

**Rotation:**  
**Medical Informatics**  
**Integrative Discipline (no defined rotation)**

**Goals:**

Achieve a competence level appropriate for a general internist in the use of technology in patient care, practice management, and intellectual advancement.

**Objectives:**

By the end of the Medical Informatics rotation, PGY-1 residents are expected to expand and cultivate skills and knowledge learned during previous training and to achieve the following objectives based on the six general competencies. The resident should exhibit an increasing level of responsibility and independency as he or she progresses throughout the year.

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
Patient Care	<b>SPECIALTY SPECIFIC OBJECTIVES</b>			
	Identify, evaluate, and utilize computer-based and internet resources for physician & patient education. Recognize these as alternatives to conventional CME.	Conference series Ambulatory clinic teaching sessions Medicine consult rotation	Global rating evaluations MCQ test Written Examination	Monthly Monthly Rotation end
	Demonstrate ability to use email (via software applications & web interfaces) in communication with colleagues and patients. Recognize the potential insecurity of this communication medium	Conference series Ambulatory clinic teaching sessions Medicine consult rotation	Global rating evaluations MCQ test Written Examination	Monthly Monthly Rotation end
	Identify, evaluate & utilize PDA-based software providing mobile management of patient data	Conference series Ambulatory clinic teaching sessions Medicine consult rotation	Global rating evaluations MCQ test Written Examination	Monthly Monthly Rotation end
	Utilize an electronic patient record and critically appraise its strengths & weaknesses. Integrate computerized decision support to improve patient care decisions.	Conference series Ambulatory clinic teaching sessions Medicine consult	Global rating evaluations MCQ test Written Examination	Monthly Monthly Rotation end

		rotation		
Medical Knowledge	<b>SPECIALTY SPECIFIC OBJECTIVES</b>			
	Recognize terms commonly used in computer technology and apply knowledge of these terms toward the purchase of computer equipment and software. Differentiate between computer & PDA operating systems and their associated hardware	Conference series Ambulatory clinic teaching sessions Medicine consult rotation	Global rating evaluations MCQ test Written Examination	Monthly Monthly Rotation end
	In development of educational materials, recognize basic issues related to computers and copyright law	Conference series Ambulatory clinic teaching sessions Medicine consult rotation	Global rating evaluations MCQ test Written Examination	Monthly Monthly Rotation end
	Recognize the importance of protection against computer data loss. Demonstrate mastery of data storage concepts (ie. hard-drives, floppy disks, CD-ROMS, etc.).	Conference series Ambulatory clinic teaching sessions Medicine consult rotation	Global rating evaluations MCQ test Written Examination	Monthly Monthly Rotation end
	Recognize the importance of computerized patient data security. Describe the recent impact of HIPAA on patient medical record keeping.	Conference series Ambulatory clinic teaching sessions Medicine consult rotation	Global rating evaluations MCQ test Written Examination	Monthly Monthly Rotation end
	Identify, evaluate & utilize PDA-based software providing mobile management of medical knowledge	Conference series Ambulatory clinic teaching sessions Medicine consult rotation	Global rating evaluations MCQ test Written Examination	Monthly Monthly Rotation end
Practice Based Learning and Improvement	<b>SPECIALTY SPECIFIC OBJECTIVES</b>			
	See General Internal Medicine Objectives for a comprehensive list.			

	Employ computer software such as word processing, spreadsheet, & desktop presentation for personal use. Apply these programs toward medical use and general office management.	Conference series Ambulatory clinic teaching sessions Medicine consult rotation	Global rating evaluations MCQ test Written Examination	Monthly Monthly Rotation end
	Demonstrate ability to search the medical literature on-line, with focus on MEDLINE (through the National Library of Medicine) & OVID databases.	Conference series Ambulatory clinic teaching sessions Medicine consult rotation	Global rating evaluations MCQ test Written Examination	Monthly Monthly Rotation end
Interpersonal and Communication Skills	<b>SPECIALTY SPECIFIC OBJECTIVES</b>			
	See General Internal Medicine Objectives for a comprehensive list.			
Professionalism	<b>SPECIALTY SPECIFIC OBJECTIVES</b>			
	See General Internal Medicine Objectives for a comprehensive list.			
Systems-Based Practice	<b>SPECIALTY SPECIFIC OBJECTIVES</b>			
	See General Internal Medicine Objectives for a comprehensive list.			

By the end of the Medical Informatics rotation, PGY-2 residents are expected to expand and cultivate skills and knowledge learned during previous training and to achieve the following objectives based on the six general competencies. The resident should exhibit an increasing level of responsibility and independency as he or she progresses throughout the year.

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
Patient Care	<b>SPECIALTY SPECIFIC OBJECTIVES</b>			
	Identify, evaluate, and utilize computer-based and internet resources for physician & patient education. Recognize these as alternatives to conventional CME.	Conference series Ambulatory clinic teaching sessions Medicine consult rotation	Global rating evaluations MCQ test Written Examination	Monthly Monthly Rotation end
	Demonstrate ability to use email (via software applications & web interfaces) in communication with colleagues and	Conference series	Global rating evaluations	Monthly

	patients. Recognize the potential insecurity of this communication medium	Ambulatory clinic teaching sessions Medicine consult rotation	MCQ test Written Examination	Monthly Rotation end
	Identify, evaluate & utilize PDA-based software providing mobile management of patient data	Conference series Ambulatory clinic teaching sessions Medicine consult rotation	Global rating evaluations MCQ test Written Examination	Monthly Monthly Rotation end
	Utilize an electronic patient record and critically appraise its strengths & weaknesses. Integrate computerized decision support to improve patient care decisions.	Conference series Ambulatory clinic teaching sessions Medicine consult rotation	Global rating evaluations MCQ test Written Examination	Monthly Monthly Rotation end
Medical Knowledge	<b>SPECIALTY SPECIFIC OBJECTIVES</b>			
	Recognize terms commonly used in computer technology and apply knowledge of these terms toward the purchase of computer equipment and software. Differentiate between computer & PDA operating systems and their associated hardware	Conference series Ambulatory clinic teaching sessions Medicine consult rotation	Global rating evaluations MCQ test Written Examination	Monthly Monthly Rotation end
	In development of educational materials, recognize basic issues related to computers and copyright law	Conference series Ambulatory clinic teaching sessions Medicine consult rotation	Global rating evaluations MCQ test Written Examination	Monthly Monthly Rotation end
	Recognize the importance of protection against computer data loss. Demonstrate mastery of data storage concepts (ie. hard-drives, floppy disks, CD-ROMS, etc.).	Conference series Ambulatory clinic teaching sessions Medicine consult rotation	Global rating evaluations MCQ test Written Examination	Monthly Monthly Rotation end
	Recognize the importance of computerized patient data security. Describe the recent impact of HIPAA on patient medical record keeping.	Conference series Ambulatory clinic	Global rating evaluations MCQ test	Monthly Monthly

		teaching sessions Medicine consult rotation	Written Examination	Rotation end
	Identify, evaluate & utilize PDA-based software providing mobile management of medical knowledge	Conference series Ambulatory clinic teaching sessions Medicine consult rotation	Global rating evaluations MCQ test Written Examination	Monthly Monthly Rotation end
Practice Based Learning and Improvement	<b>SPECIALTY SPECIFIC OBJECTIVES</b>			
	See General Internal Medicine Objectives for a comprehensive list.			
	Employ computer software such as word processing, spreadsheet, & desktop presentation for personal use. Apply these programs toward medical use and general office management.	Conference series Ambulatory clinic teaching sessions Medicine consult rotation	Global rating evaluations MCQ test Written Examination	Monthly Monthly Rotation end
	Demonstrate ability to search the medical literature on-line, with focus on MEDLINE (through the National Library of Medicine) & OVID databases.	Conference series Ambulatory clinic teaching sessions Medicine consult rotation	Global rating evaluations MCQ test Written Examination	Monthly Monthly Rotation end
Interpersonal and Communication Skills	<b>SPECIALTY SPECIFIC OBJECTIVES</b>			
	See General Internal Medicine Objectives for a comprehensive list.			
Professionalism	<b>SPECIALTY SPECIFIC OBJECTIVES</b>			
	See General Internal Medicine Objectives for a comprehensive list.			
Systems-Based Practice	<b>SPECIALTY SPECIFIC OBJECTIVES</b>			
	See General Internal Medicine Objectives for a comprehensive list.			

By the end of the Medical Informatics rotation, PGY-3 residents are expected to expand and cultivate skills and knowledge learned during previous training and to achieve the following objectives based on the six general competencies. The resident should exhibit an increasing level of responsibility and independency as he or she progresses throughout the year.

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
Patient Care	<b>SPECIALTY SPECIFIC OBJECTIVES</b>			
	Identify, evaluate, and utilize computer-based and internet resources for physician & patient education. Recognize these as alternatives to conventional CME.	Conference series	Global rating evaluations	Monthly
		Ambulatory clinic teaching sessions	MCQ test	Monthly
		Medicine consult rotation	Written Examination	Rotation end
	Demonstrate ability to use email (via software applications & web interfaces) in communication with colleagues and patients. Recognize the potential insecurity of this communication medium	Conference series	Global rating evaluations	Monthly
		Ambulatory clinic teaching sessions	MCQ test	Monthly
		Medicine consult rotation	Written Examination	Rotation end
	Identify, evaluate & utilize PDA-based software providing mobile management of patient data	Conference series	Global rating evaluations	Monthly
		Ambulatory clinic teaching sessions	MCQ test	Monthly
		Medicine consult rotation	Written Examination	Rotation end
Utilize an electronic patient record and critically appraise its strengths & weaknesses. Integrate computerized decision support to improve patient care decisions.	Conference series	Global rating evaluations	Monthly	
	Ambulatory clinic teaching sessions	MCQ test	Monthly	
	Medicine consult rotation	Written Examination	Rotation end	
Medical Knowledge	<b>SPECIALTY SPECIFIC OBJECTIVES</b>			
	Recognize terms commonly used in computer technology and apply knowledge of these terms toward the purchase of computer equipment and software. Differentiate between computer & PDA operating systems and their associated hardware	Conference series	Global rating evaluations	Monthly
		Ambulatory clinic teaching sessions	MCQ test	Monthly
		Medicine consult	Written Examination	Rotation end

		rotation		
	In development of educational materials, recognize basic issues related to computers and copyright law	Conference series Ambulatory clinic teaching sessions Medicine consult rotation	Global rating evaluations MCQ test Written Examination	Monthly Monthly Rotation end
	Recognize the importance of protection against computer data loss. Demonstrate mastery of data storage concepts (ie. hard-drives, floppy disks, CD-ROMS, etc.).	Conference series Ambulatory clinic teaching sessions Medicine consult rotation	Global rating evaluations MCQ test Written Examination	Monthly Monthly Rotation end
	Recognize the importance of computerized patient data security. Describe the recent impact of HIPAA on patient medical record keeping.	Conference series Ambulatory clinic teaching sessions Medicine consult rotation	Global rating evaluations MCQ test Written Examination	Monthly Monthly Rotation end
	Identify, evaluate & utilize PDA-based software providing mobile management of medical knowledge	Conference series Ambulatory clinic teaching sessions Medicine consult rotation	Global rating evaluations MCQ test Written Examination	Monthly Monthly Rotation end
Practice Based Learning and Improvement	<b>SPECIALTY SPECIFIC OBJECTIVES</b>			
	See General Internal Medicine Objectives for a comprehensive list.			
	Employ computer software such as word processing, spreadsheet, & desktop presentation for personal use. Apply these programs toward medical use and general office management.	Conference series Ambulatory clinic teaching sessions Medicine consult rotation	Global rating evaluations MCQ test Written Examination	Monthly Monthly Rotation end
	Demonstrate ability to search the medical literature on-line, with focus on MEDLINE (through the National Library of Medicine) & OVID databases.	Conference series Ambulatory clinic teaching sessions	Global rating evaluations MCQ test	Monthly Monthly

		Medicine consult rotation	Written Examination	Rotation end
Interpersonal and Communication Skills	<b>SPECIALTY SPECIFIC OBJECTIVES</b>			
	See General Internal Medicine Objectives for a comprehensive list.			
Professionalism	<b>SPECIALTY SPECIFIC OBJECTIVES</b>			
	See General Internal Medicine Objectives for a comprehensive list.			
Systems-Based Practice	<b>SPECIALTY SPECIFIC OBJECTIVES</b>			
	See General Internal Medicine Objectives for a comprehensive list.			

**Learning Venues:**

1. The primary learning venue for these objectives: will be the noon conference series which will include talks on every topic listed above and a training course on Blackboard.
2. Ambulatory clinic teaching sessions will reinforce learned concepts. In this setting, housestaff will be afforded direct exposure to essential technologies and will participate in "hands-on" learning.
3. The medicine consult rotation offers many opportunities to reinforce basic skills in medical literature searches.

**Competency Evaluation:**

1. Housestaff usage of computerized patient records will be directly supervised in the clinic & inpatient setting by attending physicians. Competency in this area is directly assessed in end-of-month global rating evaluations and a MCQ test on Blackboard Scoring of  $\geq 80\%$  is expected on this test..
2. Rotation-end examinations in both consult & ambulatory medicine contain questions which will assess the competencies listed.

**Outcomes Assessment:**

Specific questions on the annual survey of program graduates will be included on medical informatics. Immediate feedback on information presented in noon conference series will be made through post-lecture evaluation forms.