

CURRICULUM for INFECTIOUS DISEASES

Trainee's Name _____

Date _____

	Monday	Tuesday	Wednesday	Thursday	Friday
8-9 9-10 11-12 P	Pre-rounds Attending Rounds MR	Pre-rounds Attending Rounds MR	Pre-rounds MR (9-10) Attending Rounds	Pre-rounds Attending Rounds MR	Pre-rounds Attending Rounds MR
Noon	Conference	Conference	Conference	Grand Rounds	Conference
1-5 P	Attending Rounds, reading, Clinic Southport	Attending Rounds, reading, Clinic Stratford	Attending Rounds, reading, Clinic Stratford	Attending Rounds, reading, Clinic Stratford	Attending Rounds, reading, Clinic Southport

I. Objectives

Patient Care

Unsatisfactory Satisfactory Superior

- Takes a complete subspecialty focused history and physical examination and gathers appropriate data for presentation to consultant 1 2 3 4 5 6 7 8 9
- Written work is complete and organized in a problem-centered format 1 2 3 4 5 6 7 8 9
- Careful follow-up of patient's problems, providing assistance to the primary inpatient care team 1 2 3 4 5 6 7 8 9
- Develops own appropriate problem-based diagnostic and therapeutic plans and offers them to consultant 1 2 3 4 5 6 7 8 9

Medical Knowledge

- Commitment to Continuing Medical Education demonstrated through daily rounds, reading and completion of portfolio, if applicable 1 2 3 4 5 6 7 8 9
- Demonstrates adequate knowledge for common inpatient and outpatient subspecialty-specific conditions 1 2 3 4 5 6 7 8 9
- Applies knowledge appropriately and effectively using systematic Bayesian reasoning 1 2 3 4 5 6 7 8 9

Interpersonal and Communication Skills

- Caring, respectful behaviors 1 2 3 4 5 6 7 8 9
- Organized consultant-appropriate oral presentations 1 2 3 4 5 6 7 8 9
- Works well with primary team members – communicates consultant's suggestions 1 2 3 4 5 6 7 8 9
- Works and communicates effectively and collegially with nursing and ancillary staff 1 2 3 4 5 6 7 8 9

Practice-based learning and Improvement

- Appreciates the limitations of his/her medical knowledge and asks for help when needed 1 2 3 4 5 6 7 8 9
- Independent study and learns from mistakes 1 2 3 4 5 6 7 8 9
- Responsive to constructive criticism 1 2 3 4 5 6 7 8 9
- Able to use the computerized patient database (Powerchart) effectively to obtain information 1 2 3 4 5 6 7 8 9
- Produces at least one original research article that is relevant to diagnostic or therapeutic strategies in active patients 1 2 3 4 5 6 7 8 9

Professionalism

- Vigorous patient advocate; knows ALL the relevant facts about patients 1 2 3 4 5 6 7 8 9
- Honesty, reliability, responsibility, cooperativeness and timeliness 1 2 3 4 5 6 7 8 9
- Shows respect, compassion, and integrity in working with patients, peers and attendings, and hospital staff 1 2 3 4 5 6 7 8 9
- Follows the rules of the residency program (e.g., work hour regulations) 1 2 3 4 5 6 7 8 9
- Attends the formal educational and didactic sessions 1 2 3 4 5 6 7 8 9

Systems-based practice

- Trainee's suggestions, during presentations, are cost-effective and demonstrate proper use of available inpatient (e.g. tests) and outpatient resources (e.g. home IV therapy, visiting nurses, hospice etc.) 1 2 3 4 5 6 7 8 9

Comments:

General

- These objectives were discussed with the resident at the beginning of the rotation Yes No
- The trainee has successfully achieved the above-listed objectives of this rotation. Yes No
- This evaluation was discussed with the resident by the end of the rotation Yes No

Name of Attending Physician _____

II. Educational Purpose of Rotation:

The purpose of the Infectious Disease elective is to expose and instill a reasonable working knowledge and problem-solving skill-set required to optimally diagnose and care for patients with infectious diseases.

A) Knowledge - Trainees will learn the skills necessary to diagnose and manage common infectious diseases, including: pneumonia, urinary tract infection, skin/soft tissue infections, infectious diarrhea, HIV/AIDS (and related opportunistic infections), meningitis, and endocarditis. By use of the unique patient-syndrome-specific portfolio system, the trainee will be exposed to most common infectious diseases and use patient encounters to complete homework (applicable readings from the syllabus AND completion of the portfolio).

B) Skills: From the experiences gained during the rotation, the resident will:

1) Refine his/her skills in medical history taking especially as pertains to infectious disease problem-solving. He/she will master relevant ID review of systems and physical diagnosis focused on identifying a site of infection, 2) Learn to prioritize tasks, 3) Use time efficiently, 4) Learn the principles of medical decision making, 5) Learn to cost-effectively order diagnostic studies and provide therapeutic interventions.

C) Attitudes: Desirable attitudes. He/she should:

1) Assume responsibility for aiding in patients' infectious disease management – knowing every detail of their ID-relevant history (including old records), physical examination, laboratories, diagnostic/therapeutic plan, 2) Access the opinions of attending physicians and consultants ONLY AFTER thinking about a case and offering their best effort at synthesis and a plan, 3) Appreciate the role of and when to consult the Infectious Disease expert.

III. Principal Teaching Methods: Residents will learn by performing 1-2 consultations each day, presenting them to the attending consultant during rounds, followed by discussion. The resident will ALWAYS offer his/her diagnostic and therapeutic plan for correction and/or refinement by the attending physician. The resident will read articles from the syllabus (see below) that are germane/applicable to their patients' problems, then complete portfolio work as appropriate. Residents will follow-up patients on whom they've completed a consultation until resolution or discharge to understand the course of disease. Daily required conferences include:

1. Resident's Morning Report – MTR (11-12:00) Wed 9-10 AM
2. Infectious Disease Attending Rounds - Daily (9-11:00 and 1-5:00 PM as required to complete)
3. Noon conference lecture series – 5 days/week, July-September is a repeating course of core topics, while October-June includes specialty and sub-specialty lectures comprising a 2-year cycle that covers most fundamental topics for each discipline.

A detailed description of teaching methods, in University of Rochester (i.e. competency-specific) format, is included toward the end of this curriculum.

IV. Patient Characteristics – All adult patients admitted to Bridgeport Hospital and whose physicians request an Infectious Disease consultation. These patients include nearly equal numbers of men and women, ranging in age from 18 to over 100 years and of average age in the late 50's. Roughly 20% of patients have no insurance or Medicaid. The remaining have Medicare or private insurance. The socioeconomic demographic mirrors that of the community (20-30% poor, 70-80% middle class). Patients are admitted with a broad array of multiple and complex medical illnesses. While the majority of ID consultations are performed for patients admitted to the Medicine Service, roughly 20-30% come for patients with primary surgical or obstetric-gynecologic reasons for admission.

V. Procedures - Residents will have the opportunity to perform diagnostic procedures including arthrocentesis, paracentesis, thoracentesis, and lumbar puncture only when requested by the primary care team. All procedures will be performed under the supervision of residents or attendings who are certified in these procedures (see Institutional Procedures Credentialing Policy).

VI. References – *ALL TRAINEES MUST COMPLETE ALL OF THE READINGS IN THE INFECTIOUS DISEASE ELECTIVE SYLLABUS (returned to the Program Director's office at the end of each rotation). Computerized data-bases available throughout the hospital at every terminal: Up-to-Date and MD-Consult. All trainees are expected to use one of these or similar resources to master topics that are germane to their patients every day.

Other Resources: Harrison's, *Principles of Internal Medicine* and Mandell, *Principles and Practice of Infectious Disease*

V. Methods of Evaluation

Residents and interns are evaluated by the consulting Infectious Disease attending physicians with whom they work during the 4-week rotation.

All evaluations will be performed on-line, by email, using the E-value system. A resident shall not receive credit for a rotation until he has evaluated the rotation, attending and the degree to which he had opportunity to complete the objectives.

*The completed portfolio that follows will be critically evaluated and weighed heavily in completing the evaluation forms that follow. The portfolio will be kept by the resident, but will be submitted for "grading" in the last week of the rotation.

Infectious Disease Portfolio

(Name)

Welcome to the Department of Medicine Infectious Disease rotation. The objective of this rotation is to expose you to patients with, and educate you as to the clinical approach to, the most common infectious diseases. During this rotation you will keep a “porfolio” to document that you’ve seen cases and performed the background reading necessary to understand various disease processes. This portfolio will become the record of your rotation and can be added to your overall residency portfolio. Your weekly schedule is as follows:

	Monday	Tuesday	Wednesday	Thursday	Friday
8-9 9-10 11-12 P	Pre-rounds Attending Rounds MR	Pre-rounds Attending Rounds MR	Pre-rounds MR (9-10) Attending Rounds	Pre-rounds Attending Rounds MR	Pre-rounds Attending Rounds MR
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Attendance at conferences is mandatory.

Please remember that in the offices of private physicians you are representing their practice. You should arrive at the outpatient offices by 1:15 PM; try to get there 10 minutes early to assure you’re on time. You **MUST** be well dressed, shaved and with a white coat (no scrubs or scruffy appearance). Since clinicians will be expecting you, it is your responsibility to notify the office at least one week ahead if you cannot attend clinic following call. Since the call schedule is available ahead of time, you should be able to let offices know in the first couple days of the rotation, the days you cannot be there. Private clinicians will ask you to see new and follow-up patients who are instructive to the goals of this rotation.

The portfolio approach entails using a patient you see as a point of departure for further reading and documentation of your understanding of the disease, approaches to diagnosis/management and prognosis. It will be your responsibility to assure that you see at least one patient with the included problems (simply ask attendings to arrange for you to see cases that are required to complete your portfolio). Obviously the portfolio could be completed in a very superficial fashion without studying about each topic. However, your grade at the end of the rotation will reflect the rigor with which you approach the rotation (clinically) AND that with which you approach completion of the portfolio. You will note that there are prepared forms for syndrome-specific infectious diseases which we feel are the minimum for you to cover during the rotation. There are extra forms for other infectious diseases/syndromes that you encounter. At the end of the rotation, you will discuss your portfolio with your ID attending.

Systemic Inflammatory Response Syndrome

Symptoms:

Signs:

Ancillary Supportive Tests:

Definitions and Criteria for:

- Systemic Inflammatory Response Syndrome
- Sepsis Syndrome or Severe Sepsis
- Septic Shock

Criteria for admission versus outpatient management:

Therapies that improve outcomes:

- 1.
- 2.
- 3.
- 4.

Syndrome: Pneumonia

Symptoms:

Signs:

Ancillary Supportive Tests:

Theoretical foundation for separating pneumonias into those acquired in the community and those acquired in hospitals, nursing homes, dialysis units etc. _____

Criteria for admission versus outpatient management:

Mandatory Reading:

CAP: 1. Am J Respir Crit Care Med. 2001 Jun;163(7):1730-54.
Clin Infect Dis. 1998 Apr;26(4):811-38.

HAP: [Am J Respir Crit Care Med.](#) 2005 Feb 15;171(4):388-416

Community Acquired

Patient Name: _____ Unit #: _____

Brief History: _____

Common Pathogens of CAP (in order of frequency): _____

Treatment (empiric): _____

Rationale for empiric therapy: _____

Hospital Acquired Pneumonia Pneumonia – Including Ventilator Associated Pneumonia (VAP)

Patient Name: _____ Unit #: _____

Brief History: _____

Common Pathogens of HAP (in order of frequency): _____

Treatment (empiric): _____

Rationale for empiric therapy: _____

Syndrome: Empyema

Symptoms:

Signs:

Ancillary Supportive Tests:

Common Pathogens (in order of frequency): _____

Treatment (empiric): _____

Rationale for empiric therapy: _____

Mandatory Reading

Syndrome: Lung Abscess

Symptoms:

Signs:

Ancillary Supportive Tests:

Common Pathogens (in order of frequency): _____

Treatment (empiric): _____

Rationale for empiric therapy: _____

Syndrome: Urinary Tract Infection

Simple Cystitis

Symptoms:

Signs:

Ancillary Supportive Tests:

Criteria for admission versus outpatient management:

Common Pathogens (in order of frequency): _____

Treatment (empiric): _____

Rationale for empiric therapy: _____

Syndrome: Urinary Tract Infection

Pyelonephritis

Symptoms:

Signs:

Risks for: _____

Ancillary Supportive Tests:

Criteria for admission versus outpatient management:

Common Pathogens (in order of frequency): _____

Treatment (empiric): _____

Rationale for empiric therapy: _____

Syndrome: Meningitis

Bacterial

Symptoms:

Signs:

Ancillary Supportive Tests:

Criteria for admission versus outpatient management:

Common Pathogens of HAP (in order of frequency): _____

Treatment (empiric): _____

Rationale for empiric therapy: _____

Syndrome: Meningitis

Viral and Atypical

Symptoms:

Signs:

Ancillary Supportive Tests:

Criteria for admission versus outpatient management:

Common Pathogens of HAP (in order of frequency): _____

Treatment (empiric): _____

Rationale for empiric therapy: _____

Syndrome: Skin and Soft Tissue Infections

Symptoms:

Signs:

Ancillary Supportive Tests:

Criteria for admission versus outpatient management:

Common Pathogens of HAP (in order of frequency): _____

Treatment (empiric): _____

Rationale for empiric therapy: _____

Syndrome: Endocarditis

Acute

Symptoms:

Signs:

Ancillary Supportive Tests:

Criteria for admission versus outpatient management:

Common Pathogens of HAP (in order of frequency): _____

Treatment (empiric): _____

Rationale for empiric therapy: _____

Syndrome: Endocarditis

Subacute

Symptoms:

Signs:

Ancillary Supportive Tests:

Criteria for admission versus outpatient management:

Common Pathogens of HAP (in order of frequency): _____

Treatment (empiric): _____

Rationale for empiric therapy: _____

Syndrome: Bloodstream Infections

Symptoms:

Signs:

Ancillary Supportive Tests:

Criteria for admission versus outpatient management:

Common Pathogens (in order of frequency): _____

Common Site Sources (in order of frequency): _____

Treatment (empiric): _____

Rationale for empiric therapy: _____

Other: Cholangitis

Symptoms:

Signs:

Ancillary Supportive Tests:

Criteria for admission versus outpatient management:

Common Pathogens of HAP (in order of frequency): _____

Treatment (empiric): _____

Rationale for empiric therapy: _____

Other: _____

Symptoms:

Signs:

Ancillary Supportive Tests:

Criteria for admission versus outpatient management:

Common Pathogens (in order of frequency): _____

Treatment (empiric): _____

Rationale for empiric therapy: _____

Other: _____

Symptoms:

Signs:

Ancillary Supportive Tests:

Criteria for admission versus outpatient management:

Common Pathogens (in order of frequency): _____

Treatment (empiric): _____

Rationale for empiric therapy: _____

Other: _____

Symptoms:

Signs:

Ancillary Supportive Tests:

Criteria for admission versus outpatient management:

Common Pathogens (in order of frequency): _____

Treatment (empiric): _____

Rationale for empiric therapy: _____

DETAILED CURRICULUM

FACULTY

Zane Saul, MD
 David Lobo, MD
 Goran Miljkovic, MD
 Subasree Srinivasan, MD

Principal Educational Goals by Relevant Competency

***Legend for Learning Activities**

AR- Attending Rounds
 GR-Grand Rounds
 CD- Clinical Duties
 JRC -Joint Resident Conference
 MR-Morning Report
 NC-Noon Conference
 EBS-Evidence-based syllabus

1) Patient Care

Principle Educational Goals	Learning Activities
Thorough history; generating an accurate sequence of events prior to and during admission.	AR
Focused physical examination especially for sites of potential infection	AR, CD
Documenting duration of intravascular catheters, antibiotics and potential drug interactions	AR, CD
Generating an appropriate infectious/non-infectious differential diagnosis prior to deciding the principles of management	AR, CD
Defining and following parameters of clinical improving/worsening status	AR, CD

2) **Medical Knowledge**

Principle Educational Goals (level of competence for practicing general internist)	Learning Activities
Evaluation of fever and/or sepsis in hospitalized patients	AR, CD, MR, NC, EBS
Approach to sepsis in the immuno-compromised patient.	AR, CD, MR, NC, EBS
Approach to the patient with HIV	AR, CD, MR, NC, EBS
Appropriate interpretation of cultures and gram stains	AR, CD, MR, NC, EBS
Current recommendations for common community-acquired infections, by appropriate professional societies (e.g. IDSA)	AR, CD, MR, NC, EBS

3) **Practice-Based Learning and Improvement**

Principle Educational Goals	Learning Activities
Begin to analyze own practices/patient care to improve future performance.	AR
Location and clinical application of appropriate medical literature to patient care and/or team rounds.	AR
Facilitation of learning of ID team members.	AR
Understanding the hierarchy of study designs in using available literature to guide patient care.	AR

4) **Interpersonal Skills and Communication**

Principle Educational Goals	Learning Activities
Effective and respectful communication with allied health care personnel	AR, CD
Humane interactions with disturbed and/or grieving families	Family meetings, AR
Detailed and complete verbal case presentations.	AR, MR,
Detailed written communication skills.	CD

5) **Professionalism**

Principle Educational Goals	Learning Activities
Respect patient autonomy and privacy.	AR, CD
Learn how to use alternative sources of relevant patient information (family, employers, friends) to improve history or assessment of care while respecting patient privacy and autonomy.	AR, CD
AR, CD	AR, CD
AR	AR, CD
Appropriate appearance	AR, CD
Timeliness	AR, CD
Develops empathic relationships with patients and families	AR, CD

6) **Systems-Based Practice**

Principle Educational Goals	Learning Activities
Appropriate choices and frequency of laboratory, radiologic, culture, serology tests – based on cost, published predictive utility, availability.	AR, CD, EBS
Relates well to all allied healthcare personnel on the team – understanding the value and including the recommendations of various disciplines who contribute to the team approach	AR

Trainees evaluate the rotation and individual attendings using IM program evaluation forms.

Trainees are evaluated by: 1. Direct feed back during rounds, 2. Exit interview with ID attending, 3. There will be a pre- and post-rotation mini-quiz, 4. Discussion of 8 of 20 elements of the portfolio system.

Recommended Resources

φ All residents are expected to read the entire evidence based syllabus, focussing on the 8 topics they feel weakest in. All residents are expected to read about their patients in an appropriate general medicine or ID text. Because it is frequently updated, extensively referenced, and includes abstracts of referenced articles, the program highly recommends UpToDate as a primary resource.

- Supplementary recommended reading resources include Standard Medicine Texts sections of Harrison’s Textbook of Internal Medicine. There is online access to current Cardiology literature through PubMed, NHLB and online Journal sites for most Medicine journals. Additional resources at Health Resources Library Bridgeport, linked to Yale Medical School Library (refer to their site).