



PHARMACY



# **2022 HEALTH SYSTEM PHARMACY ANNUAL REPORT**

# From the Chief Pharmacy Officer

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It is my pleasure to present our Fiscal Year 2022 Pharmacy Annual Report for West Virginia University Hospitals. It has been a tremendous year for our pharmacy team and colleagues across Morgantown in providing excellent, high quality patient care. Despite another challenging year we were able to continue our growth as a pharmacy team to promote our mission of providing safe, high quality, affordable patient-centered care to improve the health of West Virginians and all we serve.

While it has been another trying year as we are coming out of the pandemic, we were able to make great strides in expanding our efforts in caring for our patients. I am very proud of the work we were able to accomplish and the patients we were able to care for. We were able to complete the majority of our initiatives included in our 2000-2022 Strategic Plan and had the opportunity as a department to create the 2023-2025 Strategic Plan that will help guide us over the next 3 years.

The collective and individual accomplishments of our department and staff are far too many to mention. Our focus has been, and will continue to be, on enhancing the patient experience as they transition throughout our health system, providing evidence-based medication management and improving the value of health care for our patients. We have been able to accomplish this by aligning our department goals with the goals of the organization and by maintaining a focus on the critical opportunities in front of us.

I encourage each of you to take some time to read through the FY22 annual report and celebrate the accomplishments of our department and your peers. We will continue to be challenged this year to deliver on the value of WVU Medicine health care in a continuing challenging environment. I know that through our collective efforts, collaboration, and focus on the strategic priorities we will be successful in providing the best care and service to our patients.

I am truly honored and humbled by the opportunity to lead such a fantastic group of individuals at the very best health care system in West Virginia. I am looking forward to what we can accomplish in 2023!

## Key Accomplishments:

- Expansion of medication history efforts - 63% completed during admission
- Provided 179 WVU School of Pharmacy APPE rotations
- Addition of clinical pharmacists in GI and Cardiology clinic
- Opening of Children's Hospital with dedicated central and clinical pharmacy services
- Reduced total anti-infective spend per patient day by 13%
- Rolled out Complex Outpatient Oral Antimicrobial Therapy (COpAT) program
- Expanded services at MBRCC to 7 days a week
- Expansion of medication safety efforts including 3 new FTE across the system
- Pharmacy Residency Excellence Program Award for our PGY2 Internal Medicine Program
- 6.5 million dollars of medications provided at no cost to our patients
- Implementation of Epic Willow Ambulatory in our retail and specialty pharmacies
- Dispensed over 500,000 prescriptions from our outpatient pharmacies

Warmest regards,



Todd Karpinski, PharmD, MS, FASHP, FACHE  
Chief Pharmacy Officer  
West Virginia University Health System

# 2022

# OUR MISSION

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WVU Medicine Pharmacy will provide safe, high quality, and affordable patient centered care to improve the health of West Virginians and all we serve.

# OUR VISION

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WVU Medicine Pharmacy will be the most employee focused pharmacy delivering the best patient care.

# OUR VALUES

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Provide **Safe** and **Efficient Care**

Be **Employee** Focused

Drive **Financial Performance**

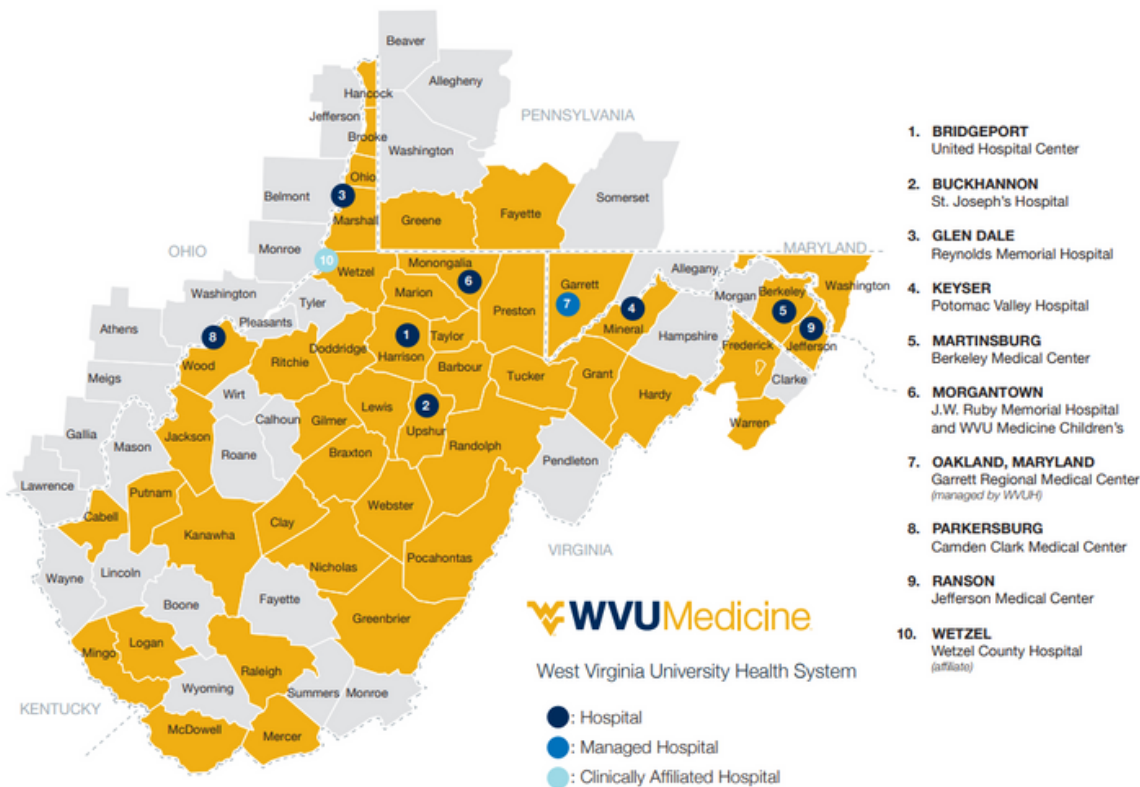
**Educate** and **Innovate**

Improve **Quality** of Patient Care



# Health System Progression

April  
2018



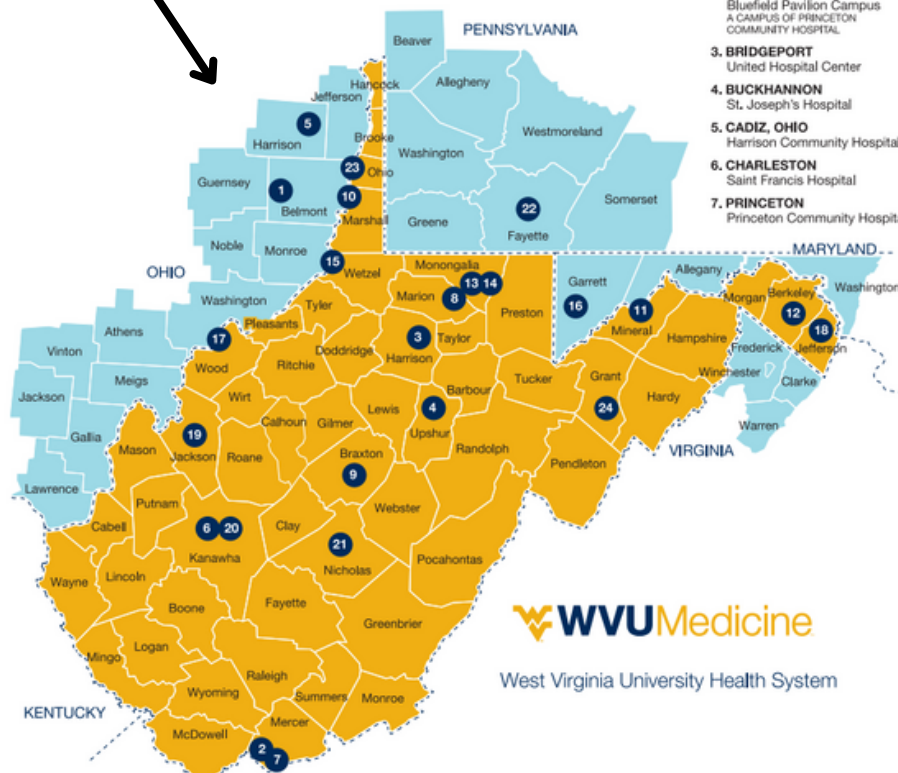
## Member System Hospitals

- 1. BARNESVILLE, OHIO**  
Barnesville Hospital
- 2. BLUEFIELD**  
Bluefield Pavilion Campus  
A CAMPUS OF PRINCETON COMMUNITY HOSPITAL
- 3. BRIDGEPORT**  
United Hospital Center
- 4. BUCKHANNON**  
St. Joseph's Hospital
- 5. CADIZ, OHIO**  
Harrison Community Hospital
- 6. CHARLESTON**  
Saint Francis Hospital
- 7. PRINCETON**  
Princeton Community Hospital
- 8. FAIRMONT**  
Fairmont Medical Center  
A CAMPUS OF J.W. RUBY MEMORIAL HOSPITAL
- 9. GASSAWAY**  
Braxton County Memorial Hospital
- 10. GLEN DALE**  
Reynolds Memorial Hospital
- 11. KEYSER**  
Potomac Valley Hospital
- 12. MARTINSBURG**  
Berkeley Medical Center
- 13. MORGANTOWN**  
J.W. Ruby Memorial Hospital
- 14. MORGANTOWN**  
Children's Hospital  
A CAMPUS OF J.W. RUBY MEMORIAL HOSPITAL
- 15. NEW MARTINSVILLE**  
Wetzel County Hospital
- 16. OAKLAND, MARYLAND**  
Garrett Regional Medical Center
- 17. PARKERSBURG**  
Camden Clark Medical Center
- 18. RANSON**  
Jefferson Medical Center
- 19. RIPLEY**  
Jackson General Hospital
- 20. SOUTH CHARLESTON**  
Thomas Memorial Hospital
- 21. SUMMERSVILLE**  
Summersville Regional Medical Center
- 22. UNIONTOWN, PENNSYLVANIA**  
Uniontown Hospital
- 23. WHEELING**  
Wheeling Hospital

## Managed Hospitals

- 24. PETERSBURG**  
Grant Memorial Hospital

**WVU Medicine**  
West Virginia University Health System



# Strategic Plan Executive Summary

January 1, 2020 - December 31, 2022

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## **Provide safe and effective care by improving care transitions**

- Optimization of a tool for structured handoff between inpatients and outpatients
- Implement efforts to deprescribe off the inpatient list prior to discharge
- Create a formal process for prior authorization for inpatients and outpatients
- Implement all ISMP best practices across WVU Health System

## **Improve financial performance by increasing prescription fill rates and net margin**

- Identify projects to increase prescription capture at discharge, following clinic visits and re-routing of outside prescriptions back to WVU Medicine pharmacies

## **Educate and innovate by ensuring ongoing pharmacist competence**

- Develop a formal targeted plan to ensure pharmacists are competent in particular areas
- Create a formal plan to create personal and professional development series for pharmacy technicians

## **Be employee focused**

- Create a recognition focus group
- Evaluate the use of LEAN methodologies to formalize quality improvement

## **Improve clinical quality of care in the ambulatory setting**

- Develop a formalized plan to start a pharmacy led diabetes service

# CLINICAL PHARMACY SERVICES

Clinical pharmacy specialists and generalists at WVUH provide patient care to adult populations in both acute care and ambulatory care settings. Clinical pharmacist services are tailored to patient care needs, and may include the development of individualized pharmacotherapy plans, medication management and optimization, patient education, and coordinating transitions of care. In addition to direct patient care, the clinical pharmacists lead quality improvement initiatives, precept learners, and serve on department and hospital committees and workgroups to advance the practice of pharmacy and raise the quality of patient care at WVUH.

## Clinical Pharmacy Divisions



The **Acute Care Adult Clinical Services** pharmacy division comprises all adult inpatient medical and surgical service areas and their related specialty areas. It is composed of clinical generalist pharmacists and clinical specialist pharmacists providing around-the-clock pharmacy services for 75 adult services. Clinical pharmacists are integrated into patient care teams as part of a practice model consisting of service line-based coverage, with clinical pharmacists predominantly decentralized. Clinical pharmacists participate in daily interdisciplinary patient care rounds for most medical services in addition to order verification duties, management of pharmacist-owned protocols, emergency response, and other patient care activities.

# Clinical Pharmacy Services

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**2,196,359**

ORDERS VERIFIED

**142,033**

PHARMACY INTERVENTIONS

**46,461**

NOTES PLACED

**6.09**

AVERAGE LENGTH OF STAY (DAYS)

**520**

*Average Daily Census*

**88%**

*Occupancy Rate*

WVU Critical Care & Trauma Institute



## 2022 ADULT HIGHLIGHTS

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- Continued to be on the forefront of innovation through collaboration with interdisciplinary teams to elevate patient care
- Pharmacists lead medication use initiatives and cost-savings projects across the system, driving clinical practice standardization
- Long-awaited protocol orders, pharmacist-to-dose warfarin and pharmacy-managed TPNs implemented
- Continued to educate the next generation of pharmacists with WVUH pharmacists precepting 179 WVU SOP APPE rotations during the 2022-2023 school year
- Clinical pharmacists partnered with medication history technicians to ensure 63% of patients received a pharmacy-driven medication reconciliation, with that number projected to continue to grow in 2023

# Medication Reconciliation Program

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The WVU Medicine medication history and reconciliation program is a multidisciplinary team consisting of clinical pharmacist, clinical technicians, and pharmacy students. This team works together to provide the healthcare team with the most accurate and comprehensive list of medications taken prior to admission to improve the health of West Virginians and all we serve. Medication historians conduct patient interviews and call outpatient pharmacies and facilities to collect the patients most current medication history for the clinical pharmacist. The clinical pharmacist then completes the medication reconciliation process by reviewing the medication history and identifying and preventing medication discrepancies and errors.

## Projects and Achievements

- Medication History and Reconciliation Program Pharmacy SharePoint updated to include information related to:
  - Education and Training
  - Medication History Tip Sheets
  - Workflow and Logistics
- Creation of two competencies for inpatient pharmacy employees
- Added five additional clinical technicians allowing expansion of services provided in emergency department and on evening shift for afternoon patient admissions

**Completed on average 63.3% of admission medication reconciliations in 2022**

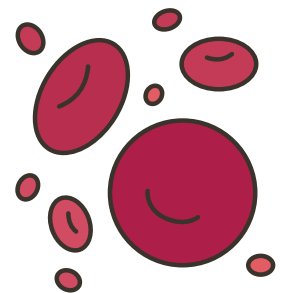
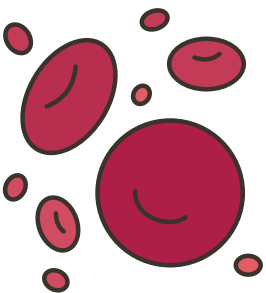
# Antithrombotic Stewardship Program

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The Antithrombotic Stewardship Program is dedicated to enhancing the safety and quality of antithrombotic use across the continuum of care of WVU Hospitals. This team is comprised of two clinical specialist pharmacists, one clinical pharmacy technician, and is overseen by a physician medical director. The team works collaboratively with clinical pharmacists and medical staff to positively impact the safe and effective utilization of antithrombotic medications and achieve optimal patient outcomes while minimizing harm.

## Projects and Achievements

- Greater than 200 pharmacy technician interventions recorded on financial and non-financial matters
- Piloted Sequential Compression Device (SCD) rounding program and identified area for improvement related to SCD compliance for greater than 3/4 of patients assessed
- Implemented a new Pharmacist to Dose Warfarin protocol
- Over 170 inpatient pharmacist interventions completed surrounding direct oral anticoagulant therapy, warfarin therapy, VTE prophylaxis, anticoagulation reversal, and lab monitoring
- Transitioned to tenecteplase the primary thrombotic for acute ischemic stroke
- Developed new standardized patient education materials for warfarin, apixaban, rivaroxaban, dabigatran, and enoxaparin for health-system use



# Ambulatory Care

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In 2022, the Ambulatory Care Adult Clinical Services Division continued to grow. The team gained financial approval for Clinical Pharmacy Specialists in both the Gastroenterology and General Cardiology clinics and successfully onboarded a Clinical Pharmacy Specialist in Gastroenterology in the fall of 2022. The division also matched with the first WVUH PGY2 Ambulatory Care Pharmacy Resident. This resident rotated through various primary care and specialty care clinics while working weekend shifts in the WVUH Discharge Pharmacy.

## Primary Care

Transitions of Care Clinic  
Anticoagulation Clinic  
Internal Medicine - UTC  
Internal Medicine - POC

## Specialty Care

Gastroenterology  
Advanced Heart Failure  
Pulmonary Hypertension  
Lipid Clinic  
Endocrinology  
Neurology / Multiple Sclerosis  
General Cardiology

## **Accomplishments:**

- Implemented physician-to-pharmacist Epic referrals and independent pharmacist schedules at the following clinics: MGP-POC, MGP-UTC, Endocrinology, Gastroenterology, Lipid Clinic
- Credentialed 3 pharmacists with the state of West Virginia who were subsequently enrolled as billable providers with a commercial insurance company
- Developed standard guidelines for ambulatory medication reviews by nursing staff in clinics
- Created 3 new collaborative practice agreements for MGP, Endocrinology, and the Lipid Clinic for submission in 2023 under newly implemented legislation

# WVU MEDICINE CHILDREN'S HOSPITAL

Opened September 2022



**WVU** Medicine  
Children's



## POSITIONS ADDED

6.5

PHARMACY GENERALISTS

3

PHARMACY SPECIALISTS

8.5

SPECIALIST TECHNICIANS

10

OPERATIONS TECHNICIANS

3

CLINICAL TECHNICIANS

M  
O  
V  
E



99

PATIENTS TRANSFERRED

D  
A  
Y

20

SURGERIES PERFORMED





# NEW SERVICE AREAS

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Emergency  
Department

Perioperative  
Services

Radiology

Infant  
Nutrition  
Room

## BY THE NUMBERS THE FIRST 90 DAYS

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**69,526**

ORDERS VERIFIED

**8,044**

ORDERS  
AUTO-VERIFIED

**30,262**

DISPENSE PREP DOSES

**173,163**

TOTAL DOSES  
ADMINISTERED

**78,048**

AUTOMATION DOSES  
DISPENSED

**645**

OUTPATIENT  
INFUSIONS COMPLETED



# Infectious Diseases Pharmacy Services

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The ID Pharmacy services team consists of five clinical pharmacy specialists, three physicians, one nurse, and one administrative assistant.

## 2022 General Overview

- Launched "Infectious Conversations" monthly podcast as a mechanism of delivering infectious diseases education to all of WVU Medicine
- 8 posters presented at national conferences
- 2 publications in peer reviewed journals
- 5 ACPE accredited CEs presented

## Antimicrobial Stewardship (AMS)

- Reduced total anti-infective spend per patient day in 2022 by 13%
- Started antifungal stewardship initiatives targeting a reduction in micafungin utilization
- Days of Therapy (DOT) Reductions (per 1000 days present)
  - Ceftaroline, 10% reduction
  - Vancomycin, 18% reduction
  - Micafungin, 27% reduction
  - Ertapenem, 11% reduction
- Greater than 20 published clinical practice guidelines approved through eAMS and eP&T to promote standardized practice for a variety of infectious diseases across the system
- AMS team recorded 815 interventions with an average acceptance rate of 70%

**Everyone is a steward!**

# Infectious Diseases Pharmacy Services

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## **Outpatient Parenteral Antimicrobial Therapy (OPAT)**

- OPAT team recorded 678 interventions with an average acceptance rate of 72%
- Featured twice in a monthly virtual presentation series called "OPAT Chat" attended by 50+ OPAT pharmacists across the nation in addition to one pharmacist from the NHS in Great Britain
- OPAT Physician presented about the OPAT program at the Dr. Anthony G. DiBartolomeo Internal Medicine Conference
- Featured in a presentation for medical residents at Medical Noon Conference
- Collaborated with the Medicine Quality Council and created an Ad Hoc Committee to discuss and create interventions to reduce discharge summary errors

## **Complex Outpatient Oral Antimicrobial Therapy (COpAT)**

- Novel service line including inpatient and outpatient consultation services at WVUH
- Average monthly census of 58 patients
- Saved greater than 2,500 days of hospital stays and days of IV antimicrobials



# MBRCC

## INFUSION CENTER SATILLITE & IDS



**210,600**  
ORDERS VERIFIED

**100+**  
ACTIVE CLINICAL  
TRIALS

**82,373**  
TOTAL OUTPATIENT  
VISITS

### HIGHLIGHTS

- Implemented dispense tracking on all dispensed medications
- Expanded services to 7 days a week
- Developed centralized Investigational Drug Services model to begin supporting system growth



# MEDICATION USE, SAFETY, QUALITY, AND COMPLIANCE

## Medication Use

The focus of the WVU Medicine Health System Medication Use Team is to collaborate with healthcare professionals to promote the safe and effective use of medications for our patients. This is achieved through integration with clinical and operational staff, as well as those in medication safety, informatics, and pharmacy administration. Medication Use is directly responsible for assessing the clinical and safety impact of medications, forecasting future drug therapies, performing, and assisting clinicians in the execution of medication use evaluations and other benchmarking strategies.

Medication Use is also responsible for the coordination of the WVU Medicine Health System Pharmacy and Therapeutics (eP&T) Committee, in addition to the eight subcommittees focusing on ambulatory care, hematology/oncology, critical care, perioperative services, antithrombotic stewardship, antimicrobial stewardship, hospital medicine, and medication safety.

## HIGHLIGHTS

**74**

CLINICAL PRACTICE GUIDELINES  
OR BEST PRACTICE  
RECONCILIATION DOCUMENTS  
REVIEWED

**38**

MEDICATIONS ADDED TO  
FORMULARY WITHOUT  
RESTRICTIONS

**47**

MEDICATIONS ADDED TO  
FORMULARY WITH RESTRICTIONS

**57**

MEDICATIONS REMOVED / NOT  
ADDED TO FORMULARY

**12**

ELECTRONIC HEALTH RECORD  
OPTIMIZATION INSTANCES

**11**

CRITERIA FOR USE REVIEW AND  
OPTIMIZATION FOR EXISTING  
FORMULARY AGENTS

# MEDICATION USE, SAFETY, QUALITY, AND COMPLIANCE

## SPECIFIC FOCUSED INITIATIVES

- Coordinated Medication Use Evaluations across three residency programs and the WVU School of Pharmacy
- Led the ED ALTO (Alternative to Opioids) Project to aid in opioid stewardship efforts across all system hospitals
- Implemented antithrombotic monitoring process at various hospitals
- Assisted with blood factor guidance and staff education
- Established monthly Medication Use newsletter
- Developed Clinical Pipeline Report to aid in forecasting efforts
- Established system-wide continuing education program for pharmacists
- Increased support for all system hospitals with the approval of 3 additional Medication Use FTEs
- Established a system-wide Clinical Guideline intranet webpage
- Managed dedicated project time for pharmacists to develop strategies to integrate medication therapies into clinical pathways to improve patient outcomes in several disease states, notably:
  - Heart Failure
  - Parenteral Nutrition
  - Enhanced Recovery After Surgery (ERAS)
  - Glycemic Control

# Medication Safety and Compliance

## Projects completed by the Medication Safety Subcommittee:

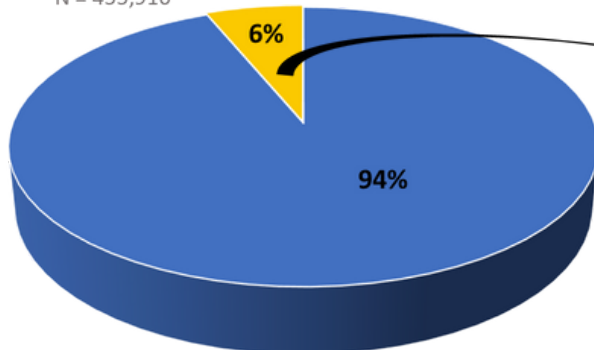
- Approval of a standardized WVUHS Concentrated Electrolyte Policy
- Reviewed and updated the WVUHS High Alert and Look Alike Sound Alike lists
- Developed clinical decision support surrounding metformin and contrast interactions in severely renal impaired patients
- Recommended changes for hypertonic sodium chloride to ensure safe utilization
- Evaluated vaccine safety in the inpatient and outpatient settings
- Approved a standardized WVUHS list for medication filtering
- Standardized Epic settings for epinephrine
- Approved standardized WVUHS guidelines for extravasation, including a standardized list of medications considered vesicants
- Streamlined medication designations and developed rules for future designations (e.g. high alert, dual sign off)

## Bluesight

- Bluesight is the artificial intelligence software used to reconcile automated dispensing cabinet (Omniceil) dispenses, wastes and returns to Epic charting of administrations. Use of the program for event reconciliation went live in April 2022.

All Events

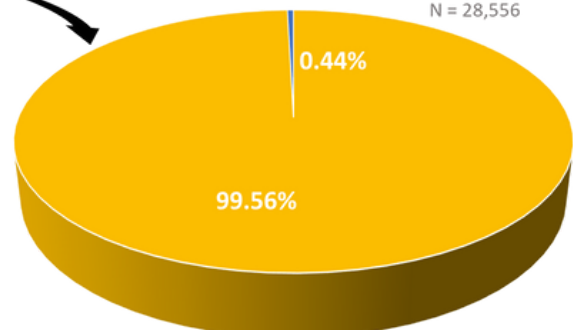
N = 455,910



■ Reconciled by Bluesight  
■ Required Investigation

All Investigated Events

N = 28,556



■ Investigated, Reconciled  
■ Investigated, Unable to Reconcile

WVU Medicine

# GOOD CATCH AWARD





# Pharmacy Residency & Education

## Pharmacy Interns

Pharmacy interns are employed throughout the hospital to support the functions of the departments in which they are employed while gaining valuable practical experience. Pharmacy interns work directly with patients conducting medication histories and supportive functions. They also participated in clinical activities alongside residents and preceptors.

## Pharmacy Students

WVU Hospital's Department of Pharmacy has a strong commitment to education. We offer introductory and advanced pharmacy practice experience (APPE) rotations across all practices. The department also hosts a longitudinal track program designed to prepare APPE students for residency.

<b>218</b> APPE Rotations	<b>64</b> Students	<b>78</b> Preceptors	<b>10</b> Practice Sites
<b>78</b> Acute Care Rotations	<b>68</b> Community & Ambulatory	<b>68</b> Administration & Systems Rotations	<b>3</b> International Rotations

# RESIDENCY CLASS

## 2022 - 2023



The WVU Medicine Pharmacy Residency Program was started in 1985 by then Residency Coordinator, Art Poremba, and accredited by ASHP in 1987. Since the program's inception, 36 classes have completed the program, consisting of nearly 200 residents. The program continues to gain national exposure, having had residents originally from schools located in nearly half of the 50 states.



# 2022 Pharmacy Residency Excellence Program Award WVUH Internal Medicine PGY2

The West Virginia University Hospitals PGY2 internal medicine residency program is shaped by a passion for helping those in need. Residents and preceptors in this program routinely practice in underserved areas to eliminate rural health disparities. In addition, residents produce and publish innovative research, which has led to meaningful changes at the institution.



The award recognizes a pharmacy residency program with a national reputation for excellence in the training of residents and consistent provision of an exceptionally positive and rewarding training experience. After reviewing more than 3,100 award applications, the ASHP Foundation deemed the WVUH program as one of the country's most "innovative and impactful" pharmacy residency programs.

"Our Program excels in innovation to enhance patient care, advocates for the underserved (both locally and globally), and actively seeks feedback to better our preceptors, program, and region alike."

**-Sheena Burwell, PharmD, BCPS, CTTs**



# INPATIENT OPERATIONS

The Pharmacy Operations team oversees the medication use process at WVU Hospitals, ensuring reliable and safe distribution of medications to patients. This team oversees the procurement, storage, preparation, distribution, and delivery of medications throughout WVU Hospitals. Our time and service are dedicated to operating the central pharmacy, including the IV room, controlled substance vault, and perioperative services. The pharmacy operations team is comprised of highly experienced and dedicated technicians, interns, pharmacists, and leaders to meet the needs of patients at WVU Hospitals.



# OPERATIONS HIGHLIGHTS

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## 4,339,317

DOSES DISPENSED

### Perioperative Workflow Changes:

- Converted 2W Pharmacy Satellite to a Medication Room to services 2W OR areas
- Addition of an additional PACU Omnicell machine to provide continued patient care to patients bordering in OR areas and require maintenance medications

### Compounding Services:

- Effectively implemented Epic Compounding and Repackaging Module for all non-sterile preparations in the Adult Inpatient Pharmacy
- Expanded dispense prep to include all high alert products and TPNs requiring manual additions in addition to hazardous medications
- Streamlined TPN compounding process from order verification to product dispensation with implementation of a direct interface to the TPN compounder from the Epic order, thus decreasing possible transcription errors

### Unit Conversions:

- Following the opening of Children's in September 2022, the Adult Inpatient Pharmacy operationalized the following adult inpatient units as part of the Children's Hospital Backfill project:
  - Relocated the Neuro Critical Care Unit
  - Added 50 net new beds focused on Medical Surgical and Extended Intensive Care services
  - Repurposed six Omnicell's to service the NCCU and new new beds



# BUSINESS OPERATIONS

The Business Operations team provides health system support for revenue cycle integrity, patient assistance, pharmaceutical contracting, pharmacy inventory management, and informatics.

This team assisted in reducing operational expenses and helping indigent patients receive free medications through patient assistance programs. The annualized savings in 2022 was 16.6 million dollars.



# BUSINESS IS BOOMING

## Finance

- Development of billing program for Ruby Inpatient Sterile Products Waste
- Implementation of Business Operations Cherwell Ticketing System
- Standardization of pharmacy cost centers across the system
- Assisted with implementation of outpatient MAR for clinics across the system

## Contracting

- Implementation of standardized price checks and audits for improved standardization of ABC pricing across the system
- Expansion of contracting services across the system to include all CAH/RRC facilities
- Development of Contracting Onboarding protocol for newly acquired hospitals

## Informatics

- Coordinated and assisted with Omnicell Implementations across system
- Lead system Omnicell Standards committee
- Manage system Omnicell database
- Coordinate standardization and contracts of new pharmacy software

## Supply Chain

- Continued planning of Central Distribution Center
- Improved drug shortage management
- Decreased WAC spend at WVUH

## Patient Assistance

**300+**

PATIENTS PROVIDED FREE  
MEDICATION

**\$6.5M**

MEDICATION PROVIDED AT NO COST  
TO PATIENTS OR ORGANIZATION

**2,000+**

PATIENTS PROVIDED FREE  
MEDICATION

# 340B MANAGEMENT PROGRAM

The Health System 340B Management Program is responsible for performing all duties associated with administering the 340B program at WVU Medicine in alignment with current rules and regulations outlined by the Health Resources and Services Administration (HRSA) and the Office of Pharmacy Affairs (OPA). The goal of the program is to ensure program compliance, maximize efficiencies, determine areas of growth and improvement, and support leadership of the WVU Health System.



# 340B MANAGEMENT PROGRAM

## Achievements

- 340B ESP Claims Submission returned \$26.6 million in net margin
- Implementation of 122 contract pharmacies resulting in \$5.7 million net margin
- Program Optimization through suspect claims \$209,126 newfound eligible claims
- Standardized mapping across the health system for mixed use
- Health system wide external audit completion
- Developed a process to monitor wholesaler 340B pricing

## Program Expansion

- Added 122 Contract Pharmacies to 340B management responsibilities
- Hired 7 additional 340B Team Members
  - 6 Additional Audit, Compliance & Pharmacy Analysts plus 1 manager
- Onboarded Barnesville, Harrison, and Wheeling hospitals
- Assisted with implementation of Jackson and Wheeling clean sites

## HIGHLIGHTS

**\$229M**

FINANCIAL 340B BENEFIT

**32,467**

CLAIMS AUDITED

**136**

CHILD SITES MANAGED

**10**

HOSPITAL OWNED RETAIL  
PHARMACIES

**265**

CONTRACT PHARMACIES

**15**

COVERED ENTITIES



# Allied<sup>HEALTH</sup> SOLUTIONS

## SPECIALTY PHARMACY

An affiliate of  WVU Medicine



### 450K

Miles Driven  
by Courier

### 21,191

Clinical Activities  
Documented

### 8

State Pharmacy  
Board Licensures

Allied Health Solutions Specialty Pharmacy team is here to provide special handling, packaging, education, and financial assistance for all our patients. We make patient care and safety our number one priority. Our specialty pharmacy team provides clinical expertise to help treat complicated diseases. We work closely with your medical provider to make sure all of your prescription needs are met.



# Specialty Pharmacy Services

21,191

## Clinical Activities Documented

- 2,743 Patient Therapy Onboarding
- 5,638 Treatment Follow-up Reviews
- 2,660 Clinical Interventions
- 6,693 Lab Reviews

8

## New Staff Certifications

- 2 Certified Specialty Pharmacist (CSP)
- 1 Board Certified Oncology Pharmacist (BCOP)
- 1 Board Certified Pharmacotherapy Specialists (BCPS)
- 2 Certified Tobacco Treatment Specialist CTTS
- 2 Certified Pharmacy Technicians (CPhT)

\$5.4M

## Patient Medication Savings

- \$4.6 million provided through co-pay assistance resources
- \$817,000 through patient assistance funds & grants
- Coaching strategies for the Flip the Pharmacy practice transformation initiative

85%

## Patients had a Copay \$20 or less

- 5,511 prior authorizations preformed by clinical technicians
- Expanded prior authorization services to include non-specialty meds

## HIGHLIGHTS

- Added 22 new positions and received access to 15 additional limited distribution drugs
- Transitioned to Willow Ambulatory & launched new Telemedicine platform
- Provided a Specialty Pharmacy elective course at WV SOP and established a homebound immunization program with the family practice clinic
- Added 3 new courier drivers and increased delivery capacity for a total of 11 daily delivery routes



# HOME INFUSION

## Home Infusion Highlights

- Expanded portfolio of medication managed to include traditional therapies like antibiotics and hydration
- Increased Home Infusion team by hiring a second clinical nurse liaison
- Expanded sterile compounding services to PA and MD, in addition to WV

## Accomplishments

- ACHC accreditation for home infusion with upgraded cleanroom approved by WV BOP and certified through Filtech validation
- Surpassed anticipated volume by having 70 patients on service with 1419 total prescriptions dispensed
- Launched 340B contract pharmacy relationship with WVUH and UHC

## SPECIALITY & HOME INFUSION

**\$138M**

TOTAL REVENUE

**5,511**

PRIOR AUTHORIZATIONS

**89.6%**

PATIENT'S WITH AN  
ADHERENCE  $\geq$  80%

**57,471**

PRESCRIPTIONS  
DISPENSED

**88%**

PROVIDER  
SATISFACTION RATE

**31**

EMPLOYEE ADDITIONS  
& PROMOTIONS

# OUTPATIENT PHARMACY SERVICES



The Outpatient Pharmacy Team consists of three retail pharmacies and one Little Mountaineer pick-up location in Morgantown.

We are located on-campus at Ruby Hospital and at the WVU Health & Education Building.

We provide the best care for patients, employees & all guest of WVUM.

We are passionate about providing high-quality care beyond the prescription.

We strive to deliver timely, safe, and accurate prescription services, provide patients with education on the importance of their medication and continue our positive financial contribution.

"Caring Beyond The Rx"



# OUTPATIENT PHARMACY BY THE NUMBERS

## **Medical Center Pharmacy**

- Prescriptions filled: 210,676
- Increased volume by 15,610 scripts from 2021
- Highest number of scripts in Dec 2022 with 25,132 Filled

## **Discharge Pharmacy**

- Prescriptions filled: 80,861
- Increased volume by 8,399 scripts from 2021
- Overall prescription capture rate: 64%

## **Mountaineer Pharmacy**

- Prescriptions filled: 68,242
- Increased volume by 4,900 scripts from 2021
- Compliance Packaging Services for over 120 patients

**Total Revenue: \$61.4M**



## HIGHLIGHTS & ACOMPLISHMENTS

- Improved Meds-to-Beds capture rate to over 63%
- Improved MTM Services by 50%
- Delivered 135,073 prescriptions across 5 states
- Compounded over 4,500 prescriptions
- First Pharmacy Community Flu Vaccine Clinic
- Continued optimization of drug inventory resulting in over \$1 Million savings in drug purchases
- Implemented Epic Willow Ambulatory
- Exceeded processing time metrics for Meds to Beds prescriptions
- Opening of Little Mountaineer Pharmacy
- Implemented the 24/7 Pharmacy Retail Service at Discharge Pharmacy
- Member of the West Virginia University PhD dissertation Committee & the WVU Medicine Pain Management Committee

# Leadership Team

## Chief Pharmacy Officer & System Vice President



**Todd Karpinski**

PharmD, MS, FASHP, FACHE

## Directors of Pharmacy



**Daniel O'Neil**

PharmD, MS  
WVU Hospitals



**Karen Famoso**

BS Pharm, MBA  
Compliance and 340B



**Louie Sokos**

BS Pharm, MBA  
Speciality Pharmacy Services



**Derek Grimm**

PharmD, BCPS  
Medication Use



**Dave Cecere**

PharmD, MBA, FACHE  
Business Operations



**Joe Gonzaga**

PharmD, MPH  
Retail Pharmacy Services

# Leadership Team

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## Assistant Directors of Pharmacy



**Dmitry Walker**

PharmD, MS

Oncology and Investigational  
Drug Services



**Jordan Carter**

PharmD, MS

Central Inpatient Operations



**Courtney Sweet**

PharmD, BCPPS

Pediatric Pharmacy Services



**Casey Yokum**

PharmD

Specialty Pharmacy Services



**Ashley Street**

PharmD, MSHA

Adult Clinical Services and Education

## Pharmacy Managers



**Karly Dancsecs**

PharmD, MBA, BCPS

Central Operations and  
Controlled Substances



**Marc Phillips**

PharmD, CPHQ, 340B ACE

Supply Chain



**Renee Postlethwait**

BS Pharm

Retail Pharmacy Services



**Maria Cumpston**

PharmD, CPPS

Medication Safety

# Leadership Team

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## Pharmacy Managers



**Rachel Mitchell**

PharmD, BCPS, CSP  
Speciality Pharmacy Services



**Bradley Gutta**

PharmD, BCPS  
Sterile Products & Perioperative Services



**Jared Lapkowicz**

PharmD  
Retail Pharmacy Services



**Jessica Stewart**

PharmD, CSP  
Speciality Pharmacy Services



**Jalyn Robinson**

PharmD, CSP  
Home Infusion



**Lisa Garavaglia**

PharmD, BCPPS  
Pediatric Pharmacy Services



**Mike Konietzko**

PharmD, MS, BCPS  
Adult Critical Care, ED, & Surgery



**Autumn Petersen**

PharmD, MPH, MS, BCPS  
Oncology and Investigational  
Drug Services



**Will Hammonds**

PharmD, MS, BCPS  
Ambulatory and Transitions of Care



**Staci Czyzewski**

BS  
Business Operations



**Amanda Hunn**

MBA-HM, CPhT  
Specialty Pharmacy Services



**Alexis Galloway**

MBA, 340B ACE  
Compliance and 340B

# Leadership Team

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## Pharmacy Managers



**Barbra May**  
MBA, 340B ACE  
Compliance and 340B



**Jessica Calderone**  
BS, 340B ACE  
Compliance and 340B

## 2022 Leadership Strategic Planning Retreat



# PUBLICATIONS

Arceri V, Busch R, Kane M, **Quinn H**, Racz M, Telese M. Abaloparatide Implementation and Follow-Up: Real-World Results of a Pharmacist-Run Anabolic Osteoporosis Clinic, *Journal of the Endocrine Society*. Volume 6, Issue Supplement 1, November-December 2022, Pages A196-197.

Belling M, **Cumpston A**. Infection in an immunocompromised patient. In: Schwinghammer TL et al, eds. *Pharmacotherapy Casebook: A Patient-Focused Approach*. 12th ed. New York: McGraw-Hill, 2023. (Accepted).

Bondi DS, Acquisto NM, Buckley MS, Erdman G, Kerns ST, Shogbon Nwaesei A, **Szymanski TW**, Walkerly A, Yau AS, **Martello JL**. Rewards, recognition, and advancement for clinical pharmacists. *J Am Coll Clin Pharm* 2023. [In Press]

Brazeale HS, Curtis CW, Gerberich AJ, Linafelter AE, **Petersen AE**, Tabulov CE. Tips for writing a letter of recommendation as a new practitioner pharmacist. Publication in *AJHP*; Oct 2022.

Chobufo MD, Regner SR, Zeb I, **Lacoste JL**, Virani SS, Balla S. Burden and predictors of statin use in primary and secondary prevention of atherosclerotic vascular disease in the US: from the National Health and Nutrition Examination Survey 2017–2020. *European Journal of Preventive Cardiology* (2022) 29, 1830–1838.

**Hoff A, Burwell S**. Optimize formulary additions for safety. *Pharmacy Purchasing and Products Magazine*. 2022 Nov 15.

**Kabulski GM**, Boughner T, **Szymanski TW**, Sokos G, **Kido K**. Evaluating guideline directed medical therapy in patients with heart failure with reduced ejection fraction post-coronary artery bypass grafting. *J Pharm Pract* 2022. doi: 10.1177/08971900221118172

**Kido K, Kabulski GM, Szymanski TW**, Shiga T, Shimizu M, Hashiguchi M. Meta-analysis comparing bivalirudin versus unfractionated heparin in adult patients with extracorporeal membrane oxygenation. *J Pharm Pract* 2022. doi: 10.1177/08971900221143406

**Kido K, Slain D**, Kamal KM, Lee JC. Adapting the layered learning model to a virtual international exchange program. *Curr Pharm Teach Learn*. 2022;14:1500-1505.

**Kido K, Colvin BM, Szymanski TW**, Guglin M. Sacubitril/valsartan off-label uses for heart failure. *J Card Fail* 2022. doi: 10.1016/j.cardfail.2022.03.348

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**Kido K, Colvin BM, Broschious R**, Bongiorno S, Sokos G, Kamal KM. Economic impact of ambulatory clinical pharmacists in an advanced heart failure clinic. *Ann Pharmacother*. 2022 Feb 15. [Epub ahead of print]

**Kovacic NL**, Wampole CR, Gagnon DJ. Agitation and Sedation in the Intensive Care Unit. *Critical Care Pharmacotherapy*, second edition: Agitation. The American College of Clinical Pharmacy. 2022.

**Lacoste JL, Szymanski TW**, Avalon JC, **Kabulski GM**, Kohli U, Marrouche N, Singla A, Balla S, Jahangir A. Atrial fibrillation management: a comprehensive review with a focus on pharmacotherapy, rate, and rhythm control strategies. *Am J Cardiovasc Drugs* 2022. doi: 10.1007/s40256-022-00529-6

Marciano KA, **Seago K**, Dillaman M, Ross KG, Veltri L, **Cumpston A**. Evaluation of the pharmacokinetic interaction between letermovir and tacrolimus in allogeneic hematopoietic cell transplantation recipients. *Transplantation and Cellular Therapy*. 2022;28(7):371.e1-371.e4.

**Martin AM**, Tribuzi A, Schieber ML, Reiter PD. Adherence to a pediatric guideline for continuous infusion propofol in mechanically ventilated critically ill patients: opportunities for change and improvement. *J Pediatr Pharmacol Ther*. 2022;27(3):263-269.

**Martin AM**, MacBrayne CE, Heiden A, Child J, Curtis DJ, Haynes AS. Isavuconazonium sulfate dosing in pediatric patients using serum therapeutic drug monitoring at a single center: a case series. *J Hematol Oncol Pharm*. 2022;12(5):271-277.

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Morse AL, **Cumpston A**. Chronic myeloid leukemia. In: Schwinghammer TL et al, eds. *Pharmacotherapy Casebook: A Patient-Focused Approach*. 12th ed. New York: McGraw-Hill, 2023. (Accepted).

**O’Kane C, Piechowski K, Hoff A**, Fang W, Mallow Z, Marshalek P, **Burwell S**. Evaluation of clinical outcomes of intravenous drug use-related infective endocarditis in buprenorphine-treated patients. *J Pharm Pharmaceutical Sci*. 2022 Aug 29; 25.

# PUBLICATIONS

**O'Neil DP**, Henderson JM, Glifford HR, **Karpinski TA**, Kaminsky L. Building a Pharmacy Technician Structure for the Future: A Lesson Learned from a Multihospital Academic Health-System. American Journal of Health-System Pharmacy.

**Petersen AE**, Zeeman JM, Vest MH, Schenkat DH, Colmenares EW. Development of a system-wide pharmacy operational weighted workload model at a large academic health system. Publication in AJHP; Mar 2022.

**Parmiter C**, **Cecere D**, **Czyzewski S**, **Gibson M**. Assessment of an In-Sourced Patient Assistance Program at a Health System in West Virginia. Hospital Pharmacy. Dec 2022; 57(6).

**Rockhold M**, **Colvin B**, **Kabulski G**. Vutrisiran: A New, Long-Acting siRNA Agent for ATTRv Amyloidosis. ACCP Cardiology PRN Newsletter. 2022 October 17.

**Slain D**, **Howard C**, Garret C. An antimicrobial treatment assessment of *Serratia marcescens* bacteremia and endocarditis. Frontiers in Antibiotics (2022). <https://doi.org/10.3389/frabi.2022.942721>

**Spigelmyer A**, **Howard C**, **Rybakov I**, **Burwell S**, **Slain D**. Impact of clinical pharmacist discharge prescription review on the appropriateness of antibiotic therapy: a retrospective comparison. Int J Clin Pharm (2022). <https://doi.org/10.1007/s11096-022-01503-7>

**Stewart A**, Arwood N. Specialty Rotation Precepting Pearls. Children's Oncology Group Pharmacy Newsletter. 2022;2(3): 1-3.

**Trickett HB**, Forman A. Workflow Optimization: Enhancing Quality of Care for Patients with Sepsis. American Journal of Medical Quality. May 2022.

**Troyer BS**, **Shigle AJ**, **Kovacic Scherrer N**. Duration of Gram-negative antibiotic therapy in patients with pneumonia prior to and after the implementation of MRSA nasal swabs, an antimicrobial stewardship tool. J Antimicrob Chemother. 2022; DOI:<https://doi.org/10.1093/jac/dkac198>.

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Vest TA, Gazda NP, **O'Neil DP**, Eckel SF. Practice-enhancing publications about the medication-use process in 2020. American Journal of Health-System Pharmacy. 8 Feb 2022;79(4):244-267.

**Walker D, Braham M, Gutta B, Konietzko M**, Short E. Building the Case for a Pharmacy Residency Program Vizient Toolkit for Pharmacy Leaders posted on Vizient Pharmacy Network Community. 2022 February.

Welty TE, Hilaire ML, Frantzen LM, **Grimm DL**, et al. Guidelines for therapeutic interchange—2022. J Am Coll Clin Pharm. 2022; 5( 4): 476- 483.

**Wietholter JP, Whetsel TR**. Chapter 16: Chronic Obstructive Pulmonary Disease. In: Pharmacotherapy Principles & Practice. 6th ed. New York: McGraw-Hill, 2022: 311-323.

**Wietholter JP**. Chapter 66: Glaucoma. In: Pharmacotherapy Principles & Practice Study Guide: A Case-Based Care Plan Approach, 6th ed. New York: McGraw-Hill, 2022. (Accepted; In Preparation)

**Yingling SK**, Gonzalez RM, Dillaman M, **Seago K**, Wen S, Ross KG, Veltri L, **Cumpston A**. Impact of body mass index (BMI) on the efficacy of plerixafor for hematopoietic progenitor cell (HPC) mobilization. Bone Marrow Transplantation. 2022;57(7):1194-1197

**Zarfoss EZ, Garavaglia J**, Hayanga JW, **Kabulski G**. Comparison of Standard-Dose Versus High-Dose Dexmedetomidine in Extracorporeal Membrane Oxygenation. Ann Pharmacother . 2022 Jun 9.

Zeeman JM, **Petersen AE**, Colmenares EW, Schenkat DH, Vest MH. Identifying health-system pharmacy operational process categories and corresponding tasks across a diverse health system using a modified Delphi process. Publication in AJHP; Mar 2022.

# PRESENTATIONS

**Bok R, McMahan E, Kinney E.** Assessing Consistency Between Utilization of Short-Term DAPT for CRAO/BRAO and Guideline Recommendations. Poster presentation at Vizient University Health System Consortium Pharmacy Network Meeting. Las Vegas, Nevada. December 2022.

**Braham M, Likar E, Quedado J.** Evaluation of postoperative use of opioids in patients undergoing elective colectomy. Poster presentation at Vizient University Health System Consortium Pharmacy Network Meeting. Las Vegas, Nevada. December 2022.

**Braham M, Fang W, Freeman L.** Clinical risk score for prediction of invasive candidiasis to guide empiric echinocandin therapy. Poster session presented at IDWeek. Virtual Presentation. October 2022.

**Braham M.** 340B and Me. WVU Medicine Health System Continuing Education Series. October 2022.

**Broscious R.** Heart Failure Management CE: Part 1. WVU Medicine Health System Continuing Education Series. June 2022.

**Butcher M, Martin A.** Whoa Baby! Time Sensitive Interventions for Newborns. WVU Medicine Health System Continuing Education Series. August 2022.

**Butcher M.** Food for Thought: Providing Effective Feedback. WVU Medicine Pharmacy Preceptor Development Program. June 2022.

**Cumpston M.** Medication Safety Series: Review of West Virginia University Health System Medication Safety Policies. WVU Medicine Health System Continuing Education Series. April 2022.

**Czyzewski S.** Developing a Medication Assistance Program: Difficulties Faced & Expansion to System Facilities. Healthcare Advocate Summit. September 2022.

**Embrey S.** Here We Go! A Look Into the Pipeline. Presentation at the 2022 WV American College of Cardiology Conference. October 2022.

**Garavaglia L.** Making DEI "Real". Presentation at the ASHP Midyear Meeting Manager Clinical Pearl - December 2022

# PRESENTATIONS

Green A, **Gutta B.** Innovative Pharmacy Technician Practice Models during the COVID-19 Pandemic. ASHP ACPE Webinar. March 2022.

**Grimm D, Trickett H.** Optimizing Medication Use within an Academic Health-System. Presentation at the Spring Premier Pharmacy Executive Conference. April 2022.

**Harvey M, Stewart J.** Patient Satisfaction of Delivery Methods and Eco-Friendly Cold Chain Packaging for Specia Medication Deliveries at One Health System Specialty Pharmacy. ASHP Midyear Clinical Meeting. Las Vegas, NV. December 2022.

**Hammonds W, Street A.** Implementation of a pharmacy-driven antithrombotic stewardship program at a rural academic medical center. ASHP Midyear Clinical Meeting. Las Vegas, NV. December 2022.

**Hill J.** Early-Stage Breast Cancer Survivorship. Presentation at the 2022 WVU Cancer Institute Fall Cancer Conference. Nov 2022.

Hoefing E, Kumor L, Kandah H, Nugent R, Rightmier E, Shah, Rushabh, **Stewart J.** Improving Health-System Specialty Pharmacy One Audit at a Time. ASHP Midyear Clinical Meeting. Las Vegas, NV. December 2022.

**Howard C.** COVID-19 Treatment Updates: Where are we now? Presentation at the OMCPA November Meeting Nov 2022.

**Howard C.** COVID-19 Season 3: Updates in COVID-19 Treatments and Treatment Guidelines. WVU SoP Flatwoods Spring Seminar. June 2022.

**Howard C.** Criteria for Use of Monoclonal Antibody Therapy and Oral Antivirals. WVCSTI Project ECHO. Jan 2022.

**Hudson S.** Evaluation of dronedarone use in hospitalized patients with atrial fibrillation. Poster presentation at Vizient University Health System Consortium Pharmacy Network Meeting. Las Vegas, Nevada. December 2022.

**Jasko J.** Medication Safety Series: Become the CEO of HRO's. WVU Medicine Health System Continuing Education Series. July 2022.

# PRESENTATIONS

**Jasko J.** Evaluating Discontinuation Events of SGLT2 Inhibitors. Presented at ASHP Midyear Clinical Meeting; December 2022; Las Vegas NV.

**Jones T, Jaynes M.** Evaluation of health outcomes within patients utilizing compliance packaging. Poster session presented at: ASHP Midyear 2022 Clinical Meeting & Exhibition; 2022, December 4-8; Las Vegas, NV.

**Jones M.** Dosing of Clonidine as a Transition from Dexmedetomidine in Pediatric Patients. Poster presentation at Vizient University Health System Consortium Pharmacy Network Meeting. Las Vegas, Nevada. December 2022.

**Kabulski G.** Hiding in Plain Sight: Infection and Antimicrobials in Extracorporeal Support. Presented at WVU Medicine CVICU Grand Rounds. March 2022.

Kielkowski B, **Yingling S, Heise C, Walker D.** Retrospective Evaluation of Trastuzumab and Related Biosimilar Usage for Advanced Preparation to Maximize Cost Savings in an Outpatient Cancer Center. Poster session presented at: ASHP Midyear 2022 Clinical Meeting & Exhibition; 2023, December 4-8; Las Vegas, NV.

**Kinney A.** The ABCs of Code Blue MEDs. Live CE presentation with PharmCon. December 2022.

**Kiss Z, Stewart A, Whiteman M.** Evaluation of Vancomycin Utilization in Febrile Neutropenia at WVU Medicine Children's. Poster presentation at Vizient University Health System Consortium Pharmacy Network Meeting. Las Vegas, Nevada. December 2022.

**Kovacic-Scherrer NL.** Closing the gap: A review of Diabetic Ketoacidosis Treatment. WVU Medicine Health System Continuing Education Series. December 2022.

**Kovacic Scherrer NL, Barreto E, Cook C, Sakhuja A.** Impact of an electronic acute kidney injury alert on nephrotoxin use in a cardiac surgery intensive care unit. Platform presentation at the Society of Critical Care Medicine's Critical Care Congress. April 2022.

# PRESENTATIONS

**Malcolm S, Stewart A, Tomboc P.** Evaluating the effect of acetazolamide on urinary alkalization in pediatric patients receiving high-dose methotrexate. Hematology Oncology Pharmacy Association Annual Meeting, Boston, MA. April 2022.

**Manson S.** Evaluation of Factors Impacting the Collection of Sustained Virologic Response (SVR) Tests in Patients Treated for Hepatitis C at a Health-System Specialty Pharmacy. Poster presentation at Vizient University Health System Consortium Pharmacy Network Meeting. Las Vegas, Nevada. December 2022.

**Manson S.** Clinical and Staffing Resources for New Pharmacists. Presentation and discussion for the ASHP Community Pharmacy Resident Network. September 2022.

**Manson S.** Hepatitis C Treatment: Drug Interactions Review. Presentation for health care providers at a West Virginia Project ECHO Hepatitis C/HIV meeting. August 2022.

**Moser M, Wietholter JP, Broschious R.** Evaluation of appropriate dosing upon initiation of sacubitril-valsartan in an acute care setting. 2022 ASHP Midyear Clinical Meeting, Poster #7-281. Las Vegas, NV: December 6th, 2022.

**Oblizajek NJ, Bredhold B, Hoff A.** Evaluation of methadone for acute withdrawal in patients with opioid use disorder. Poster presentation at Vizient University Health System Consortium Pharmacy Network Meeting. Las Vegas, Nevada. December 2022.

**Painter MA.** Rates of adherence to standards of care diabetes medications based on comorbidities in an endocrinology clinic. Poster presentation at Vizient University Health System Consortium Pharmacy Network Meeting. Las Vegas, Nevada. December 2022.

**Painter MA.** Staying Sharp on Shots. WVU Medicine Health System Continuing Education Series. December 2022.

**Pham K, Hammonds W, Street A.** Prevalence of medication list discrepancies in medication histories with one versus two sources. Poster presentation at Vizient University Health System Consortium Pharmacy Network Meeting. Las Vegas, Nevada. December 2022.

# PRESENTATIONS

**Platt E, Sibbesen J.** The A, B, Cs & VWDs of Bleeding Disorders: Hemophilia & Von Willebrand Disease. WVU Medicine Health System Continuing Education Series. December 2022.

**Quinn H.** Developments in Diabetes Treatment. WVU Medicine Diabetes Symposium. Morgantown, WV. November 2022.

**Rockhold M, Kunkel L, Lacoste J, Szymanski T.** Evaluation of VerifyNow (PRU) Assay in Patients Undergoing Cardiac Surgery. Poster presentation at Vizient University Health System Consortium Pharmacy Network Meeting. Las Vegas, Nevada. December 2022.

**Rorabaugh K.** Recovering from Burnout. WVU Medicine Health System Continuing Education Series. May 2022.

**Shahan J.** Error Prone to Error Prevention. 2022 Medication Safety Enterprise Series. September 2022.

**Smith A, Seago K, Yingling S, Dillaman M, Cumpston A.** Evaluation of screening and preventive care after implementation of a pharmacist-driven allogeneic hematopoietic cell transplant survivorship clinic. Poster presentation at Vizient University Health System Consortium Pharmacy Network Meeting. Las Vegas, Nevada. December 2022.

**Stewart A, Anderson M.** Evaluation of co-prescribing psychiatric medications in pediatric oncology patients. Hematology Oncology Pharmacy Association Annual Meeting, Boston, MA. April 2022.

**Stewart A, Gunzenhauser S.** Assessment of childhood vaccination rates in pediatric oncology patients. Hematology Oncology Pharmacy Association Annual Meeting, Boston, MA. April 2022.

**Street A.** How to Recruit Pharmacy Team Members: Where to Look and When to Swipe Right. Presentation at ACCP Global Conference on Clinical Pharmacy. October 2022.

# PRESENTATIONS

**Spigelmyer A.** C. the Difference: Evaluating the 2021 C. difficile Treatment Guideline Updates. CE Presentation at the WV Pharmacist Association Spring Conference. April 2022.

**Sokos L.** Infusion Site of Care Considerations - Health System Specialty Pharmacy Workshop. Presented at the 2022 National Association of Specialty Pharmacy (NASP) Annual Meeting & Expo. Orlando, FL. September 2022.

**Sokos L.** From All Angles: Unpacking Specialty Infusion - Expert Panel Reaction. Presented at the 2022 ASHP Summer Meetings and Exhibition. Phoenix, AZ. June 2022

**Trickett H, Street A.** Leveraging Cost-Savings for Clinical Practice Systemization and Service Line Growth. Presentation at the Vizient Pharmacy Network Meeting. December 2022.

**Trickett H, Street A.** Integration of System-Wide Clinical Practice Guidelines Using Frontline Clinical Pharmacists. Presentation at the ASHP Midyear Clinical Meeting & Exhibition. December 2022.

**Walker D,** Hatwig C, Kent S, Rough S, Tiry K. Trends and Opportunities in Health System Pharmacy: Implications for the School of Pharmacy UW School of Pharmacy – Board of Visitors. Madison, WI. October, 2022.

**Walker D.** Impact of Biosimilars on Healthcare Costs. Planned and helped moderate an expert panel as part of the Advanced Topics for Oncology Pharmacy Professionals Summit. San Diego, CA. July 2022.

**Ward A.** Updates in Outpatient COVID-19 Treatments. Presentation at the 2022 Southern Appalachian Fall Seminar. September 2022.

**Ward A, Howard C, Spigelmyer A, Slain D.** Evaluation of Antibiotic Regimens Used to Treat Uncomplicated Gram-negative Bacteremia Before and After Implementation of Antimicrobial Stewardship Guidance and Rapid Diagnostic Technology. Poster presentation at 2022 ACCP Global Conference on Clinic Pharmacy. October 2022.

# PRESENTATIONS

**Wietholter JP**, Maynor LM, Clutter J. Impact of Personality Type on Pharmacotherapeutics Focused Systems-Based Therapy Grades in a Doctor of Pharmacy Curriculum. 2022 ACCP Global Conference on Clinical Pharmacy, Poster #Mon AM-77. San Francisco, CA: October 17th, 2022.

**Wietholter JP, Kinney EM**, Maynor LM. Impact of Rounding Clinical Pharmacists on Inpatient Blood Glucose and Blood Pressure Control. 2022 ACCP Global Conference on Clinical Pharmacy, Poster #Mon AM-76. San Francisco, CA: October 17th, 2022. Meeting abstract to be published in J Am Coll Clin Pharm.

**Wietholter JP**. Internal Medicine Clinical Pharmacy Practice. Presentation at the 2022 ACCP Career Roundtable Session at the 2022 ACCP Annual Meeting. October 2022.

**Wietholter JP**. Selected Topics in Neurologic Disorders. CE Presentation for ASHP's Pharmacotherapy Specialty Core Therapeutic Module Package for Recertification. November 2022.

**Whiteman M**, Gupta S. Antimicrobial Stewardship at WVU Medicine Children's. Presentation at WVU Department of Pediatrics Grand Rounds. December 2022.

Wyland J, **Cummings J, Cecere D**. Reimbursement and Operations Pearls for COVID-19 EUA Treatments and Vaccines. Poster presentation at the ASHP Midyear Clinical Meeting. Las Vegas, Nevada. December 2022.

**Zarfoss E**. Surviving the Change: A Review of the 2021 Surviving Sepsis Campaign Guideline Updates. WVPA Spring Conference. Apr 2022.

Zimmerman J, Shultz C, **Cumpston A**, Craig M. Correlating next generation sequencing data with treatment outcomes in patients with acute myeloid leukemia. Oral presentation at West Virginia Chapter American College of Physicians Annual Meeting, Roanoke, WV. November 2022. (Awarded oral competition winner.)

# AWARDS

**Aaron Stewart, PharmD, CTTS**

- HOPA Basic Science and Clinical Research Literature Award

**Christina Deussenberry, PharmD, BCPS**

- Continued Commitment to Safety Award

**Gretchen Horning, PharmD, BCPPS**

- Continued Commitment to Safety Award

**Larry Calemine, BSPharm**

- BRAVO! Inspiration Award Winner

**Lisa Pitrolo, PharmD, BCPS, BCIDP**

- WVU School of Pharmacy Outstanding Alumna of the Year

**Jon P. Wietholter, PharmD, BCPS, FCCP**

- 2022 WVU School of Pharmacy P3 Teacher of the Year
- Fulbright Specialist Roster for International Clinical Pharmacy and Education  
Developed by the U.S. Department of State's Bureau of Educational and Cultural Affairs (ECA) Selected Member
- American College of Clinical Pharmacy (ACCP) Professional Leadership Development (APLD) Program Inaugural Class Participant (1 of 20)

**Karen Dusci-Famoso, BSPharm, MBA**

- Pharmacist of the Year, Ohio-Marshall County Pharmacists Association (OMCPA)

**Nicholas Sandoval, PharmD, BCPS**

- WVU Medicine Longitudinal Track Preceptor of the Year

**Nicole Kovacic-Scherrer, PharmD, BCCCP**

- Continued Commitment to Safety Award

**Sarah Woodford, CPhT**

- Continued Commitment to Safety Award

**Spencer K. Yingling, PharmD, BCOP**

- HOPA Practice Management Travel Grant Recipient

**WVU Medicine Medication History Team**

- BRAVO! Team Award for Building a Better Workplace

**WVU Medicine Medication Safety Team**

- BRAVO! Performance Improvement Team Award for Exemplary Outcomes

# COMMITTEE APPOINTMENTS

## **Vizient Pharmacy Network Community**

- Ashley Street - Pharmacy Practice Advancement Committee
- Autumn Petersen - Cancer Care Committee
- Bradley Gutta - Programming Innovation & Engagement Committee
- Dmitry Walker - Professional Development & Workforce Committee Vice Chair
- Hannah Trickett - Pharmacy Programming, Innovation & Engagement Committee
- Khoa Pham - Professional Development & Workforce Committee
- Maria Cumpston - Quality, Safety, and Compliance Committee
- MJ Braham - Professional Development & Workforce Committee
- Micheal Gallagher - Cancer Care Committee
- Mike Konietzko - Professional Development & Workforce Committee
- Nathan Oblizajek - Pharmacy Practice Advancement Committee
- Samantha Manson - Pharmacy Residency Standing Committee

## **American Society of Health System Pharmacists (ASHP)**

- Ashley Street - Section Advisory Group for Strategy & Industry Disrupters Co-Chair
- Autumn Petersen - Section Advisory Group for New and Emerging Leaders
- Ben Bredhold - Section Advisory Group for Post-Graduate Education and Learning Experiences
- Bradley Gutta - Section Advisory Group for Frontline Leaders
- Dan O'Neil - Section Advisory Group on Strategy & Industry Disrupters
- Dave Cecere - Section Advisory Group of Pharmacy Informatics and Technology
- Derek Grimm - Section Advisory Group for Business Development and System Integration
- Dmitry Walker - Section Advisory Group for New and Emerging Leaders
- Hannah Trickett - Section Advisory Group for Medication Management
- Jessica Stewart - Section of Specialty Pharmacy Accreditation and Compliance
- Jon Jasko - Section Advisory Group for Pharmacy Informatics and Technology
- Khoa Pham - Pharmacy Administration and Leadership Residents Collaborative
- MJ Braham - Section Advisory Group for New and Emerging Leaders
- Nathan Oblizajek - Pharmacy Administration and Leadership Residents Collaborative
- Rachel Mitchell - Section of Specialty Pharmacy Outcomes and Value
- Samantha Manson - Section of Community Pharmacy Practitioners
- Tom Szymanski - Council on Therapeutics

## **American College of Clinical Pharmacy (ACCP)**

- Abigail Hoff - Internal Medicine Training and Travel Awards Chair
- Ashley Street - Clinical Administration PRN Student & Resident Committee
- Eric Likar - Perioperative Care PRN Treasurer/Secretary
- Jay Martello - Clinical Pharmacy Services Committee Chair
- Jon Wietholter - Adult Medicine PRN Chair
- Matthew Rockhold - Cardiology PRN Communications and Social Media Committee
- Tom Szymanski - Certification Affairs Committee
- Tom Szymanski - Cardiology PRN Nominations Committee

# COMMITTEE APPOINTMENTS

## **American Pharmacists Association (APhA)**

- Autumn Petersen - Communications Standing Committee
- Matthew Rockhold - Residency Communications Standing Committee
- Samantha Manson - Community-Based Resident Network Planning Committee

## **Society of Critical Care Medicine (SCCM)**

- Nicole Kovacic-Scherrer - Programming Committee
- Nicole Kovacic-Scherrer - Practice Advancement Committee

## **Center for International Blood and Marrow Transplant Research (CIBMTR)**

- Aaron Cumpston - Lymphoma, Acute Leukemia, Plasma Cell Disorders, Regimen-Related Toxicity and Supportive Care, Graft-Versus-Host-Disease, Late Effects and Quality of Life Committees

## **Premier**

- Dave Cecere - National Pharmacy Committee

## **WVU School of Pharmacy**

- Jon Wietholter - Curriculum Committee
- Jon Wietholter - DEI Committee
- Jon Wietholter - Schoolwide Education Committee

## **Eastern Cooperative Oncology Group (ECOG)**

- Aaron Cumpston - Pharmacy Committee
- Aaron Cumpston - Leukemia Committee

## **Kansas Pharmacists Association**

- Matthew Rockhold - Governments Affairs Committee

## **Children's Oncology Group**

- Aaron Stewart - Pharmacy Member Education Committee

## **Hematology/Oncology Pharmacy Association (HOPA)**

- Spencer K. Yingling - Publications Committee
- Jordan Hill - Patient Outreach Committee Chair

## **West Virginia Society of Health System Pharmacists (WVSHP)**

- Catessa Howard - Treasurer
- Sarah Embry - President





