Health Sciences Centre Department of Pharmaceutical Services  
Pharmacy Student Practicum Descriptions

The Hospital

The Health Sciences Centre (HSC) is an 820 bed tertiary care hospital that provides health services to adults and children from Manitoba and Northwestern Ontario. It comprises a General Hospital (adult medical & surgical care), a Women’s Hospital, Respiratory and Rehabilitation Hospitals, a PsycHealth Centre and a Children’s Hospital. The HSC campus extends from Sherbrook Street to the east, Notre Dame Avenue to the south, Tecumseh Street to the west and William Avenue to the north (approximately three square city blocks). The HSC Campus merges with the University of Manitoba Bannatyne Campus at Emily Street. A series of above and below ground walkways connect HSC hospitals to one another, to the Brodie Centre (which houses the U of M Medical Library), and the Canadian Blood Services building.

The Department of Pharmaceutical Services

The HSC Pharmacy has a large staff that works from the Central Pharmacy or one of eight satellite pharmacies. Most satellite pharmacists provide both clinical and drug distribution services (unit-dose, IV admixture) to the patients in their service area. Central Pharmacy staff members provide medications to the rest of the patient care areas using a combination of automated unit-dose (Pyxis), individual prescription, or wardstock distribution systems. The Sterile Products Satellite (4th floor, General Hospital) provides oncology and parenteral nutrition admixture services as well as a centralized IV admixture program. Pharmacists from the Central Pharmacy have clinical service assignments to selected program teams (e.g., Dialysis Program).

HSC pharmacists have excellent access to both print and electronic health information resources via the Kishor Mehta Memorial Library and Drug Information Centre. Students are encouraged to use the Drug Information Centre, as well as the drug information resources located in each Pharmacy Satellite. Finally, students have convenient access the information resources of the University of Manitoba Medical Library, which is located next to the HSC.

Practicum Sites

You are invited to visit all areas of the department while at HSC. Students may be assigned to more than one service area during the placement. We make every effort to accommodate requests to be assigned to a specific practice area; however, due to the number of students who request certain practice sites, not all requests can be met.
1. **Adult Critical Care**

The Critical Care Satellite Pharmacy team members provide clinical and drug distribution services to patients in the Adult Critical Care, Intermediate Intensive Care, and Lung Transplant Patients, 24 hours a day, 7 days a week. This Pharmacy Team also provides limited support to the Adult Post-Anesthesia Care Unit. Adult Critical Care is made up of three ICUs: a Medical ICU, Surgical ICU and Coronary Care Unit (CCU). The Medical ICU cares for people that have life-threatening medical conditions (e.g., severe increase or decrease in blood pressure, severe pneumonia or other life-threatening infections, decompensated congestive heart failure, etc). Many patients require blood pressure or breathing support. The Surgical ICU cares for people that have experienced trauma or major surgical procedures (e.g., transplantation, high-risk surgical procedures). The Coronary Care Unit cares for people that have acute myocardial infarction, cardiac arrhythmia or unstable angina. The Intermediate Intensive Care Unit is a step-down unit for people that have medical problems that are best handled in an ICU setting, but that don't require the full resources of the Adult ICU.

If you are assigned to Adult Critical Care, you’ll have many opportunities to answer drug information questions, attend rounds, and to observe/monitor the effects of drug therapy. There are also many excellent opportunities to counsel patients about medications that are recommended in the post-myocardial infarction setting. Critical Care also provides excellent opportunities to discuss important practice issues such as time management, building pharmacist-patient relationships, and how to deal with death and dying. Finally, because the satellites operate 24 hours a day, it may be possible for you to observe the responsibilities of the sole charge pharmacist during evening hours.

2. **Pediatrics**

The CK4/NICU/PICU Satellite Pharmacy team members provide clinical and drug distribution services to patients in the pediatric and/or neonatal intensive care unit, and to children on all wards at the Children’s Hospital. Service is provided 24 hours a day, 7 days a week. The Neonatal ICU and Pediatric ICU care for neonates and children that have life-threatening medical/surgical/congenital conditions (e.g., severe increase or decrease in blood pressure, life-threatening infections, cardiac or breathing problems, etc). Some patients require blood pressure or breathing support. On the general care units, children may have respiratory infections, uncontrolled asthma, cancer, kidney problems (e.g., transplant recipients), or other medical/surgical/congenital problems that require hospital care.

If you are assigned to the Pediatrics area, you’ll have many opportunities to answer drug information questions, research diseases and drug therapies used in
the pediatric population, and to interact with members of unique patient care teams (safety & family-focused care). There are opportunities to counsel children or their caregivers about medications that the child needs to take upon discharge from hospital. Finally, this setting provides excellent opportunities to get practical experience with pharmacotherapy issues in a pediatric patient population (e.g., adherence to medication therapy; dosage form modifications for kids; drug dosing & pharmacokinetic changes in kids, etc).

3. BMT/ Acute Oncology

The BMT/GD6 Satellite Pharmacy team members provide clinical and drug distribution services to patients in the leukemia and blood/marrow transplant unit 8-10 hours a day, 7 days a week. This team cares for adults that have life-threatening blood or bone marrow conditions (e.g., leukemia, lymphoma, graft-vs-host disease, serious infections).

If you are assigned to the BMT area, you’ll have many opportunities to interact with a wide range of health professionals while assisting your preceptor to deliver patient care. Pharmacists regularly consult with dietitians, social workers, nurses, home care workers, and physicians while caring for these patients. The pharmacists focus on the pharmacotherapy of issues such as serious infections, pain, bleeding, nausea or vomiting, mucositis, diabetes, and immunosuppression. Pharmacists also provide discharge counseling and continuity of pharmaceutical care with outpatient care providers. You might have an opportunity to observe a bone marrow harvest (operating room), transplant, radiation therapy, or other medical or surgical procedures that involve drug therapy.

4. Mental Health

The PsycHealth Satellite Pharmacy team members provide clinical and drug distribution services to patients in the PsycHealth facility 8 hours a day, 5 days a week. This team cares for adults that have psychiatric disorders (e.g., depression, acute psychosis, bipolar affective disorder, and schizophrenia).

If you are assigned to this area, you’ll have many opportunities to interact with nurses, occupational therapists, social workers and psychiatrists while assisting your preceptor to deliver patient care. The pharmacists focus on medication adherence issues (managing adverse effective of drugs for psychiatric disorders), drug interactions, and pharmacotherapy monitoring of narrow-therapeutic range drugs. Pharmacists also assist the team with medication selection for non-psychiatric disorders (e.g., infections, nausea or vomiting, hypertension, diabetes, etc). Pharmacists also provide discharge counseling to patients that receive outpatient prescriptions from the PsycHealth Pharmacy.
5. Adult Medicine/Surgery

Pharmacists provide clinical and drug distribution services to patients on medical and surgical units associated with Medicine and Surgery Teaching Services 8 hours a day, 5 days a week. A wide variety of patients are seen in these patient care areas (e.g., heart disease, renal disease, respiratory disease, diabetes, serious or uncommon infections, deep vein thrombosis, neurosurgery, general surgery, gynecologic surgery, etc.), providing excellent opportunities to identify, prevent and resolve drug-related problems with drugs and diseases.

If you are assigned to this area, you will have many opportunities to interact with nurses, physicians-in-training, and other allied health professionals. Pharmacists focus on safe and effective medication prescribing, answering drug information questions, medication reconciliation, and pharmacotherapy monitoring of narrow-therapeutic range drugs. Pharmacists provide discharge medication counseling to patients if consulted to do so.

6. Renal Health

Pharmacists provide clinical services for inpatients and outpatients with renal health issues (e.g., dialysis, renal health, renal transplant). Pharmacists are part of a multidisciplinary health team; therefore you will have opportunities to interact with other health care professionals. Renal Health patients usually have multiple disease states and complex medication profiles. Pharmacists focus on preventing and resolving drug-related problems, safe and effective medication prescribing, answering drug information questions, and pharmacotherapy monitoring of narrow-therapeutic range drugs. The pharmacist provides discharge medication counseling to most patients.

7. HIV (Health Sciences Centre & Nine Circles Community Health Centre)

Pharmacists provide clinical services for outpatients with HIV and sexually transmitted diseases. Pharmacists are part of a multidisciplinary health team; therefore you will have opportunities to interact with other health care professionals. HIV patients usually have multiple disease states and complex medication profiles. Pharmacists focus on preventing and resolving drug-related problems, safe and effective medication prescribing, answering drug information questions, and pharmacotherapy monitoring of narrow-therapeutic range drugs. The pharmacist provides medication education in small group and individual settings.

8. Investigational Drug Services (IDS)
Pharmacists and technicians provide drug distribution services to inpatients and outpatients enrolled in clinical trials or receiving medication through the Special Access Program. Pharmacy staff interacts regularly with study nurses, investigators and study sponsors; therefore you will have opportunities to interact with other health care professionals. Pharmacists are involved in reviewing study protocols, setting up pharmacy procedures, audits, and outpatient counseling.

9. Emergency Medicine
The Emergency Department (ED) pharmacist works collaboratively with a multidisciplinary team to improve quality of care and patient safety in the emergency department. The ED is a unique environment - often chaotic and unpredictable - with high volumes and wide diversity of patients ranging anywhere from trauma, toxicology, pregnancy to chronic illnesses. The ED pharmacist focuses on safe and effective medication management, particularly in chronic illnesses, as well as identifying and resolving drug related problems contributing to patients' admission to the emergency department.

10. Lucentis Program
Ranibizumab (Lucentis®) is a specialty intravitreal treatment for macular degeneration. A pharmacist, who is sited at Misericordia Health Centre, reviews ranibizumab orders and audits ranibizumab therapy at multiple sites where this program operates. Concordia Hospital Pharmacy prepares ranibizumab aseptically in ready-to-administer format, and the syringes are delivered from Concordia Hospital to ophthalmology clinics across Winnipeg.