



Kaiser Permanente Greater Southern Alameda Area PGY1 Pharmacy Residency Program Structure

Purpose Statement: PGY1 residency programs build upon Doctor of Pharmacy (PharmD) education and outcomes to develop pharmacist practitioners with knowledge, skills, and abilities as defined in the educational competency areas, goals, and objectives. Residents who successfully complete PGY1 residency programs will be skilled in diverse patient care, practice management, leadership, and education, and be prepared to provide patient care, seek board certification in pharmacotherapy (i.e., BCPS), and pursue advanced education and training opportunities including postgraduate year two (PGY2) residencies.

The GSAA's PGY1 Pharmacy Residency Program's structure incorporates the ASHP required competency areas as follows:

- R1: Patient Care
- R2: Advancing Practice and Improving Patient Care
- R3: Leadership and Management
- R4: Teaching, Education, Dissemination of Knowledge

PGY1 Pharmacy Greater Southern Alameda Area (Fremont, Hayward, Union City, San Leandro), California:

Kaiser Permanente has been an established, premier health care service for this East Bay community since the 1960's. The GSAA has an integrated, multidisciplinary team which provides care to one of the most diverse membership groups in California. The GSAA provides health care services for all major health care related disease states and services to its over 366,000 members. This service is provided by over 500 physicians and 5,000 employees operating under this integrated health plan. Our pharmacists have a unique opportunity to be involved in many aspects of health care delivery, from assisting clinicians in medication choices to providing direct patient care.

The Kaiser Permanente Greater Southern Alameda Area PGY1 residency program is a one-year postgraduate training program that allows the resident to gain clinical experience and confidence in providing comprehensive pharmaceutical care in any practice setting. The resident will participate in core rotations as well as elective rotations based on the resident's interest and will be involved in P&T Committee activities throughout the residency. The resident will conduct a formal research project with guidance from preceptors and present at the Western States Regional Residency Conference. Residents also play an important role in precepting pharmacy students from the University of California San Francisco, Touro, and the University of the Pacific.

The GSAA's PGY1 Pharmacy Residency Program's offers **twenty seven learning** experiences (required and elective) based primarily at the San Leandro, Fremont, or Union City Medical Centers with select elective offerings at Kaiser Permanente regional offices. Resident pharmacist will be exposed to all health-system facilities in varying degrees with projects, services and other opportunities. The learning experiences vary in length from two- to six-week learning experiences to twelve month longitudinal learning experiences, **fourteen** of which are required for all residents to complete (9 block and 5 longitudinal), and **thirteen** elective learning experience offerings. Of the eleven elective learning experience offerings, the resident pharmacist will select three or four elective learning experiences to complete their residency training within the medical center depending on the length of the electives selected.

Learning Experience	Location	Length
Required Experiences		
Acute Care	San Leandro and Fremont	6 weeks
Adult Family Medicine / Medication Therapy Management (AFM/MTM)	Union City Medical Center	6 weeks
Drug Use Management	San Leandro and Fremont Medical Center	4 weeks
Inpatient Operations	San Leandro and Fremont Medical Center	5 weeks
Infectious Disease	San Leandro Medical Center	4 weeks
Medication Adherence Quality Improvement	Union City Medical Center	2 weeks
Oncology	San Leandro and Fremont Medical Center	5 weeks
Orientation	San Leandro and Fremont Medical Center	3 weeks
Prevent Heart Attacks and Strokes Everyday (PHASE)	Union City Medical Center	4 weeks
Longitudinal: Administration	San Leandro and Fremont Medical Center	Longitudinal x 52 weeks (Includes dedicated administration meeting time for discussion and other longitudinal learning assignments; generally involves a 1 hr meeting per month, and topic discussions with preceptor).
Service: Drug Use Management	San Leandro and Fremont Medical Center	Longitudinal x 52 weeks (Staffing 8 hr shift twice per month before licensed and one 4 hr shift once per month after licensed).
Service: Inpatient	San Leandro and Fremont Medical Center	Longitudinal x 52 weeks (Once per month, 4 hr shift on Friday and 8 hr shift on Saturday starting after the resident is licensed. A day off is given during the week when staffing a Saturday shift.).
Longitudinal: Teaching	San Leandro and Fremont Medical Center	Longitudinal x 52 weeks (Includes 1 day of didactic teaching certificate session in July/August, generally involves 2 hrs/mth of teaching certificate activities, precepting, meetings w/preceptor, and preceptorship of APPE students journal club presentations.

Longitudinal: Project	San Leandro and Fremont Medical Center	Longitudinal x 52 weeks (includes 1 week meeting attendance & CFS presentation, platform presentation at Western States Conference, plus allocated project time 60hrs to be tracked by the resident continuously).
<i>Elective Experiences*</i>		
Adult Psychiatry and Addiction Medicine Recovery Services (AMRS)	Union City Medical Center	4 weeks
Advanced Infectious Disease	San Leandro Medical Center	4-6 weeks (May only be completed after required Acute Care and Infectious Disease learning experience is successfully completed)
Advanced AFM	Union City Medical Center	4 weeks (May only be completed after required AFM/MTM learning experience is successfully completed)
Advanced PHASE	Union City Medical Center	4 weeks (May only be completed after required PHASE learning experience is successfully completed)
Chronic Pain/Hospice	Union City Medical Center	4 weeks (Combination elective for residents who have interest in Chronic Pain and Hospice)
Critical Care	San Leandro Medical Center	4 weeks (May only be completed after required Acute Care learning experience is successfully completed)
Desktop Medicine	San Leandro Medical Center	4 weeks
Drug Information	Kaiser Regional	3 weeks
Hospice	Union City Medical Center	4 weeks
Inpatient Medical-Psychiatry Unit (MPU)	Fremont Medical Center	6 weeks
Regional Medication-Use Safety	Kaiser Regional	4 weeks
Regional Continuum	Kaiser Regional	4 weeks
Weight Loss Medication	San Leandro Medical Center	2 weeks

** If an elective is desired in another specialty area, consideration will be given to the development of such if preceptor availability, support of providers, and other resources allow. A separate learning experience will be developed for the learning experience with the assistance of the resident. If the elective is to be in the same area of a required learning experience, the learning experience will be conducted at a more advanced level under a different learning experience description (that the resident will be expected to assist in developing) and with different objectives and additional activities than the required learning experience that the resident completed.*



Kaiser Permanente Greater Southern Alameda Area PGY1 Pharmacy Residency Program Rotation Descriptions

REQUIRED ROTATIONS

Orientation

The Orientation rotation is a three week learning experience at Kaiser Permanente San Leandro and Fremont Medical Centers. An orientation of the GSAA Hospital, Medical Clinics and Pharmacy Operations is conducted at the beginning of the residency program. The GSAA PGY1 Residency Program Manual and Policies are reviewed with the incoming residents. An orientation is provided for each pharmacy care setting (primarily the in-patient and out-patient settings). The purpose of the orientation is to provide a foundation of the pharmacy care services in the relevant settings that so that residents have basic knowledge of each setting and its requirements.

Acute Care

The acute care rotation is a six week learning experience at Kaiser Permanente San Leandro Medical Center (SLMC) and Fremont Medical Center (FMC). San Leandro Medical Center is 216 bed hospital while Fremont Medical Center is 106 bed hospital; collectively both facilities is part of an integrated health care delivery system that serves the community and approximately 300,000 members in the Greater Southern Alameda Area (GSAA).

The hospitals have a full-service emergency department, critical care services, OB Services/neonatal intensive care services (SLMC), orthopedic surgery (SLMC), and bariatric surgery (FMC). This six week rotation encompasses services in internal medicine, neonatal ICU, infectious disease and transitional care.

Adult Family Medicine / Medication Therapy Management (AFM/MTM)

The Adult Family Medicine/ Medication Therapy Management (AFM/MTM) rotation is a seven week learning experience at Kaiser Permanente Union City Medical Center. The goal of the Adult and Family Medicine Pharmacy Service is to assist in management of disease states commonly encountered in the primary care setting. The pharmacists work as a team with physician mentors, primary care providers, nurses, and medical assistants in outreach and management of conditions such as hypertension, hypothyroidism, osteoporosis/osteopenia, gout, and sexually transmitted infections.

Kaiser Permanente's Medication Therapy Management Program (MTMP) is a medication management service for Medicare Part D members that will be provided by ambulatory care pharmacists operating under approved drug therapy management protocols. The Centers for Medicare & Medicaid Services (CMS) requires that all health plans that offer Part D drug benefits provide this service. The goal of the MTMP is to optimize therapeutic outcomes through improved medication use. This may be achieved by identifying and clarifying the member's active medication profile, supporting the member through self-management and adherence, reducing the risk of adverse drug reactions, optimizing dosing and monitoring, facilitating cost effective therapy, initiating therapy where clinically appropriate, and assessing appropriateness of therapy according to guidelines where available.

Oncology

The Oncology rotation is a five week learning experience at Kaiser Permanente San Leandro and Fremont Medical Centers. The Clinical Oncology Pharmacy Services provide residents with an in-depth exposure to chemotherapy

medication preparation and distribution activities as well as pharmacy-managed oncology protocols. This is accomplished through several regional computerized pharmacy and medical systems such as Health Connect, BEACON, and pharmacy protocols. Residents will have "hands-on" experience in selecting drug products, participating in the admixing process, dispensing, monitoring, evaluation and supplying drug information. Residents will be given exposure to refine their communication skills with patients and other healthcare professionals. In addition, residents will be exposed to the latest research in clinical trials during this rotation.

Prevent Heart Attacks and Strokes Everyday (PHASE)

The Prevent Heart Attacks and Strokes Everyday (PHASE) rotation is a four week learning experience at Kaiser Permanente San Leandro Medical Center, which is part of an integrated health care delivery system that serves the community and approximately 300,000 members in the Greater Southern Alameda Area (GSAA).

The Prevent Heart Attacks and Strokes Everyday (PHASE) program provides population management for approximately 23,000 patients with diabetes mellitus between the ages 18-75 years of in the Greater Southern Alameda Area. Physician mentors, ambulatory care pharmacists, nurse care managers, registered dietitians, and support staff work as a team to assist primary care providers in outreach and management of diabetes, cholesterol, and hypertension for these patients.

The pharmacist provides care via telephone, video, or in-person appointments to review above goal labs, discuss medication interventions, and provide safety/efficacy monitoring. PHASE providers are supported by a health-connect integrated program called PROMPT which provides basic patient information on health care screenings, as well as alerts and reminders for both the patient and the care team. The overall goals of the program are to:

- Empower and enhance the patient's self-management of health through patient education and longitudinal care
- Improve condition control, i.e. HgA1c, BP, and appropriately dosed statin therapy
- Evaluate, monitor, and initiate/adjust patient's medication regimen in alignment with guidelines
- Refer patients as appropriate to health education services
- Decrease hospitalizations, improve quality of life and survival in regards to diabetes and cardiovascular health

The pharmacist resident is responsible for collecting and analyzing patient information through chart review and patient interview to determine the most appropriate interventions (drug and lifestyle) for diabetes, statin use, and blood pressure control. The resident will then formulate a monitoring plan and communicate the respective information to the patient using patient-friendly terminology in a comprehensive manner. The resident will determine appropriate follow-up for safety and efficacy and document all actions in the patient's medical record. The resident will complete topic discussions, case conferences, and a presentation over the course of the rotation and may assist with precepting students.

Drug Use Management

The Drug Use Management rotation is a four week learning experience at Kaiser Permanente San Leandro and Fremont Medical Centers. Drug Use management refers to the cost-effective management of prescription drugs in a manner that reduces overall prescribing variations and optimizes clinical outcomes while providing the most appropriate care for our members. In some cases, this means increasing the use of a particular drug category in order to improve clinical outcomes and reduce hospitalization. The goal of drug use management is to maximize the health value of the prescription drugs and care our patients receive.

The pharmacy resident should expect to receive hands-on training in valuable skills. He or she will learn how to help manage pharmaceutical cost-containment and quality-improvement initiatives for a large medical center. The resident will spend time getting to know many of the systems that support Kaiser Permanente's objective: to enable physicians to deliver high-quality, high-value health care to members of the community. By the end of the rotation, the pharmacy resident will have an appreciation for pharmacy's place in the health-care system, and Kaiser's organized, effective approach to the management of pharmaceuticals.

Inpatient Operations

The inpatient pharmacy operation is a six week learning experience at Kaiser Permanente San Leandro Medical Center (SLMC) and Fremont Medical Center (FMC). San Leandro Medical Center is 216 bed hospital while Fremont Medical Center is 106 bed hospital; collectively both facilities are part of an integrated health care delivery system that serves the community and approximately 300,000 members in the Greater Southern Alameda Area (GSAA). The hospitals have a full-service emergency department, critical care services, OB Services/neonatal intensive care services (SLMC), orthopedic surgery (SLMC), and bariatric surgery (FMC).

The learning experience is designed to familiarize the Resident with inpatient pharmacy operations with an emphasis during the learning experience on operations, technology (computerized prescriber order entry (CPOE) system for electronic medication ordering integrated with electronic health records (EHR) and pharmacy information systems, clinical decision support tools that bring best practice information and guidelines to clinicians at the time it is needed and rules-based system for monitoring, evaluating, responding, and reconciling medication-related events and information), automated dispensing cabinets and pharmacy carousel storage retrieval, integrated medication administration management systems that enable bar code medication administration and use of smart infusion pumps, sterile product preparation and USP 797, process improvement, regulatory, compliance and change management. While on rotation, an expectation is for the Resident to be able to run the day-to-day operations, and actively participate in the planning of future initiatives for the inpatient pharmacies.

To prepare for this experience the Resident will have shadowing and hands on experiences in a variety of technician and pharmacist roles to obtain a knowledge-base for the inpatient pharmacy central and decentralized operations.

At some stage in this learning experience, the Resident will assume responsibility as the centralized pharmacist. These responsibilities are designed to increase self-confidence in clinical skills and enhance the development of communication and teaching skills.

Infectious Disease

The infectious disease core rotation is a four week learning experience at Kaiser Permanente San Leandro Medical Center (SLMC). San Leandro Medical Center is 216 bed hospital that is part of an integrated health care delivery system that serves the community and approximately 300,000 members in the Greater Southern Alameda Area (GSAA).

The infectious disease pharmacist is responsible for ensuring safe, effective, and judicious use of antimicrobials in hospitalized patients. Daily responsibilities include detailed review of all hospitalized patients on antibiotics, assessing for appropriateness of antibiotics based on suspected infections, and recommending narrowing or adjusting therapy as necessary. Other responsibilities include reviewing pertinent labs and recommending appropriate follow-up or diagnostic studies, assessing intravenous to oral conversion, assessing antibiotics for any required dosage adjustments, and serving as the drug-information expert for the infectious disease team.

Longitudinal: Administration

The Longitudinal: Administration rotation is a 52-week learning experience at Kaiser Permanente Union City Medical Center. The Administration practice experience for our residents is provided by our Clinical Pharmacy Director, Pharmacy Services Supervisor, Inpatient Pharmacy Director, Outpatient Pharmacist Director, and Area Pharmacy Director. The Area Pharmacy Director is our top level manager who oversees all location specific operations managers, and reports to our Service Area Vice President. The resident learns to analyze and develop staffing needs; evaluate performance; develop new clinical programs, setting measurable service goals, cost justification proposal and outcome evaluation; use the SBAR system for communication, and manage Quality Assurance and safety/security programs. The residents will attend management peer group meetings, P&T Committee meetings (local medical center and possibly regional), and Pharmacy Management Team meetings.

Service: Drug Use Management

The Service: Drug Use Management rotation is a 52- week learning experience with Kaiser at Kaiser Permanente San Leandro and Fremont Medical Centers. The longitudinal learning experience is an opportunity for the Resident to develop foundational practice skills in Drug Use Management, Drug Conversion and use of KPHC and ePIMS (outpatient pharmacy system). Longitudinal x 12 months (Staffing 8 hour shift twice per month before licensed and one 4 hour shift once per month after licensed).

At some stage in this learning experience, the Resident will assume responsibility as the conversion pharmacist. These responsibilities are designed to increase self-confidence in operational and clinical skills to enhance the development of communication and teaching skills.

Service: Inpatient

The service inpatient rotation is a longitudinal 52-week learning experience at Kaiser Permanente San Leandro Medical Center (SLMC) and Fremont Medical Center (FMC). San Leandro Medical Center is 216 bed hospital while Fremont Medical Center is 106 bed hospital; collectively both facilities are part of an integrated health care delivery system that serves the community and approximately 300,000 members in the Greater Southern Alameda Area (GSAA). The hospitals have a full-service emergency department, critical care services, OB Services/neonatal intensive care services (SLMC), orthopedic surgery (SLMC), and bariatric surgery (FMC).

The longitudinal learning experience is an opportunity for the Resident to develop foundational practice skills in hospital pharmacy practice. The Resident will staff shifts in the central distribution pharmacy as well as the decentralized clinical shifts.

At some stage in this learning experience, the Resident will assume responsibility as the centralized pharmacist and as the decentralized clinical pharmacist. These responsibilities are designed to increase self-confidence in operational and clinical skills to enhance the development of communication and teaching skills.

The inpatient pharmacist on the team is responsible for ensuring safe and effective medication use for all patients admitted to the team. Routine responsibilities include: monitors and/or manages the medication therapy of specific hospitalized or ambulatory patients, dispenses, compounds, procures, stores and distributes pharmacy products. The pharmacist will also provide drug information and education to healthcare professionals as well as patients and caregivers.

Longitudinal: Teaching

The Longitudinal: Teaching rotation is a 52- week learning experience at Kaiser Permanente San Leandro and Fremont Medical Centers. The teaching rotation is a longitudinal rotation where the resident is challenged to continually enhance their skill in various aspects teaching and preceptor roles. Through direct preceptor ship of students during rotations as well presentations to patients, the resident will be required to design, present and assess effective educational activities. In addition to student and patient teaching, this rotation also incorporates formal presentations to health care providers on pertinent drug information topics.

Longitudinal: Project

The Longitudinal: Project rotation is a 52-week learning experience at Kaiser Permanente San Leandro and Fremont Medical Centers. This is a longitudinal rotation that focuses on identifying a research question, developing a methodology for answering the question, verifying the hypothesis with statistics and deriving a conclusion (if possible) based on the evidence. The resident will be challenged to create and integrate information, as well as represent process in three formats: presentation (WSC PowerPoint), poster, and manuscript.

The project management (PM) preceptor is familiar with the research processes like the Consultative-Facilitative Service (CFS) Initial Concurrence (IC), Internal Review Board (IRB), methodologies, and various publication format. The PM preceptor will advise the resident on how to shepherd the process along. The clinical preceptor (CP) is provided (when available) to be the content expert, specific to patient care.

Medication Adherence Quality Improvement

The Medication Adherence Quality Improvement rotation is a required, 2-week learning experience at the Kaiser Permanente Union City Medical Center. The Medication Adherence Quality Improvement rotation will ensure appropriate medication use and improve Medicare Star Ratings that reflect the health plan's overall quality and performance. Components of the Medication Adherence Quality Improvement rotation may include:

- Medication Adherence (to oral diabetes medications, cholesterol medications (statins), and high blood pressure medications (Renin-Angiotensin-System Antagonists))
- Medication Therapy Management (MTM)
- Statin Use in Persons with Diabetes (SUPD)
- Polypharmacy
- Medication reconciliation during transitions of care, including new member onboarding

The goal of the Medication Adherence Quality Improvement rotation is for the pharmacist to optimize therapeutic outcomes through improved medication use. This may be achieved by identifying and clarifying the member's active medication profile, supporting the member through self-management and adherence barriers, reducing the risk of adverse drug reactions, and optimizing dosing and monitoring.

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

- Diabetes Mellitus
- Dyslipidemia
- Hypertension

ELECTIVE ROTATIONS

Adult Psychiatry and Addiction Medicine Recovery Services (AMRS)

Union City Medical Center is part of an integrated health care delivery system that serves the community and approximately 300,000 members in the Greater Southern Alameda Area (GSAA).

Adult Psychiatry (2 weeks): The Adult Psychiatry rotation provides medication management of patients with psychiatric conditions (see below for commonly encountered disease states). The focus of the rotation is to help pharmacy residents develop familiarity and expertise with psychiatric medications as well as understand the typical duration for an adequate trial of antidepressants, mood stabilizers, antipsychotics, and that for different disease states the duration will differ as well.

Addiction Medicine (2 weeks): The Addiction Medicine rotation is designed to build upon the foundation of the Psychiatry rotation and can be taken after successful completion of at least 4 weeks of Psychiatry outpatient. This rotation supplements the resident learning by highlighting the specific knowledge, attitude, and skills needed to manage patients with alcohol, opioids, benzodiazepines, stimulants, cannabis, and other substance use disorders. The goal of this rotation is for residents to be able to assess and treat substance use disorders in an ambulatory care rotation. Patient care is provided by either: telephone, medical office visits, and/or in a patient group setting as clinically indicated. After this rotation, the resident should feel comfortable managing acute withdrawals, long-term management with Medication Assisted Treatment, lead patient education groups, and work with our treatment team to develop a treatment plan that optimizes chances of recovery and success

The pharmacist has the role of a covering provider, and coverage will be 4 to 6 providers daily. The pharmacist will be covering in-baskets of providers and does not have patients empaneled to them. The duties include the following but are not limited to: addressing patient medication inquiries via messaging and following up via appointment as needed, refill authorizations, results management, following up on CC'ed charts and staff messages as appropriate. Patient care is provided only by telephone encounters.

Adult Psychiatry: The pharmacy resident will gain an understanding of managing medications for patients with psychiatric conditions. The resident is expected to review, assess, and formulate medication therapy plans for patients based on pertinent progress notes, and taking into consideration additional comorbid conditions as well as concurrent medications that patients are on.

Scope of practice: The resident will be able to prescribe medications related to psychiatric management, while under review of preceptor.

Goal: Know common indications for psychiatric medications, usual effective target dosing range for psychiatric conditions, required labs for mood stabilizers, identify common DDIs, and familiarize self with medication classes and their mechanisms of action.

Addiction Medicine: The pharmacy resident will gain an understanding of the pharmacists' role in optimizing pharmacotherapy and educating patients in the outpatient setting. The resident will actively participate in weekly multidisciplinary team meetings as well as select patient groups. The resident is expected to review, assess, and formulate medication therapy plans tailored to the AMRS population. This includes review of the patient's medical information, identification and mitigation of potential drug related problems (e.g. drug interactions, adverse drug reactions, duplicative therapy, inappropriate medications), discontinuation of unnecessary medications, monitoring and management of symptoms, adjustment and titration of symptom medications. The resident will become proficient in the management of acute withdrawals and long-term medication management of cravings with Medication Assisted Treatment (MAT). The resident should utilize literature resources to provide accurate and reliable responses to patient-specific drug information.

Advanced Infectious Disease

The advanced infectious disease elective rotation is a four to six week learning experience at Kaiser Permanente San Leandro Medical Center (SLMC). San Leandro Medical Center is 216 bed hospital that is part of an integrated health care delivery system that serves the community and approximately 300,000 members in the Greater Southern Alameda Area (GSAA).

The infectious disease pharmacist is responsible for ensuring safe, effective, and judicious use of antimicrobials in hospitalized patients. Daily responsibilities include detailed review of all hospitalized patients on antibiotics, assessing for appropriateness of antibiotics based on suspected infections, and recommending narrowing or adjusting therapy as necessary. Other responsibilities include reviewing pertinent labs and recommending appropriate follow-up or diagnostic studies, assessing intravenous to oral conversion, assessing antibiotics for any required dosage adjustments, and serving as the drug-information expert for the infectious disease team.

The pharmacy resident is responsible for identifying and resolving antibiotic related issues for hospitalized patients. The resident will also provide and document therapeutic drug monitoring services for complicated patients receiving aminoglycoside and vancomycin therapy if requested by the clinical pharmacists. Additionally, the resident will participate in ID consultations with the ID physician as appropriate. Documentation will be completed on the day service was provided.

Advanced AFM

The Advanced AFM rotation is a four week learning experience at Kaiser Permanente Union City Medical Center. The Union City Medical Center is part of an integrated health care delivery system that serves the community and approximately 300,000 members in the Greater Southern Alameda Area (GSAA).

The goal of the Advanced Adult and Family Medicine Pharmacy Service is to assist in management of disease states commonly encountered in the primary care setting and to build upon skills developed in the Adult and Family Medicine rotation. The pharmacists work as a team with physician mentors, primary care providers, nurses, and medical assistants in outreach and management of conditions such as hypertension, hypothyroidism, osteoporosis/osteopenia, gout, and sexually transmitted infections.

Advanced PHASE

The Advanced PHASE rotation is a four week learning experience at Kaiser Permanente Union City Medical Center. The Prevent Heart Attacks and Strokes Everyday (PHASE) program provides population list management for approximately 15,000 patients with diabetes mellitus between the ages 18-75 years of age with GFR $\geq$ 30 ml/min in the Greater Southern Alameda Area. The PHASE program is piloting working with the small population of patients with CKD4 or post-renal transplant. Physician mentors, ambulatory care pharmacists, nurse care managers, registered dietitians, and support staff work as a team to assist primary care providers in outreach and management of diabetes, cholesterol, and hypertension for these patients.

As part of the Advanced PHASE rotation, the resident will be tasked with taking initiative for their learning by identifying challenging diabetes patients to work up daily. Challenging patients include patients using CGM systems, basal/bolus insulin regimen, U500 insulin regimen, and/or other psycho/social barriers. The resident will also have the opportunity to work with 2 new populations of patients: patients identified as having ASCVD (without diabetes), and patients with impaired kidney function (CKD4 or post-renal transplant).

Chronic Pain/Hospice

The Chronic Pain rotation is a four week learning experience at Kaiser Permanente Union City Medical Center. The Pain Management Program (under Chronic Conditions Management Program) provides population care management for members who experience this condition.

Physicians, Pharmacists, Nurse Care Managers, and associate staff specialists work as a team to assist primary care physicians in outreach to and management of these members. Patient care is provided by either: telephone, medical office visits, and/or in a patient group setting as clinically indicated.

Direct Patient Care Responsibilities

- New Patient Referrals
- Conduct a chart review for all patient's under pain physicians schedule at minimum the day before the scheduled visit
- Template Note should reflect thorough chart review at at minimum include the following :
 - Pt chief complaint for referral to CPP Program
 - PMHx which includes work-up for above mentioned dx (eg. Imaging) and trial/failure of pain medication
 - If relevant, status of chronic opioid therapy monitoring and surveillance requirement.
 - If possible, begin to formulate a pain medication regimen or medication recommendations
- Enrolled Patients
- For telephone appointment with pharmacist, conduct relevant chart review, provide medication management (ie initiate, discontinue, or adjust pain medication if appropriate), provide patient education or counseling, make referral recommendations to other services when appropriate (ie acupuncture, PT, spine clinic, etc), update or refill prescription if appropriate, and ensure chronic opioid therapy monitoring requirements are met
- Schedule appropriate and timely return visits to follow-up on new medications started, medication adjustments made, or pending lab or EKG results
- For ongoing refill requests and medication related care management, conduct chart review for relevant history, ensure chronic opioid therapy monitoring surveillance requirements met, ensure correct pick up date and pick up pharmacy noted, and intervene if needed due to interaction with other medications or polypharmacy
- Triage health care practitioner pain management related questions from other practitioner consults including:
 - design of opioid taper regimen
 - calculating equianalgesic dosing for opioid rotations
 - withdrawal management
 - guidance on non-opioid medication management recommendations
 - outpatient pharmacy clarifications

- For all patients enrolled in CPP Level II and III programs, provide answers for medication related questions and/or participate in presenting program workshops when available

In-Direct Patient Care Responsibilities

- Assist and Present at Patient Classes when scheduled
- Facilitate presentations / in-services

Critical Care

The Critical Care rotation is a four week learning experience at Kaiser Permanente San Leandro Medical Center (SLMC) and Fremont Medical Center (FMC) and may only be completed after the required Acute Care learning experience is successfully completed. San Leandro Medical Center is 216 bed hospital while Fremont Medical Center is 106 bed hospital; collectively both facilities is part of an integrated health care delivery system that serves the community and approximately 300,000 members in the Greater Southern Alameda Area (GSAA). The hospitals have a full-service emergency department, critical care services, OB Services/neonatal intensive care services (SLMC), orthopedic surgery (SLMC), and bariatric surgery (FMC). This four week rotation encompasses services in internal medicine, neonatal ICU, infectious disease and transitional care.

The most hemodynamically unstable and critically ill patients are transferred to or directly admitted to the intensive care unit where they are managed closely by a multidisciplinary ICU team. The team consists of intensivists, nurses, respiratory therapists, social workers, discharge planners, dieticians, and nursing managers to facilitate patient care – the pharmacist plays a significant role in this team. The purpose of this learning experience is to refine and polish drug information and critical thinking skills in a critical care setting to be able to ultimately function in a fast-paced environment where clinical pharmaceutical management changes on a day-to-day basis. You will be responsible for the care of your patients in the ICU and for communicating your interventions and plans with the medical team.

Desktop Medicine

Kaiser Permanente's Desktop Medicine (DTM) clinic is a 4-week medication management service provided by Ambulatory Care Pharmacists to help physicians address and triage patient online messages. Operating under approved drug therapy protocols.

Ambulatory Care Pharmacists review and approve refill requests sent in by patients through online messages intended for Adult and Family Medicine (AFM) physicians and Specialty services (Paxlovid, OBGYN, Pediatric asthma, Topical steroids, Mental Health, ADHD, Rheumatology and Ophthalmology). The goal of the DTM pharmacist is to assist healthcare teams by responding to member messages on behalf of the physician to ensure that member's concerns and questions are answered promptly.

Drug Information

Drug Information is an elective three-week remote learning experience that is offered to Kaiser Permanente pharmacist residents via a NCAL regional lottery. One member from the Drug Intelligence and Strategy (DIS) Team will serve as the primary preceptor for this experience. However, the resident will interface with various members of the DIS team including Pharmacist Evidence Analyst and Strategists (PEAS).

The role of pharmacists within DIS includes reading, assessing, and abstracting the published literature for new drugs. The DIS pharmacists have responsibility for the following:

- Drafting scholarly monographs for each new drug, which are made available for all physicians in the organization to review.
- Presenting the monograph and DIS formulary recommendation to the appropriate chiefs of service for the physician groups that prescribe the drug to solicit a formulary recommendation.
- Presenting the drug to the Regional P&T Committee for a final vote on the formulary status.
- Receiving requests for drug information then researching and responding to these requests using appropriate resources including medical texts, online databases such as point of care references, conducting searches of

the published medical literature primarily via the PubMed interface with Medline, searching the web for information published on reputable websites, and working with appropriate drug companies.

Hospice

The hospice rotation is an elective, four week learning experience. Hospice is a philosophy as well as a structured system of interdisciplinary care dedicated to meeting the physical, emotional and spiritual needs of families and individuals facing a terminal, life-limiting illness with a prognosis of six months or less. The focus is shifted from curing the disease to emphasizing the palliation of symptoms and maximizing comfort and quality of life in the final months.

The hospice team consists of physicians, pharmacists, nurses, social workers, chaplains, bereavement coordinators, volunteer coordinator/volunteers, home health aides. The role of a hospice pharmacist is to assess the appropriateness of medication orders through evidence-based, patient-centered care while ensuring timely provision of medications for symptom management, providing drug expertise to the hospice team, and educating patients/caregivers regarding medication therapies.

The pharmacy resident will gain an understanding of the philosophy of hospice and the pharmacist's role in optimizing and managing pharmacotherapy in hospice patients. The resident is expected to be prepared for daily clinical activities and complete all readings, projects, and assignments in a timely manner. The resident will be reviewing relevant patient information, identifying medication related issues (e.g. drug interactions, adverse reactions, duplicative therapy, inappropriate therapy, additional therapy required, etc), and formulating evidence-based, patient-centered medication therapy plans for individual hospice patients. The resident's independence is expected to increase as they demonstrate appropriate triaging skills.

Inpatient Medical-Psychiatry Unit (MPU)

This is a six-week inpatient elective learning experience at Kaiser Permanente Fremont Medical Center's Medical-Psychiatry Unit (MPU). It is an 18-bed unit for patients with acute medical and psychiatric conditions such as but limited to, schizophrenia, depression, anxiety, eating disorders, and bipolar disorder. The treatment team consists of psychiatrists, internal medicine physicians, nurses, mental health workers, pharmacists, patient care coordinators, dietitians, occupational therapists, case managers and social workers. It is also a teaching site for psychiatric residents.

The MPU pharmacist is responsible for ensuring safe and effective medication use for all patients admitted, including but not limited to proper monitoring of atypical antipsychotics and mood stabilizers, drug-drug interactions and drug-disease interactions. The pharmacist also leads medication group twice a week, provides discharge medication counseling, completes medication reviews for patients at high risk of falls and provides drug information consultations.

Regional Medication-Use Safety

The Regional Medication-Use Safety rotation is a 4-week virtual learning experience with Kaiser Regional Offices. This program is based in Northern California (NCAL) at the Regional Offices in Oakland, with projects and assignments that include National, NCAL, and local medical center scope. This program provides residents with extensive training and work experience that contributes to their overall development as pharmacists and leaders in the fields of medication safety, evidence-based medicine, and policy management.

The PGY1 Pharmacy Resident will be immersed in all activities of the Northern California (NCAL) Pharmacy Quality and Medication Safety (PQMS) as a department/team member. The PQMS learning experience will provide the PGY1 Pharmacy Resident with an opportunity to represent the KP NCAL PQMS Department through participation in, involvement with or collaboration with various inter-dependent, multi-disciplinary departments, committees, workgroups and leaders (e.g., National PQMS, regional and local pharmacy operations, as well as The Permanente Medical Group – TPMG).

This 4-week learning experience will provide the resident with experiences and an understanding of the patient/medication safety principles applied across various pharmacy practice settings (e.g., hospital, ambulatory care, oncology/infusion and outpatient pharmacy). The resident will understand how the patient/medication safety principles (e.g., medication safety nomenclature, safety culture, event analysis, risk assessment tools, etc.) are used to improve safety within the medication-use systems. The resident will be afforded opportunities to assess/analyze the organization's current medication use systems and data (e.g., Adverse Drug Event reports, reported Medication Events/Errors, etc.), as well as participate in the identification, development, implementation and monitoring of medication safety performance improvement projects or initiatives, including organization-wide communication.

Regional Continuum

The Regional Continuum rotation is a 4-week hybrid learning experience with Kaiser Regional Offices. This hybrid rotation would be a hybrid of onsite at KPPACC (Kaiser Permanente Post-Acute Care Center) in San Leandro (patient focused) and remote (project-based).

The Regional Pharmacy Continuum team at Kaiser Permanente (KP) generates solutions to improve pharmacy care to members across the Continuum. The Continuum refers to the transition of care from one health care setting to another (i.e. Hospital to Skilled Nursing Facility, Skilled Nursing Facility to Home, etc.). The Regional Pharmacy Continuum team aims to:

- Effectively bridge pharmacy care delivery during the transition from one level of care to another
- Enhance safety of medication therapy and quality of pharmacy service across the continuum
- Ensure pharmacy-related programs across the continuum are compliant with regulatory requirements
- Increase affordability through enhanced workflow efficiency and spread of pharmacy best practices
- Drive innovation by embracing technology and transforming our pharmacist workforce

Weight Loss Medication Management

The Weight Loss Medication Management rotation is a two-week learning experience at Kaiser Permanente Union City Medical Center, San Leandro Medical Center, and Fremont Medical Center. These three medical centers are part of an integrated health care delivery system that serves the community and approximately 300,000 members

The goal of the Weight Loss Medication Management Program is to assist in management of adult patients with an obesity or overweight diagnosis through the use of FDA-approved anti-obesity medications, with the aim of reducing the risk of complications associated with weight-related comorbidities such as type 2 diabetes, hypertension, dyslipidemia, metabolic syndrome, obstructive sleep apnea, and nonalcoholic fatty liver disease. Pharmacists collaborate with physician mentors, primary care providers, the bariatric surgery team, and the health education department to address the multifactorial contributors to weight gain and promote effective weight management.

Pharmacists deliver comprehensive medication management through telephone appointments and monthly follow up through Kaiser secure messages or scheduled encounters as needed. The pharmacists create safe and effective treatment plans by evaluating, monitoring, and initiating/adjusting medications according to an approved protocol, and by providing patient education.

The pharmacy resident is responsible for collecting and analyzing patient information to determine the most appropriate plan and/or drug regimen. The resident will identify and clarify the member's active medication profile, assess for adherence, reduce the risk of adverse drug reactions, optimize dosing and monitoring, facilitate cost effective therapy, initiate therapy where clinically appropriate, and assess appropriateness of therapy. The resident will document any action in Health Connect. In addition to patient care, the resident will provide drug information via topic discussion(s). Familiarity with anti-obesity medications and good communication are vital to success in this experience.