Elective: Cardiac Surgery

OVERVIEW

The cardiac surgery service is based at St. Boniface General Hospital. The yearly operative case volume can be expected to exceed 1200 cases. This elective is structured to provide the student with an intensive exposure to clinical cardiovascular disease.

INTRODUCTION

Location(s):

St. Boniface General Hospital

Preceptors:

Attending Surgeons
Dr. Alan Menkis, Professor
Section Head for Cardiac Surgery

Contact Person:

Dawne Skoleski, Program Administrator
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LEARNING OBJECTIVES (CanMEDS)

The clinical disorders which the student should have an opportunity to observe and to participate in the care and management of include:

- Ischemic heart disease
- Mitral stenosis
- Mitral insufficiency
- Aortic stenosis
- Aortic insufficiency

*Cases of thoracic aortic aneurysmal disease and thoracic aortic dissection may be encountered.

All of the above should be approached from the perspective of:

- Etiology
- Pathophysiology
- Clinical presentation
- Investigation Management

Medical Expert

As Medical Experts, physicians integrate all of the CanMEDS Roles, applying medical knowledge, clinical skills and professional attitudes in their provision of patient-centered care.
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- History and physical examinations (with attending review) on a small number of representative cases.
- Weekday rounds on the cardiac surgical ward and the cardiac intensive care unit on patients known to the student.
- Observing and scrubbing in the operating room to observe the pathology and to perform the simpler technical procedures such as wound closure.
- The clerks will be expected to write progress notes and take an active part in the continuing care of the patients known to them in a team approach.
- The clerks will have the opportunity to see in-hospital consultations and to attend outpatient clinics.

Communicator
Physicians effectively facilitate the doctor-patient relationship and the dynamic exchanges that occur before, during, and after the medical encounter.

- Establish rapport, trust and a therapeutic relationship with patients and families.
- Listen effectively.
- Elicit relevant information and perspectives of patients, families, and the health care team.
- Convey relevant information and explanations to patients, families and the health care team.
- Convey effective oral and written information about a medical encounter.
- Maintain clear, accurate, appropriate, and timely records of clinical encounters and operative procedures.
- Address challenging communication issues effectively
  - Obtain informed consent
  - Deliver bad news
  - Disclose adverse events
  - Discuss end-of-life care
  - Discuss organ donation
- Address anger, confusion and misunderstanding using a patient centered approach.

Collaborator
Physicians effectively work within a healthcare team to achieve optimal patient care.

- Demonstrate a team approach to health care
- Participate effectively in an interprofessional and interdisciplinary health care team.
- Recognize and respect the diversity of roles, responsibilities, and competences of other health professionals in the management of the surgical patient.
- Work with others to assess, plan, provide, and integrate care of the surgical patient.

Leader
Physicians engage with others to contribute to a vision of a high-quality health care system and take responsibility for the delivery of excellent patient care through their activities as clinicians, administrators, scholars, or teachers.

- Employ information technology appropriately for patient care
- Allocate finite health care resources
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**Health Advocate**
Physicians responsibly use their expertise and influence to advance the health and well-being of individual patients, communities and populations.

- Concern for the best interest of patients
- Identifying health needs of individual patients, and advocate for the patient in cases where appropriate
- Promote and participate in patient safety

**Scholar**
Physicians demonstrate a lifelong commitment to reflective learning, as well as the creation, dissemination, application and translation of medical knowledge.

- Demonstrate the ability for continuing self learning
- Discuss the principles of surgery and the application of basic sciences to surgical treatment.
- Demonstrate appropriate presentation skills, including formal and informal presentations.
- Critically evaluate medical information and its sources and apply this appropriately to clinical decisions.
- Critically appraise the evidence in order to address a clinical question.
- Integrate critical appraisal conclusions into clinical care.

**Professional**
As Professionals, physicians are committed to the health and well-being of individuals and society through ethical practice, profession led regulation, and high personal standards of behaviour.

- Exhibit professional behaviors in practice, including honesty, integrity, commitment, compassion, respect and altruism.
- Demonstrate a commitment to delivering the highest quality care.
- Recognize and respond appropriately to ethical issues encountered in practice.
- Recognize and respect patient confidentiality, privacy and autonomy.
- Participation in peer review
- Manage conflicts of interest
- Maintain appropriate relations with patients.
- Demonstrate awareness of industry influence on medical training and practice
- Recognition of personal and clinical limitations

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**INFORMATION**

**Teaching Unit**
The Cardiac Surgery ward is located on 2B at SBGH.
The CVICU is located on the 2nd floor of SBGH.

**Call Responsibility**
1-4

**Required Reading**
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Lawrence Essentials of General Surgery, 3rd Ed. Chapters of particular relevance to this rotation include:
- Chapter 2 - Preoperative Medical Evaluation of Surgical Patients
- Chapter 3 - Fluid & Electrolytes
- Chapter 4 - Nutrition
- Chapter 5 - Surgical Bleeding & Blood Replacement
- Chapter 6 - Shock
- Chapter 7 - Wounds & Wound Healing
- Chapter 8 - Surgical Infections
- Chapter 22 - Diseases Of The Vascular System

Lawrence Essentials of Surgical Specialties, 2nd ed. Chapters of particular relevance to this rotation include:
- Chapter 6, Cardiothoracic Surgery: Diseases of the Heart, Great Vessels & Thoracic Cavity

Cecil's Essentials Of Medicine. Chapters of particular relevance to this rotation include:

Suggested Reading

Cardiac Surgery in the Adult, Lawrence M. Cohn & L. Henry Edmunds, Jr.
- Available online at http://www.cts.net.org/sections/journalsandbooks/books/index.html

Multimedia Manual of Cardiothoracic Surgery, Marko Turina, editor-in-chief
- Available online at http://www.cts.net.org/sections/journalsandbooks/books/index.html

Principles of Surgery, Schwartz, 8th edition 2005
- Chapter 20  Acquired Heart Disease, pages 645-689
- Chapter 21  Thoracic Aortic Aneurysms and Aortic Dissection, pages 691-715

Service Evaluation (by student)
Hand in at the end of rotation to Surgery Education Office.

Student Evaluation (by service)
An exit interview should be set up at the beginning of the elective so that student evaluations may be completed.

*Evaluations for Internal Students will be distributed and collected through OPAL

WARD ACTIVITIES

Academic Schedule
Cardiac Surgical Rounds
Wednesday 0700-0830

Cardiology/Cardiac Surgery Catheterization Rounds
Wednesday 1600–1700

The student will receive information regarding topics and room locations at the time of orientation to the service.