

1. Rotation Name

Infection Control

2. Educational Purpose of the Rotation

The Infection Control rotation is designed to give the sub-specialty resident experience and expertise in the techniques and appropriate uses of Infection Control procedures and techniques in a hospital system. Topics covered during this rotation include principles and practice of Infection Control, hospital benefits of an effective Infection control program, principles of isolation, outbreak investigation, use of statistics in determining outbreaks, epidemiology, clinical course, and manifestations of major infections, quality assurance and cost containment, OSHA regulations, risk management, health care policy, use and management of antimicrobial agents in a variety of settings, and administrative responsibility of the Infection Control committee.

3. Staffing of the Rotation

Robin Roach RN, the director of the Infection Control program at Sparrow Hospital, supervises this rotation. Participating Infection Control faculty will also include Dr. Farnum, the Director of Infection Control at Ingham Medical Center and Dr. Havlichek, the Director of Infection Control at St. Lawrence Hospital from 1986 to 1994. The Infection Control office at Sparrow hospital contains 2 additional full time RN's and secretarial support.

4. Resources

Sub-specialty residents will work with the Infection control team and have library and computer based resources available to them. Sub-specialty residents will have the opportunity to attend the Society for Hospital Epidemiologists of America (SHEA) annual training meeting.

5. Patients

Ms. Roach will supervise SSR's during their Infection Control rotation. Direct patient care will not occur as a result of performing Infection Control duties, however when/if patient contact occurs SSR's will maintain the highest professional standards during these interactions. As the resident's understanding and competencies increase, so does their role in Infection Control assessment and management. Residents are exposed to a variety of Infection Control issues and techniques that can influence a patients risk to acquire nosocomial infection.

6. Responsibilities

Goal: The resident will understand the methods of pathogen transmission, means to prevent such transmission, assessing baseline nosocomial infection rates, how to determine if an outbreak exists and management of such an outbreak, and techniques to break the chain of infection. Subspecialty residents will also participate and lead educational programs for the Infection Control Department, as appropriate.

Duties: The infectious disease resident is expected to:

- a. Attend Infection Control Committee meetings and other meetings as appropriate.
- b. Participate in hospital Infection Control surveillance activities.
- c. Provide input to the Infection control team concerning individual patients, as appropriate.
- d. Participate in statistical analysis of data.
- e. Prepare presentations for the Infection Control Committee, as appropriate.
- f. Participate in Infection Control conferences and other infectious disease related conferences.
- g. Participate in other infectious disease related conferences occurring in other disciplines (example outside speakers in other programs with special Infectious Disease expertise like Pediatric HIV)
- h. Attend inpatient rounds with the attending physician on assigned weekends.
- i. Read and be prepared to discuss key literature including articles as listed in the recommended reading section.

7. Objectives

- a. Demonstrate a sound knowledge base pertinent to the discipline of Infection Control.
- b. Demonstrate the ability to assess baseline nosocomial infection rates and determine if an outbreak is present.
- c. Understand appropriate uses and limitations of isolation procedures.
- d. Demonstrate understanding of the interaction of the Microbiology Laboratory with the Infection Control Department.
- e. Demonstrate the ability to effectively work with other members of the Infection Control health care team, including attending physicians and other health care providers.
- f. Communicate effectively within the hospital administrative community concerning Infection Control issues.

- g. Demonstrate the ability to respond appropriately to unique pathogens that could threaten patients, hospital personnel, students, residents or attending physicians.
- h. Understand the importance of Infection Control measures in the hospitals response to a bioterrorist event and channels of reporting of possible events.

8. Instructional Methods

For the Infection Control therapy rotation, a variety of instructional modalities are included. All sub-specialty residents will work with the Infection Control team for a minimum of 2 months. During that time they will have direct experience with surveillance and directed investigations. Mandell's Principles and Practice of Infectious Diseases, and Mayhalls' Hospital Epidemiology and Infection Control will be used as base texts for SSR education. Didactic lectures relating to Infection Control are part of the core lecture series. Sub-specialty residents will have the opportunity to attend the SHEA course regarding Infection Control.

9. Evaluation

- a. At the conclusion of the Infection Control rotation faculty members will summarize and accurately describe the resident's performance on the provided form, discuss this evaluation with the resident and return the form to the residency director.
- b. The resident will summarize and accurately describe faculty performance and return it to the program office for inclusion in a computer-generated report to insure resident anonymity.
- c. Twice per year the resident will be evaluated by the program director in a formal, written evaluation session. Performance on the Infection Control rotation will be part of this evaluation. These evaluations will be transcribed and signed by both the residency program director and the resident.

10. Schedule

See master schedule

Infection Control Rotation Competency Objectives

1. Patient Care

- a) Understand situations where appropriate infection control measures improve safety of patients and personnel.
 - b) Determine appropriate infection control measures in inpatient and outpatient situations.
 - c) Demonstrate the ability to respond appropriately to unique pathogens isolated in the Microbiology laboratory.
2. Medical Knowledge
- a) Gain experience and expertise in the techniques and appropriate implementation of Infection Control procedures.
 - b) Gain medical knowledge in the basic principles of pathogen transmission and host-pathogen interaction.
 - c) Gain knowledge of appropriate statistical analysis of nosocomial infection rates and identification of outbreaks.
 - d) Demonstrate a sound knowledge base pertinent to the broad range of illnesses common to the practice of Infection Control and understand the importance of infection control in a bioterrorism setting.
3. Interpersonal and Communication Skills
- a) Communicate effectively with the Infection Control team, hospital administrators, and attending physicians.
4. Professionalism
- a) Throughout the rotation, residents are expected to exhibit reliability in their duties, as well as integrity and respect in their interactions with patients and colleagues.
 - b) Residents will be able to demonstrate appropriate principles of communication and responsiveness pertinent to the issues of Infection Control.
5. Practice Based Learning and Improvement
- a) Rotating residents will demonstrate self-initiative in the use of information technology available via the MSU electronic library to access and retrieve materials for self-education regarding Infection Control.
 - b) Rotating residents will be expected to show progressive learning throughout the rotation, with emphasis on learning from any cognitive or procedural errors. They are also expected to facilitate any Infection Control quality improvement initiatives that take place.

- c) Read, as appropriate, Mandells' Principles and Practice of Infectious Diseases, and Mayhalls' Hospital Epidemiology and Infection Control.
6. Systems Based Practice
- a) All residents will demonstrate conscientious awareness of the impact of their professional activities in the Infection Control setting, and will conscientiously avoid inappropriate use of the practice resources.
 - b) Residents must demonstrate understanding of cost-effectiveness of care incorporating cost-effectiveness into their development of diagnosis and treatment plans.