



A Resident's Typical Day

Pediatric Intensive Care Unit (PICU)

The PICU team manages both medical and surgical children, and coordinates care with a variety of services including: neurology, neurosurgery, pulmonology, nephrology, GI, solid organ transplant, hematology/oncology, stem cell transplant, and general surgery, amongst others. In the PICU even pre-rounding can be challenging. I arrive around 7:00 AM to prepare by collecting labs, vital signs, overnight events and consultant recommendations. Walk rounds generally last from 8:30-11:00, during which the multidisciplinary team of physicians, nurse practitioners, nutritionists, consultants and even medical students develop a treatment plan. The attending and fellow physicians frequently integrate patient-specific teaching, and invite pharmacy residents to contribute as well! With my preceptor's help, I provide recommendations for optimization of therapies or doses, particularly for therapeutic drug monitoring, renal dose adjustments, antibiotic regimens and therapeutic interchanges. After rounds I work directly with providers and nurses to implement our plans, follow up on drug information for the team and read about patients' unique and often complex medical histories and therapies. In the afternoon I evaluate the status of our team's therapeutic plan and discuss patients as well as topics related to the intensive care unit with my preceptor. The PICU rotation is also a great opportunity to get hands on experience with managing medical emergencies, including Code Blue scenarios. The Pediatric Intensive Care Unit rotation provides opportunities to encounter novel disease states, manage high-acuity and dynamic patients and earn real-life experience for managing medical emergencies.

Pharmacy Practice Resident, Class of 2015,
from University of California, San Francisco

Cardiovascular Intensive Care Unit (CVICU)

A typical day in the CVICU begins around 7am with pre-rounding. During pre-rounding, I check changes made to the medication regimen, labs, and microbiology to help me determine whether medication dose adjustments or other drug recommendations to the team may be beneficial to my patients. During pre-rounds, I also stop by the patient's bedside to confirm rates of all continuous infusions. Monitoring of anticoagulation, narcotics, and pharmacokinetics also occurs at this time. Rounds begin around 8:30am with a review of the radiology films taken of our patients followed by bedside rounds. The patients in the CVICU include infants, young children and adults recovering from corrective surgery for their congenital heart diseases. A very unique experience is with our patients with ventricular assist devices awaiting heart transplant or immediate post heart transplant who are also managed in the CVICU. The rounding team consists of an attending physician, pediatric cardiology fellows, PICU fellows, nurse practitioners, nurses, and other various subspecialty services. Medical residents generally do not rotate in the CVICU. Pharmacy residents are well received and welcome on rounds and many questions are asked of us. After rounds, I meet with the CVICU preceptor to discuss my patients and topics relevant to pediatric cardiology. Pharmacy residents are encouraged to participate and assist the pharmacist in preparing emergent medications during any code blue events. The end of the day is a good time to research and read ahead for the next day.

Pharmacy Practice Resident, Class of 2014,
from University of California, San Francisco

Transplant

The solid organ transplant rotation at Lucile Packard Children's Hospital Stanford is extremely unique. You have the opportunity to work closely with the unit-based pharmacist and provide care for pre- and post-transplant patients. Organs that have been transplanted include the heart, lungs, liver, small bowel and kidneys. Mornings are spent attending rounds in the intensive care units as well as in

the general pediatrics units. Pharmacotherapy plays a crucial role in helping to prevent rejection and infection. In the afternoons, there are meetings to discuss patients who could potentially benefit from a transplant as well as updates on patients currently on the transplant list. Discharge teaching post-transplant is also a large component of this rotation. You get to work closely with the patient and patient's

family to ensure proper administration of medication and understanding of medication side effects. This solid organ transplant rotation allows you to experience the full spectrum of providing care to pre- and post-transplant patients.

Pharmacy Practice Resident, Class of 2014,
from University of California, San Francisco

Neonatal Intensive Care Unit (NICU)

The NICU affords an opportunity to care for a unique patient population. Many of the patients are premature and have a variety of congenital heart defects or genetic disorders. I generally begin pre-rounding at 7 am by evaluating patients and their drug regimens through vital signs, labs, clinical transcriptions and reports from the overnight nurse. I also work up new patients who were born overnight or transferred from other hospitals for higher levels of care. The NICU team rounds at 9 am, during which we develop patient-specific therapeutic plans. I assist the team with dosing recommendations, therapeutic alternatives or for evaluation of therapeutic drug monitoring. The physicians and medical students frequently present on unique or patient-specific diseases or issues; similarly, pharmacy residents are asked to research and present unique pharmacotherapy applications in the neonatal population. Bedside rounds are immediately followed by radiology rounds, in which we examine X-rays and other images. Every Friday we also attend a weekly Perinatal Conference in which complex and interesting cases are discussed amongst the neonatologists and other specialists. The afternoons are spent following up on patient-care issues and discussing patient-specific issues and topics related to neonatology with my preceptor. Overall, this unique opportunity to learn about and care for such a complex patient population has been a fantastic experience and has enhanced my understanding of pediatrics and pharmacotherapy in general.

Pharmacy Practice Resident, Class of 2015,
from University of California, San Francisco

General Pediatrics

The General Pediatrics rotation is a great opportunity to work with a wide range of patients with chronic disease states as well as acute exacerbations. The first week or two of the rotation is spent rotating with the different services to get a feel for all of the types of patients and disease states commonly seen at Lucile Packard Children's Hospital Stanford, including pulmonology, gastroenterology, cardiology, and nephrology. The second half of the rotation is spent working closely with either general pediatrics or the pulmonary team as their primary pharmacist. In my experience, I worked with the pulmonary team. Family centered rounds started at 8:45 am and generally lasted 1-2 hours, depending on the number of patients. Working with this service involves a lot of therapeutic drug monitoring and the opportunity to provide drug information to the team regarding levels and drug interactions during rounds. After rounds I worked with the resident and outpatient pharmacy to help facilitate discharge and followed up on any outstanding patient issues. I was available to the team for any dosing or drug related questions and was paged and called throughout the day. This rotation also gave me the opportunity to work closely with patients and provide clinical teaching to help them better understand their medications as well as how to manage their regimens at home. Overall, this was an excellent clinical experience as well as a rewarding rotation in which I really felt that I was able to contribute to the team and the health of our patients.

Pharmacy Practice Resident, Class of 2015,
from University of Wisconsin

Hematology/Oncology

The Hematology/Oncology/Stem Cell Transplant rotation allows residents the opportunity to work one-on-one with oncology specialists and the unit-based pharmacist. A typical day begins with pre-rounding followed by sit-down rounds with the attending, fellow, residents and RNs to discuss overnight events and to devise a treatment plan. Examples of pharmacist interventions during rounds include renal dose adjustments, antibiotic dosing monitoring recommendations, and

medication/dosage form availability. After sit-down rounds, the team visits with each patient and their families for input and discussion of care. In the Bass Center Pharmacy, pharmacists and technicians prepare and dispense high-risk oncology medications for the patients in both inpatient and day hospitals at Lucile Packard Children's Hospital and at our satellite El Camino Hospital. Pharmacists are one of the few constant providers during a patient's hospital course and have developed

close working relationships with nursing and the oncology providers. In addition, residents work closely with the unit-based pharmacist to learn novel treatments as well as Children's Oncology Group protocols. Developing treatment plans for these patients is a rewarding challenge because of their variable pharmacokinetics and the high-risk nature of their medications.

Pharmacy Practice Resident, Class of 2016,
from University of California, San Diego