Froedtert & Medical College of Wisconsin

PGY1/2 Health-System Pharmacy Administration and Leadership Pharmacy Residency Manual

2023 - 2024

Table of Contents

Welcome!

Congratulations on starting your residency at Froedtert Hospital!

We are delighted to welcome you as the newest members of our Froedtert pharmacy team. Your pharmacy residency is an exciting and unique time. It will be a year devoted to learning and refining clinical skills. Our team is dedicated to providing a variety of high-quality learning experiences during your residency, empowering you to advance your practice to the highest level. Your residency year should be customized to your specific interests to progress your strengths and enhance areas of relative weaknesses.

This will be a year of great professional growth. The pharmacist you are today will be vastly different from the pharmacist that you will be on graduation day. This year will not be easy, but the more you invest in your growth and development the greater your personal and professional fulfillment will be upon completion. At Froedtert, it is our goal to partner with you to guide you on your journey to become a highly trained and competent pharmacist.

Again, congratulations and welcome to the Froedtert Family!

Best regards,

Justin Konkol, PharmD, MHA BCPS, DPLA
Director of Pharmacy – Froedtert Hospital

This manual has been developed for the Pharmacy Residency Program at Froedtert Hospital to provide information on the policies, procedures, benefits, and other elements that may directly relate to the completion of our program. Questions regarding the manual may be addressed with the Residency Program Directors or the Residency Steering Committee. There may be changes to the policies and procedures at any time when deemed necessary. You will be informed of those changes accordingly.

About Froedtert Health

Froedtert & the Medical College of Wisconsin

The Froedtert & the Medical College of Wisconsin (MCW) regional health network is a partnership between Froedtert Health and the Medical College of Wisconsin supporting a shared mission of patient care, innovation, medical research and education. Our health network operates eastern Wisconsin's only academic medical center, Milwaukee's only adult Level I Trauma Center at Froedtert Hospital, and an internationally recognized training and research center engaged in thousands of clinical trials and studies. The Froedtert & MCW health network, which includes eight hospitals, nearly 2,000 physicians and more than 50 health centers and clinics, draws patients from throughout the Midwest and the nation. In our most recent fiscal year, outpatient visits were nearly 1.5 million, inpatient admissions to our hospitals were 55,085 and visits to our network physicians totaled 1.1 million.

Froedtert Hospital

Froedtert Hospital, is a 702-bed academic medical center and a leading referral resource for advanced medical care. Froedtert Hospital also operates the region's only adult Level I Trauma Center. The Primary adult teaching affiliate of the Medical College of Wisconsin, Froedtert Hospital is a major training facility for more than 1,000 medical, nursing, and health technical students annually. It is also a respected research facility with more than 2,000 research studies, including clinical trials, every year.

Froedtert Menomonee Falls Hospital

Froedtert Menomonee Falls Hospital, founded in 1964 by the citizens of Menomonee Falls and surrounding communities, is a full-service hospital that specializes in cancer care, heart and vascular care, orthopaedics, women's health and advanced surgical procedures. Since 2017, the hospital has been home to inpatient training for Medical College of Wisconsin residents part of the Froedtert Menomonee Falls Hospital Family Medicine Residency Program. A three-year residency, the program includes 18 residents with six residents per class.

Froedtert Health and the Medical College of Wisconsin have shared mission, vision, and values.

- Mission: We advance the health of the diverse communities we serve through exceptional care enhanced by innovation and discovery
- Vision Statement: We will be the trusted leader by transforming health care and connecting communities to the best of academic medicine
- Values:
    - **Value People.** We treat others with respect, knowing that their feelings, thoughts, and experiences are as important as our own.
    - **Work Together.** We collaborate across the enterprise to put forward our best.
    - **Act Now.** We take action to solve problems and move forward quickly.
    - **Own It.** We take full accountability for our decisions, actions, and results.
    - **Break Through.** We change the future of care with creativity and innovation.
    - **Deliver Excellence.** We set the standard that others aspire to by always asking "What more can we do?"

Pharmacy Department
- Mission:
    - The Pharmacy Department at Froedtert & MCW provides:
        - High-quality, cost-effective, comprehensive, patient-centered care in an atmosphere of communication and shared respect
        - Life-long learning through the education of patients, students, residents, staff and other health care professionals
        - Research and discovery designed to enhance the quality and safety of medication use
- Vision Statement:
    - To improve the health of the community by achieving high-quality patient outcomes through appropriate use of medication therapy

Vizient Quality and Accountability Rankings

Vizient, an alliance of academic medical centers in the United States, provides rankings for academic medical center and affiliated hospitals based on quality, safety and service. In 2021, our collective hospitals ranked in the 82nd percentile as a system placing our health network among the best in the nation. Froedtert Hospital ranked 16 of 101 in the academic medical center category. Froedtert Menomonee Falls Hospital ranked 53 of 226 in the community hospital category. Vizient offers many resources to member hospitals as well as leadership and networking opportunities for pharmacists and pharmacy residents.

 @FMCWPharmRes

 @Froedtert

 @froedtert.mcw

Departmental Information

Clinical Pharmacist Scope of Services

Safe and Effective Medication Use
- Pharmacists will take clinical action and make recommendations based on evidence to ensure safe and effective use of medications to meet therapeutic goals

Evaluation of Patient Profile and Medication Orders
- A pharmacist reviews the appropriateness of medication orders for medications to be dispensed in the hospital
- Each order will be evaluated for appropriateness prior to the first dose being dispensed (except in emergency situations or in those instances where a medication is administered under the direct supervision of a physician)
- Order verification in timely manner
    - For priority medications, verified within 15 minutes of receiving order
    - For non-urgent medications, verified within 60 minutes of receiving order
- Patient profile review upon order verification and continuously based upon team and patient acuity
    - Known drug allergies
    - Review of medication list for:
        - Drug-drug interactions
        - Drug-disease interactions
        - Duplicate or missing medications
        - Appropriate lab orders
        - Cost effective therapy
    - Assessment of therapeutic appropriateness
        - Indication
        - Route and method of administration
        - Anticipated toxicity or adverse effects
- Assessment of renal dosing upon order verification and upon profile review
- Therapeutic drug monitoring and ordering of associated laboratory procedures as indicated
- Daily antibiotic stewardship efforts to require indication and duration of therapy for each antibiotic ordered and to enforce current antimicrobial formulary restrictions and practice guidelines
- Ensure appropriate compliance for Risk Evaluation and Mitigation Strategy medications
- Support distribution needs to patient care area by coordinating with central pharmacy staff
- Direct pharmacy technicians and interns in their daily work through observing their performance, giving timely feedback, answering questions, providing guidance, and checking the accuracy of their work

Pharmacist Medication Dosing Services
- Pharmacists are responsible for the following pharmacy consult services:
    - Vancomycin and aminoglycosides
    - Antifungal medications
    - Direct thrombin inhibitors
    - Warfarin
    - Total parenteral nutrition

Medication Histories and Reconciliation
- Pharmacists are accountable for the following:
    - Obtain medication history within 24 hours of patient admission
    - Complete admission medication reconciliation within 24 hours of patient admission
    - Complete transfer medication reconciliation with each level of service transfer and with transfer out of the operating room

Discharge Reconciliation and Coordination
- Pharmacists are held accountable for the following:
    - Complete discharge medication reconciliation prior to patient discharge
    - Complete discharge medication counseling to patient prior to discharge
    - Facilitate access to outpatient prescriptions prior to discharge as appropriate

Drug Information and Patient Education
- A primary focus for pharmacists on a daily basis includes:
    - Provide consultations in a timely and accurate manner to support other health professionals regarding medication therapy selection and management
    - Provide disease state and medication specific education during hospitalization

Multidisciplinary Team Involvement
- In order to better integrate into the medical team, pharmacists:
    - Attend daily care coordination rounds to facilitate discharge medication needs
    - Support and augment patient care rounds
    - Document notes and care plans in the electronic medical record as appropriate

Communication Between Pharmacists
- To ensure proper care of patients through shift changes and transfers, pharmacists are to:
    - Proactively identify hand-off needs prior to the end of shifts and coordinate key hand-offs in the sign-out notes
    - Contact receiving pharmacy team members when appropriate regarding patient transfers from unit to unit to ensure continuity of care

Precepting and Teaching
- As part of an academic medical center, pharmacist duties include the following:
    - Daily teaching and incorporation of evidence-based learning into resident and student rotations
    - Evaluation and feedback for residents and students on a regular basis
    - Timely coordination of rotation activities
    - Effective use of residents, students, and interns as pharmacist extenders

Formulary Management
- Pharmacists assess the following during the course of their daily duties:
    - Approved use and indication of formulary and restricted agents
    - Compliance and support of Froedtert Hospital evidence-based guidelines and medication use policies
    - Approved therapeutic interchanges for medications at order verification
    - Assessment and prospective planning of switching patients from IV to PO regimens when able
    - Completion of non-formulary request process
    - Supply documentation to health care providers regarding medication use and patient outcomes from medication therapy
    - Participate and provide input in the development and application of policies, procedures, clinical care plans, guidelines, order sets, interdisciplinary standards of care, and protocols involving medication use
    - Verify the validity of off-label medication use with primary, secondary, and tertiary medication references

Emergency Management
- Pharmacists support and participate in emergency management:
    - ICU or Emergency Department pharmacists respond to all Code 4 emergencies and airway responses
    - Pharmacists will respond to all rapid responses in their assigned area

o Timely response to emergency or disaster management process
o Support rapid sequence intubation and conscious sedation

Quality and Process Improvement
- Pharmacists are actively engaged in quality and process improvement:
    o Represent the Pharmacy Department on committees, task forces, workgroups, and unit-based councils that make decisions concerning medication use or engage in improvement initiatives which support patient-focused care
    o Lead and support medication use related to achieving outcomes around quality measures (national patient safety goals, core measures, value-based purchasing)
    o Active and timely participation and support of multidisciplinary process improvement
    o Actively participate in business process committees throughout the hospital

Medication Distribution and Control

- Pharmacy staff will:
    o Utilize inventory management software to purchase pharmaceuticals
    o Purchase pharmaceuticals at the lowest possible price and maintain an inventory sufficient to meet the needs of our patients
    o Obtain pharmaceuticals from primary wholesalers or direct from the manufacturers
    o Procure, store, and distribute all medications used in the inpatient and ambulatory settings throughout Froedtert Hospital
    o Prepare and label drug formulations, dosage forms, strengths, and packaging not commercially available in accordance with applicable practice standards and regulations.
    o Ensure adequate quality assurance standards for these practices exist
    o Prepare and label compounded sterile products in accordance with practice standards
    o Prepare and label compounded and repackaged non-sterile products in accordance with practice standards
    o Coordinate all drug recall notices and follow procedures to remove recalled products for return to the manufacturer and patient follow up if necessary
    o Routinely monitor inventories of pharmaceuticals to ensure proper storage conditions and remove expired medications from stock
    o Maintain accountability for the distribution of controlled substances and monitor systems to detect diversion
    o Identify processes for safe handling and disposal of hazardous drugs
    o Identify practices to ensure adequate supply of emergency medications needed in the event of an incident resulting in mass casualties

Clinical Cancer Center Services

- Pharmacy staff will:
    o Provide direct comprehensive pharmaceutical care in the Cancer Center
    o Coordinate medication use in the oncology patient population
    o Perform duties as outlined above in Clinical Pharmacist Practice Service and Medication Distribution and Control as applicable
    o Develop, review, and maintain protocols and regimens within the oncology electronic medical record system in collaboration with members of the Department of Hematology/Oncology Pharmacists are responsible for verification of medication orders and perform a dual verification for all chemotherapy orders
    o Prepare and label compounded hazardous products for the entire campus in accordance with practice standards
    o Participate in clinical research and Investigational Drug Services
    o Participate as a member of multi-disciplinary and pharmacy committees in the Clinical Cancer Center
    o Work with inpatient Heme/Onc and retail pharmacy staff to ensure continuity of care

- Pharmacists will:
  - Assist in the education of patients receiving chemotherapy and adjuvant medications

Be responsible for the development, maintenance, and execution of Collaborative Practice Agreements with physicians

Froedtert Health Pharmacy Solutions (FHPS)

FHPS focuses on outpatient pharmacy services including retail, specialty, home infusion, and includes a full-service PBM.

Froedtert Pharmacy Retail Services
- Froedtert Pharmacies provide services Monday through Friday with certain locations offering Saturday hours and the 92nd Street location operating 365 days a year.
- There are 12 retail pharmacy locations and 1 remote dispensing site with plans to expand locations in FY23.
- The three discharge pharmacies located within FMLH, FMFH, and FWBH are accredited by Community Health Accreditation Partner (CHAP), allowing Medicare Part B Billing for approved DME products with additional locations being approved for billing Medicare Part B medications.
- Pharmacy staff working in the Froedtert Pharmacy Retail Stores are responsible for:
  - Prescription data entry, claims adjudication, medication profile review, assessment for clinical appropriateness, identification of interactions or possible adverse events, collaborating with interdisciplinary team members, product dispensing, final product verification, cash handling and point-of-sale transactions, counseling patients on prescription and over-the-counter medications
  - Fulfill duties outlined in the Clinical Pharmacist Practice Service and Medication Distribution and Control as applicable
  - Support patients through challenges in receiving their medications by utilizing available resources, such as patient assistance programs, prior authorizations, Froedtert Rx Savings Plan, approved interchange polices, and programs, such as the Drug Repository Program, Diabetic Smart Start and Discount Programs, etc
  - Per Wisconsin State Law, pharmacists are required to counsel on new prescriptions, when therapy changes are made, when requested by the patient or patient agent or when the pharmacist deems necessary.
  - Additional services available include Medication Therapy Management, Immunizations, Quality Interventions, Enhanced Refill Processing, and the Froedtert Rx App to assist patients in managing their medications

Froedtert Pharmacy Home Delivery & Specialty Services
Home Delivery
- Froedtert Pharmacy offers Home Delivery to seven states for no additional charge to patients.
- Before sending out any medications, the pharmacy staff proactively call patients to confirm their order, preventing missed doses and minimizing unwanted medication from being sent.

Specialty
- The Froedtert Pharmacy Specialty team manages high cost, often chronic medications used by our patients in and outside of our hospitals or clinics and touches a variety of areas within our health system and is URAC accredited. Each month a pharmacist reviews the patient's medical record to ensure their medications are appropriate and accurate.
- The Medication Access Team (MAT) is imbedded with the specialty pharmacy service line and perform the following duties:
  - Acquire prior authorizations for specialty medications infused, administered, or dispensed at any of the Froedtert and the Medical College of Wisconsin campuses, health centers, or Froedtert Pharmacies
  - Obtain medication and/or financial assistance for patients who are uninsured or unable to afford their specialty medication

- o Collaborate with social work, case management and financial counselors to ensure patient access to affordable medications
- o Review of pending Medicare write-offs to correct potential billing errors to maximize reimbursement

Froedtert Pharmacy Home Infusion Services
- Provides safe and effective option for patients to receive therapy via intravenous or other non-oral routes from the comfort of their own home or infusion suite.
- The Home Infusion team includes registered nurses and pharmacists and coverage spans the state of Wisconsin
- Home Infusion is accredited by the Joint Commission for home care services and is a certified Medicare provider for DME

Ambulatory Pharmacy Services

- Ambulatory pharmacists perform duties outlined above in the Clinical Pharmacist Scope of Service
- Pharmacists will:
  - o Provide medication therapy management Monday through Friday in many clinics across the organization
  - o Be responsibility for the development, maintenance and execution of Collaborative Practice Agreements with physicians
  - o Work with multi-disciplinary teams to provide patient care in the clinic setting

Investigational Drug Services

- Pharmacy staff are responsible for the proper procurement storage, labeling, dispensing, record keeping and disposal of investigational drugs for all clinical research at Froedtert Hospital and clinics on the Froedtert Hospital campus
- Investigational drugs will only be dispensed to patients enrolled in an IRB-approved research study and only after informed consent has been completed and verified by a pharmacist
- Pharmacy staff are responsible for proper storage, labeling, dispensing, record keeping and disposal of emergency use medications, medications available as a part of an expanded access program, and compassionate use medications
- Pharmacy staff will work with the clinical team as needed to facilitate authorization through the IRB, correspondence with the supplying company and procurement of drug as needed
- Investigational Drug Service team members are responsible for preparing protocol summaries to facilitate after-hours dispensing of medications for clinical trials where necessary
- Investigational Drug Service team members are routinely available Monday through Friday 7:00 am to 5:30 pm. An Investigational Drug Service team member is available during the evening and weekends if needed for urgent situations

Center for Medication Utilization

- The Center for Medication Utilization (CMU) team promotes and ensures the safe, effective and fiscally responsible use of medications across the Froedtert & MCW health network. The team provides structure and support for the System Pharmacy and Therapeutics Committee and is integral to many critical medication management efforts across the health network, including:
  - o Medication utilization management for medication spending and reimbursement across the health network
  - o Effective medication shortage management to ensure patients and providers have access to the medications they need
  - o Formulary management with support for informatics and policy integration
  - o Vigilance of safe medication use in accordance with regulatory requirements and best practices

- Facilitation and oversight of medication guidelines, protocols, collaborative practice agreements, and clinical pathways
- Development and maintenance of infusion pump libraries, user-friendly drug information resources, and communication tools
- Continual monitoring of medication-use patterns and value-based care initiatives

Pharmacy Informatics/Epic Willow Teams

- The pharmacy informatics and Epic Willow teams manages, implements, and designs automation and technology including the electronic health record, distributive technologies, and ancillary programs across the Froedtert and the Medical College enterprise
  - Primarily responsible for the Epic Willow Inpatient application, Epic Willow Ambulatory application, medication related ancillary applications, medication related reporting and training of pharmacy staff
  - Pharmacy Informatics and Epic Willow team members are routinely available Monday through Friday 8:00 am to 4:00 pm. A Pharmacy Informatics and Epic Willow team member is available during the evening and weekends if needed for urgent situations

Pharmacy Leadership Team

Jordan Dow
VP, Chief Pharmacy Officer

- **Balaji Narayanan** — Manager, Pharmacy Strategic Programs

- **Noah Franz** — Director, Holy Family Memorial & Business Operations

- **Kevin Perhach** — Business Manager
  - Billing and Reimbursement Team

- **Dale Drozd** — Executive Director, FH Pharmacy Solutions
  - Eric Siegenthaler — Director, Home Infusion
    - Brooke Halbach — Manager, Home Infusion Services
    - Chris Sanders — Specialty Pharmacy Manager
    - OPEN — Specialty Pharmacy Manager
      - Vacant — Pharmacy Supervisor
    - Desirae Carter — Pharmacy Supervisor
    - Kate Lewis — Supervisor, Specialty Pharmacy
    - Ben Glennon — Supervisor, Home Delivery Operations
  - Tim Hinkley — Director, Specialty Pharmacy Services
  - Melanie Engels — Director, Outpatient Pharmacy
    - Kimberly Schrank — Retail Pharmacy Manager
    - Val Fredrickson — Retail Pharmacy Manager
    - Jessica Page — Retail Pharmacy Manager
    - OPEN — Retail Pharmacy Manager
    - Vinette Immekus — Pharmacy Supervisor
  - OPEN — Director, VertuRx

- **Garret Newkirk** — Director, Clinical Pharmacy Services
  - Kristin Hanson — Medication Safety Officer
  - Residency Program
  - Anticoagulation Stewardship Program
  - Pain Stewardship Program
  - ID Stewardship Program
  - Center for Medication Utilization Program

- **Jordan Spikane** — Director, Ambulatory Services
  - Nick Olson — Clinical Pharmacy Manager
  - Jennifer Hardman — Clinical Pharmacy Manager

- **Chris Schuenke** — Director, Pharmacy Informatics and Technology
  - Pharmacy Analytics Team
  - Pharmacy IT Team

- **Justin Konkol** — Director, Froedtert Hospital, Oncology Service Line & IDS
  - Kristin Tiry — Operations Pharmacy Manager
  - Kristin Bialkowski — Clinical Pharmacy Manager
  - Sarah Steinert — Operations Pharmacy Manager
    - Brandon Marchan — Pharmacy Supervisor
    - Jodi Evans — Pharmacy Supervisor
  - Mindy Waggoner — Investigational Pharmacy Services Manager
  - Tara Feller — Clinical Pharmacy Manager
  - Tim Miller — Oncology Operations Pharmacy Manager
  - Melissa Rhoades — Oncology Clinical Pharmacy Manager

- **Chris Vogt** — Director, Pharmacy Centralized Services
  - Jake Olson — 340B Pharmacy Manager

- **Kate Schaafsma** — Director, Community Hospital Division
  - Brian Schlitt — Operations Pharmacy Manager
  - Terry Audley — Clinical Pharmacy Manager
  - Laura Avino — FWB Pharmacy Manager
  - Jess Peterleus — Operations Pharmacy Supervisor

Residency Program Leadership

Kristin Hanson, BSPharm, MS
Program Director for Residency Programs

Teri Mattek
Pharmacy Education Coordinator

PGY1 Residency Programs

Froedtert Menomonee Falls Hospital PGY1

- **John Muchka, PharmD, BCPS**
  - Residency Program Director
- **Brian Kasica, PharmD, BCPS**
  - Residency Program Coordinator

Froedtert Hospital (Acute Care Focus) PGY1

- **Anne Zechlinski, PharmD, BCPS**
  - Residency Program Director
- **Amanda Pilo, PharmD, BCPS**
  - Residency Program Coordinator

Froedtert Hospital (Ambulatory Focus) PGY1

- **Mickey Hart, PharmD, BCACP**
  - Residency Program Director
- **Jonathan White, PharmD, BCACP**
  - Residency Program Coordinator

Froedtert Hospital PGY1 Community

- **Melanie Engels, PharmD, MBA**
  - Residency Program Director
- **Kevin Stutt, PharmD**
  - Residency Program Coordinator

Health System Pharmacy Administration and Leadership PGY1 and PGY2

- **Justin Konkol, PharmD, MHA, BCPS, DPLA**
  - Residency Program Director
- **Kristin Tiry, PharmD, MHA and Tara Feller, PharmD, MBA, MPH, BCPS**
  - Residency Program Coordinators

Medication Use Safety and Policy PGY1 and PGY2

- **Kristin Hanson, BSPharm, MS**
  - Residency Program Director

PGY2 Residency Programs

PGY2 Ambulatory Care

- **Amanda Mauerman, PharmD, BCACP**
  - Residency Program Director
- **Jonathan White, PharmD, BCACP**
  - Residency Program Coordinator

PGY2 Critical Care

- **Joel Feih, PharmD, BCCCP**
  - Residency Program Director
- **Kaitlin Cooper-Johnson, PharmD, BCCCP**
  - Residency Program Coordinator

PGY2 Emergency Medicine

- **Cathyyen Dang, PharmD, BCPS**
  - Residency Program Director
- **Jessica Feih, PharmD, BCCCP**
  - Residency Program Coordinator

PGY2 Infectious Diseases

- **Alison Gibble, PharmD, BCIDP**
  - Residency Program Director

PGY2 Informatics

- **Jill Zimmerman, PharmD, MS**
  - Residency Program Director
- **Brian Dekarske, PharmD**
  - Residency Program Coordinator

PGY2 Oncology

- **Melissa Rhoades, PharmD, BCOP**
  - Residency Program Director
- **Felicia Zook, PharmD, BCOP**
  - Residency Program Coordinator

Residency Program Policies and HR Information

Resident Licensure
Last Review: September, 2020
Next Review: September, 2023
Description: keywords, licensure
Policy number: 40310-004
Origination date: January, 2013
Purpose: To define requirements related to licensure for pharmacy residents.

Policy: Consequences of failure to obtain licensure within the expected timeframe will be determined by the Residency Program Director, Residency Coordinator, Director of Pharmacy and a representative from Human Resources.

I.   The pharmacy resident should submit appropriate documentation to the Wisconsin State Board of Pharmacy as soon as possible after learning they have matched with a Froedtert residency program.

II.   The resident must be fully licensed as a pharmacist (successfully pass the NAPLEX and MPJE exam and have an active pharmacist license) within 90 days of the beginning of the residency.

III.   If the resident is not licensed within 90 days of the beginning of the residency program, the following describes the outcome for the resident.

  a.   If the resident has taken, but not successfully passed either the NAPLEX or MPJE exam, or both, the Residency Advisory Committee (RAC) may consider allowing a 30-day extension, which   will allow the resident to complete two-thirds of the residency as a licensed pharmacist.

    i.   If approved, this extension will be noted in the RAC minutes.
    ii.   If this extension is not approved, the resident will be dismissed.

  b.   If the resident has not taken both the NAPLEX and MPJE exams within 90 days of the beginning of the program, the resident will be dismissed from the program.

IV.   If a 30 day extension has been provided and the resident is still not licensed as a pharmacist, the following describes the outcome for the resident.

  a.   If the resident has signed up to retake the test(s) but not successfully completed, the RAC may consider allowing an additional extension, not to exceed 90 days (i.e. 210 days after the beginning of the residency).

    i.   If approved, this extension will be noted in the RAC minutes, and the residency will be suspended until such time as the resident is licensed as a pharmacist. Once licensed, the residency will be extended by the amount of time as the extension to ensure that the resident completes 12 months of training and completes two-thirds of the residency as a licensed pharmacist. If the resident is not licensed as a pharmacist by the end of this extension, the resident will be dismissed.
    ii.   If this extension is not approved, the resident will be dismissed.

  b. Factors taken into consideration will include:

- Reason(s) for the delay (within or beyond the resident's control)
- Number of attempts to pass licensure exams
- Overall competency, ability and performance of the resident

Residency Program - Scheduled, Unscheduled, and Extended Absences from Residency

Last Review: March, 2021
Next Review: March, 2024
Description: Residency program completion, extended absences, leave, LOA, PTO,
                     sick time, holiday
Policy number: 40310-005
Origination date: September 2005
Purpose: To describe the requirements for residency completion and extended
                     absences.

Policy:

A. Froedtert & the Medical College of Wisconsin PGY1 and PGY2 pharmacy residency programs are designed as 52-week programs of full time work. Combined PGY1/PGY2 pharmacy residency programs are designed as two consecutive 52-week programs. The non-traditional residency program allows the resident to meet the residency requirements over an extended period of time.

B. Residents may take up to a total of 21 days of time off (paid or unpaid) per year for vacation, interviews, sick time and holidays. Residents taking time off in excess of 21 days or 168 hours per year will need to make up those days in order to complete their residency program and earn a residency certificate.

C. The residency program will be extended up to 12 weeks (with pay) beyond the original expected completion date to facilitate completion of all program requirements for residents with an approved Leave of Absence during the residency year. The length of the extension will align with the duration of the approved leave.

D. In the event of extended or multiple intermittent absences beyond an approved Leave of Absence, the option to extend the residency will be at the discretion of the Residency Program Director and manager. The residency program may be extended up to 12 weeks beyond the original completion date.

E. Absences of greater magnitude or frequency are considered too substantial of an interruption and will result in program dismissal without a residency certificate.

Procedure:
A. Residents will work with their program director, manager, and scheduler to request time off.

B. Residents may not schedule time off from staffing shifts. Unscheduled time off from a staffing shift may result in the make-up of that shift at a later date.

C. Approval and handling of absences, including paid time off (scheduled and unscheduled) will be done in accordance with Froedtert Health policies specific to the situation.

D. If an extension to the residency is a warranted, the duration of the extension will be determined by the amount of time missed.

Preparation: Kristin Hanson, BSPharm, MS
Authorization: Residency Steering Committee
Pharmacy Department Policy and Procedure Committee

FROEDTERT PHARMACY POLICY

Title: Residency Program: Residency Program Completion
Entities Impacted: FMFH (X) FMLH (X) FMCWCP ( ) FWBH ( )

Effective Date: June, 2021
Revised Date:
Policy Number Pending

PURPOSE: Describe requirements for residency program completion

DEFINITIONS: I:\FMLH\PHARMACY\Residency Program\Steering Committee\Agendas and Notes 2020-2021\Notes\Updated definition of progesss toward goals NI SP ACH ACHR 06.06.18 FINAL_.pdf

POLICY: Residents much meet all completion requirements prior to being awarded a residency certificate.

Each residency program maintains a list of completion requirements specific to that program.

Completion requirements are included in the residency manual and provided to residency candidates at the time of their interview with the program.

Progress on achieving completion requirements will be monitored by the Residency Program Director or designee and documented as a part of the resident's development plan at least quarterly.

Residents are required to complete all program specific completion requirements by the end of the residency program.

For residency programs with a Patient Care Competency Area (R1); all objectives within that competency area must be Achieved for Residency (ACHR) by the end of the residency program.

At least 70% of the other required objectives must be Achieved for Residency (ACHR) and Satisfactory Progress (SP) must be made on all remaining required objectives by the end of the residency program.

PROCEDURE:

RELATED POLICIES/PROCEDURES:

AUTHORS: Terry Audley, John Muchka, Kristin Hanson

16

Residency Program – Resident Performance Improvement Planning and Corrective Action
Entities Impacted: FMFH ( ) FMLH (X) FMCWCP ( ) FWBH ( )

Effective Date: 8/10/2005
Revised Date: 3/2/2020
Policy Number: NA

PURPOSE: To provide guidance on handling situations in which pharmacy residents are not meeting or completing residency program requirements as expected.

DEFINITIONS: **Residency Program Director (RPD)** – The pharmacist on record with the American Society of Health System Pharmacists (ASHP) who is responsible for the leadership of a pharmacy residency program. This pharmacist may or may not be a formal leader at Froedtert Health..

Leader – The pharmacy resident's direct supervisor at Froedtert Health.

Mentor – A pharmacist assigned by the residency program director to assist with resident development during the residency year. The mentor is a Froedtert Health staff member who is typically not in a leadership role.

Advisor – A pharmacist assigned by the residency program director to assist with resident development and career planning during the residency year. The advisor is a Froedtert Health staff member who is typically in a leadership role.

Preceptor – A pharmacist who oversees a resident learner during a specific learning experience.

POLICY:
A. In order to earn a residency certificate at Froedtert & the Medical College of Wisconsin, residents must meet criteria outlined in policy AD25.000, Residency Program Completion and Extended Absences.

B. If at any point during the residency program, it is determined that a resident is consistently &/or substantially not fulfilling the expectations of the residency, a formal plan for improvement will be initiated by the Residency Program Director (RPD) and the resident's leader. The resident's mentor and/or advisor may be included depending on the circumstances.

C. Coaching will be used to correct deficiencies or behaviors initially unless:

1. The resident is having difficulty performing tasks required to independently staff in a pharmacist role.
2. The behavior or action would result in corrective action or dismissal for a staff member per Froedtert policies and procedures.
   i. As a Froedtert Hospital staff member, residents are expected to comply with all Froedtert Health Rules of Conduct and other Human Resource policies as outlined separately.

17

> > > ii. Non-compliance with these policies will be handled by the resident's leader and the department's Human Resource liaison.
> > 3. A pattern of behavior has been established and has not improved with coaching.

PROCEDURES: <u>Coaching</u>

    A. When a preceptor or other member of the pharmacy department identifies that the resident is not meeting expectations, this information shall be communicated directly to the resident, the resident's RPD and the resident's direct leader.

    1 In addition to verbal feedback, the preceptor should provide written feedback to the resident in Pharmacademic with clear direction for the improvements that are needed. "Needs Improvement" should be used to document deficiencies. The RPD and/or leader will investigate by following up with the resident's preceptor as well as other preceptors and pharmacists who have worked with the resident.

    2 The RPD and leader will schedule a meeting with the resident to initiate a coaching conversation regarding identified problem areas and issues. A list of areas for improvement and goals to be achieved will be defined at this meeting. The rotation schedule and/or learning experiences may be adjusted in order to provide the resident an opportunity to show improvement. The resident's mentor and or advisor may also be included at the discretion of the RPD and leader.

    3 The RPD and leader will write a formal plan with actionable goals that has a distinct timeline using the attached template. The resident and leader will sign off on this document. The leader will add this plan to the resident's personnel file.

    4 The RPD and leader will schedule follow-up meetings with the resident at two and four weeks to discuss progress with the plan. Meetings may be scheduled sooner or more frequently if appropriate. Feedback will also be gathered from the resident's preceptors. If sufficient progress has been made, this will be documented on the plan and updated in the file. Based on the nature of the areas for improvement, the RPD and leader will determine if additional follow-up is needed.

<u>Formal Performance Improvement Plan</u>

    B. At the end of the four-week time period, if it is determined that the resident has not made sufficient progress in improving performance, the RPD and leader may initiate a formal Performance Improvement Plan with the assistance of their human resources liaison. Action may start here for situations listed under section C above.

18

1. The resident's leader will be responsible for discussing the situation with the department's HR liaison and their Director.

2. The leader and RPD will meet with the resident to discuss all areas in which it is believed the resident is still not meeting expectations. An official Performance Improvement Plan will be initiated based on the areas for improvement identified and timelines discussed. The leader and the resident will sign off on this document. This document and sign off will go into the resident's file, and will also reflect the understanding that if progress is not made during the established time frame, there is a possibility of dismissal from the program that would exclude the resident from earning a residency certificate.

3. It is the responsibility of the resident to achieve the documented goals. The leader and/or RPD will schedule follow-up meetings with the resident based on the timelines established in the performance improvement plan. The resident's mentor and/or advisor may be included in these meetings at the discretion of the resident's RPD and leader.

4. At the end of this time frame, if it is determined that the resident has not made progress toward completion of the goals, the RPD and the resident's direct leader shall discuss dismissal of the resident from the program and/or termination of employment.

5. The director of pharmacy, along with the resident's leader, and the RPD will make the final decision regarding dismissal/termination in consultation with the department's Human Resource liaison.

AUTHORS: Kristin Hanson, MS, RPh

APPROVAL: Pharmacy Policy Committee

ATTACHMENTS/APPENDICES:
Resident Coaching Documentation Template
Performance Improvement Plan Template

Residency Programs – Duty Hours (DRAFT)
Last Review: December, 2020

Next Review: December, 2023
Description: Residency, resident, duty hour
Policy number: TBD
Origination date: December 2020
Purpose: To ensure pharmacy residents are "fit for duty" by outlining a process for monitoring and tracking duty hours as a way to identify if and when interventions are needed to promote resident wellness and patient safety.

Definitions:

Duty Hours – Duty hours are defined as all scheduled clinical and academic activities related to the pharmacy residency program. Duty hours include:
- Training and orientation, time to complete required certifications (ex. ACLS, BLS)
- Patient care activities (rotation & staffing)
- Administrative responsibilities
- Committee appointments and assignments
- Scheduled conferences (Milwaukee Citywide, Midyear, GLPRC, etc.)
- Projects & tasks assigned by preceptors, program director or coordinator required to meet the goals & objects of the program
- Work to complete year-long residency project
- Assignments for longitudinal rotations

Duty hours do not include:
- Reading, studying & academic preparation time
- Travel time to & from off-site rotations
- Travel time to & from conferences
- Time to complete education, training or certification not required as part of residency program
- Resident & department social activities

Scheduled duty periods – Assigned duties, regardless of setting, that are required to meet the educational goals and objectives of the residency program. These duty periods are usually assigned by the residency program director or preceptor and may encompass hours which may be within the normal work day, beyond the normal work day, or a combination of both.
Moonlighting – Voluntary, compensated, pharmacy-related work performed outside the organization (external), or within the organization where the resident is training (internal), or at any of its related participating sites. These are compensated hours beyond the resident's salary and are not part of the scheduled duty periods of the residency program.
Bonus Shift – Terminology used at Froedtert & the Medical College of Wisconsin for "moonlighting shifts" that are periodically available to residents for additional compensation.
Continuous Duty – Assigned duty periods without breaks for strategic napping or resting to reduce fatigue or sleep deprivation.
Days Free – Calendar days with no scheduled residency-related activities. This includes weekends when not scheduled to staff.

Policy:

A. All Froedtert & the Medical College of Wisconsin pharmacy residency training programs abide by the requirements set forth in the American Society of Health System Pharmacists (ASHP) Pharmacy Specific Duty Hours and Accreditation Standards. Residents will review the ASHP Duty Hours document upon initiation of the residency training program.
https://www.ashp.org/-/media/assets/professional-development/residencies/docs/duty-hour-requirements.pdf#:~:text=ASHP%20Duty-Hour%20Requirements%203%20E.%20If%20a%20program,not%20exceed%2016%20hours.%20The%20maximum%20allowable%20duty

- During orientation, the RPD will review requirements related to duty hours with residents. Furthermore, the RPD will highlight and emphasize resident accountability and responsibility as it relates to patient safety and the importance of being "fit for duty."

B. Maximum duty hours of work per week and duty-free times:
- Duty hours must be limited to 80 hours per week, averaged over a four-week period, inclusive of all in-house activities and all moonlighting/bonus shifts.
- Mandatory time free of duty: residents must have a minimum of one day in seven days free of duty (when averaged over four weeks).

C. Moonlighting/Bonus Shifts
- Any moonlighting/bonus shifts worked at Froedtert Health or externally are included within duty hours.
- Once trained and licensed, residents may pick up bonus shifts at Froedtert Health as long as:
  - i. The resident obtains permission from RPD prior to picking up their first shift.
  - ii. The shifts do not interfere with residency program requirements.
  - iii. The resident is meeting or exceeding residency program requirements.
  - iv. The shift will not cause the resident to exceed duty hours rules.
- If a pharmacist believes the resident is showing signs of fatigue (excessive yawning, sedation, etc), the resident should be relieved of their duty. The pharmacist will notify the program director and the resident will be prohibited from moonlighting/bonus shifts for at least 4 weeks.
- Moonlighting/bonus shifts will be prohibited if it appears to be interfering with the resident's judgement or ability to achieve educational goals.
- External moonlighting is discouraged, however, if a resident chooses to moonlight, hours must be disclosed with duty hours. If it is identified that moonlighting is interfering with fitness for duty, residents will be required to end moonlighting responsibilities.

D. Duty Hours Tracking
- Residents are expected to self-monitor their compliance with duty hours on a weekly basis. They will track compliance using the Duty Hours Tracking document or PharmAcademic custom evaluation at the discretion of the RPD.
- RPDs will review duty hours for each resident on a monthly basis. It is the resident's responsibility to notify their program director at any point there they are

approaching a duty hours limit or if they are feeling excessive fatigue or exhaustion.

- If a resident is exceeding duty hours limits, the RPDs will work with the resident to identify a strategy to comply with the standard while meeting program requirements.

Author: Anne Zechlinski, PharmD
Approval:
Residency Steering Committee
Pharmacy Policy and Procedure Committee

Standardized Definitions of Resident Performance Evaluations for use within PharmAcademic

NI = Needs Improvement

Definition: Resident **is not meeting** expectations. The resident is **performing below** the level that would be expected of a resident at this point in their training program as evidenced by meeting 1 or more of the following characteristics:

- Requires direct and repeated supervision, guidance, intervention, or prompting
- Make questionable, unsafe, or non-evidence-based decisions
- Fails to complete tasks in a time appropriate manner
- Fails to incorporate or seek out feedback
- Acts in an unprofessional manner

Preceptor Action: The preceptor is required to document criteria-based, specific comments within PharmAcademic, citing specific example(s) why NI was assigned, and providing direction on how the resident may improve their performance. When applicable, the preceptor should contact the RPD, RPC, and mentor early in the learning experience if resident performance concerns are noted. The resident's progress should be communicated to the preceptor team in a timely fashion, using whatever mechanism that residency program uses for preceptor communication (i.e. Residency Advisory Committee, etc.). The preceptor should determine when to reevaluate the goal/objective that for which a "NI" was assigned, ideally in about 4 months, and may necessitate a change in resident schedule.

SP = Satisfactory Progress

Definition: Resident **is meeting** expectations. The resident is **performing at** the level that would be expected of a resident at this point in their training program as evidenced by meeting the following characteristics:

- Requires infrequent supervision, guidance, intervention, or prompting
- Makes appropriate, safe, or evidence-based decisions with limited prompting or intervention from the preceptor
- Completes tasks in a time appropriate manner with limited prompting and guidance
- Incorporates feedback from preceptors with minimal prompting
- Acts in a professional manner

Preceptor Action: The preceptor is required to document criteria-based, qualitative written comments that are specific and actionable, and acknowledge the resident's skill progression within PharmAcademic.

ACH = Achieved

Definition: Resident **is consistently meeting** expectations. Resident is **independently performing at or above** the level of performance expected at the conclusion of the residency program. Resident displays all of the following characteristics:

- Appropriately seeks guidance when needed
- Consistently makes appropriate, safe, or evidence-based decisions on an independent basis
- Independently and competently completes assigned tasks
- Consistently demonstrates ownership of actions and consequences
- Accurately reflects on performance and can create a sound plan for improvement
- Acts in a professional manner

Preceptor Action: The preceptor must document criteria-based, specific comment(s) and example(s) within PharmAcademic to justify ACH.

ACHR = Achieved for Residency

Definition: Resident has demonstrated a <u>**sustained performance of independently meeting or exceeding**</u> expectations for the end of the year.

Note: Once a goal is marked as ACHR, further evaluation in future learning experiences is optional. If a resident regresses in performance after a goal is marked as ACHR, it may be unchecked by the RPD or RPC.

<u>**Who can mark as ACHR?**</u>
Documentation (within PharmAcademic) of a resident's achievement of a goal/objective for the residency program will be the responsibility of the RPD, RPC, and mentor. This can be done at any point throughout the year, ideally in coordination with a formalized process for resident evaluation such as monthly Residency Advisory Committee or quarterly evaluations / customized training plans.

Last revised 06.06.18

PharmAcademic Evaluations

- All Froedtert residency programs utilize PharmAcademic for completion of resident performance evaluations.
- All evaluations should be completed by the last day of rotation or absolutely no later than the following Sunday.
- PharmAcademic evaluations are critical for both monitoring resident progress and rotation experience and should be completed thoroughly.

Duty Hours Tracking Documents
.

- Residents are expected to self-monitor their compliance with duty hours per the Duty Hours Policy.
- Duty hours documentation should be completed monthly using PharmAcademic
- There is an excel tracking tool located in this folder that may be used in addition to Pharmacademic: I:\FMLH\PHARMACY\Residency Program\2022-2023\Duty Hours
  ASHP Duty Hours Guidance: I:\FMLH\PHARMACY\Residency Program\2022-2023\Duty Hours

Bonus Shifts

- PGY1 and PGY2 pharmacy residents at Froedtert are eligible to pick up bonus staffing shifts to help meet department staffing needs. Residents will be paid a lump bonus sum for working a half shift ($320) or full shift ($640). **Bonus shifts will be paid every other pay period for the preceding four weeks.**
- The following criteria apply:
  - Shifts will be solicited and approved by a manager. Available shifts will be assigned and divided between interested residents, per manager and residency program director discretion
  - Resident must be "meeting" or "exceeding" requirements of the residency program and meeting all applicable residency deadlines (i.e. low-performing residents should spend their time focusing on residency program, not extra shifts)
  - Residents will only be able to pick up shifts that do not conflict with residency responsibilities. This will mean that they would be eligible to pick up weekend shifts (when not staffing as residents) or the PM position (1700-2100) of open shifts
  - Shifts are paid as a bonus in half and full shift blocks (e.g. working from 1700 until 2130, instead of 2100, is still paid as a half bonus shift). Residents will not be mandated to work bonus shifts
  - ASHP (American Society of Health-System Pharmacists) duty hour guidelines apply
  - Residents should report bonus shifts worked to their manager. For residents working bonus shifts in the inpatient setting at FMLH, they will be added to Humanity by the manager who has assigned the shift which will prompt payment
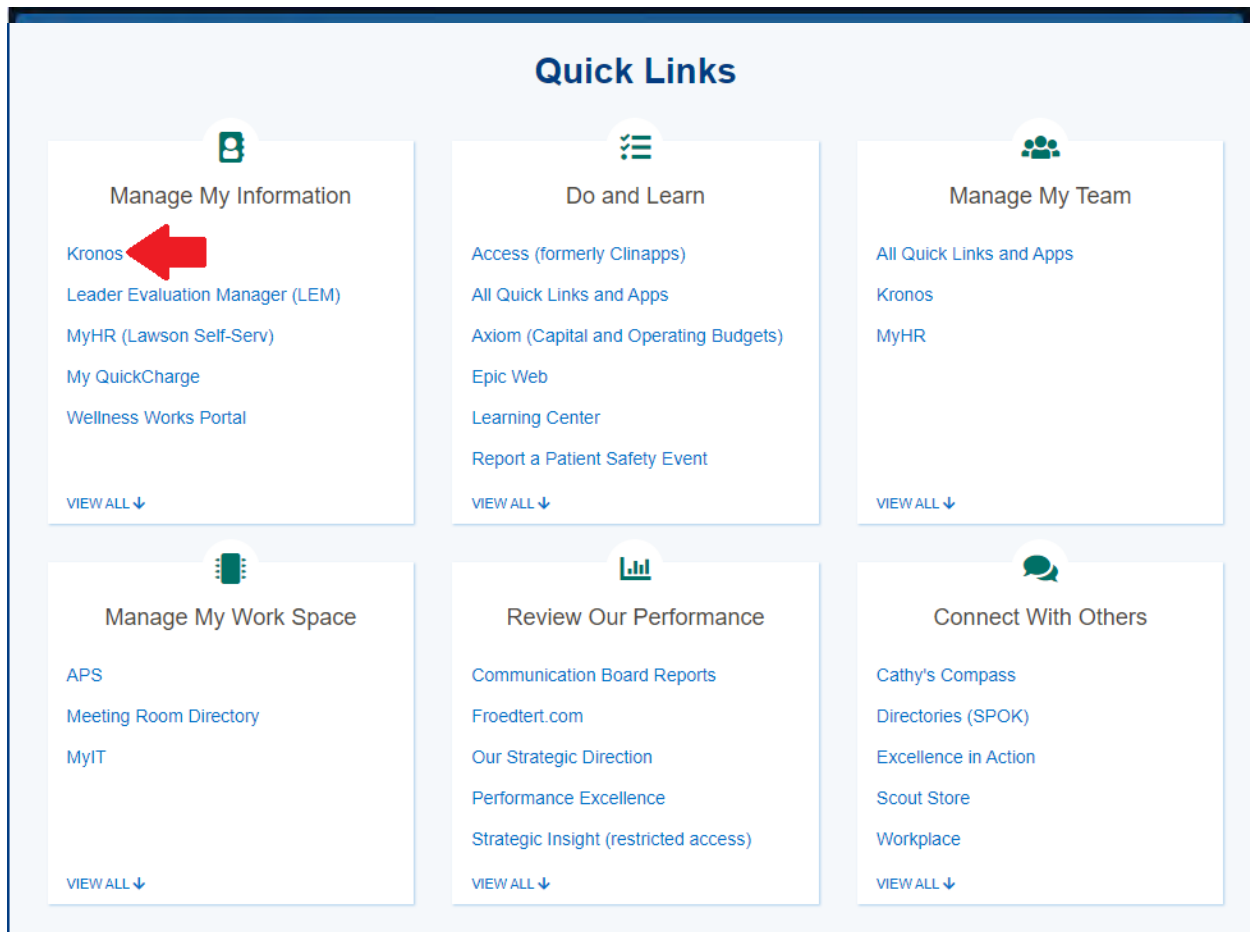
Resident Attendance Expectations

- Residents are expected to work at least 8 hours/day Monday-Friday
- Residents are expected to notify their program director and manager in advance (as soon as possible) in the event that they will not be on-site on a weekday (either due to PTO or work-from-home).
  - Residents must alert their preceptor and RPD in advance of planned work-from-home outside of the local area (ie, > 60 miles from campus).
- The following are examples when RPD and manager should be notified:
  - Resident is taking scheduled PTO (vacation, interview, etc) or bereavement time
  - Resident is off during the week with the intent of making up the day on a weekend
  - Resident has an unscheduled absence (sick, emergency, etc)

Paid Time Off

- Residents are allotted 21 vacation days (paid time off – PTO). Residents are responsible for setting aside PTO for interviews and illness. Residents must notify their program director and manager of PTO requests for approval.
- Requests for time off must not fall on staffing days. If time off is needed during a staffing day, it is the resident's responsibility to identify coverage and communicate the switch.
- It is the responsibility of the resident to notify their RPD and rotation preceptor of days off.
- Residents are not allowed to take PTO during the last 4 weeks of employment. Exceptions may be considered, but must be discussed and approved by manager in advance.
- Requests for ≤ 2 days off must be made at the beginning of the rotation in which they fall.
- Requests for > 2 consecutive days off should be made as soon as possible or at least one month in advance to allow for any necessary rotation schedule adjustments.
- In the case of an absence on rotation, making up the rotation day on a weekend as opposed to using PTO will be assessed on a case-by-case basis at the discretion of the rotation preceptor(s).
- Resident is responsible for updating Kronos to reflect days off prior to sign-off by manager.
- When possible, ambulatory residents should follow the Outpatient Pharmacy Department PTO Picking Procedure, found here: https://goo.gl/Uzsl85.
- Residents are allowed bereavement pay per Froedtert's policy. Time away for bereavement counts towards the 21 days away/year.

Figure 1. Entering Kronos and Documenting PTO

Back to Table of Contents

		Date	Pay Code	Amount	In	Transfer	Out	In	Transfer	Out	Schedule	Shift	Daily	Period
+	×	Fri 6/18			8:00AM		4:00PM				8:00AM-4:00...	8.0	8.0	8.0
+	×	Sat 6/19												8.0
+	×	Sun 6/20												8.0
+	×	Mon 6/21									8:00AM-4:00...	8.0	8.0	16.0
+	×	Tue 6/22			8:00AM		4:00PM				8:00AM-4:00...	8.0	8.0	24.0
+	×	Wed 6/23			8:00AM		4:00PM				8:00AM-4:00...	8.0	8.0	32.0
+	×	Thu 6/24			8:00AM		4:00PM				8:00AM-4:00...	8.0	8.0	40.0
+	×	Fri 6/25			8:00AM		4:00PM				8:00AM-4:00...	8.0	8.0	48.0
+	×	Sat 6/26												48.0
+	×	Sun 6/27												48.0
+	×	Mon 6/28			8:00AM		4:00PM				8:00AM-4:00...	8.0	8.0	56.0
+	×	Tue 6/29			8:00AM		4:00PM				8:00AM-4:00...	8.0	8.0	64.0
+	×	Wed 6/30			8:00AM		4:00PM				8:00AM-4:00...	8.0	8.0	72.0
+	×	Thu 7/01			8:00AM		4:00PM				8:00AM-4:00...	8.0	8.0	80.0

Remove scheduled In and Out Times

		Date	Pay Code	Amount	In	Transfer	Out	In	Transfer	Out	Schedule	Shift	Daily	Period
+	×	Fri 6/18			8:00AM		4:00PM				8:00AM-4:00...	8.0	8.0	8.0
+	×	Sat 6/19												8.0
+	×	Sun 6/20												8.0
+	×	Mon 6/21	PTO ▼	8.0							8:00AM-4:00...	8.0	8.0	16.0
+	×	Tue 6/22			8:00AM		4:00PM				8:00AM-4:00...	8.0	8.0	24.0
+	×	Wed 6/23			8:00AM		4:00PM				8:00AM-4:00...	8.0	8.0	32.0
+	×	Thu 6/24			8:00AM		4:00PM				8:00AM-4:00...	8.0	8.0	40.0
+	×	Fri 6/25			8:00AM		4:00PM				8:00AM-4:00...	8.0	8.0	48.0
+	×	Sat 6/26												48.0
+	×	Sun 6/27												48.0
+	×	Mon 6/28			8:00AM		4:00PM				8:00AM-4:00...	8.0	8.0	56.0
+	×	Tue 6/29			8:00AM		4:00PM				8:00AM-4:00...	8.0	8.0	64.0
+	×	Wed 6/30			8:00AM		4:00PM				8:00AM-4:00...	8.0	8.0	72.0
+	×	Thu 7/01			8:00AM		4:00PM				8:00AM-4:00...	8.0	8.0	80.0

Enter Pay Code "PTO" and Number of Hours

Holidays

- Froedtert Hospital recognizes six official holidays: Independence Day, Labor Day, Thanksgiving Day, Christmas Day, New Year's Day, and Memorial Day.
- Residents who staff in areas that are open on holidays are required to staff up to two 10-hour holiday shifts during the residency year (described under Resident Staffing Requirements).
- Time off for holidays is subtracted from PTO.
- Residents may elect to be present on rotation (instead of taking PTO) on holidays when not assigned to "staff" with approval of preceptor and residency program director.
- For PGY2s, if an assigned holiday falls on a weekend, the resident can choose to either take a day off a rotation day the week prior to or after the holiday OR count the holiday towards their weekend shift requirements. This should be arranged with their RPD and manager.

Unscheduled Absences

- For inpatient/oncology staffing shifts/rotation:
  - Contact central pharmacy at least two hours prior to shift start time (if possible) to notify them of illness/unscheduled absence (414-805-2690) regardless if you are staffing. The manager on-call will cover your scheduled shift if staffing. Depending on the circumstances, you may be asked to work an alternate shift to make up the missed staffing day
  - If on rotation, notify your preceptors and residency program director of the absence as soon as possible.

- For ambulatory/retail staffing shifts/rotation:
    - Contact the on-call leader/coordinator at least two hours prior to shift start time (if possible) to notify them of illness/unscheduled absence (pager: 414-314-1369) regardless if you are on rotation or staffing
    - If staffing, the on-call leader/coordinator will seek coverage options for your scheduled shift. Depending on the circumstances, you may be asked to work an alternate shift to make up the missed staffing day.
    - If on rotation, the leader on-call will notify your preceptor(s), RPD, and manager of the absence. The resident may also send notification if desired.
  PTO will be used for unscheduled absences unless other arrangements are made with preceptors and your manager.

Bereavement
- Eligible staff may be granted a maximum of three scheduled work days, if necessary, to observe a period of bereavement when having suffered the loss of a:
    - Parent
    - Brother/Sister
    - Grandparent
- See Bereavement FH-HR.023 for additional details

Professional Leave/Business Days

- Professional leave will be granted to attend the ASHP Midyear Clinical Meeting, the Great Lakes Resident Conference, Wisconsin Pharmacy Resident Conference and other meetings approved by Residency Steering Committee.
- Additional days may be approved for the resident to use to attend other professional meetings; however, both approval by the resident's program director and manager must be obtained.

Professional Meeting Attendance and Funding

- Each PGY1 resident is allotted a $1200 stipend and each PGY2 resident is allotted an $1800 stipend to offset travel, lodging, and registration expenses for professional meeting attendance.
- Stipends are not to be used to offset membership dues, meals or items other than those mentioned above
- Expenses exceeding the stipend amount will be covered by the resident.
- Unused portions of the stipend are not payable to the resident and cannot be carried over for the following year.

PGY1 Residents
- PGY1 residents are expected to attend the ASHP Midyear meeting (including the Vizient Pharmacy Council meeting immediately prior to the ASHP meeting) and one regional residency conference. In the event that a resident is unable to attend one of these meetings, additional arrangements will be made to allow the resident to present a poster and a platform presentation.
- PGY1 residents are expected to present a poster at the Vizient Pharmacy Council meeting (or approved alternative).
- PGY1 residents are expected to travel to the ASHP Midyear / Vizient Pharmacy Council meeting on Friday and participate at least through mid-day on Wednesday.
- The $1200 travel stipend is intended to offset the expenses related to ASHP Midyear / Vizient Council meeting.
- Any remaining balance may be utilized to offset expenses for other professional meetings.
- Separate funding is provided for the PGY1 residents to attend one regional residency conference.

<u>PGY2 Residents</u>
- Attendance at the ASHP Midyear meeting is optional for PGY2 residents (unless required by the specific PGY2 program).
  - o PGY2 residents who elect to attend ASHP Midyear, are expected to attend the Vizient Pharmacy Council meeting immediately prior to the ASHP meeting and present a poster at the Vizient meeting.
  - o PGY2 residents are expected to travel to the ASHP Midyear / Vizient Pharmacy Council meeting on Friday and participate at least through mid-day on Wednesday. Exceptions must be discussed with RPD and manager for approval.
- The $1800 travel stipend may be used to cover ASHP Midyear as well as other professional meetings, conferences (e.g. ACCP, SCCM, HOPA, UGM, XGM, etc.) and residency conferences.

Expense Reports/Reimbursement
- To complete an expense report:
  - o Froedtert Scout (main screen) → Departments → Finance → Expense Reimbursement
    Link: https://fh.sp.froedtert.com/sites/1580/default.aspx
- All expense reports for travel must be completed prior to the trip or within two weeks from the return date in order to ensure reimbursement.
- All original receipts must be kept and attached to the electronic 'Expense Reimbursement' request.
- Residents are expected to keep track of their stipends and not request reimbursement for amounts greater than the allotted stipend.
- All expense reimbursement for resident travel should be submitted with manager listed as "Kristin Hanson."
- Contact your manager and RPD prior to planning any travel or before applying for reimbursement.

Figure 2: Company Codes and Accounting Units for Travel Reimbursement

	Company	Accounting Unit	Account Number	Account Description
PGY1 FMF	2010	40310	866100	Professional Development/Seminar
PGY1 (Acute Care)	3000	40310	866100	
PGY1 (Am Care)	3000	40310	866100	
PGY1 (Admin)	3000	40310	866100	
PGY1 Community	1430	75050	866100	
PGY1 (MUSP)	3000	40310	866100	
PGY2 Admin	3000	75000	866100	
PGY2 Am Care	3000	75010	866100	
PGY2 Crit Care	3000	75000	866100	
PGY2 EM	3000	75000	866100	
PGY2 ID	3000	75000	866100	
PGY2 Informatics	1000	75002	866100	
PGY2 MUSP	3000	75000	866100	
PGY2 Oncology	3000	75020	866100	

Back to Table of Contents

Resources for Residents

Laptops, Workstations, and Pagers

- Residents will be issued laptop computers, home work stations, and personal pagers to be used throughout the year
  - **Laptops:** Laptops should be used as a workstation while on rotation (including for clinical rotations) as well as can be used at home. Laptops should be stored in a secure location.
    - Residents should not store documents containing Health Insurance Portability and Accountability Act (HIPAA) information directly on computer hard drives, but rather these documents should be stored on Froedtert Network and accessed via the VPN or remote access portal.
    - Residents should also password protect all documents containing Health Insurance Portability and Accountability Act (HIPAA) information (see example below "Example: How to Password-Protect Patient Data").
  - **Workstations:** A monitor, laptop docking station, mouse, and keyboard are issued for use at home.
  - **Pagers:** Pagers should be carried by the resident while on campus. Expected response time if paged is 15 minutes or less during business hours. Residents may have assigned "on-call" times when pagers need to be carried 24/7. Residents may obtain app to manage pager on their phone.
- Any loss or damage to these items must be reported to the residency program director as soon as possible. The resident may be responsible for covering any fees related to loss or damage. Equipment must be returned at the end of residency training program.
- If there are issues with device performance (i.e. low battery life, missing applications, etc), the resident is responsible for contacting IT for fix through the myIT app (see Figure 4).
- If you need assistance in making the request, contact Deanna Zapfel, Administrative Coordinator, Deanna.zapfel@froedtert.com
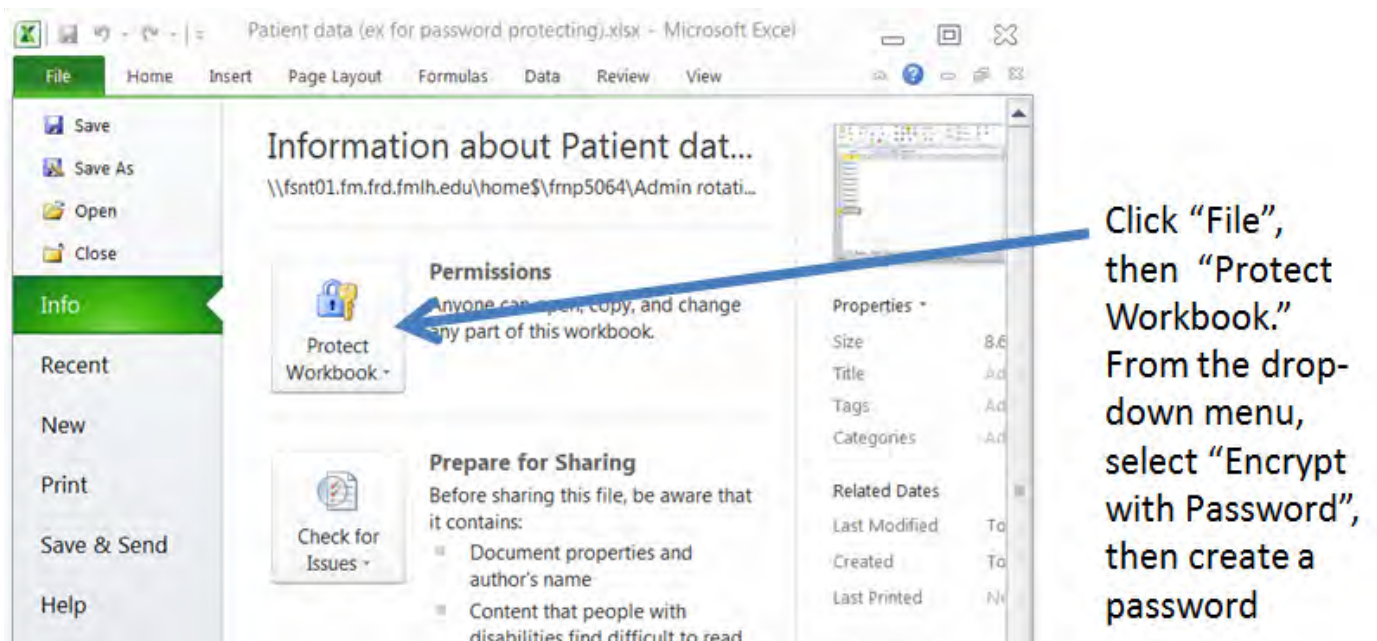

Figure 3. How to Password Protect Patient Data

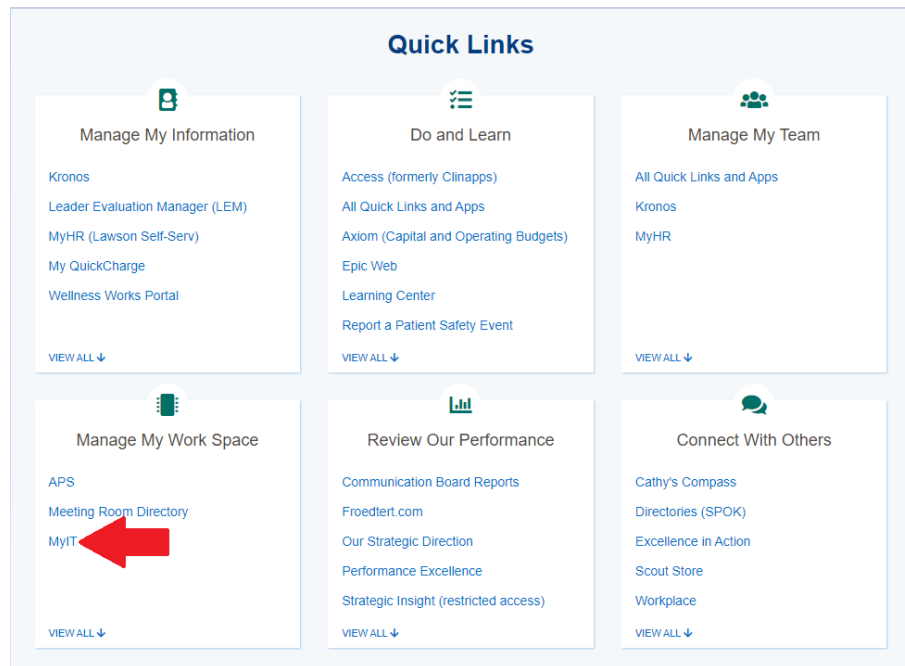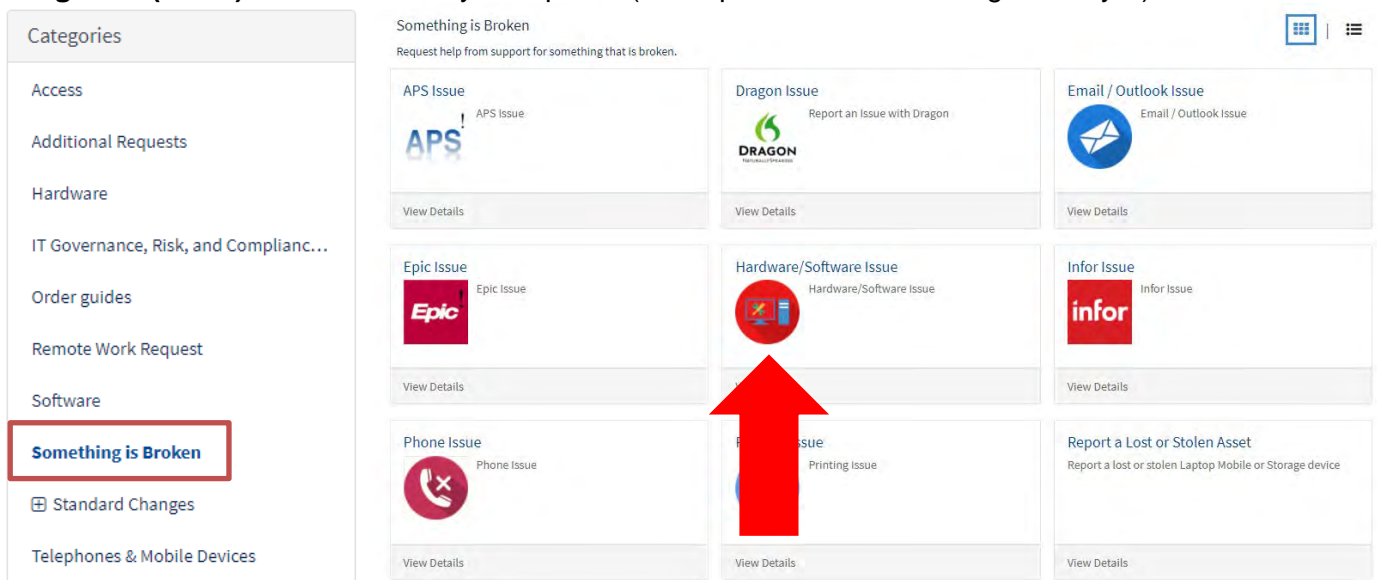**Figure 4.** How to enter MyIT requests (Use Epic Credentials to Log In to MyIT)

Figure 4 (Cont.). How to enter MyIT requests (Use Epic Credentials to Log In to MyIT)

Back to Table of Contents

VPN/Remote Access

- Residents must log in to the Automated Provisioning System (APS) in order to request remote access. Intranet link to APS
    - Use Froedtert Network Credentials to log in, and select "Request for Myself" under "My Access"
    - Type in "remote access" using search bar to find line item below (see screenshot). Select Remote – Basic Remote Access.

**Figure 5.** How to Request Remote Access via APS
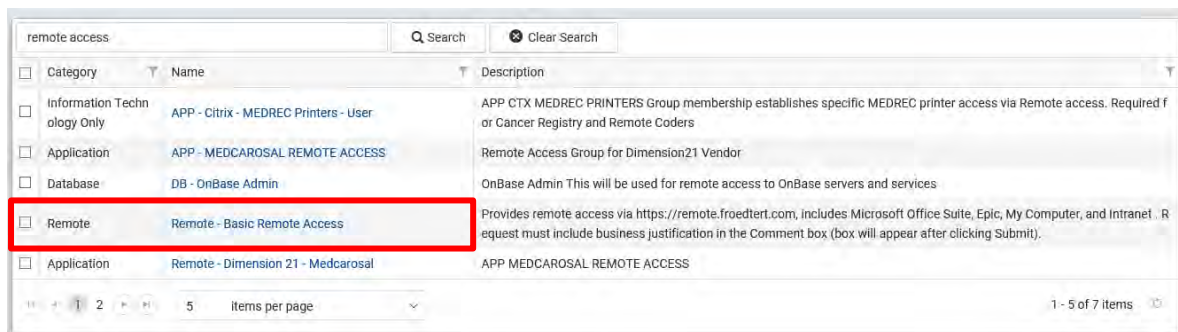
Remote Access Portal (to access Froedtert network on a personal computer)
- To access remote portal, Citrix must be downloaded. The IT help desk may be contacted at (414) 805-2101 to assist with download if needed.
- The VIP App must be downloaded and used as a method for dual authentication. The app should be downloaded on a personal devise from Froedtert Campus in order to link it with the account. Click link below to access instructions:
- http://intranet.froedtert.com/upload/docs/Froedtert%20Health/Departments/Information%20Technology/Forms/Free%20Symantec%20VIP%20Access%20App%20Instructions%20V9.pdf
- Link to Froedtert remote desktop: https://remote.froedtert.com/
- Once logged in, the following applications should be available:
    - Epic
    - Microsoft Outlook, Excel, Word, PowerPoint, OneNote
    - Froedtert Intranet
    - Froedtert Network (H: Drive and I: Drive)

VPN (used to access Froedtert network on a Froedtert issued computer)
- In order to have access to VPN, you will need access to the remote portal (above) and Cisco AnyConnect VPN Software on your laptop
- To see if you have the VPN software on your computer, click on the icon in Figure 6
- If you do not have the VPN application downloaded on the Froedtert issued laptop, request this application via a MyIT request under "Install Application" with the application being "Cisco AnyConnect VPN software"
- Instructions for logging into VPN can be found here: I:\FMLH\PHARMACY\Residency Program\2022-2023\ALL Resident Orientation

Figure 6. VPN Access
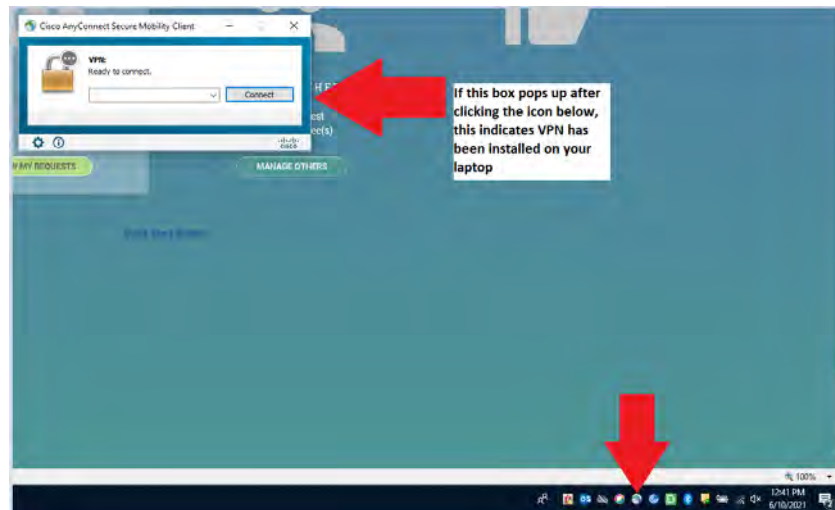
Personal Device Access

- Residents may access email on a personal device (phone or tablet). The Froedtert Health Personal Device User Agreement must be completed in order to set up access on the device.
  - This can be found on Scout (also referred to as the "intranet"). Open internet explorer:
    Homepage > Departments > Information Technology (Froedtert Health) > Froedtert Health Information Technology > Mobile Devices > MyITPortal

Figure 7: Requesting Personal Device Sync
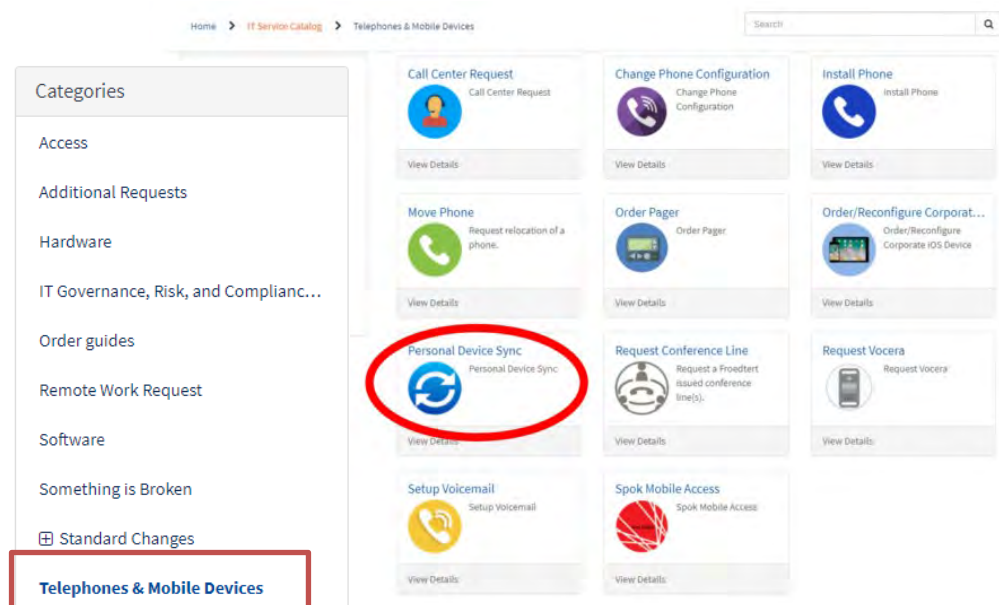
- Once access request has been processed, the Outlook App can be used to access email and calendar Instructions on how to use the app are available on the IT website.
  - Android:
    http://intranet.froedtert.com/upload/docs/Froedtert%20Health/Departments/Information%20Technol

ogy/Mobile%20Device%20Documents/Android%20Outlook%20Support%20Document%20for%20
Personal.pdf
- o iOS:
http://intranet.froedtert.com/upload/docs/Froedtert%20Health/Departments/Information%20Technol
ogy/Mobile%20Device%20Documents/iOS%20Outlook%20Support%20Document%20for%20Pers
onal.pdf

Workplace
- Workplace is the primary location for organizational communication. It is a work version of the Facebook platform.
- You will receive an email to set up a Workplace account – before this, you will not be able to create an account.
- You should create a Workplace login using your Froedtert email address. You are also encouraged to download the Workplace app on your phone or tablet.
  - o *https://froedtert.workplace.com/*
  - o Downloading the Workplace Mobile app
- All employees are expected to keep up-to-date with organizational communications posted on Workplace.
- Employees are also encouraged to comment/like posts and post work-related content.

WebEx Teams
- All Froedtert employees have access to the WebEx and WebEx Teams platform to use for virtual meetings.
- In order to schedule a meeting using WebEx, create a calendar appointment and in the location, type @webex. Once the meeting is sent, login information will be populated within the body of the appointment.
- Additional capabilities are available using the WebEx Teams Application. This should be available on all Froedtert computers. It can also be downloaded onto a personal computer from: https://www.webex.com/downloads.html/.
- User guides for Webex Teams are posted here: https://fh.sp.froedtert.com/cwt/cwt/index.html

Figure 8: Meeting Set-Up Using Webex Teams

Email Expectations

- Residents are expected to check Froedtert email daily Monday through Friday during the work week. Responses to email are expected within 24 "business hours" of receipt.
- The specified response time is not required during PTO/vacation, however, residents should use an out-of-office alert to notify sender of absence. Residents are expected to follow-up on email as soon as possible upon return.
- It is expected that residents create an email signature using the Froedtert approved template (see link below). Directions on how to set up an email signature can be found on the Scout page under Marketing and Communications Department – Brand Resource Center http://intranet.froedtert.com/?id=17585&sid=5

Figure 9: Setting an Out of Office Alert (Automatic Reply)
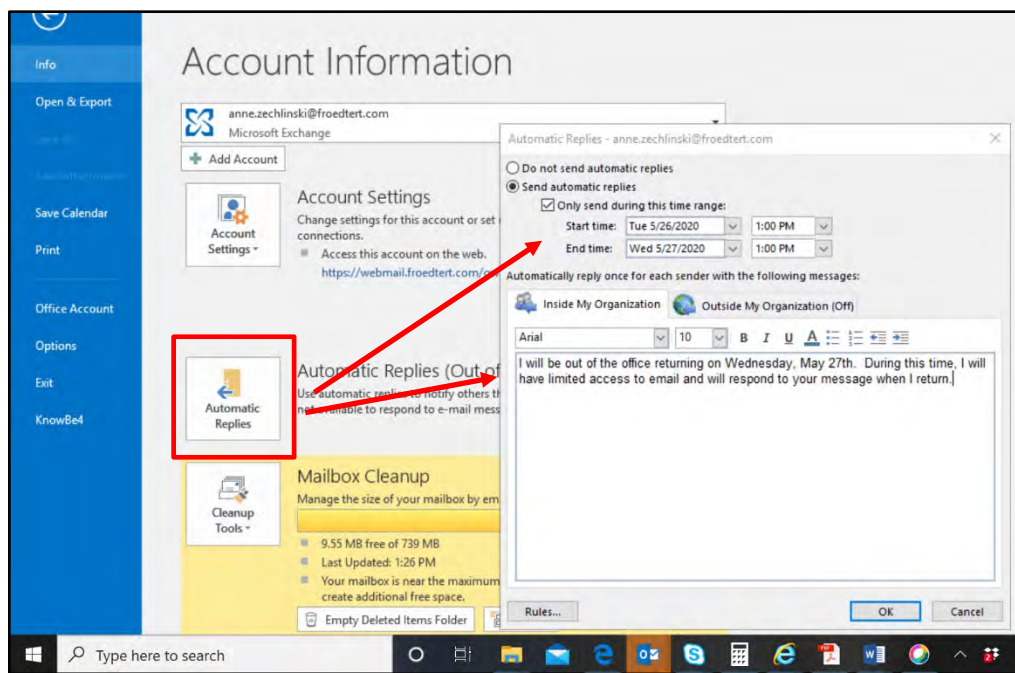
Dress Code

- The Froedtert Dress Code - Personal Appearance Policy is posted on the Scout page at link below: http://fhpolicy.s1.fchhome.com/Content/ViewContentDetails.aspx?id=e650bde6-3540-4a3c-aebc-7cb25387b6d0&contentTypeId=ccb019f2-dd72-4de5-8175-dd9629f47da0
- In general, residents are expected to wear business casual attire when on rotation and staffing on decentral units, ambulatory clinics, outpatient pharmacies or in office environments.
- Scrubs are acceptable in the ED, OR and pharmacy operations areas (central, day hospital, etc.). In the ED and pharmacy operations areas, residents may choose to wear their own scrubs or request Froedtert issued scrubs. In the OR, residents must wear Froedtert issued scrubs.
- More formal attire will be required for special events. For example, suits are required for presentations outside the organization (i.e. Midyear posters, Great Lakes Presentations)
- White coats are strongly encouraged when on a clinical rotation or when staffing decentrally.

White Coats

- Additional white coats may be ordered using the order form below.
  - https://datacollectionrb.sp.froedtert.com/sites/pharmacy/pharmacy/_layouts/15/WopiFrame.aspx?sourcedoc=/sites/pharmacy/pharmacy/Forms/Lab%20Coat%20Froedt%20Pharm%20order%20form%20Nov21.doc&action=default
  - o The department will reimburse residents for embroidery, but resident will be responsible for paying for coat
  - o Deanna Zapfel, Administrative Coordinator, is the contact person for white coats, should you need any additional coats throughout the year

Scrub Request Forms

- Froedtert issued scrubs must be worn in OR areas and may be worn in ED and pharmacy operational areas. The scrub request form is available on the Environmental Services site: http://intranet.froedtert.com/?id=26274&sid=1
- Complete form, obtain manager signature and fax
- Contact Deanna Zapfel, Administrative Coordinator with any questions

Business Cards

- Residents should place orders for business cards prior to <u>September</u> so that they arrive in time for recruitment season
  - o This can be found on Scout https://fh-printservices.com/internal/
  - o Use the following titles:
    - "PGY1 Pharmacy Resident"
    - "PGY1 Health-System Pharmacy Administration and Leadership Resident"
    - "PGY1 Medication Use Safety and Policy Resident"
    - "PGY2 (Program Name) Pharmacy Resident"

Residency Project Resources

Residency Project Sharepoint
- o Information about research protocols, posters, and presentations can be found here: https://datacollectionrb.sp.froedtert.com/sites/pharmacy/residency/Residency%20Manual/Forms/AllItems.aspx?RootFolder=%2Fsites%2Fpharmacy%2Fresidency%2FResidency%20Manual%2FResidency%20Project%20Resources&FolderCTID=0x012000E03E235BD9CA0145ACB0ED85E267E9EE&View=%7BADB81E86%2D56C9%2D4818%2D9081%2D737811761E51%7D
- o There are also past resident project abstracts, posters, and presentations on this website that may serve as examples

MCW Biostatistics Support
- Residents will have the opportunity to seek statistics support for their projects through the MCW Biostatistics Department.
- The Pharmacy Research Committee will prioritize and approve resident projects for statistics support based on complexity of the statistics required, type of project, likelihood of publication and other factors.
- This document describes process for requesting biostatistics support: https://datacollectionrb.sp.froedtert.com/sites/pharmacy/residency/_layouts/15/WopiFrame.aspx?sourcedoc=/sites/pharmacy/residency/Residency%20Manual/Residency%20Project%20R

esources/Internal%20Resources/MCW%20Biostatistics%20Request%20Process_v10.29.pdf&action=default

Presentation and Poster Templates

- *Presentations*
  - o Froedtert Health has a presentation template that should be used when creating presentations to be shared internally and externally.
  - o Residents should use the template with the Froedtert & Medical College of Wisconsin logo.
  - o Templates are located here: http://intranet.froedtert.com/?id=17587&sid=5
  - o Pharmacy-specific templates will be shared via the I: Drive or email
- *Posters*
  - o The Pharmacy Research Committee has developed templates to be used for student, resident, and staff-presented posters.
  Poster templates are located here: I:\FMLH\PHARMACY\Residency Program\2022-2023\Posters and Poster Templates

Additional General Information

**Wisconsin Prescription Drug Monitoring Program (ePDMP)**

- Residents should register with the Wisconsin Prescription Drug Monitoring Program as it will be a needed resource to carry out staffing duties as a pharmacist (note that you will need to be licensed in order to register)
- Prescribers are responsible for checking ePDMP prior to prescribing any controlled substances at discharge or for use in the ambulatory setting
  - o **Apply for access**
    - ▪ Go to: https://pdmp.wi.gov/
    - ▪ Click "Register"
    - ▪ Select "Healthcare Professional"
    - ▪ Complete required fields including your license number
    - ▪ Select a username and password
    - ▪ Look for confirmation email from "noreply@pdmp.wi.gov"
  - o **Logging in**
    - ▪ Go to: https://pdmp.wi.gov/
    - ▪ Type in username and password
    - ▪ Click "Patient Report" to look up a patient

Basic Life Support (BLS) and Advanced Cardiac Life Support (ACLS) Certifications

- Froedtert offers certifications in Basic Life Support (BLS) and Advanced Cardiac Life Support (ACLS)
  - o PGY2 residents in Critical Care and Emergency Medicine, and PGY1 acute care PGY1 HSPA-L and PGY1 MUSP residents are required to maintain ACLS certification. Residents are expected to complete ACLS prior to starting ICU or ED rotations or staffing in these areas. ACLS is optional for other PGY2 residents
  - o BLS is required for all residents who will be working in the outpatient/retail settings in order to administer immunizations.
- Enrollment
  - o Enrollment is done through The Learning Center by searching for ACLS or BLS. Prior to being able to access materials for the course, a manager must approve via the Learning Center

- o Residents may take one project day to complete the course. Residents are responsible for scheduling Part 2 of ACLS/BLS based on their rotation/staffing schedule

Figure 10. Registration in The Learning Center for ACLS and BLS Training
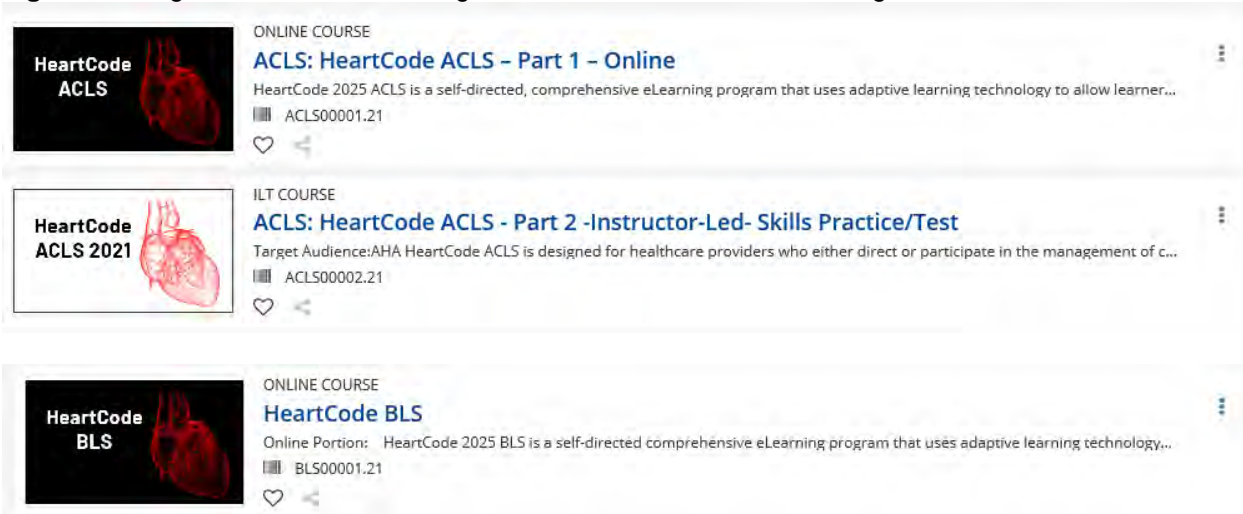
- ACLS
  - o Online portion takes about 7 hours and requires knowledge of CPR as well as ability to identify basic rhythms. This portion is very comprehensive and does take some preparation to pass. Some course materials are provided, although the use of other resources may be helpful
  - o "Megacode" portion (Part 2) is scheduled separately and occurs off-site (usually across street within WAC building). Participants are required to run a code without the assistance of others. This portion takes about 4 hours and occurs after online portion is completed
  - o Completion of both portions of the course is required in order to pass

Parking
- Residents must adhere to their assigned parking location.
  - o On Saturdays, Sundays and major holidays, residents may park in patient parking structures (Parking area 1 on 92nd street and 3 on 87th street).
  - o Off-Peak Times (Mon-Fri, 6PM-8AM), residents may park in parking area 1 or parking area 3. Must arrive AFTER 6PM and leave BEFORE 8AM.
- Residents are encouraged to use technology for participation in off-site meetings using WebEx in order to minimize travel time.
- Additional details about parking can be found in the parking handbook.
- Parking Scout Page: http://intranet.froedtert.com/?id=358&sid=1

Project Days

- Residents may be allocated project days at the discretion of their residency program director. These days are to be used for program-related projects and research activities. The number of days and when they can be taken will vary based on the residency program.
- Residents may choose to work remotely on their project days, but should be available via WebEx, email and/or cell phone.

Working Remotely

- Some pharmacy department staff have transitioned to work-from-home (WFH) full-time or in a hybrid model. Generally, residents will be expected to work-from-home if completing a rotation in these areas.
- All informatics team members are permanent WFH, center for medication use and stewardship pharmacists are currently in a hybrid model.
- If a resident intends to work-from-home in a location outside of the local area (ie, their home in the Milwaukee area), their RPD and/or manager must be contacted to approve this arrangement in advance.

Vizient Committee Involvement
- Residents can elect to join the Vizient Pharmacy Network Committees
- This elective experience will provide residents the ability to participate on projects and network with individuals at academic medical centers across the country
- The Froedtert team has been involved in the following committees:
  - Ambulatory Pharmacy Development
  - Business of Pharmacy Enterprise
  - Cancer Care
  - Med Use Informatics and Technology
  - Professional Development Workforce
  - Quality Safety and Compliance
  - Research
  - Supply Chain Optimization

Academia Opportunities
- Academia and precepting opportunities are available through Concordia University of Wisconsin (CUW) School of Pharmacy, the Medical College of Wisconsin (MCW) School of Pharmacy, and University of Wisconsin-Madison (UW) School of Pharmacy
- An optional teaching certificate is available through the Medical College of Wisconsin

Research Certificate
- Residents have the option of completing a formal Pharmacy Research Certificate over the course of residency training.
- Residents are encouraged to discuss participation in the Research Certificate with their program director.

Pharmacy Society of Wisconsin Membership
- Pharmacy Society of Wisconsin is covered by Froedtert & the Medical College of Wisconsin for all pharmacy residents and staff.
- PGY1 residents who are in their first year of practice receive their first year of registration free regardless of employment and are encouraged to register with PSW and affiliate with Froedtert.
- PGY2 residents who are new to Froedtert will be added to Froedtert's member list within the first half of the residency year.

Wellness and Resilience Resources
- In addition to residency programming to address wellness, resilience and prevention of burnout, Froedtert Health offers a variety of wellness resources that are available to all employees.
- Many of these are listed on the Wellness Works intranet page: http://intranet.froedtert.com/wellnessworks
- The Employee Assistance Program (EAP) also offers a variety of services that are included as part of the benefits package. http://intranet.froedtert.com/EAP

Excellence in Action
- This platform can be used to submit recognitions for fellow residents, other pharmacists/ pharmacy staff members, or other healthcare professionals or staff who went above and beyond to help you, a patient, or others.
- Link: http://intranet.froedtert.com/?id=24359&sid=5

COVID19 Resources and Guidance
- Information regarding COVID19 changes quickly, so employees are encouraged to visit the intranet pages below for the most up-to-date information. Residents are also encouraged to carefully review organizational and departmental communications regarding this topic as they are released.
- Information from Internal Occupational Health regarding COVID19 exposure or symptoms is available here: http://intranet.froedtert.com/IOH
- General information about COVID19 at Froedtert can be found here: http://intranet.froedtert.com/?id=27904&sid=1
- Clinical resources about COVID19 can be found here: https://intranet.froedtert.com/?id=27870&sid=1
- Froedtert residents will adhere to any Froedtert Health mandated business travel restrictions due to COVID19.
- All staff must wear a medical grade mask while working on the Froedtert campuses. The type of mask will vary based on vaccination status.

Daily Heath Self-Assessment
- Staff are required to self-screen for symptoms of COVID-19 before entering Froedtert buildings. This process is to keep staff and patients safe and shows our patients we're taking extra measures to protect them.
- Download the Froedtert&MCW application
  - Create an account with the app using a personal e-mail and password.
  - Employees who use this app for on-demand virtual visits use the same e-mail address they use for their MyChart account.
- Use self-assessment guide if needed https://intranet.froedtert.com/upload/docs/Froedtert%20Hospital/Departments/Infection%20Control/Coronavirus/Top%203%20Links/Daily%20Health%20Self-Assessment.pdf
- If symptoms are present, positive test or exposure use the "Screen2Work" section in the application to determine next steps.
- Notify your leader and program director based on screening results or testing results.
- If assigned to work a shift and unable to work based on screening, follow unscheduled absence process for your designated area

Figure 11. Froedtert & MCW Mobile App and Screen2work

Back to Table of Contents
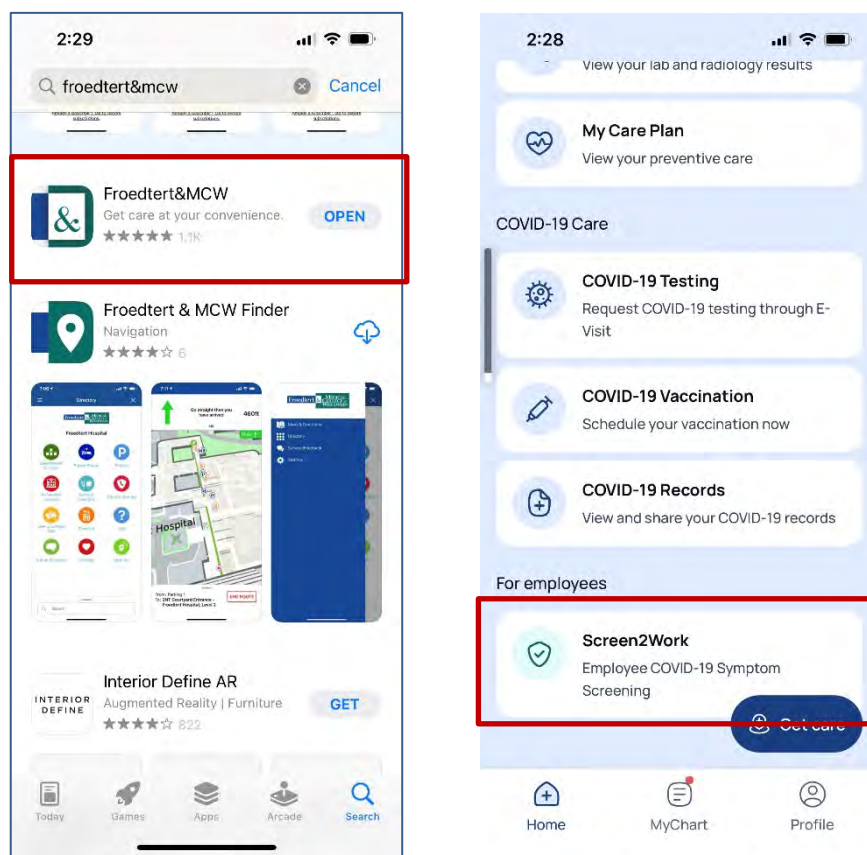
Medical College of Wisconsin Teaching Certificate Program

The Medical College of Wisconsin (MCW) Pharmacy School Teaching and Learning Certificate Program offers an innovative and interprofessional learning environment that prepares the educators of the future for success in didactic and experiential settings.

PROGRAM BENEFITS

Innovative Our curriculum embraces active learning pedagogy, employing team-based learning (TBL) and utilizing technology to enhance the learning experience. Participants may gain experience with several educational platforms, including ExamSoft, TopHat, Storyline Articulate, GoAnimate!, and NeehrPerfect.

Interprofessional Collaborative, interprofessional learning is a cornerstone of MCW's teaching philosophy. Participants will have the opportunity to participate in interprofessional educational sessions with local health professions students, including physicians, nurses, medical interpreters,anesthesiologist assistants and others.

Flexible We provide on-demand, web-based learning sessions and a two-year program completion window to provide flexibility for participants to complete requirements at their own pace.

Personalized The small size of our program enables us to provide personalized support and feedback to program participants. All participants will have a formal mentor to encourage their professional growth throughout the program. Academic Educator Distinction is available for participants who desire additional training and experience to prepare for a career in academia.

TEACHING CERTIFICATE PROGRAM STRUCTURE

- Participants may elect to complete the program requirements over 1 or 2 years
- Required learning modules are provided as a combination of live educational seminars and recorded web-based lectures
- Didactic learning opportunities are available in several core MCW Pharmacy School courses, including the longitudinal Patient Care Lab and the Integrated Sequence therapeutics classes

Residents

The program is designed to facilitate achievement of PGY1 and PGY2 ASHP residency program objectives relating to teaching and precepting

TEACHING CERTIFICATE REQUIREMENTS

At a minimum, participants will engage in the following activities at the MCW Pharmacy School:

- Attend introductory session "boot camp" at the beginning of the academic year (July)
- Complete required monthly modules (live and remote sessions offered)
- Deliver two hours of didactic lecture
- Lead one Patient Care Lab activity
- Facilitate six Patient Care Lab activities
- (Co)-Precept one IPPE/APPE student
- Develop a teaching portfolio and personal teaching philosophy

Available live/online modules include:

Teaching and Learning Styles • Curricular Design • Teaching with Technology • Evaluation and Assessment Strategies • Preceptor Essentials • Academia Structure, Rank & Promotion • Learning Objectives • Effective Presentations • Scholarship of Teaching and Learning • Interprofessional Education • And Many More!

PROGRAM COSTS

The cost of the program for practicing pharmacists is $400. A discounted enrollment cost of $100 is available for MCW Preceptors participating in the Preceptor Benefits Program, bronze-gold level. Complimentary enrollment is provided for pharmacists currently enrolled in a residency program.

43

Back to Table of Contents

Pharmacy Research Certificate Overview

Residents have the option to complete a formal Pharmacy Research Certificate over the course of their residency training. The certificate is optional for most residents. However, individual residency programs have the opportunity to require additional components as part of certificate completion; they may also require the certificate as part of residency completion requirements. Discuss with your Residency Program Director what his or her expectations are for the Pharmacy Research Certificate.

The purpose of the Pharmacy Research Certificate program is to enhance the research development curriculum at Froedtert & the Medical College of Wisconsin (MCW) and provide rigorous training for those interested in pursuing a career with continued scholarly pursuits.

Goals and Objectives:

1. Increase pharmacist understanding of and ability to interpret biostatistics in medical literature.
2. Increase comfort and awareness of the various research processes and resources available at Froedtert & MCW.
   a. Improve understanding of how to develop a research question.
   b. Improve understanding of departmental research processes.
   c. Decrease barriers to research.
   d. Familiarize staff and increase the number of research mentors.
   e. Increase engagement of staff in research.
3. Improve quality of research project submissions.
4. Improve quality of research posters and presentations.
5. Increase resident and staff publication rates and attitudes towards publishing.

Program Leadership:

Joel T. Feih, PharmD, BCCCP
Clinical Pharmacist, Froedtert Hospital
PGY2 Critical Care Pharmacy Residency Program Director
Froedtert & the Medical College of Wisconsin
9200 West Wisconsin Avenue
Milwaukee, Wisconsin 53226
joel.feih@froedtert.com
primary contact

Kristin Busse, PharmD, BCPS
Assistant Professor of Regulatory Sciences
Medical College of Wisconsin, School of Pharmacy
Regulated Research Oversight Program Director
Medical College of Wisconsin, Office of Research
Medical College of Wisconsin
8701 W Watertown Plank Rd
Milwaukee, WI 53226
kbusse@mcw.edu

William J. Peppard, PharmD, BCPS, FCCM
Pain Stewardship Coordinator
Froedtert & the Medical College of Wisconsin
9200 West Wisconsin Avenue
Milwaukee, Wisconsin 53226
william.peppard@froedtert.com

Components for Completion of the Certificate:

- Attendance at 100% of live Research Development Series sessions, including selected Academic Afternoon sessions (*described below*)
- Active participation in Research Development Series sessions, whether joining live or virtual
- Preparation of a manuscript suitable for publication in a peer-reviewed journal
- Poster or oral presentation at a national-, regional-, or state-level meeting
- Program evaluation and feedback

Residency Program Director approval is required prior to granting the certificate. The certificate is optional for most residents. However, individual residency programs have the opportunity to require additional components as part of certificate completion; they may also require the certificate as part of residency completion requirements. Discuss with your Residency Program Director what his or her expectations are for the Pharmacy Research Certificate.

Research Development Series (RDS):

Most sessions of the RDS are 1 hour long and will occur during a typical Academic Afternoon schedule; to achieve 100% attendance, participants will have to make up any missed sessions. It is strongly recommended that residents avoid missing live sessions; if unavoidable, a make-up plan must be developed by discussing with program leadership prior to the anticipated absence (eg, staffing, PTO). Unexpected or emergent absences will be accommodated on a case-by-case basis. Sessions will be recorded and provided via Webex Teams; additional activities or assignments may be required as part of a make-up plan.

Each session has associated objectives and recommended project activities. The participant is expected to complete the recommended project activities prior to the corresponding discussion session and then use the information from each session to modify and optimize that component of their residency project.

Timing	Topic
July through September (approximately once weekly)	Introduction to Projects at Froedtert & the Medical College of Wisconsin
	Developing a Research Question and Specific Aims
	Institutional Review Board (IRB) and Institutional Research Processes
	Obtaining Reports and Data for Quality Improvement and Research Projects
	Research Best Practices from a Librarian's Perspective
	Evidence-Based Medicine
	Basic Study Designs
	Advanced Study Designs
	Types of Data, Descriptive Statistics
	Inferential Statistics
October	Database Management and Design
November	Miscellaneous Statistics
January	Preparing a Research Abstract: Focus on Presenting Results
March	Manuscript Writing

Residents are encouraged to reach out to program leadership for the certificate with questions or for further discussion. An overview presentation will be provided during New Resident Orientation. If planning to participate, a commitment to the program will be required by early July.

Inpatient Staffing Information

There are 2 primary staffing models in the department:

7/70 staff
- These pharmacists work Monday through Sunday (7 days) and work 10 hours each day. During this stretch, they work on their primary team as either straight AM shifts or PM shifts. They will then have the following 7 days off
    - What this means for residents is that you may have a different preceptor during each week of rotation. For example, during a 4-week rotation you may have the same preceptor on weeks 1 and 3 and a different preceptor on weeks 2 and 4
    - "A week" and "B week" are designated 7 day stretches at Froedtert to reflect the 7/70 model
    - Staff are only paid for the hours they work (eg. 70). Some staff who work 7/70 would like to work a full 80 hours each pay period, so they will work an "8th day" during their off week. This is also a 10-hour shift, but usually not on their primary team.
    - 7/70 (and 8/80 staff) work every other weekend. Both 7/70 and 8/80 are considered full time employment.
    - ICU, oncology, transplant, cardiology, central, and ED pharmacists have 7/70 or 8/80 scheduling

8 hour rotating staff
- These pharmacists work primarily Monday through Friday, 8 hour shifts
    - Eight hour pharmacists work a mixture of AM and PM shifts. When possible, 8-hour pharmacists are scheduled for a week stretch on the same team for continuity of care. They then rotate to a different team or work PMs on their other week.
    - These pharmacists also work weekends, but less frequently (about every 4th).
    - Pharmacists in medicine, surgery, neurology, central, and the pre-admission testing clinic work this type of schedule.

Resident Staffing Requirements

Weekday Staffing
- Residents staff in 1-2 week blocks at a time. A week consists of Monday-Friday PM shifts, usually 11:30AM to 10PM (10 hours).
- During a single week, the resident staffs on the same area. This allows the resident to become a part of the team, get to know the physicians and nurses on that unit, and most importantly, follow patient progress and the results of their interventions or recommendations.
- PGY1 residents work 9 weeks throughout the year on a medicine or surgical unit.
- PGY2 residents work 7 weeks throughout the year. An effort is made to schedule PGY2 residents in their area of specialty. PGY2s in administration, drug information, medication safety, and informatics will staff a mix of central and decentral staffing weeks.

Weekend Staffing
- Weekend staffing will occur on different weeks from weekday staffing blocks, during rotation weeks.
- These weekend staffing shifts may include working in central pharmacy, staffing a patient care team, providing med history/reconciliation help, etc. Weekend staffing shifts will also be 10 hours.
- PGY1 residents will work 12 weekends (Saturday and Sunday) throughout the year
- PGY2 residents will work 10 weekends (Saturday and Sunday) throughout the year unless additional staffing weekends are required by the PGY2 program (see PGY2 program-specific information for more details).
- PGY2 residents will be assigned weekends upon schedule publication. Residents must select weekends off around their staffing weeks if a 7-day staffing stretch is not preferred. Residents typically may make schedule requests on 2 of 4 weekends per schedule period.

*Additional staffing for **PGY1** residents will include:*
- Four additional eight hour shifts distributed throughout the year to complete the staffing requirements.
- All PGY1 Residents will staff one 7-day week, Monday – Sunday, during the month of December. This week will occur over Christmas week or New Year's week. PGY1 residents will be compensated by having the opposite 7-day week off from work

Holiday Staffing
- Each resident must work two <u>10 hour</u> holiday shifts
- PGY1 residents will work one of the following groups of holidays:
    - New Year's Day and Thanksgiving Day
    - Christmas Day and Memorial Day
    - Once assigned, PGY1 residents may switch holidays with other PGY1 residents. Holiday switches with staff pharmacists require manager approval.
- PGY2 residents will also work two 10-hour holiday shifts (usually a major and minor) as assigned by clinical managers.
    - PGY2 Admin and MUSP residents will typically work July 4th between their 1st and 2nd year.
- If an assigned holiday falls on a weekend, the resident can choose to either take a day off a rotation day the week prior to or after the holiday OR count the holiday towards their weekend shift requirements (this does not apply to the 7/70 weeks worked by the PGY1 residents over the winter holidays).

Inpatient PGY2 Weekend Staffing

PGY2s will submit their weekend availability for each schedule when requested by the pharmacist scheduler. Residents may indicate "no availability" for up to two weekends per schedule. If a resident does not submit availability by the schedule request deadline, it will be assumed that the resident does not have a weekend preference.

High Demand Weekends

The following weekends are considered high demand weekends due to a large number of staff members requesting off. Availability requests for PGY2 residents during these weekends are not guaranteed and approval for the weekend off will not be known until schedule publication (approx. 6-8 weeks in advance). Manager approval must be obtained for extenuating circumstances.
- Internal PGY2s will be available to work two July weekends (at beginning of residency year)
- Labor Day Weekend
- The weekend after Thanksgiving (residents who are off Thx, will NOT be scheduled for this weekend unless otherwise requested)
- The weekends prior to and after Christmas (residents who are off Christmas may select to be off one of these two weekends)
- Spring Break/Easter weekends (mid/end of March, April 2 and 3, April 9 and 10, April 16 and 17, April 23 and 24).
- Memorial Day Weekend
- Last weekend in June and 1st weekend in July (end of year for external PGY2s

Inpatient Staffing Model

Staffing model is subject to change. Log in to http://www.humanity.com to find the most updated version of staffing model document – "Pharmacist and Intern Staffing Model", which is listed under 'Shared Files'

WEEKDAY STAFFING MODEL					
	AM Pharmacists	Overlap	PM Pharmacists		Overnight Pharmacists
Medicine (0800-1630)	Med1 (4NE): MT 1, 6, 7, 4NE non-medicine patients Med2 (4SE): MT 2, 8, 17, 23, 4SE non-medicine patients Med3 (9NT): MT 3, 9, 14 (and supplemental AHF), 19, 9NT and 7NT ACU non-medicine patients Med4 (8NT): MT 4, 10, 11, 8NT non-medicine patients Med5 (5SE): MT 5, 12, 15, 24, 5SE non-medicine patients Med6 (4SW): MT 16, 18, 20, 21, 22, transplant med (and supplemental transplant), Onc, 4SW non-medicine patients	5 hour overlap (1130 start)	pMed1* (8 or 10hr): 4SE, 4NE, 5NE 1-14 pMed2* (10hr): 8NT, 9NT, 5NE beds 15-21 pMed3 (8hr): 4SW, 5SE, 7NT ACU	**Move to Central @ 2000; assist with all units	
Surgery/Neuro (0700-1530)^^	Surg1: 2NT (32 beds) Surg2: 10CFAC (32 beds) Surg3: 4PV, ERU (20/8 beds) Surg4: 5NW (30 beds) Surg5: 11CFAC (32 beds) Surg6: 12CFAC (32 beds) Surg7: 5SW, 5NE (19/28 beds)	4 hour overlap (1130 start)	pSurg1 (8hr): 2NT, 5SW, 10CFAC beds 7-11 pSurg2 (8hr): 10CFAC beds 12-32, 11CFAC pSurg3* (10hr): 5NW, 15 beds on 3W (assignment based upon patient type and discussion with pCards pharmacist), 5NE beds 22-28 pSurg4* (10hr): 12CFAC, 4PV	**Move to Central @ 2000; assist with all units; Stay logged into 3W Vocera and	
Cardiology	Cards1 (10hr): CVICU (20 beds) Cards2 (10hr): 3W (share 50 beds) Cards3 (8hr): 3W (share 50 beds) Cards Faculty (4hr) - MT 14	6 hour overlap	pCards1 (10hr; 1145 start): CVICU, 35 beds on 3W (assignment based upon patient type and discussion with pSurg3 pharmacist)		
Transplant^^	Tx1 (10hr): TICU (20 beds) Tx2 (10hr): 4NW (26 beds)	5 hour overlap	pTx1 (10hr; 1230 start): 4NW, TICU, 10 CFAC beds 1-6		
Oncology (Share 94 beds)^^	Onc1 (10hr) (BMT): 7/8/9 CFAC Onc2 (10hr) (Heme): 7/8/9 CFAC Onc3 (10hr) (Solid): 7/8/9 CFAC Onc4 (8hr 0800 start) (Heme/BMT): 7/8/9 CFAC Onc5 (10hr) (Swing): 7/8/9 CFAC	6 hour overlap	pOnc1 (10hr; 1130 start): 7/8/9 CFAC		
Critical Care (0700-1730)^^	ICU1: SICU (21 beds) ICU2: NICU (20 beds) ICU3: MICU (26 beds), 7NT ICU MICU Faculty (4hr)	5-6 hour overlap	pICU1 (10hr; 1130 start): SICU, NICU, ED boarders pICU2 (10hr; 1230 start): MICU, 7NT ICU, ERU		N3 (10hr; 2145 start) and N4 (10hr; 2145 start) share coverage of CVICU, ED, MICU, NICU, SICU, TICU
Emergency Department (0700-1730)	ED: Emergency Department	4 hour overlap	pED (10hr; 1330 start): Emergency Department		
Central	C1 (10hr; 0630 start): Central, Birth Center, MT13 (Obs) C2 (8hr; 0800 start): Central, Birth Center, MT13 (Obs) OR (8hr; 0630 start)(cover 3CFAC PAR if open)	5-7 hour overlap	pC1 (10hr; 1030 start): Central, Birth Center, MT13 (Obs) pC2 (8hr; 1330 start): Central, Birth Center, MT13 (Obs), 3CFAC PAR (if open)	**Pick up Infusion Clinic and OR @ 1500	N (10hr; 2100 start) and N22 (10hr; 2200 start) Share hospital coverage
* = resident shift * = resident shift					
^^	Surgery will be the primary team to pick up ED boarders. In situations of extreme capacity challenges and very high number of ED boarders, ask will also be sent to transplant, oncology and critical care to assist with ED boarders				

Inpatient Staffing Model (Weekends)

	AM Pharmacists	Overlap	PM Pharmacists	Overnight Pharmacists
		WEEKEND STAFFING MODEL		
Medicine (0700-1530)	wMed1: 4NE, 5SE (beds 14-19) (36 beds)	4 hour	wpMed (10hr; 1130 start; start on 5SE)	
	wMed2: 4SE, 5SE (beds 9-13)		wpSurg (10hr; 1130 start; start on 10CFAC + log into Vocera)	
	wMed3: 9NT		**Move to Central @1530	
	wMed4: 8NT, 5SE (beds 20-27)		Open all med/surg queues @1530; Reach out to cardiology	
	wMed6: 4SW, 5SE (beds 1-8)		pharmacist @1530 to see if assistance is needed	
Surgery/Neuro (0700-1530)	wSurg1: 2NT, 10CFAC beds 23-27 (37 beds)*		Add transplant/onc/cards queues @1730	
	wSurg2: 4PV, ERU, 10CFAC beds 7-17 (31 beds)		wpOverflow^: 7NT Acute, OCU (non-MT13), LL OCU West, 3CIC	
	wSurg4: 5NW, 5SW beds 1-10 (40 beds)			
	wSurg5: 11CFAC, 10CFAC beds 18-22 (37 beds)			
	wSurg6: 12CFAC, 10CFAC beds 28-32 (40 beds)			
Cardiology	Cards1 (10hr): CVICU, 5NE beds 1-10,@ 1530 assist 3W (30 beds)	6 hour		
	Cards2 (10hr): 3W 25 beds, 5SW beds 11-15 (30 beds)			
	wCards3 (8hr): 3W 25 beds, 5SW beds 16-20 (30 beds)			
Transplant (0700-1730)	Tx1 (10hr): TICU, split 10CFAC beds 1-6 with Tx2			
	Tx2 (10hr): 4NW, split 10CFAC beds 1-6 with Tx1			
Oncology	Onc1 (10hr) (BMT): 7/8/9 CFAC			
	Onc2 (10hr) (Heme): 7/8/9 CFAC			
	Onc3 (10hr) (Solid): 7/8/9 CFAC			
	Onc4 (5hr) (Heme/BMT): 7/8/9 CFAC			
Critical Care (0700-1730)	ICU1 (10hr): SICU, 5NE beds 11-19 (30 beds)	6 hour		N3 (10hr; 2145 start) and N4 (10hr; 2145 start) share coverage of CVICU, ED, MICU, NICU, SICU, TICU, 7NT
	ICU2 (10hr): NICU, 5NE beds 20-28 (30 beds)			
	ICU3 (10hr): MICU, 7NT ICU		wpICU (10hr; 1130 start): CVICU, MICU, NICU, SICU, TICU, 7NT IC	
ED (0700-1730)	ED: Emergency Department	4 hour	pED (10hr; 1330 start): ED + open queue for inpt units @ 1530	N (10hr; 2100 start) and N22 (10hr; 2200 start) Share hospital coverage
Central (0630-1700)		6 hour		
	C1: Birth Center, OR, MT13 (Obs)		pC1 (10hr; 1030 start): Birth Center, OR, MT13 (Obs)	

*	wSurg1 to assist C1 with verify queue if needed
^	wpOverflow shift will be staffed subject to needs of overflow areas open. wpOverflow RPh to work with wpMed and wpSurg to triage and support the needs of all other areas if needed

Inpatient and Oncology Team Details

Team	Units	"A" Week	"B" Week
Medicine			
Med1	4NE (MT 1,6,7)	Joanne Antonopoulos	Matt Zimmerman
Med2	4SE (MT 2, 8, 17)	Jory Ward*	Ali Katula
Med3	9NT (MT 3, 9, 14)	Alison Glienke	Brittany Tefft
Med4	8NT (MT 4, 10, 11)	Caitlyn Trapp	Amber Wollenziehn
Med5	5SE (MT 5, 12, 15)	Adam Hood	Jess Luzi
Med6	4SW (MT 16, 20, TM)	Laurie Dworak	Matt Birschbach
Surgery & Neurology			
Surg1	2NT (32 beds)	Leah Holschbach	Sara Hubbard*
Surg2	10CFAC (32 beds)	*Rotating*	Aaron Lentz
Surg3	4PV, ERU (20/8 beds)	*Rotating*	*Rotating*
Surg4	5NW (30 beds)	Sarah Crober	Kim Knoernschild
Surg5	11CFAC (32 beds)	Kaytie Weierstahl	Ann Birkenstock/Sarah Solano
Surg6	12CFAC (32 beds)	Debbie Kessen	*Rotating*
Surg7	5SW (19 beds)	*Rotating*	Kyle Moomey
Rotating team members: Julie Haase, Brittney Duewell, Brian Pella, Libby Sutton, Stephanie Neilson, Eileen Shannon, Nicki Wex, LaRae Bagnall, Edward Long			
Critical Care/ED			
ICU1	SICU (21 beds)	Sara Farrell	Dave Herrmann
pICU1	SICU, NICU (41 beds)	Elizabeth Scanlon	Lindsey Dailey
ICU2	NICU (20 beds)	Danielle Lancaster*	Kim Haldeman
pICU2	MICU (26 beds)	Kaitlin Cooper Johnson	Patti Rouman
ICU3	MICU (26 beds)	Carla Karczewski	Mike Katz
ED	Emergency Department	Jessica Feih, Ryan Feldman	Cathyyen Dang, Matt Stanton, Chetna Patel
N3/N4	3rd shift ICU	Katie Ewert, Alyssa Meixelsperger	Kelly Richardson, Chris Viesselmann
ICU Faculty	MICU	Sarah Peppard	
Cardiology			
Cards1	CVICU (20 beds)	Joel Feih	Greg Stilin
Cards2	3W (50 beds)	Rotating	Melissa Tan
Cards3	3W (50 beds)	Amanda Pilo	Amanda Pilo
pCards1	3W (beds 1-35), CVICU (20 beds)	Bethanne Held-Godgluck	Janelle Juul*
Cards Fac	CVICU, 3W (heart failure team)	Joe Rinka	
Transplant			
Tx1	TICU (20 beds)	*Rotated*	*Rotated*
Tx2	4NW (27 beds)	*Rotated*	*Rotated*
pTx1	4NW, TICU (46 beds)	*Rotated*	*Rotated*
Transplant Team Members: Carolyn Haupert, Roo Bhatt*, Lindsey Verbunker, Stephanie Tchen			

Team	Units	"A" Week	"B" Week
Central Pharmacy			
C1	Central, Obs, BC (0630)	Ben Knapp	Mike Morris
C2	Central, Obs, BC (0800)	Rotating	
pC1	Central, Obs, BC, OR after 1500 (1000)	Jackie Schabold	Aina Lasky
N	3rd shift central	Mark Owens	Lynn Buss
N2	3rd shift central	Danielle Corrin	Lisa Weinzatl
Specialty Areas			
OR	Perioperative Service	David Eberle*	
PAT	Pre-Admission Testing	Liz Thimm	
INF	Infusion Clinic	Nikki Masse	
Diab	DAART (Glucose surveillance)	Linda Guddie	
Froedtert Inpatient Oncology			
Onc1, Onc2, Onc3, Onc4, Onc5 (AM)	7/8/9 CFAC (96 beds total)	*Rotated*	*Rotated*
Onc6 (PM)	7/8/9 CFAC (96 beds total)	*Rotated*	*Rotated*
Oncology Team Members: Lisa Olson, Emilie Aschenbrenner*, Nan Tong, Cole McCoy, Aaron Lorge, Lisa Samanas, Cole Lightfoot, Nicole Law, Sarah Jesse			
Froedtert Day Hospital			
DH630	Day Hospital	Christy Regan	
DH6	Day Hospital	Brooke Fraser, Julie Difonzo, Stacy Laird*, Deb Sass, Kate Gebultowicz, Erin Turk	
DH7	Day Hospital		
DH8	Day Hospital		
Froedtert Ambulatory Oncology Clinics			
	Grace Clinic - 1	Felicia Zook, Angie Canadeo, Erin McGurty, Melissa Staats, Lori Maurer	
	Grace Clinic - 2		
	Moorland – 3 (M, F)		
	Courage Clinic	Erin McGurty	
	Life Clinic	Nichole Ruffcorn	
	Faith Clinic	Bradley Mayer	
	Breast Clinic	Elizabeth Weil	
	Hope Clinic	Stephanie Spitzer	
	Ambulatory Rotation (2)	Sara Bugamelli, Abigail Beachy	
Drexel and Moorland Cancer Center Pharmacists			
	Drexel	Tom Nowak (clinic), Erin Turk/Laura Case (infusion)	
	Moorland	Lori Maurer, Melissa Staats (clinic/infusion rotation)	
Investigational Drugs (IDS) Pharmacists			
		Angela Urmanski, Karie Gielow, Elizabeth Madrzyk, Emma Carroll, James LaTourette, Kallie Grassinger, Daniel Brusch	

*Denotes Pharmacist Coordinator

PGY1 Resident Project Timeline

March/April 2022	May 2022	June 2022
• Call for projects from staff • Remind any potential project advisors to complete CITI training	• Incoming residents to complete Collaborative Institutional Training Initiative (CITI) training	• Finalized project list distributed to incoming residents
Resident action steps = none	**Resident action steps** • Go to https://www.citiprogram.org/ and complete all modules for Group 1 - Biomedical Investigators, Co-Investigators and Study Coordinators	**Resident action steps** • Review available projects and prepare questions to ask project leads once on-site
July 2022	**August 2022**	**September 2022**
• Project leads will present available projects to residents during orientation • Residents submit project rankings (usually top 5-7) • Projects are assigned • Research team established • Scoping of project and scoping presentation preparation begins	• Work with advisor and project team to scope project and develop protocol (template available)	• Present protocol to Pharmacy Research Committee (PRC). Each resident is allotted 30 minutes to present their protocol and receive feedback • PRC submits feedback that resident must respond to and return in order to obtain protocol approval • Schedule initial biostats consult
Resident action steps ☐ Follow up with project leads to get any questions answered prior to submitting project rank list ☐ Submit rank list by deadline ☐ Build research team with help of project advisor ☐ Plan project and begin creating scoping presentation (template on residency SharePoint site)	**Resident action steps** ☐ Schedule and coordinate necessary team meetings ☐ Distribute protocol draft to project team two weeks prior to scheduled PRC presentation date	**Resident action steps** ☐ Send protocol draft to Mary Frances Picone one week prior to PRC presentation date ☐ Respond to e-mail containing feedback within one week ☐ Distribute finalized protocol to team ☐ Complete e-bridge registration and submission
October 2022	**November 2022**	**December 2022**
• Begin data collection after receiving protocol approval • Draft Vizient poster abstract • Submit Vizient poster abstract	• Begin working on Vizient Poster • Submit Vizient Poster after reviewed by research team	• **Vizient Meeting** • **Midyear Meeting**
Resident action steps ☐ Send abstract to project team 2 weeks prior to deadline ☐ Submit finalized abstract by deadline	**Resident action steps** ☐ Send to poster draft to project team 2 weeks prior to proof deadline ☐ Submit for proof printing by deadline ☐ Submit for final printing by deadline	**Resident action steps** ☐ Present poster!
January 2023	**February 2023**	**March 2023**
• Midpoint check-in with PRC (via email) • Request full Biostats support if needed • Develop WPRC/Great Lakes abstract (due between mid-Jan and Feb 1st)	• Continue implementation and data collection for your project	• Develop WPRC/Great Lakes slide set and presentation
Resident action steps ☐ Send abstract to team 2 weeks prior to submission deadline ☐ Send to RPD, at least 3 business days prior to submission deadline ☐ Submit abstract by deadline	**Resident action steps** ☐ Continue working on project and providing updates to project team	**Resident action steps** ☐ Submit slide set to RPD and project team prior to deadline ☐ Complete practice presentations
April 2023	**May 2023**	**June 2023**
• Great Lakes slide set submission • WPRC/Great Lakes Conference	• Develop project manuscript • Present project at Froedtert (late May/early June)	• Manuscript submission deadline • Project wrap-up
Resident action steps ☐ Submit slide set prior to deadline if required ☐ Present at WPRC/Great Lakes Conference	**Resident action steps** ☐ Send to project team prior to deadline ☐ Send to mentor/advisor by deadline ☐ Update WPRC/GLs slide to include final data and analysis	**Resident action steps** ☐ Submit manuscript to RPD by deadline ☐ Close out study in eBridge, close out of project and tag off to project advisor

PGY1 Acute Care Specific Information

Rotation Opportunities

PGY1 Learning Experiences			
Required Learning Experiences	**Pharmacy Administration Selective***	**Critical Care Selective***	**Elective Rotations**
• Orientation (5 weeks) • Acute Care Clinical Practice Staffing (9 weeks, 12 wknds, 2 holidays, 4 extra shifts, 7/70 week over winter holiday) • Internal Medicine (4 week rotation)	• Department Administration • Clinical Practice Administration • Operations Management • Medication Safety • Residency Program Administration	• Critical Care Medicine • Surgical/Trauma Critical Care • Neurosurgical Critical Care • Cardiovascular Critical Care	**Four Week Rotations:** • Academia (MCW, CUW) • Acute Care Oncology • Hematologic Malignancy • Solid Tumor • BMT (prerequisite of previous student or resident onc rotation) • Ambulatory Oncology • Ambulatory Care (Primary Care, Anticoagulation, Solid Organ Transplant, ID/HIV, Anemia, Cardiology, GI/hepatology, endocrine, pulmonary, rheumatology, sickle cell, neurology, etc.) • Cardiology • Critical Care (may choose additional as an elective) • Emergency Medicine • Infectious Diseases • Informatics • Investigational Drugs • Neurology • Solid Organ Transplant • Specialty Pharmacy **Two Week Rotations:** • Acute Care Rehab (Choose from Spinal Rehab or Stroke/Neuro) • Antimicrobial Stewardship • Infusion Clinic • Inpatient Diabetes (DAART) • Internal Medicine II (Precepting Focus) • OR/Perioperative Care • Third Shift Critical Care
	Medication Use Selective*		
	• Anticoagulation Stewardship • Antimicrobial Stewardship • General Medication Use • Pain Stewardship		
	* Residents will complete at least one 4 week rotation in administration, critical care, and medication use ** PGY1 MUSP Residents will complete Medication Safety Rotation as their administration experience *** PGY1 Informatics Residents will also complete an informatics rotation during their first year **** PGY1 HSPAL Residents will complete operations administration, clinical administration, medication use and an ambulatory care rotation during their first year		
Each resident will complete 8-9 four-week rotations with additional weeks available for 2 week experiences and/or other learning experiences			

Other Program Details

PGY1 Project Days

- Residents will be allowed 5 project days that may be taken during elective rotations (ie project days will not be taken during admin, required critical care rotation, medicine rotation and staffing).
- Residents are strongly encouraged to use project days!!
- Residents should communicate when they plan on using in their pre-rotation email (typically a Monday or Friday work best).
- Residents may work from home for project days, but they must be available via WebEx, email, cell phone.

Rotation Attendance (Required Rotations)

- Residents are discouraged from taking vacation (elective PTO) during required rotations.
    o Residents will be allowed up to two days away from required rotations for sick days and PGY2/employment interviews.
    o Absences beyond two days must be made up either on weekends or by extending the duration of the rotation.
    o If a longer absence is known in advance, the resident may choose to move or extend the required rotation.
- Attendance at recruitment events, PGY1 interview days, Midyear, Great Lakes and other required program activities are not included in time away from rotation.

ACLS Certification

- ACLS Certification should be completed prior to first ICU or ED rotation.
- An additional project day will be allowed for completion of ACLS. It will be the resident's responsibility to schedule Part 2 of a course at a time that aligns with schedule.
- Enrollment is through the learning center and manager must approve request before content can be accessed.
- In the event that a resident already has ACLS certification, the certification information should be provided to RPD so that it can be entered in the Froedtert system. The resident does not need to repeat certification until certification expires.

Projects

Year-long Resident Project
- Over the course of the residency year, each resident will be responsible for planning and executing a project.
    o Projects are selected using resident rank-lists; most residents obtain one of their top choices for project.
    o A project advisor will be assigned to provide guidance to the resident throughout the year, however the resident is ultimately responsible for each element of the project.
    o The resident and project advisor will collaborate to add additional members to the research team.
    o The resident will complete all of the items listed in the Residency Project Checklist throughout the year including:
        ▪ Protocol submission – template available on the Residency SharePoint site
        ▪ Vizient Abstract Submission – see Vizient website (due approx. Nov 1st)
        ▪ Vizient Poster Submission during the ASHP Annual Clinical Meeting
        ▪ Wisconsin Pharmacy Residency Conference or Great Lakes Residence Conference presentation (due approx. mid-January (WPRC) or Feb 1st (WPRC))
        ▪ Great Lakes slide set submission – see Great Lakes website http://glprc.com/

- Froedtert Resident Research Symposium (Presentation of research to Froedtert & MCW Pharmacy Staff, late May/early June)
- Manuscript
  - Major project must be summarized in a written format acceptable for publication. Submission for ASHP Best Practice Award is also acceptable.
  - Residents are strongly encouraged to pursue publication and/or presentation of their project in a peer-review setting upon completion of their residency.
  - o Resources
    - Numerous resources for residency project work are on the Pharmacy SharePoint site:https://datacollectionrb.sp.froedtert.com/sites/pharmacy/residency/Poster%20and%20Presentation%20Resources/Forms/AllItems.aspx

Medication Use Longitudinal Activities

- Each resident will contribute to the completion of both:
  - o A Medication Use Evaluation (MUE)
  - o A writing project (this may be a guideline, class review, monograph, etc)
  - o These experiences will be incorporated into the medication use selective.
- Medication Use Evaluation (MUE)
  - o Pharmacy coordinators or CMU team members will serve as preceptors for MUE learning experience.
  - o Residents may be asked to present results at P&T Committee. There is a chance that the P&T Committee presentation may fall outside of the assigned Medication Use Selective.
  - o Results from the MUE will be used to optimize medication use and ultimately impact patient outcomes
  - o Rotation time will be allotted to work on the MUE, however, it is possible that some of this assignment may need to be completed outside of rotation.
- Writing Project
  - o Residents will complete a writing project during their Medication Use Selective. This might be completion of a monograph, class review or policy update depending on departmental need.
  - o Residents will have time to complete this assignment during their Medication Use Selective.
  - o Pharmacy coordinators and CMU team members will precept this experience and be assigned based on the topic.

Academic Afternoon

- Academic afternoon is a required weekly meeting for all PGY1 residents (unless completing required staffing).
- A variety of topics including: journal clubs, topic discussions, open discussions, medication error reviews, program updates and administrative topic discussions.
  - o 1300-1400
    - 1st, 2nd, 5th weeks – Admin discussions
    - 3rd week – Medication Safety Discussions
    - 4th week – PGY1 Open Discussions
  - o 1400-1500
    - Medication Use or Research Certificate topics
    - Journal Clubs
  - o 1500-1600
    - Clinical Topic Discussion

- There may be times in which academic afternoon is held virtually in which case residents are encouraged to participate from home. During virtual meetings, residents will be asked to use Webcams to enhance the learning experience or discussion.

Research Certificate
- PGY1 residents are required to participate in the Research Certificate Program.
- Most of the research certificate activities are integrated into Academic Afternoon.

Journal Clubs
- Each resident will present one journal club throughout the year
    o A schedule for the year will be posted on the Residency SharePoint
- Resources for journal club are found on the Residency SharePoint within the Journal Club Workspace
- Article requirements
    o Published in previous 12 months, except if the trial is considered a pivotal trial
        ▪ For example, a resident may present on the NICE-SUGAR trial, which was published >1 year ago, but is a pivotal trial. When the resident submits the journal for approval, the preceptor will confirm if the journal is considered a pivotal trial (see below)
    o Topic should be medication-related, original research, and either
        ▪ Something of interest to resident
        ▪ A study expected to make a large impact
- Article/Preceptors Selection and Approval Process
    o Planned citation/article and recommendation for pharmacist preceptor should be submitted to Journal Club Coordinator (Audrey Kostrzewa) at least 3 weeks prior for approval.
    o Residents should not ask the pharmacist preceptor to precept journal club articles prior to receiving approval from Audrey Kostrzewa. After receiving approval for the article and preceptor, it is the resident's responsibility to contact the pharmacist preceptor and ask them to serve as the journal club preceptor.
- Preparation
    o The resident responsible for presenting should thoroughly review that article prior to presentation in order to generate discussion about the topic.
    o PowerPoint will NOT be used as a means to present the article. The presenter should assume that audience members have read the article.
    o If deemed necessary by the presenter, a handout (up to one page) may be created in order to provide additional background information about the topic. This should NOT be a detailed overview of the article.
    o The presenter should use their preceptor to help with preparation. For additional preparation assistance, they may contact the CMU team via cmu@froedtert.com email address.
- Article distribution
    o Distribute electronic copy of article to residents and all pharmacists on the Wednesday prior to journal club (after current week Journal club). Email lists to use: FMLH Pharmacy All Pharmacists and FMLH Pharmacy Residents (this group includes CMH Residents).
- Participation
    o All PGY1 residents are expected to read the journal club article prior to coming to journal club (this should take about 30-60 mins).
    o PGY1 residents should bring a paper copy of the article (ie laptops are not allowed) as a reference to use during the discussion.
    o The presenter should make an effort to generate discussion and call on people in order to make journal club interactive.
- Evaluation
    o Pharmacist preceptor will be responsible for evaluating journal club presentation in PharmAcademic.

  o A member of the CMU team will participate either in person or via phone to generate additional discussion around statistics and study design if needed.

Administrative Topic Discussion

- Each resident will be responsible for one administrative discussion presentation
  - Presentations should be approximately 45 minutes in length and contain active learning/participation
  - Guides for creating the presentation are available
    - I-drive/PHARMACY/Admin Resident/Administrative Discussions
      - These resources should be used to guide your presentation preparation; do not plagiarize someone else's presentation
      - Any copied slides should be appropriately cited within your presentation
  - Topics will be assigned by PGY2 HSPAL residents at the beginning of the year

Medication Error Review

- Each resident will review medication error reports for assigned month (through VIZIENT Safety Intelligence – Safety Event Reporting System), trend data and present to residency class at Academic Half-Day, as well as at the inpatient pharmacist weekly meeting for "A" and "B" week
- Activities:
  - Evaluate all medication errors reported through VIZIENT Safety Intelligence – Safety Event Reporting System for an assigned month (recommended to review submitted errors daily)
  - Residents will develop a presentation on the medication errors for the month to be presented at academic afternoon. They will also present at quarterly M&M conference.
- Residents will be assigned to a quarter to review errors (will be a different quarter than MUE). Within the group, the residents will determine who is reviewing errors on any given day. Review will be done daily so that follow-up can be timely.
- The program can be accessed via Scout page under Applications, or on your desktop under the icon Safety Event Reporting
- Additional information about this activity is found in the Residency Manual portion of the Residency SharePoint under the PGY1 Folder and in the Medication Errors Learning Experience folder.

Teaching and Precepting Experiences

IPPE Students (PGY1 residents will serve as the primary preceptors)
- Precepting may occur during scheduled rotations and/or staffing shifts
- Concordia IPPE students (P1, P2)
  - Usually at Froedtert for an entire week at a time (Fall and Spring)
  - Often students may be with one resident for half a day and then spend the other half of the day with another resident
  - One resident will be the primary preceptor and must submit grading in E-value
    - Of note, residents must be added in E-value before they may be assigned a student's evaluation
    - Students must e-mail the school if a preceptor has not been set up as a preceptor so that they may be added in the system
- University of Wisconsin IPPE Students (P1, P2, P3)
  - Usually at Froedtert on Fridays or weekends for 8 hours at a time
  - Students will be with residents during PM and weekend staffing shifts
  - One primary preceptor will submit feedback via e-mail to one of the administrative residents, who passes it along to the school
- Medical College of Wisconsin (MCW) pharmacy students

- o Students will be completing IPPE rotational experiences on Fridays throughout the year.
    - o Students will be assigned to PM resident staffing teams. The resident who is staffing during the last week of rotation will be responsible for completing student evaluation at the end of rotation.
    - o Email will be used to gather feedback from other residents throughout the rotation.
- Teri Mattek, education coordinator, will contact residents via email with student assignments. Teri is the main point of contact for any questions regarding student assignments and schedules.

APPE Students (staff pharmacists will be the primary preceptors)
- These roles are less formal and can vary based on the rotation.
- The rotation preceptor should provide the resident with guidance on expectations for precepting during the rotation.

Medical College of Wisconsin School of Pharmacy Patient Care Lab
- Each resident will be required to help facilitate at minimum of four patient care labs.
    - o Resident is expected to attend pre-lab planning meeting 1 week in advance, either in person or via phone.
    - o Typically labs occur 8AM – 1PM and residents are expected to arrive 30 minutes prior to the start of lab (labs should be scheduled during non-staffing weeks).
    - o Residents are responsible for reviewing all material prior to prelab planning meeting.
- Patient Care Lab dates and topics list will be distributed to residents within first two months of residency. Residents are to rank dates based on their availability and topic interest. Residents are then notified of assigned dates.
- MCW Patient Care Lab Contact:
    Rachel Kavanaugh, PharmD, BCACP
    Assistant Professor, Co-Director of Professional Labs
    Phone: 414-955-2868
    Email: rkavanaugh@mcw.edu

Preceptor Development
- Residents will participate in several preceptor development topic discussions during the first quarter in order to prepare for precepting responsibilities.
- All residents (regardless of participation in teaching certificate) will participate in a half day training session at MCW during orientation.

MCW Teaching Certificate Program
- PGY1 residents are strongly encouraged to participate in this program
- A faculty mentor will be assigned to each resident

Other Required Learning Experiences

Committee Membership
- Involvement with one or more hospital or departmental committees is required- this list is subject to change.
- Assignments such as small projects, taking of minutes, etc. will be required.
- At the beginning of the residency year, residents will submit a rank list for their preferred committee involvement.
- Residents are responsible for setting up a meeting with the committee chair/contact prior to the first committee meeting in order to discuss expectations.
- Options:
    - o Medication Safety
    - o Pharmacy Quality
    - o Medication Warnings and Alerts
    - o Pharmacy Practice
    - o Pharmacy Research

- o Sterile Products
- o USP 800
- o System Operations
- o System Pharmacy Clinical Committee
- o Product Integration Committee
- o Pain Stewardship Committee
- o Epic Workgroup

Administrative Responsibility
- Involvement with one or more administrative responsibilities is required – this list is subject to change. One or more residents may be assigned to each task based on the amount of workload required.
- At the beginning of the residency year, residents will submit a rank list for their preferred administrative responsibility; more than one resident may be assigned to each
    - o Residency Conference Coordinator
    - o Academic Afternoon Coordinator
    - o Student Clinical Trainer (Inpatient)
    - o Historian
    - o Duty Hours Tracking coordinator
    - o Naloxone Utilization Coordinator
    - o Resident Office Manager
    - o Resident Time Study Coordinator
- Descriptions of administrative responsibilities can be found on the iDrive:I:\FMLH\PHARMACY\Residency Program\PGY1 Admin Assignments

Recruitment Events – options may change
- o Pharmacy Society of Wisconsin (PSW) Annual Meeting
- o Illinois Council of Health-System Pharmacists (ICHP) Annual Meeting
- o Concordia University Wisconsin
- o University of Michigan
- o University of Wisconsin – Madison
- o University of Iowa
- o Froedtert Virtual Events

Milwaukee Citywide Resident Events
- Citywide resident events occur at different pharmacy residency program sites throughout the Milwaukee area
- Typically there are three Citywide Events per year
    - o July/Aug – Resident Research Symposium (Froedtert Hospital)
    - o Aug/Sept – Preceptor Development (Concordia University)
    - o March – Practice Resident Presentations (St. Luke's Medical Center)
- Residents who are not scheduled to staff on these dates will be required to attend

Time Study Analyses
- In order to obtain residency program funding reimbursement from CMS, time studies must be completed documenting the amount of time spent directly precepting residents on rotation.
- Residents will be responsible for coordinating with their primary preceptors the documentation form and submitting the hours electronically for review.

Medication Inspections
- All residents will be assigned to complete monthly medication inspections in one area of the hospital or clinics.
- Medication inspections must be completed and documented prior to the 25th of each month.
- The resident is responsible for communicating with area manager and pharmacy leadership regarding any medication issues identified on the medication inspection.

Community Service
- Each PGY1 resident is required to participate in 4 hours of Community Service during the academic year.
- Healthcare-related opportunities will be available including opportunities to support vaccination clinics and other community events.

Other Experiences

Vizient/American Society of Health-system Pharmacists (ASHP) Midyear Clinical Meeting
- Occurs in early December
- Activities:
  - Poster presentation (at Vizient meeting)
  - Resident recruitment
  - Others as required

Wisconsin Pharmacy Resident Conference or Great Lakes Pharmacy Resident Conference (April)
- Occurs in early April (WPRC) late April (PSW)
- WPRC – A state conference hosted by PSW in conjunction with PSW Educational Conference
- GLPRC – A regional conference that offers the opportunity for residents from Illinois, Indiana, Kentucky, Michigan, Ohio and Wisconsin to present their research projects to their peers and colleagues
- Activities:
  - Project presentation (10-20 minute presentation and 5 minutes for questions)
  - Attendance and active participation during other resident presentation
  - Others as required

Departmental Meeting Attendance
- Tuesday Inpatient Pharmacy Meetings (rotating staff meetings, grand rounds, M&M presentations)
  - Residents are expected to attend monthly M&M meetings when they are not staffing
- Wednesday Academic Afternoons
  - Attendance is required if not staffing or on PTO
  - Other meetings should NOT be scheduled during this time

Mentorship Experiences

Residents are responsible for scheduling monthly meetings in Outlook with their assigned mentors and advisors.

Project Advisor
- A project advisor is assigned to each resident based on their project topic.
- Residents and project advisors are expected to meet regularly but the frequency may change throughout the year.
- The project advisor should review all project materials before they are submitted (protocol, abstracts, poster, presentation, etc).

Residency Mentor
- Residency mentors are pharmacists assigned to each resident. Their primary purpose is to provide residents guidance throughout the year with an emphasis on development and education
- Residents and mentors are expected to meet approximately monthly.

Residency Advisor
- Residency advisors are pharmacists assigned to each resident. Their primary purpose is to provide guidance throughout the year with an emphasis on overall professional development and career advancement.
- Residents and advisors are expected to meet approximately monthly.

Evaluation and Documentation

- Residents are responsible for contacting primary preceptors for each rotation 10-14 days prior to the start of each rotation with an introductory e-mail (see pre-rotation communication expectations).
- The link below contains contact information for each rotation: Rotation Contact List
- All FMLH residency programs utilize PharmAcademic for completion of resident performance evaluations.
- All evaluations should ideally be completed by the last day of rotation or absolutely no later than the following Sunday.
- **Important:** in order to complete the residency program, good progress must be demonstrated on all program goals. Residents must be performing at level of "Achieved for the Residency" on Goal R1 Patient Care and all associated objectives and at least 70% of the remaining required goals. The resident must be at a level of "Satisfactory Progress" on any goals not achieved.
- Residents are responsible for monitoring their progress on residency objectives and must keep preceptors informed about objectives that should be focused on for each rotation. Progress will also be discussed at RAC meetings.

Residency Advisory Committee (RAC)

- Residency Advisory Committee meetings will be held in October, January, April, and June. Residents will attend all four meetings. Other attendees include the RPD, the resident's mentor, advisor, project advisor, and preceptors from rotations that occurred during the previous quarter.
- The resident is responsible for ensuring all attendees are aware of the meeting and will be in attendance. All evaluations in PharmAcademic should be completed prior to the meeting.
- Residents will work with their mentors to upload updated development plans (see below) in PharmAcademic by October 1st, January 1st, April 1st, and June 1st in preparation for the quarterly meeting.
- During the meeting, residents will present their development plan and discuss updates to strengths, areas of improvement, or project milestones. Preceptors will also provide and reinforce feedback from respective rotations.

Development Plan Template

Entering Characteristics	Initial Plan: Changes to Program	1st Quarter Update/ Effectiveness of Changes	2nd Quarter Update	3rd Quarter Update	Final Comments
Strengths:					
Areas for Improvement:					
Career Goals:					

Interests:					
Residency Goals:					
Residency Project • Title: • On track?					
Committee					
Administrative Assignment					
Duty Hours tracking reviewed					
% of objectives at ACHR List of objectives at NI					
Resident Progress & Notes Program Adjustments					
Wellness Strategies					
Teaching Certificate					

Other Important Deadlines

PGY2 Early Commitment
- It is at the discretion of the PGY2 program director as to whether their program will participate in early commit. This decision will be communicated to the residents around October 1st.
- If the program is participating in early commit, interested residents should express interest in a PGY2 program by around October 15th.
  - In general, an email expressing the resident's intent to apply should be sent to both the PGY2 program director of the program of interest, as well as the resident's PGY1 program director.
- Applications deadline for PGY2 programs is usually around November 1st.
  - Applications require a letter of intent, CV, and three letters of recommendations at a minimum.
  - Applicants will be required to give a presentation during the interview.
- Decisions regarding early commit will be announced prior to or immediately following the Midyear Meeting at the discretion of the PGY2 RPD.

Communication between Rotations

- Residents are responsible for communicating year-long progress to each preceptor via an additional pre-rotation email.

- This email will be completed by the resident's current preceptor and forwarded to the resident's mentor and next primary preceptor.
- These emails will not replace PharmAcademic evaluations, but will briefly supplement the resident's progress to better bridge the end of a rotation and start to another

Pre-Rotation Communication Expectations

Below are the elements that should be included in pre-rotation communication as well as an example of an exceptional pre-rotation email.

Goals:
- In order for residents and preceptors to adequately prepare for the rotation, residents must provide preceptors with rotations goals. Residents need to have at least 3-4 goals that they would like to work toward. Goals should be specific and appropriate for the time assigned to the rotation. For 1-2 week rotations, residents may only have 1-2 goals.
- Example good goal: Become familiar with the selection and narrowing of antibiotic therapy and overall treatment of community acquired vs. hospital acquired pneumonia in the ICU setting
- Example poor goal: Improve knowledge of antibiotics **- too broad**
- Example good goal: Increase comfort and confidence in making recommendations and interacting with physicians during patient care rounds
- Example poor goal: Increase confidence **- too broad**

Learning Style:
- Additionally, it is helpful if residents provide information about their learning style. Residents should be able to provide a general description of what is most effective for them to learn.
- Example: I like to be quizzed on new information, I am a hands on learner - I learn by doing, I like to observe first prior to trying new things on my own

Schedule:
- Preceptors should be notified with any meetings, staffing days, and if a project day will be scheduled during the rotation. Since schedules are likely to change, residents should provide preceptors with any updates on the first day and throughout the rotation.

Deadlines/Competing Priorities:
- Residents are encouraged to communicate with their preceptors about other things that are on their plate around the time of their rotation.
- For example: presenting journal club on 10/15, teaching philosophy is due on 11/1, applying for early commit for critical care, application due 11/1.
- This is not meant to be an excuse, but rather a way to help resident and preceptor to set deadlines for any activities that may be required during that rotation.

Strengths and Opportunities for Improvement:
- The goal for this portion is for residents to incorporate feedback from previous rotations and communicate it forward to the next preceptors.
- Example: My identified strengths on my previous rotation were ability to thoroughly review a patient profile identify drug-related problems and ability to prepare topic discussions for students. Opportunities for improvement were my time management in working up patients, improving confidence by speaking up more on rounds, and looking up information prior to asking for the answer from my preceptor

Example Pre-Rotation Email

Goals (These should be measurable and specific, you do not need this many goals, 3-4 is appropriate):
1. Be able to **analyze** a complex patient and make drug therapy plans and interventions as needed

2. Gain **confidence** in making recommendations to the team; enhance my **communication** skills
3. Better understand the pharmacology and appropriate use of **antiepileptic drugs** in the critical care setting (indications, appropriate orders, side effects, therapeutic drug levels, etc.)
4. Better understand therapies for **common disease states** seen in the NICU (i.e., TBI, SAH, status epilepticus, CNS infections, brain tumors, stroke, neurological disorders, and common neurosurgical procedures)
5. Become more familiar with **neurosurgical procedures** and related medication use issues:
   a. Which meds to hold, which meds are unnecessary/necessary (med rec)
   b. Which meds are necessary to use with certain procedures or devices and which to avoid
6. Broaden and deepen my understanding of the appropriate use of **antibiotics**, especially in the NICU patient population and be able to recognize **pharmacokinetic** changes which occur in patients with traumatic brain injury, CNS infections, and other neurological states
7. Become familiar with **NICU-specific orders** and better understand which drugs can/cannot be used on the regular hospital floors

Strengths:
- Thorough profile review
- Precepting students

Areas for Improvement:
- Efficiency
- Confidence
- Looking up information before going to preceptor for answers

Schedule:
- Tuesday, 2/24:
  - o 1200-1300 Resident Candidate Interview Lunch
  - o **DONE ON ROTATION BY 1615/1630** (central PM bonus shift @ 1700)
- Thursday, 2/26:
  - o 1300-1400: Quality Review Committee Meeting
- **Friday, 2/27: NOT ON ROTATION, staffing pMed2**

Deadlines/Competing Priorities:
- Presenting journal club on 2/25, teaching philosophy is due on 2/28. Data collection for project is on-going, need to get 100 patients analyzed this month to stay on track.

Project Day (for elective rotations):
- Full project day on Monday, March 2nd

Learning Style and Feedback:
- Repetition
  - o I like to be able to WRITE things down and go back to them later, so if I take a lot of notes, that's why. I like to be able to see things later to remind me of what was talked about earlier
  - o If asked a question, I like to have time to look into things I don't know or am not sure about
- Daily feedback is appreciated especially if I am not meeting expectations
- Working on self-reflection skills so would like the opportunity to assess my performance before getting feedback

PGY1/PGY2 Health-System Pharmacy Administration and Leadership Residency and Masters of Healthcare Administration Overview

PGY1/PGY2 Program Director
Justin Konkol, PharmD, MHA, BCPS, DPLA
Director of Pharmacy
Froedtert & the Medical College of Wisconsin
Phone: 414-805-4009
Email: justin.konkol@froedtert.com

PGY1/PGY2 Program Coordinators
Tara Feller, PharmD, MBA, MPH, BCPS
Pharmacy Manager
Froedtert & the Medical College of Wisconsin
Phone: 414-805-6247
Email: tara.feller@froedtert.com

Kristin Tiry, PharmD, MHA
Pharmacy Manager
Froedtert & the Medical College of Wisconsin
Phone: 414-805-8266
Email: kristin.tiry@froedtert.com

Introduction
A PGY2 health-system pharmacy administration and leadership residency builds upon the PGY1 residency graduates' competence in the delivery of patient-centered care and in pharmacy operational services to prepare residents who can assume high level supervisory, managerial, and leadership responsibilities. Areas of competence emphasized throughout the program include safe and effective medication-use systems, quality assurance and improvement, management of human resources, management of financial resources, use of technology, and advanced leadership. The residency lays the foundation for continued growth in management and leadership skills. Upon graduation, residents are prepared for a variety of clinical or operational leadership roles in a variety of work settings.

Features
This residency program prepares residents to assume high-level managerial, supervisory, and leadership responsibilities. During the first year of the program, the resident will fulfill PGY1 pharmacy residency program requirements while participating in additional administrative responsibilities. During the second year of the program, the resident will complete rotations and learning experiences that focus on safe and effective medication utilization, operations and clinical management in both inpatient and ambulatory settings, transitions of care, quality assurance, management of human and financial resources, and the use of technology. Projects and longitudinal activities during both years will relate to resident's interests in pharmacy leadership and administration. When available, interim leader opportunities are highly encouraged and will be tailored to the resident's skills and interests. In addition, residents will complete a 2-year Masters of Healthcare Administration (MHA) degree in partnership with University of Wisconsin-Milwaukee (UW-M).

PGY1 Learning Experiences
HSPAL residents will be required to complete a rotation in pharmacy operations, clinical administration, executive pharmacy leadership, ambulatory care and a rotation with the Center for Medication Utilization (CMU). All other rotation requirements are the same as those for the PGY1 Residency Program.

Residency Benefits
- Estimated annual stipend: $49,920
- Health insurance; life, disability, dental and vision insurance also available

Residency Benefits (continued)
- 56 hours paid time off, six paid holidays annually (residents will work two holidays per residency year)
- Discounted membership to Wisconsin Athletic Club
- Pharmacy Society of Wisconsin Membership
- ACLS classes provided
- Laptop and office space
- Travel, registration, and lodging allowance for ASHP Midyear Clinical Meeting, ASHP Conference for Pharmacy Leaders, Great Lakes Residency Conference

Current Residents
Tyler Wempen, PharmD
PGY1 Health-System Pharmacy Administration and Leadership Resident
- PGY1 Project: Implementation of Adherence Packaging Technology within a Health-System Home Delivery & Specialty Pharmacy

Olivia Crabtree
PGY1 Health-System Pharmacy Administration and Leadership Resident
- PGY1 Project: Piloting Inpatient Pharmacist Staffing Model Enhancements to Improve Employee Engagement

Past Graduates of Program

Name	Year	Current Leadership Role	Organization
Melissa Theesfeld	2008	Director of Experiential Education	Concordia University School of Pharmacy
Kate Lewis	2009	Specialty Pharmacy Coordinator	Froedtert
Anne Zechlinski	2009	PGY1 Program Director – Pharmacy Coordinator	Froedtert
Sara Wilke	2010	Operations Manager	Rush
Justin Guthman	2011	National Director of Pharmacy Operations	Ascension
Ryan Fleming	2012	Pharmacy Manager, Thrombosis Service	University of Utah Hospitals and Clinics
Richard Taylor	2013	Director of Pharmacy	Beaumont Hospital, Wayne
Lindsey Clark	2014	Pharmacy Manager – Care Transitions	University of Michigan
Alyssa Ferrie	2015	Pharmacy Manager	University of Utah Hospitals and Clinics
Chad Johnson	2015	340B Education & Compliance Support	Apexus LLC
Noah Franz	2016	Director of Pharmacy, Home Infusion	Froedtert
Annie Shelton	2016	Health-System Pharmacy Operations Manager	University of Kansas
Erick Siegenthaler	2017	Senior Director – Infusion Strategy	Visante
Christian Holm	2017	Pharmacy Supply Chain Manager	Aurora Health Care
Kristin Tiry	2018	Pharmacy Operations Manager	Froedtert

Alyssa Billmeyer	2018	Specialty Pharmacy Manager	Emory Healthcare
Marshall Johnson	2019	Coordinator for Oral Chemotherapy & Specialty Pharmacy	University of Kansas
Elizabeth Rodman	2019	Clinical Pharmacy Lead, Medicare Infusion Strategy	Humana
Adam Henn	2020	Pharmacy Operations Manager	University of Kansas
Marilyn (Gaske) Hill	2020	Ambulatory Pharmacy Manager	Dartmouth-Hitchcock
Kevin Krueger	2021	Pharmacy Operations Manager	Froedtert
Kelsey Raymer	2021	Director of Health System 340B Operations and Pharmacy Supply Chain	University of Mississippi
Aimen Naveed	2022	Manager of Automation and Central Operations	Northwestern Medicine
Sarah Steinert	2022	Pharmacy Operations Manager	Froedtert

Expectations and Opportunities

Professional Organization Membership
- American Society of Health-System Pharmacists (ASHP)
- Pharmacy Society of Wisconsin (PSW)
- American College of Healthcare Executives (ACHE) – highly recommended.

Conference Opportunities
- Milwaukee Residency Conferences (PGY1 year)
- ASHP Conference for Pharmacy Leaders (required)
- Vizient and ASHP Midyear Clinical Meetings (required)
- Great Lakes Pharmacy Resident Conference (GLPRC) (required)
- Wisconsin Pharmacy Residency Conference (in partnership with the PSW Educational Conference (required)
- PSW Annual Meeting, Legislative Day(optional)

Formal Presentations (Required)
- Vizient Resident Poster Presentation
- Great Lakes Pharmacy Resident Conference Presentation
- Wisconsin Pharmacy Residency Conference Presentation/Poster

Staffing
- PGY1: Approximately nine weeks on second shift (Mon-Fri 1130-2200) in a decentralized location.
    - 12 weekends (Sat/Sun, 10 hour shifts)
    - 7/70 week over Christmas or New Years (alternate week OFF)
- PGY2: Approximately seven weeks throughout the year in a central or decentralized location
    - 10 weekends (Sat/Sun, 10 hour shifts): additional staffing TBD per department needs

Departmental Meetings
- Weekly manager meetings
- Weekly resident journal clubs, clinical conference, and administrative discussions

- Monthly department staff meetings
- Monthly medication safety discussions
- Leader meetings and corporate pharmacy meetings
- Additional meetings based on resident interest and rotation area

Administrative Opportunities
- Internship program manager (inpatient and outpatient)
- Leadership Self-Assessment (DiSC) and administrative mentoring
- Pharmacy Manager on-call responsibilities
- Lead recruitment of incoming administrative residency class
- PSW Practice Advancement Leadership Team (PALT)
- Strategic planning process
- Student rotation coordination and precepting
- Health-system site visits (as available)
- Interim manager/leader (as available)

PGY2 Required Rotations

Ambulatory Pharmacy Leadership
Preceptor(s): Jordan Spillane, PharmD
Director of Ambulatory Pharmacy Services

Overview:
The objective of this rotation is to provide a PGY2 pharmacy administration resident direct experience with ambulatory pharmacy leadership. Residents will be provided the opportunity to work directly on ambulatory pharmacy initiatives and attend meetings from the perspective of a director of ambulatory pharmacy services.

Chief Pharmacy Officer Leadership
Preceptor(s): Jordan Dow, PharmD, MS, FACHE
Vice President and Chief Pharmacy Officer

Overview:
The purpose of this rotation is to expose the resident to high-level pharmacy leadership across the F&MCW enterprise. The resident will focus on activities related to pharmacy leadership, but will experience aspects of corporate, system-wide leadership initiatives. At the end of the rotation, the resident will have knowledge and understanding of the primary forces impacting large health-systems, the driving forces behind current and future health-care reform, and an understanding of how pharmacy department goals are aligned with organizational goals.

Outpatient Pharmacy Leadership
Preceptor(s): Dale Drizd, PharmD
Executive Director & Chief Operating Office – Froedtert Health Pharmacy Solutions

Overview:
This rotation will provide an overview of a variety of outpatient pharmacy services including specialty, PBM/managed care, home infusion and retail. The resident will be given an opportunity to actively participate in daily activities and be integrated into workflows and processes. The specific rotation involvement will be tailored to the resident's interests. At the end of the rotation, the resident will have an understanding of the function and importance of each practice setting and will gain the necessary knowledge to support pharmacy teams within these outpatient areas. Objectives of this rotation will be completed by a variety of activities that will differ depending on the practice area the resident is rotating through.

Health-System Pharmacy Administration
Preceptor(s): Justin Konkol, PharmD, MHA, BCPS, DPLA
Director of Pharmacy, Froedtert Hospital and Oncology Service Line

Overview:
The objective of the Administration rotation is to give the resident a thorough understanding of the role of a Director of Pharmacy Services. The resident will actively participate in the decision making processes that support continuity of pharmacy services across the system and assist in the coordination of management resources within the department to accomplish tasks. Objectives of this rotation will be completed by working independently on assigned projects, attending interdisciplinary/administrative meetings and through topic discussions with the Director.

Operations Management II (Inpatient or Oncology)

Preceptor(s):   Kevin Krueger, PharmD, MHA   Kristin Tiry, PharmD, MHA
Pharmacy Operations Manager   Pharmacy Operations Manager

Sarah Steinert, PharmD, MHA
Pharmacy Operations Manager

Overview:
The operations management rotation focuses on the use and integration of medication system automation in an academic medical center. The resident will work closely with the pharmacy administrators responsible for medication system automation to develop the skills necessary to independently manage the operations of these medication use systems. The resident will actively participate in decisions related to process improvements in the medication use systems/automation with the goal of being able to independently manage the automation processes. The resident will also assume the role and responsibility of a pharmacy administrator which will allow them to gain experience in change management to facilitate process improvement initiatives. The objectives of this rotation will be completed through project work, implementation of process improvement initiatives, and attending various interdisciplinary/administrative meetings.

Clinical Pharmacy II Management

Preceptor(s):   Tara Feller, PharmD, MBA, MPH, BCPS   Kristin Bialkowski, PharmD, BCCCP
Pharmacy Clinical Manager   Pharmacy Clinical Manager

Overview:
The clinical management rotation will provide the health-system pharmacy administration resident exposure to the inpatient clinical pharmacy services at Froedtert Hospital. The resident will work collaboratively with pharmacy leadership on the creation, coordination, and ongoing support of clinical programs and the needs of the pharmacists providing patient care. The resident will actively participate in the decision making processes that support continuity of pharmaceutical care across the system and assist in the coordination of management resources within the department to accomplish tasks. The resident will assume the role and responsibility of a pharmacy administrator, which will offer them the opportunity to gain experience in change management to facilitate process improvements, and leading practice initiatives within the organization. Objectives of this rotation will be completed by working on assigned projects and initiatives as well as attending various interdisciplinary/administrative meetings. Activities of the rotation will be tailored, when able, to meet the resident's short and long-term career goals.

Supply Chain and Contracting

Preceptor(s):   Chris Vogt, RPh, MHA   Matt Spaeth
Director of Pharmacy Centralized Services   Contracts and Purchasing Coordinator

Kristin Tiry, PharmD, MHA   Jacob Olson, PharmD
Pharmacy Operations Manager   340B Pharmacy Program Manger

Overview:
This one-month rotation will focus on effective supply chain management of the health-system pharmacy enterprise. This will include exposure to pharmacy contracting, working with group purchasing organizations, wholesalers and vendors as well as inventory management, drug shortage management, development of cost savings initiatives and the management of the 340b drug discount program. The PGY2 resident will assist in the roles and responsibilities of the pharmacy administrators and will have the opportunity to gain experience in contracting and inventory management. The resident will actively participate in activities that support the financial mission of the department and health system and assist in the coordination of resources within the department to accomplish tasks. Objectives of this rotation will be completed through independent work on projects, supply chain meetings/topic discussions, and other avenues to benefit the learner.

Longitudinal Rotations

Executive Leadership
Preceptor(s):   Jordan Dow, PharmD, MS, FACHE
Vice President and Chief Pharmacy Officer

Overview:
The purpose of this rotation is to expose the resident to high-level health-system leadership. The resident will focus on activities related to pharamcy leadership, but will experience aspects of corporate, system-wide leadership initiatives in partnership with a hospital senior executive. At the end of the rotation, the resident will have knowledge and understanding of the primary forces impacting large health-systems, the driving forces behind current and future health-care reform, and an understanding of how pharmacy departmental goals are aligned with organizational goals. Objectives of this rotation will be completed by working on assigned projects and by attending various interdisciplinary and administrative meetings.

Medication Use Safety
Preceptor(s):   Kristin Hanson, BSPharm, MS
Medication Safety Officer

Overview:
This longitudinal rotation will focus on management of medication safety within an academic medical center. The resident will assist in the roles and responsibilities of a pharmacy administrator and offers the opportunity to gain experience in process improvements, leading best practice initiatives and implementing safety initiatives within the organization. The resident will actively participate in the decision making processes within medication safety across the system. Objectives of this rotation will be completed by working on assigned projects and initiatives, following up on medication related errors within the organization and by participating in various patient safety meetings.

- Joint Commission Prep: Committee Participation *Froedtert Hospital Regulatory Committee
- Pharmacy Quality Committee: Agenda/meeting minutes follow-up accountability
- Inclusion into major error follow-up
- Enterprise Med Safety member; chair second half of the year

Personnel Management, Scheduling, and Outcomes
Preceptor(s):   Sarah Steinert, PharmD, MHA
Pharmacy Operations Manager

Overview:
This longitudinal rotation will focus on management of personnel within an academic medical center. The PGY2 resident will assist in the roles and responsibilities of a pharmacy administrator and offers the opportunity to gain experience in human resource management through the overall management of the pharmacy interns. This includes but is not limited to creating a staffing model, participating in hiring process, putting together a schedule, obtaining feedback from interns and responding to feedback received on performance, conducting performance evaluations, and holding staff meetings. The resident will actively participate in the decision making processes surrounding human resource management across the system. Objectives of this rotation will be completed by providing oversight of the internship program and personnel management.

Budgeting and Financial Services
Preceptor(s):   Kristin Tiry, PharmD, MHA   Justin Konkol, PharmD, MHA, BCPS, DPLA
                    Pharmacy Operations Manager   Director of Pharmacy, Froedtert Hospital
                                              and Oncology Service Line

Overview:
This year-long rotation will focus on effective financial management of the health-system pharmacy enterprise. This will include exposure to both operational and capital budgeting, monitoring budget performance and variances, developing business plans, determining return on investment, and making decisions and setting priorities to meet health system and departmental objectives related to financial performance. The PGY2 resident will assist in the roles and responsibilities of a pharmacy administrator and will have the opportunity to gain experience in participating in financial analyses, monitoring, and decisions. The resident will actively participate in activities that support the financial mission of the department and health system and assist in the coordination of resources within the department to accomplish tasks. Objectives of this rotation will be completed by working on assigned projects and initiatives as well as attending various interdisciplinary/administrative meetings.

Elective Rotations

Apexus 340b Operations
Preceptor(s):   Christopher Hatwig, MS, RPh, FASHP; chris.hatwig@apexus.com
President Apexus | 340B Prime Vendor Program (Irving, Texas)

Overview:
Apexus/340B Pharmacy Operations is a 4 week rotation with Christopher Hatwig at the Apexus headquarters located in Irving, Texas. Apexus is the government contracted prime vendor for all covered entities participating in the 340B program. The Health Resources and Services Administration's Office of Pharmacy Affairs has made clarifications to previously existing rules making compliance with the program more technically difficult. Additionally, the recent onset of audits by HRSA and manufacturers have elevated the expectations for compliance in the marketplace, and staying up-to-date on 340B policy remains challenging. Having a firm understanding of the 340B program and its requirements by the end of the program will provide the resident with a valuable skillset, potentially differentiating the resident from other recent residency graduates in the job market.

Community Hospital Leadership
Preceptor(s):   Kate Schaafsma, PharmD, MS, MBA, BCPS
Director of Pharmacy – Community Hospital Division

Overview:
This rotation will provide advanced exposure and experience related to the management of clinical pharmacy practice and leadership in a community hospital. The resident will work collaboratively with the Pharmacy Director and Management team on daily activities, meetings, quality improvement and optimization projects. There will also be a focus on comparing the differences in leadership structure culture, and strategic focus within a community hospital environment. Activities of the rotation will be tailored to meet the resident's short and long-term career goals.

Community/Retail Pharmacy Management
Preceptor(s):   Melanie Engels, PharmD, MBA
Director of Pharmacy – Outpatient Pharmacy Services

Overview:
The objective of the community pharmacy management rotation is to give the resident a thorough understanding of the role of a Community Manager of Pharmacy Services. The resident will actively participate in the decision making processes that support continuity of pharmacy services within the community practice settings. The resident will assist in the coordination of management resources to accomplish tasks. Objectives of this rotation will be completed by working independently on assigned projects, attending interdisciplinary/administrative meetings and through topic discussions with the manager.

Data Analytics/Decision Support
Preceptor(s):   Christopher Schuenke, PharmD, MBA, MIS
Director of Pharmacy Informatics and Technology

Overview:
This one-month rotation will focus on understanding and managing Froedtert Pharmacy Informatics and Data Analytics. This will include exposure to data analytics, software support, decision support, predictive analytics and technology advancement. The PGY2 resident will assist in the roles and responsibilities of managing the home data analytics team and will have the opportunity to gain experience in participating in informatics strategy, data collection, analytics and decision support. The resident will actively participate in activities that support the home data analytics team and assist in the coordination of resources within the department to accomplish the department's goals. Objectives of this rotation will be completed by working on assigned projects and initiatives as well as attending various interdisciplinary/administrative meetings.

Home Infusion Services

Preceptor(s):   Brooke Halbach, PharmD, MS, BCPS
                                   Manager, Infusion Services

Overview:
This one-month rotation will focus on understanding and managing Froedtert Home Infusion services. This will include exposure to home infusion operations, sterile compounding, infusion billing and reimbursement, site of care changes, monitoring budget performance and variances, developing business plans and determining return on investment. The PGY2 resident will assist in the roles and responsibilities of managing the home infusion team and will have the opportunity to gain experience in participating in infusion strategy, operations, personnel management and sterile compounding. The resident will actively participate in activities that support the home infusion team and assist in the coordination of resources within the department to accomplish the department's goals. Objectives of this rotation will be completed by working on assigned projects and initiatives as well as attending various interdisciplinary/administrative meetings.

Oncology Practice Leadership

Preceptor(s):   Tim Miller, PharmD, BCOP, DPLA
                       Pharmacy Operations Manager

Overview:
This rotation is designed to incorporate many aspects of practice leadership in the area of oncology. This includes the ability to manage the range of facilities that prepare and distribute anticancer medications – including safe preparation, handling, and disposal of those which are hazardous. It will aid the resident in developing into an oncology pharmacy specialist that can serve a health care organization as the ultimate resource for information about anticancer medications and for decision-making affecting the medications and care of patients.

Pharmacy Administration Informatics

Preceptor(s):   Christopher Schuenke, PharmD, MBA, MIS
                                   Director of Pharmacy Informatics

Overview:
This rotation will provide the postgraduate year two (PGY-2) administrative pharmacy resident with exposure to pharmacy informatics at Froedtert and the Medical College of Wisconsin. The purpose of the rotation is to provide the resident further insight into the principles of pharmacy informatics and health information technology (HIT). The resident learning experience during the rotation will consist of the resident actively participating in informatics project management, electronic health record (EHR) design and maintenance, clinical decision support, meeting/committee attendance, and completing assigned projects under the guidance of the preceptors. Upon the completion of the rotation, the resident will be able to describe and apply principles of pharmacy informatics to the medication-use process within the health care system. Objectives of this rotation will be completed by working on assigned projects and by attending various interdisciplinary/Epic team meetings.

Specialty Pharmacy Administration

Preceptor(s):   Tim Hinkley, PharmD, MS, BCPS   Chris Sanders, PharmD, MHA
                       Directory of Pharmacy – Specialty   Specialty Pharmacy Manager
                       Pharmacy

Overview:
The objective of this rotation is to provide a PGY2 pharmacy administration resident direct experience with specialty pharmacy program development and management. The resident will have the opportunity to assist with expansion of Froedtert's Specialty Pharmacy Program and gain operational experience with management of the Integrated Service Center. The resident will have the opportunity to participate in entrepreneurial opportunity assessment, new business planning, and service expansion.

*Other rotation opportunities available as defined by resident and program director

Master of Healthcare Administration Overview Program Introduction

The UWM Master in Healthcare Administration program provides evidence-based interprofessional training in micro and macro theory and practice to advance the health of individuals and communities, local, national, and international. The curriculum addresses four broad competency domains as defined by the Commission on Accreditation Healthcare Management Education (CAHME).

The increasingly complex healthcare environment requires healthcare managers who can manage people and organizations in a rapidly changing world of interdisciplinary care, inter professional practice and education, translational research and practice, and technological advances in systems that are products of bioengineering and bio-medical informatics. Healthcare managers must somehow hold these fabulous strands of progress together and make them work for the good of individual patients. The corner office must be transformed from a citadel of management's traditional and expanding importance into the multilingual, multivalued, multifaceted, multicultural nerve center of the increasingly complex systems science that healthcare has become. Genomic medicine, family medicine, community nursing, blood supply management, outbreak control and species jumping diseases are but a few aspects of healthcare that must be within the healthcare manager's conceptual reach, if not his or her grasp. The MHA program will train students to take up this challenge.

MHA Course Sequence

<u>Year 1</u>	<u>Course</u>
Fall Semester	Leading Change and Innovation in Systems Design of Health and Human Services Systems Health Regulatory Policy and Politics
Spring Semester	Leading Strategic Innovation in a Competitive Global Marketplace Financial Management for Health Care Organizations
<u>Year 2</u>	
Fall Semester	Operations Management in Health Care Organizations Human Resources Management in Health Care Organizations Statistical Analysis in Health Sciences
Spring Semester	Law for Healthcare Consumers and Professionals Strategic Planning in Health Care Organizations Capstone Course

<u>Longitudinal Experiences</u>
- Internship

Elective Courses (paid at the resident expense, not required for graduation)
- Data and Text Mining
- Consumer Health Informatics
- Survey of Biomedical and Health Informatics
- Introduction to Health Care Informatics
- Topics in Health Management and Biomedical Health Informatics
- Epidemiology for the Health Sciences II
- Information Security
- Health Regulatory Science
- Healthcare Quality Management
- Computational Intelligence in Health Informatics

- Seminar in Health Outcomes Assessment

Elective Courses (Continued)
- Health Data Analytics
- Social Media and Healthcare
- Patient-Provider Communication: Strategies and Practices

Resources

Master of Healthcare Administration
- http://uwm.edu/graduateschool/healthcare-administration

Graduate School Requirements for Master's Students
- http://uwm.edu/graduateschool/admission/