and Educational Work Hours for the regular educational activities.

8. In consideration of Clinical and Educational Work Hours restrictions, no GME Trainees assigned to inpatient service requiring in-house call shall engage in any moonlighting activity during that rotation.
9. Audits of moonlighting hours logged will be performed by the GMEO and the GME trainee's program director.
10. In view of the serious legal implications of GME Trainees engaging in unauthorized moonlighting activities, noncompliance with this policy may result in certain disciplinary or adverse actions, including dismissal from the residency or fellowship training program. Specific disciplinary or adverse actions will be determined by the program director, department chair, or DIO.

Approved by Residency Advisory Committee, November 2007

Updated: January 2011, September 2016, December 2016, March 2019

Reviewed: April 2016, June 2017

**A. SUBJECT:** Preceptor Appointment, Reappointment, Development, and Expectations Policy

**B: EFFECTIVE DATE:** May 1, 2020

**C: POLICY**

The following describes the processes for preceptor appointment, reappointment, development, and performance expectations.

**D: PROCEDURE**

1. Initial preceptor appointment

To be considered as a new residency preceptor, interested pharmacists shall submit a completed [Academic and Professional Record](#) (APR) and statement of interest to their direct supervisor and the Residency Coordinator. New preceptor requests will be reviewed by the Residency Oversight Committee (ROC). Guidance on how to complete each of the sections of this form can be found [here](#).

Preceptors must possess current licenses to practice pharmacy in the state of their practice site and must practice within that site during the time of their resident's rotation. Preceptors must be in their current roles for at least 6 months and have successfully completed their human resources probationary period.

PGY1 pharmacy residency preceptors must have must have completed: an ASHP-accredited PGY1 pharmacy residency plus a minimum of 1 year of practice experience; PGY1 and PGY2 pharmacy residencies plus a minimum of 6 months of experience; or without completion of a pharmacy residency have at least 3 years of pharmacy practice experience. PGY2 residency preceptors must have completed an ASHP-accredited PGY2 residency plus 1 year of pharmacy practice in the advanced area or without completion of an ASHP-accredited PGY2 residency have 3 or more years of experience in the advance practice area.

***Preceptors-in-training:***

Preceptors must meet the criteria established by ASHP and documented within the [PGY1 pharmacy](#), [PGY1 community-based pharmacy](#), and [PGY2 accreditation standards](#) and [corresponding guidance documents](#). Preceptors not meeting the minimum criteria may be designated as preceptors-in-training for up to 2 years. Preceptors-in-training shall have a preceptor advisor and an individualized preceptor development plan that are approved through ROC. The transition from preceptor-in-training to full preceptor is determined by ROC and requires submission of an updated APR and documented completion of the preceptor development.

***Non-pharmacist preceptors:***

Non-pharmacy preceptors will not be considered for PGY1 pharmacy residency programs. PGY2 residents may be precepted by non-pharmacy preceptors in select instances when appropriate. Approval of non-pharmacy personnel as preceptors is subject to the endorsement of ROC and residency program director. Non-pharmacy preceptors will be evaluated for appropriateness based on a review of professional accomplishment, accolades, and commitment to serving as a preceptor for pharmacy residents. A



pharmacist preceptor must coordinate with non-pharmacist preceptors to develop goals and objectives for the rotation and to ensure regular feedback and evaluations are provided.

## 2. Preceptor Reappointment

Preceptor reappointment is performed on biennial basis in the following manner:

- Preceptors with last names starting with A-L are reviewed in the first quarter of odd fiscal years
- Preceptors with last names starting M-Z are reviewed in the first quarter of even fiscal years

The review and reappointment process is overseen by ROC involves preceptor submission of an updated APR by August 1 of the designated review year. In addition to review of the preceptor qualifications, ROC will review adherence to preceptor development criteria, timeliness of evaluation submission (electronic evaluation system dashboard), and preceptor evaluations submitted by residents (electronic evaluation system).

## 3. Preceptor Development:

### *All preceptors*

All Preceptors are expected to participate in at least 4 preceptor development sessions per academic year (July- June). Individuals in their first year of precepting will have their preceptor development requirements prorated for the duration of the year that they are an approved preceptor. For example, a preceptor approved by ROC in January is responsible for completing 2 preceptor development sessions between January and June.

Preceptor development sessions may include but are not limited to documented participation in live or virtual departmental preceptor development sessions, preceptor development continuing education provided by schools of higher education (School of Medicine, Schools of Pharmacy), preceptor development webinars provided by the external sources such as the Pharmacist's Letter, attendance at the National Pharmacy Preceptors Conference, or Accreditation/ Preceptor Development Resources provided on the [ASHP website](#).

Live preceptor development sessions may be provided by any member of the department. All residency program directors shall provide a minimum of one preceptor development offering per calendar year.

Completion of preceptor development activities is tracked by an administrative support staff member and shared with preceptors on an ongoing basis.

### *New preceptors*

In addition to the above preceptor development requirements, new preceptors will complete the following preceptor development training modules on the [ASHP Accreditation Services Website](#) following approval by ROC and prior to having the first resident trainee:

- Resident's Learning Activities: Understanding Learning Taxonomies and Levels - new (2014) Standards
- Starring Roles: The Four Preceptor Roles and When to Use Them
- UVA Evaluation Definitions Video

## 4. Preceptor Expectations

Each residency learning experience preceptor is responsible for the following activities:

- Preparing/ updating learning experience descriptions as instructed by the residency program director

- Orienting residents to their particular learning experience prior to or on the first day of the learning experience
- Reviewing resident development plans in order to modify learning experiences based upon resident strengths and areas for improvement
- Providing timely, qualitative formative feedback to the resident
- Completing all summative evaluations within the electronic evaluation system within one week of the completion of the learning experience
- Meeting with the resident to discuss summative, self, and preceptor/ learning experience evaluations
- Submitting documentation of preceptor development activities to the administrative supportive staff member

Revised: June 2012, August 2014, November 2014, June 2015, August 2016, October 2017, March 2019, April 2020

**UVA Health  
Pharmacy Residency Programs**

**Expectations for Summative Evaluations by Residents and Preceptors**

Summative evaluations are a critical piece of feedback and communication to assist in the growth and development of resident, preceptors, and the residency program. In order for an evaluation to have the greatest value, the content needs to provide fundamental information regarding what was done well, constructive feedback for areas of improvement, and should be provided as close to the completion of the activity as possible. The following outlines the expectations for the content and timeliness of summative evaluations for the Uva Pharmacy Residency Programs.

**Timeliness:** All evaluations are expected to be completed in PharmAcademic within one week of the conclusion of an experience.

On a weekly basis, a member of our administrative support team will obtain an “overdue evaluations” report for all programs from PharmAcademic for submission to all program directors and CCing the direct supervisors of preceptors who are overdue on their submissions. Individuals who fail to meet timeliness expectations are subject to performance management processes.

Clinical pharmacists serving as preceptors will be granted 1 hour of administrative time per rotation to complete summative evaluations. It is the pharmacist’s responsibility to arrange coverage for this time and should seek assistance from the clinical coordinator, if necessary.

**Summative Evaluations of the Resident by the Preceptor:** Evaluations should be written so the resident knows what they did well and what they can improve upon. The evaluation should not list what the resident did, but how well they did it. The follow elements should be included for objectives evaluated:

1. Specific examples of how the resident is working to meet the objective. Describe what is it about the activity that indicated the resident in on track to achieving the objective.
2. If the resident has not yet achieved the objective, list what specifically the resident should do to achieve the objective.

Evaluations that do not include the above comments will be returned to the preceptor through the “send back for edits” feature in PharmAcademic.

**Summative Self-Evaluations by the Resident:** Self- reflection is an important skill for ongoing growth and lifelong learning. It is also a valuable tool for assessing agreement between resident and preceptor perception of progress toward reaching goals and objectives. At a minimum, residents should discuss the following as part of self-evaluation:

1. What did I do?
2. How well did I do it?
3. What did I learn?
4. What will I do differently next time?

Self-evaluations that do not include the above comments will be returned to the resident through the “send back for edits” feature in PharmAcademic.

All of the pharmacy residency programs include a required objective focused on self-evaluation (Apply a process of ongoing self-evaluation and personal performance improvement). All PGY1 pharmacy and

PGY2 residents are assigned to complete self-evaluations for all required presentations (seminar, tech talk), the first 3 rotations, and for the first quarter of longitudinal residency requirements. On a quarterly basis, each RPD will assess resident responses to the above questions and make a determination if the resident has achieved for residency the objective that focuses on self-evaluation. If determined by the RPD, PGY1 pharmacy residents may achieve for residency the self-evaluation objective no earlier than at the midpoint of the year (end of quarter 2) and PGY2 residents no earlier than after the first quarter. Once the RPD has determined that the resident has achieved for residency this objective, subsequent self-evaluations are removed from Pharmacademic. Verbal conversations between residents, preceptors, advisors, and RPDs on self-evaluation continue throughout the residency year.

PGY1 community-based residents complete self-evaluations on the same schedule as the preceptor for the duration of the year as is required by the [accreditation standard](#).

**Summative Evaluations of the Preceptor by the Resident:** As our part of our commitment to lifelong learning and growth, preceptors welcome feedback from the residents as to how they can continue to challenge and guide residents through the residency. At a minimum, residents should address the following as part of the preceptor evaluations:

1. What were the preceptor roles that the preceptor most frequently utilized (from the 4 ASHP preceptor roles)?
2. What are the preceptor's strengths?
3. What did I learn from this preceptor?
4. What could the preceptor do to make future experiences more valuable?

Preceptor-evaluations that do not include the above comments will be returned to the resident through the "send back for edits" feature in PharmAcademic.

**Summative Evaluations of the Learning Experience by the Resident:** In order to provide challenging and valuable learning experiences, the preceptors welcome feedback regarding the experience. At a minimum, the resident should address the following as part of the learning experience evaluations:

1. What was the most valuable aspect of this experience?
2. What did I learn from this experience?
3. What could be done in the future to make the learning experience better?

Learning experience evaluations that do not include the above comments will be returned to the resident through the "send back for edits" feature in PharmAcademic.

Developed: June 2016

**UVA Health**  
**Department of Pharmacy Services**  
**Pharmacy Residency Programs**

**Program Director Responsibilities/ Expectations:**

- Meets ASHP qualifications for residency program director
- Ensures preceptors meet ASHP preceptor qualifications and are appointed/reappointed based upon criteria
- Ensures adherence to National Matching Services rules
- Ensures ongoing compliance with residency accreditation regulations and standards
- Corresponds as necessary with GME and ASHP Accreditation Services Division (ASD)
- Actively manages all residency program accreditation survey needs (submission of applications, pre-survey materials, survey reports, etc) as requested by ASHP ASD
- Oversees recruiting for program including regularly updating the ASHP on-line directory listing and UVA pharmacy residency website
- Represents program at Residency Oversight Committee
- Actively participates in preceptor development activities including providing at least one session per fiscal year
- Oversees creation of all learning experience descriptions for the program
- Identifies and assigns preceptors/advisors for all programmatic experiences (service, project, presentation, etc)
- Creates initial and quarterly development plans for resident(s)
- Ensures resident schedule, evaluations, learning experience descriptions, and development plans are entered into Pharmacademic (as required by the accreditation regulations)
- On an ongoing basis, tracks resident progress in meeting graduation requirements
- Tracks employment, certifications, etc for program graduates as required by the accreditation standard
- Ensures resident(s) have adequate opportunities for quality project(s) and research project(s)
- Performs an annual program evaluation and implements changes as necessary

## **Early commitment process for internal applicants to the PGY2 residency programs**

### **Application process**

Application requirements for internal candidates are different from those of external candidates due to the availability of evaluations, individualized development plans and quarterly updates to PGY2 program directors and preceptors. The application requirements are as follows:

- Letter of intent
- Curriculum vitae

Interviews for internal applicants will be conducted and will include time with the following individuals:

- PGY2 residency program director
- Panel of applicable PGY2 residency program preceptors
- Residency coordinator
- Lunch and interview with current resident (if applicable)

The residency program director will convene a meeting of all individuals involved in the interview process within 4 working days of the interview in order to determine candidate acceptability. The final acceptance of the residency candidate is the responsibility of the residency program director, residency program coordinator, and the Director of Pharmacy Services.

### **Timeline**

The deadline for receipt of completed application materials is October 20.

Interviews will occur within 10 days of the application deadline. If the internal candidate is selected for the position, candidates will be given at least 5 working days to make their decision. The residency program acceptance letter must be signed and returned to the residency program director prior to the beginning of ASHP Midyear Clinical Meeting. Upon completion of this process, the National Matching Service will be notified of the early commitment. In the event that the interview committee elects to pursue additional candidates, both internal and external candidates will be considered.

Internal candidates are not required to participate in early commitment and may apply for PGY2 positions during traditional interview process (early January). All PGY2 applicants outside of the early commitment process must participate in the National Matching Program.

**UVA Health**  
**Department of Pharmacy Services**  
**Pharmacy Residency Programs**

**Resident Expectations**

The resident reports to and is supervised by the rotation preceptor and the residency director/ coordinator. The resident is expected to abide by all policies and the values of the organization at all times.

Responsibilities of the resident include:

1. Development of personal goals for the residency following an initial evaluation of career interests, prior experience, and areas of strength and weakness.
2. Compliance with rotation expectations:
  - a. meeting with the rotation preceptor to define individual goals and objectives for the rotation
  - b. completing assignments by the end of the rotation
  - c. scheduling routine meetings with rotation preceptor
  - d. informing the residency director of difficulties encountered in meeting goals and objectives or problems with preceptors
  - e. assuming responsibility of the rotation preceptor in his/her absence
  - f. preparing reflective self-evaluation, preceptor and learning experience evaluation at the conclusion of each rotation and quarterly for longitudinal requirements.
3. Timely communication regarding absences and requested leave; failure to inform the program director of an absence/ illness will result in disciplinary action.
4. Completion and submission of quarterly reports to residency program director
5. Documentation of GME requirements including duty hours in New Innovations
6. Provision of pharmacy staffing coverage as indicated on the Pharmacy Staffing Schedule
7. Provision of required presentations throughout the residency (see graduation requirements and rotation specific learning experience descriptions)
8. Completion of assigned residency administrative duties (see below)
9. Attendance at the ASHP Midyear Clinical Meeting and regional residency conference (PGY1 only). Residents may attend other professional meetings if the staffing schedule permits.

### Administrative Duties

Resident	Administrative Assignment
	Pharmacy Week representative
	UNC REPS residency conference coordinator (PGY1)
	Residency Representative to ROC/ Resident “lead” (PGY2)
	Midyear logistics coordinator
	Core Curriculum schedule coordinator
	Residency research committee support
	Student presentation coordination/ communication
	Scheduling Czar to represent residents on scheduling task force (PGY1 HSPA)
	Hoo’s News Fall edition editor
	Hoo’s News Spring edition editor
	Residency website editor (PGY2 IT)
	Historian (photos/ end of year)
	Wellness Champion for pharmacy department
	PGY2 management conference
	Foundations Lab coordinator
	Student “transition for success” mentor/ facilitator
	Residency presentations (case conference, seminar, and tech talks) coordinator
	End of year celebration coordination



**UVA Health**  
**Department of Pharmacy Services**  
**Pharmacy Residency Programs**

**Methods of Communication**

The Department of Pharmacy Services provides each resident with a cell phone for business use. The device is provided during the first week of the residency and is returned to the Department at the completion of the residency or departure from the institution.

During the workday, devices should be set to “Phone only.” Such setting will allow for an audible notification of incoming phone calls and text messages. It is NOT recommended that you have your device set to notify you (either audible or vibrate) for incoming email messages. During continuing education sessions and/or executive meetings outside the department, the audible settings should be turned OFF.

Although it is tempting to check your e-mail by using your phone on a frequent basis, it is not acceptable to check email messages while on rounds, in meetings, and during one-on-one discussions with other health care providers.

The preferred route for non-urgent communication with rotation preceptors, pharmacy managers, and the program director(s) is by e-mail. Phone calls are discouraged. Urgent messages should be communicated by text messaging or text paging. If none of these options are available, calling is acceptable.

Outlook Scheduler is the preferred method for scheduling meetings. Non-urgent meetings should be requested through the Outlook Scheduler a minimum of 2 work days in advance.

**UVA Health  
Department of Pharmacy Services  
Pharmacy Residency Programs  
Annual/Professional Leave Request\***

Residents submit requests for leave through the “Vacation” database. Failure to submit vacation requests prior to leaves will result in disciplinary action.

**Requests for annual leave MUST be submitted at least 1 week prior to a planned absence.  
Exceptions must be approved by the residency director.**

**In the event of illness, residents shall reach out to the program director and preceptor immediately.  
Sick leave must be documented in the database upon the first day of returning to work.**

**The last available leave day is June 21, 2021.**

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**UVA Health  
Department of Pharmacy Services  
Pharmacy Residency Programs  
Weekend Switch Request**

Weekend switches may only be made by residents in the same postgraduate year. Weekend switches may only be performed with approval from the residency program director and coordinator, affected weekend supervisors, and the scheduling coordinator.

Weekend switches are requested through the Schedule OneSource software.

**UVA Health  
Department of Pharmacy Services  
Pharmacy Residency Programs  
Moonlighting Approval Form**

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Employer: \_\_\_\_\_ Potential Employment Hours: \_\_\_\_\_

I understand that my primary responsibility is to the UVA Health Pharmacy Residency Program and that additional employment should not interfere with this responsibility. I understand that I need to check with my rotation preceptor before agreeing to work. I also understand that ACGME standard that prohibits working more than 80 hours per week (averaged over a four week period) applies to internal moonlighting. Should the residency program director deem that “moonlighting” interferes with my responsibilities, he/she may prohibit me from additional employment.

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**Resident Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Residency Director Approval:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Residency Coordinator Approval:** \_\_\_\_\_ **Date:** \_\_\_\_\_

GME Requires completion of a “Moonlighting Application” which can be found at:  
<https://med.virginia.edu/gme/wp-content/uploads/sites/255/2018/07/Moonlighting-Procedure-and-Application.pdf>



Important Policies

- Licensure and Documentation, Leave or Request for Absence, Performance Assessment, Dismissal, and Appeals Policy, Learning and Working Environment (includes duty hours and moonlighting) Policies, and Requirements for Graduation

*I attest that the above policies were reviewed with me during my orientation period.*

Resident Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**University of Virginia Health Pharmacy Residency Programs**  
**Frequently Asked Questions (2020-2021)**

**What is the governing body of the pharmacy residency programs?**

- Residency Oversight Committee (ROC) that includes:
  - All Residency Program Directors (RPDs) and assistant RPDs
  - Resident Representative (administrative duty for one PGY2)
  - Meets monthly 10 months out of the year (or more frequently as necessary)

**Do I need to show proof of pharmacist license in Virginia?**

- Your annual license should be provided to the pharmacy administrative specialist for display in the appropriate care
- Department does not reimburse for pharmacist licensure expense

**Do I need to provide a copy of my PGY1 certificate if I am an incoming PGY2 resident?**

- Yes; scan your PGY1 certificate and send to Michelle McCarthy AND
- Upload a copy of your certificate into Pharmacademic (files) AND
- Save a copy to your resident notebook folder
- Failure to produce a PGY1 certificate by the second week of July will result in dismissal

**Am I responsible for my cellphone if I lose or break it?**

- Yes!

**Am I responsible for my tablet (if provided) if I lose or break it?**

- Yes!

**Will I get lab coats?**

- Yes; 2 per residency year (follow GME onboarding instructions)

**Will I get business cards?**

- Yes (order through this site: <https://uvaprint.virginia.edu/health-system-stationery>)
- Select business cards
- Create account
- Fill out the form
  - PTAO= 100933 255.8 LO00037 22065
  - Color= blue and orange
  - Quantity = 250 (give out during Midyear and interviews plus professional meetings)
  - Order a proof to your email address

- Department = Pharmacy
- Division and Street= N/A
- Name= Your name, PharmD (make sure to add PharmD to this line!!)  
PO Box 800674, Charlottesville, VA 22908-0674

### **How do I reserve a meeting room?**

- Ask Jamie Collins

### **Can I request office supplies?**

- Yes, within reason
- Ask Jamie Collins
- Michelle McCarthy must approve “non-standard” (computers, monitors, software, chairs) office supply requests

### **Can I login from home?**

- Yes, with VPN; must be requested by using the following link: <https://www.healthsystem.virginia.edu/alive/computing/forms/Security/OAR2/AccessRequest.cfm>
- Select “VPN” under System and Role drop-down lists. Also confirm that you have appropriate computing ID, email address, and supervisor ID (MM4TM) filled out.
- You can look at the following link to figure out how to use the VPN access (<http://hit.healthsystem.virginia.edu/index.cfm/departments/security/guides-tools-and-forms/vpn-resource-guide/>).
- If you want to remotely access your office PC from non-UVA network, you can follow the directions in this link (<https://hit.healthsystem.virginia.edu/index.cfm/help-desk/top-resources/access-my-pc-remotely/>).

### **How do I request days off?**

- Ensure Microsoft Access is loaded to your computer
- Go to: O:\DRUGINFO\Resident Resources Folder\Vacation database
- Select “ResidentVacations.accdb” or the file with the most current date
- When the file opens, be sure to select “Enable Content”
- Also answer “Yes” to the pop-up regarding trusted document
- Select your name and appropriate postgraduate year from the dropdown menu in “Resident”
- Fill out all fields and submit
- If you identify a preceptor who needs to be added, please notify Michelle McCarthy immediately
- The system automatically tracks the days off
- 12 days “time off”; 5 interview days; 14 sick days
- Can take no more than 20% off a rotation off
- Requests for time off are not permissible for the last week of June

### **How do I call off a day during a rotation (e.g., sick)?**

- Call the rotation preceptor as soon as possible
- Call your RPD as soon as possible
- Complete “time off” request in database upon your return
- Number of days will be tracked / unusual patterns (sick days before or after holidays, required presentations, major deadlines) will be addressed

#### **Do I get bereavement?**

- Yes, depending on the relationship ([UVA policy](#) defines relatives that qualify)
- 2 days [you do not use your “time off” and if bereavement days are needed on a weekend you are scheduled to work, you will not be required to make up the shift(s)]

#### **How do I call off for staffing (weekend)?**

- Call inpatient pharmacy (outpatient pharmacy for PGY1 community and PGY2 am care) to notify as soon as possible
- Page Pharmacy Manager on-call
- E-mail your RPD & Derek Burden letting them know that you had to call off
- You will be required to make up the shift(s) missed

#### **How do I trade a weekend?**

- Utilize the StaffReady schedule to determine which residents may be able to swap with you
- Trades can be discussed with clinical pharmacists but it is encouraged to start with residents first
- Once a trade has been determined, have the schedule Czar (Cameron) adjust the schedule

#### **How do I work an extra internal shift (moonlight)?**

- PGY2s only have the opportunity to pick up extra shifts posted through StaffReady “shift bid” process or through email communication
- You must be approved by GME to moonlight (see GME website for form to request permission)
- To be paid, a manager must engage HR in processing your application for dual employment
- You must document any moonlighting hours in New Innovations
  - Remember: If the scheduling taskforce leader asks residents to cover open shifts, you have the option of deciding yes or no (picking up extra shifts is voluntary)

#### **How do I get a poster printed?**

- Follow instructions very carefully and double check that your poster is correct prior to shipping to Midyear

#### **Before submitting**

- Please set your poster size to **18 inches by 36 inches** (allowing them to print to 200% to 36 inches x 72 inches)

- Save the file as a **pdf** with your last name at the beginning of the file name so the individual poster tubes can be labeled (ex. Zhang\_QualityProejct)

#### Placing the order

- Link: <https://uvaprint.virginia.edu/health-system-stationery>
- Select "order other print"
- Create an account/Log in
  - Residents: You should already have an account from when you ordered your business cards.
  - Students: Please create an account using your UVA email address. The department is "Pharmacy Services".
- Enter in your name, email, and address
- Department: Pharmacy Services
- Requested delivery date: Monday, November 26, 2018
- **P: 100933, T: 255.8, A: LO00037, O: 22065**
- Billing address: P.O. Box 800674 Charlottesville VA 22908
- Delivery address: 1215 Lee Street, Room G543 (basement of the main hospital), Charlottesville VA 22908
- Job description: UVA Pharmacy Residency Poster Group
- Order request
  - Quantity: 1
  - Paper stock: vinyl poster
  - Finished size: **36 inches x 72 inches**
  - Proof to: yourself if you need it
  - Ink color: Full color
- Please upload the file as a **pdf**

#### Does my residency have a purpose statement?

- Yes; RPD will review this statement with you

#### What is a Residency Learning Experience Description (LED)?

- Located in PharmAcademic under the specific residency program
- General description of rotation
- Role of the Pharmacist
- Goals and objectives that will be evaluated
- Specific learning activities for EACH OBJECTIVE (what you will be evaluated on)

#### Are there definitions for Needs Improvement (NI), Satisfactory Progress (SP), Achieved (ACH), and Achieved for Residency (ACHR)?

- Yes, see below
  - Needs improvement- the resident is not practicing at the expected level and specific practice modifications are needed
  - Satisfactory Progress- the resident is practicing in a manner consistent with their level of experience; improvement was noted during the rotation, but the individual has not yet mastered this/ able to function as an independent practitioner.



- Achieved- the resident practices independently and has mastered the skill set. No further instruction or evaluation is required.
- Achieved for Residency (ACHR) - may only be designated by program directors based upon review and assessment of each individual resident's performance from summative evaluations and programmatic criteria. In instances where goals and objectives are taught and evaluated in multiple learning experiences, to be ACHR, an objective shall:
  - be rated as "achieved" in at least 2 experiences before being marked as ACHR;
  - OR
  - be rated as "achieved" in the final scheduled evaluation.

### **What is formative feedback/assessment?**

- Regular, on-going assessment and feedback about how you are progressing in their achievement of the program's required educational goals and objectives and how to improve
  - Verbal comments in the moment or "Feedback Fridays"
  - Writing/feedback on resident's work (place this type of formative feedback in your Residency Notebook; "track changed documents")
  - Can be documented in the "Feedback" tab in Pharmacademic

### **What is summative feedback/evaluation?**

- Formal evaluation on extent of achievement of program's required educational objectives at the END of a learning experience or quarterly for longitudinal experiences

### **What are the expectations for rotations?**

- Contact preceptor at least 2 (preferably 5) workdays prior to rotation start to identify the time and place for first day
- First day:
  - Preceptor should review learning experience description (LED) with you (set expectations)
  - Review projects and assignments
  - Review/establish rotation calendar (meetings, deadlines, etc)
    - Tell preceptor any approved days off, required meetings, weekend working, etc.
  - Tell preceptor what goals/objectives you want to work and/or have been instructed to focus on
  - Discuss your development plan with rotation preceptor (can be found in Pharmacademic under "development plan" tab)
- When applicable, set day in Outlook for your self-evaluation to be completed (few days before end of rotation in order for your preceptor to have adequate time to review your self-evaluation and if needed, send back to you for additional comments); review Resident Self-Evaluation Strategy document (page 29 of the [residency manual](#))

- Request to schedule an appointment in Outlook for you and your preceptor to review summative evaluation (no later than one week after the conclusion of the experience)
- Complete preceptor evaluation within one week of the conclusion of the rotation (earlier is better)
- Complete learning experience evaluation within one week of the conclusion of the rotation (earlier is better)

### **What are Development Plans?**

- Individual resident plans based on strengths, areas of opportunity, interests, and goals (aka your residency year journey GPS)
- There will be 4 development plans
  - Initial/1<sup>st</sup> Quarter Development Plan (must be completed by the RPD before orientation experience ends; before first rotation)
  - 2<sup>nd</sup> Quarter Development Plan (Due Oct. 1<sup>st</sup>)
  - 3<sup>rd</sup> Quarter Development Plan (Due Jan. 1<sup>st</sup>)
  - 4<sup>th</sup> Quarter Development Plan (Due April 1<sup>st</sup>)
- The development plan will track your progress on your graduation requirements specifically the % of objectives that have been ACHR

### **What other evaluations/ reflections do I have to do?**

- Each resident will submit a quarterly report (QR) to their RPD and advisor
- QR due dates are as follows:
  - Q1: for 7/1-9/30; due 10/4
  - Q2: for 10/1-12/31: due 12/30
  - Q3: for 1/1-3/31; due 4/3
  - Q4: for 4/1-6/15, due 6/22
- Guidelines for QR are available in the residency manual

### **How do I switch a rotation?**

- Bring your request and rationale to Michelle McCarthy/ RPD
- Michelle/ RPD will determine feasibility and update the master rotation schedule (if approved)

### **Is attendance at resident presentations mandatory?**

- Yes this include Core Curriculum, CE Seminars, research practice presentations
- Exceptions must be approved by RPD

### **What are the types of residency presentations? (See graduation checklist)**

- Continuing education- Pharmacist Seminar and Technician Talk (PGY1 only)
- Journal club x 2 throughout the year on rotations
- Inservices x 2 throughout the year on rotations

- UNC REPS (PGY1s only)
- Research project

**When are the title, goals and objectives due for CE Seminar?**

- Select topic and identify preceptor
- Follow all instructions in CE processing document
- Each resident will present their seminar twice- first on a Th morning at 7 AM, then the encore the following Wednesday at 2 PM

**What are the expectations for Midyear and Vizient?**

- All PGY1s are required to attend Midyear and the Vizient meeting
- All residents attending the Midyear meeting present a poster at the Vizient resident poster session and attend the entire Vizient meeting
- All residents MUST be in attendance at the Midyear Residency Showcase

**What are the expectations for UNC REPS?**

- All PGY1s are required to attend UNC REPS and present a 12 minute platform of their research project
- Residents will attend the entire meeting and the presentation of their co-residents