

**University of Rochester Medical Center**  
**Department of Pediatrics Residency Program**  
 Program Director, J. Peter Harris, MD  
 Educator, Constance D. Baldwin, PhD

## Handouts

	Page
<b>I. Introduction</b>	
Powerpoint handouts	ppt file
<b>II. Rotation Planning</b>	
<b>Cardiology</b> (1 month rotation, sometimes split)	
• Curriculum Planning Table	1
• Individual Learning Plan	2-6
• Direct Observation (Mini-CEX) form	7
• Objectives-based Evaluation Form	8
<b>Continuity Clinic</b> (longitudinal experience)	
• Curriculum Planning Table	9-10
• Self-evaluation Checklist (ILP) (and benchmarks table)	11-13
• Objectives-based Evaluation Form	14-15
<b>Curriculum Planning Instructions to Faculty</b>	16-18
<b>Evaluation System Pocket Card</b>	19
<b>Small Group Activity 1</b>	20-33
<b>III. Program-wide Planning</b>	
<b>Program-wide Curriculum Planning Table</b>	34-44
• Composite List of Essential Objectives Sorted by 4 Domains	
<b>Program-wide Curriculum Assessment by Residents</b> (example: Systems-based Practice domain only)	45-46
<b>Small Group Activity 2</b>	
• Composite List of Essential Objectives Sorted by 4 Domains	See above
• Competency Elements list	47-48
<b>IV. Getting to our Destination: Program Evaluation</b>	
<b>Post Rotation Debriefing Forms:</b>	
• Resident form with data from Cardiology rotation pilot test	49-50
• Faculty form	51
<b>V. Wrap-up</b>	
<b>Pearls for Competency-based Curriculum Development</b>	52
<b>Evaluation Form</b>	53



<b>Cardiology Rotation:</b>  <b>Individual Learning Plan</b>	<b>Primary Competency Domain:</b> PC – Patient Care MK – Medical Knowledge PBLI – Practice-based Learning & Improvement ISC - Interpersonal Skills & Communication PRO – Professionalism SBP – Systems-based Practice	<b>Priority for Evaluation</b> 1=optional 2=important 3=essential	<b>Resident's Learning Priority</b> 1=low 2=moderate 3=high
<b>Resident:</b>	<b>Faculty:</b>	<b>Date:</b>	
<b>Essential Learning Objectives for this Rotation:</b>			
13. Perform a comprehensive cardiovascular examination	PC	3	
14. Recognize normal murmurs in newly referred patients	PC	3	
15. Recognize ejective, regurgitant, continuous, and diastolic decrescendo murmurs and their relationship to heart abnormalities	PC	3	
16. Distinguish benign from worrisome chest pain, syncope, and palpitations	PC	3	
17. Recognize the presentation and explain the initial management of congestive heart failure.	PC	3	
18. Describe/identify the presentation, treatment, and prognosis of: <ul style="list-style-type: none"> <li>• Kawasaki Disease</li> <li>• Acute rheumatic fever</li> </ul>	PC	3	
19. Counsel an adolescent about healthy heart habits.	ISC	3	
20. Describe respiratory virus prophylactic measures for patients with heart disease (type, timing).	MK	3	
21. Describe the identification and initial management of supraventricular tachycardia.	MK	3	
22. State the type and dose of antibiotics for infective endocarditis prophylaxis for dental procedures.	MK	3	
23. Describe the cardiovascular clearance for competitive sports.	SBP	3	
24. Describe the cardiac problems associated with: <ul style="list-style-type: none"> <li>• Trisomy 21, 18, 13</li> <li>• Marfan's, Williams', Turner's, and Noonan's syndromes</li> <li>• VACTERL association</li> <li>• Chromosome 22 microdeletion</li> <li>• Maternal connective tissue disease</li> </ul>	MK	3	
<b>Lower Priority Goals and Objectives for this Rotation:</b>			
<b>5.14 GOAL Normal Vs. Abnormal (Cardiovascular). Distinguish normal from abnormal cardiovascular signs and symptoms.</b>			
5.14.1 : Describe normal perinatal circulation and changes at birth and during the first year of life.	MK	2	
5.14.2 : Describe age-related changes in heart rate and blood pressure, including normal ranges from birth through adolescence.	MK	1	
5.14.3 : Explain the findings on history and physical examination that suggest congenital heart disease or cardiovascular disease needing further evaluation and treatment.	MK	2	
5.14.4 : Interpret clinical and laboratory tests to identify cardiovascular disease, including: pulse and blood pressure monitoring, chest X-ray interpretation, pulse oximetry, hyperoxia test, electrocardiography, ECG monitoring reports and echocardiography reports.	MK	2	
5.14.5 : Describe the principles of electrocardiography, including normal	MK	2	

<b>Cardiology Rotation:</b>  <b>Individual Learning Plan</b>	<b>Primary Competency Domain:</b> PC – Patient Care MK – Medical Knowledge PBLI – Practice-based Learning & Improvement ISC - Interpersonal Skills & Communication PRO – Professionalism SBP – Systems-based Practice	<b>Priority for Evaluation</b> 1=optional 2=important 3=essential	<b>Resident's Learning Priority</b> 1=low 2=moderate 3=high
voltages and rhythms. Differentiate normal from abnormal rhythms and voltages that suggest cardiovascular disease.			
<b>5.15 GOAL: Undifferentiated Signs and Symptoms (Cardiovascular). Evaluate, treat, and/or refer patients with presenting signs and symptoms that suggest a cardiovascular disease process.</b>			
5.15.1 : Create a strategy to determine if the following presenting signs and symptoms are caused by a cardiovascular disease process, and determine if the patient should be treated or needs referral to a subspecialist. <ol style="list-style-type: none"> <li>1. Shortness of breath</li> <li>2. Cyanosis</li> <li>3. Wheezing</li> <li>4. Apparent life threatening event</li> <li>5. Failure to thrive</li> <li>6. Exercise intolerance</li> <li>7. Unexplained tachypnea, dyspnea</li> <li>8. Abnormal heart sounds</li> </ol>	PC MK	2	
<b>5.16 GOAL: Common Conditions Not Referred (Cardiovascular). Diagnose and manage patients with common cardiovascular conditions that generally do not require referral.</b>			
5.16.1 : Diagnose, explain and manage the following cardiovascular conditions: <ol style="list-style-type: none"> <li>1. Tachycardia related to fever</li> <li>2. Peripheral pulmonic stenosis</li> <li>3. Small, hemodynamically insignificant and closing VSD</li> <li>4. Small, hemodynamically insignificant and closing PDA within the neonatal period</li> <li>5. Mild hypertension</li> <li>6. Premature atrial contractions</li> <li>7. Benign premature ventricular contractions</li> </ol>	PC	2	
<b>5.17 GOAL: Conditions Generally Referred (Cardiovascular). Recognize, provide initial management of, and refer patients with cardiovascular conditions that generally require referral.</b>			
5.17.1 : Identify, explain, provide initial management and refer the following cardiovascular conditions: <ol style="list-style-type: none"> <li>1. Hypertension, moderate and severe</li> </ol>	PC	2	

<b>Cardiology Rotation:</b> <b>Individual Learning Plan</b>	<b>Primary Competency Domain:</b> PC – Patient Care MK – Medical Knowledge PBLI – Practice-based Learning & Improvement ISC - Interpersonal Skills & Communication PRO – Professionalism SBP – Systems-based Practice	<b>Priority for Evaluation</b> 1=optional 2=important 3=essential	<b>Resident's Learning Priority</b> 1=low 2=moderate 3=high
2. Bradycardia 3. Congestive heart failure 4. Cardiovascular collapse 5. Pathologic heart murmurs 6. Congenital heart disease for initial diagnosis and followup			
5.17.2 : Identify the role and general scope of practice of pediatric cardiologists; recognize situations where children benefit from the skills of specialists trained in the care of children; and work effectively with these professionals in the care of children with congenital heart disease and other cardiovascular disease processes.	SBP	2	
<b>5.18 GOAL: Congenital Heart Disease. Understand the general pediatrician's role in diagnosis and management of congenital heart disease in children.</b>			
5.18.1 : Describe the presenting symptoms, signs/physical findings, pathophysiology, treatment and prognosis for the following congenital cardiovascular conditions: <ol style="list-style-type: none"> <li>1. Ventricular septal defect</li> <li>2. Atrial septal defect</li> <li>3. Tetralogy of Fallot</li> <li>4. Patent ductus arteriosus</li> <li>5. Coarctation of the aorta</li> <li>6. Transposition of great vessels</li> <li>7. Tricuspid atresia</li> <li>8. Pulmonary atresia</li> <li>9. Hypoplastic left heart</li> <li>10. Aortic stenosis</li> <li>11. Pulmonic stenosis</li> <li>12. Total anomalous pulmonary venous return</li> <li>13. Mitral valve prolapse</li> <li>14. Truncus Arteriosus</li> <li>15. Atrioventricular canal</li> </ol>	MK	2	
<b>5.19 GOAL: Acquired Heart Disease. Understand the general pediatrician's role in diagnosis and management of acquired heart</b>			

<b>Cardiology Rotation:</b>  <b>Individual Learning Plan</b>	<b>Primary Competency Domain:</b> PC – Patient Care MK – Medical Knowledge PBLI – Practice-based Learning & Improvement ISC - Interpersonal Skills & Communication PRO – Professionalism SBP – Systems-based Practice	<b>Priority for Evaluation</b> 1=optional 2=important 3=essential	<b>Resident's Learning Priority</b> 1=low 2=moderate 3=high
<b>disease in children.</b>			
5.19.1 : Describe the presenting signs and symptoms, physical findings, pathophysiology, treatment and prognosis for the following acquired cardiovascular conditions:  1. Myocarditis/cardiomyopathy  2. Bacterial endocarditis  3. Essential hypertension  4. Long QT Syndrome  5. Complete atrioventricular block  6. Ventricular tachycardia	MK	2	
<b>5.20 GOAL: Hypertension. Understand the general pediatrician's role in diagnosis and management of hypertension in children.</b>			
5.20.1 : Classify a patient with hypertension as to severity according to current national guidelines, e.g., mild, moderate or severe.	MK	2 + Cov in Neph	
5.20.2 : Develop a diagnostic plan for a child with hypertension that accounts for severity of the condition, including recognition and management of hypertensive emergencies.	PC	2 + Cov in Neph	
5.20.3 : Manage a patient with hypertension using a step-wise approach that includes the role of diet, exercise, weight control and medications.	PC	2 + Cov in Neph	
5.20.4 : Compare the commonly used antihypertensive drugs, considering indications and contraindications for use, mechanism of action and side effects.	MK	2 + Cov in Neph	
5.20.5 : Identify the indicators for a cardiology or nephrology referral in a child with hypertension.	MK	2 + Cov in Neph	
<b>5.21 GOAL: Cardiovascular Drugs. Understand key principles related to the use of cardiovascular drugs.</b>			
5.21.1 : Identify the indications, contraindications, mechanism of action and side effects of the commonly used cardiovascular drugs (antiarrhythmic, chromotropes, inotropes, diuretics, vasodilator, vasopressors).	MK	2 + Cov in PICU	
<b>Procedures</b>			
<b>7.1.GOAL: Technical and therapeutic procedures.</b> Describe the following procedures, including how they work and when they should be used; competently perform those commonly used by the pediatrician in practice.			
Cardioversion/defibrillation	PC	2	
<b>7.2. GOAL: Diagnostic and screening procedures.</b> Describe the following tests or procedures, including how they work and when they should be used; competently perform those commonly used by the pediatrician in practice.			
ECG: emergency interpretation	PC	2	
ECG: perform	PC	2	
Monitoring interpretation: Holter, event recorder	PC	2	
Radiologic interpretation: chest X-ray	PC	2	
<b>COMMENTS BY RESIDENT:</b>			

<b>Cardiology Rotation:</b>  <b>Individual Learning Plan</b>	<b>Primary Competency Domain:</b> PC – Patient Care MK – Medical Knowledge PBLI – Practice-based Learning & Improvement ISC - Interpersonal Skills & Communication PRO – Professionalism SBP – Systems-based Practice	<b>Priority for Evaluation</b> 1=optional 2=important 3=essential	<b>Resident’s Learning Priority</b> 1=low 2=moderate 3=high
<b>COMMENTS BY FACULTY:</b>			
<b>Source:</b> Kittredge, D., Baldwin, C. D., Bar-on, M. E., Beach, P. S., Trimm, R. F. (Eds.). (2004). APA Educational Guidelines for Pediatric Residency. Ambulatory Pediatric Association Website. Available online: <a href="http://www.ambpeds.org/egweb">www.ambpeds.org/egweb</a> . [Accessed 08/25/2005]. Project to develop this website was funded by the Josiah Macy, Jr. Foundation 2002-2005.			

## Mini-CEX for Pediatric Cardiology Rotation

**NOTE:** This is based on the traditional Mini CEX, but include essential, observable objectives for cardiology. The format is set-up to print out as a 2-sided pocket card.

**Pediatric Cardiology Rotation**

Resident: \_\_\_\_\_

**1. Performed a comprehensive cardiovascular examination.**

Attending: \_\_\_\_\_ Date: \_\_\_\_\_  
Rating: 0 1 2 3 4 5

**2. Recognized normal murmurs.**

Attending: \_\_\_\_\_ Date: \_\_\_\_\_  
Rating: 0 1 2 3 4 5

**3. Recognized (a) ejective, (b) regurgitant, (c) continuous, (d) diastolic decrescendo murmurs and their relationship to cardiac abnormalities.**

Attending: \_\_\_\_\_ Date: \_\_\_\_\_  
Rating: 0 1 2 3 4 5

**4. Distinguished benign from worrisome chest pain.**

Attending: \_\_\_\_\_ Date: \_\_\_\_\_  
Rating: 0 1 2 3 4 5

**5. Distinguished benign from worrisome syncope.**

Attending: \_\_\_\_\_ Date: \_\_\_\_\_  
Rating: 0 1 2 3 4 5

**6. Distinguished benign from worrisome palpitations.**

Attending: \_\_\_\_\_ Date: \_\_\_\_\_  
Rating: 0 1 2 3 4 5

**7. Recognized the presentation and explained initial management of CHF.**

Attending: \_\_\_\_\_ Date: \_\_\_\_\_  
Rating: 0 1 2 3 4 5

**8. Counseled an adolescent about healthy heart habits.**

Attending: \_\_\_\_\_ Date: \_\_\_\_\_  
Rating: 0 1 2 3 4 5

<b>Rating Key:</b>	
0 – No interaction	3 - Developing Competency
1 – Remedial	4 – Competent
2 – Novice	5 – Proficient

<b>Objectives-based Evaluation of Resident Cardiology Rotation</b> Rotation segment: I _____ II _____ Resident Name:	<b>Primary Comp Domain</b> PC MK PBLI ISC PRO SBP	<b>Rating of Resident:</b> 0 – No interaction 1 – Remedial 2 – Novice 3 – Developing Competency 4 – Competent 5 – Proficient	<b>Notes for continuing learning</b>
<b>Completed by:</b> _____ <b>Date:</b> _____			
25. Perform a comprehensive cardiovascular examination	PC		
26. Recognize normal murmurs in newly referred patients	PC		
27. Recognize ejectile, regurgitant, continuous, and diastolic decrescendo murmurs and their relationship to heart abnormalities	PC		
28. Distinguish benign from worrisome chest pain, syncope, and palpitations	PC		
29. Recognize the presentation and explain the initial management of congestive heart failure.	PC		
30. Describe/identify the presentation, treatment, and prognosis of: <ul style="list-style-type: none"> <li>• Kawasaki Disease</li> <li>• Acute rheumatic fever</li> </ul>	PC		
31. Counsel an adolescent about healthy heart habits.	ISC		
32. Describe respiratory virus prophylactic measures for patients with heart disease (type, timing).	MK		
33. Describe the identification and initial management of supraventricular tachycardia.	MK		
34. State the type and dose of antibiotics for infective endocarditis prophylaxis for dental procedures.	MK		
35. Describe the cardiovascular clearance for competitive sports.	SBP		
36. Describe the cardiac problems associated with: <ul style="list-style-type: none"> <li>• Trisomy 21, 18, 13</li> <li>• Marfan's, Williams', Turner's, and Noonan's syndromes</li> <li>• VACTERL association</li> <li>• Chromosome 22 microdeletion</li> <li>• Maternal connective tissue disease</li> </ul>	MK		

**Comments by faculty:**

  
  
  
  

**Comments by resident:**

## \*Continuity Clinic Planning Table Goals, Objectives and Evaluation of Residents

	Comp	Teaching Method	Eval Method
<b>GOAL: Health Promotion and Screening. Provide comprehensive health care promotion, screening and disease prevention services to infants, children, adolescents and their families in the ambulatory setting.</b>			
1. Perform health promotion (well child care) visits at recommended ages based on nationally recognized periodicity schedules (e.g., AAP Health Supervision Guidelines, Bright Futures, GAPS). <ul style="list-style-type: none"> <li>a. Infant</li> <li>b. Toddler/preschool</li> <li>c. School age</li> <li>d. Adolescent</li> </ul>	PC	CC, L, Pr CE, Supervise as R3	at least 2 Obs. for R1 and at least 1/yr R2, R3 for each age group
2. Perform a family centered health supervision interview including age-appropriate developmental surveillance and screening, school performance monitoring <ul style="list-style-type: none"> <li>a. Identify patient and family concerns.</li> <li>b. Discuss goals for visit, prioritize agenda with family</li> <li>c. Identify risks to optimal developmental progress</li> </ul>	PC	CC, L, CE	Observation, PtPr
3. Provide age-appropriate anticipatory guidance to parent(s) or caregiver(s), and the child or adolescent, according to recommended guidelines (e.g., AAP TIPP program, Bright Futures, GAPS). Address topics including: <ul style="list-style-type: none"> <li>a. Promotion of healthy habits (e.g., physical activity, reading, etc.)</li> <li>b. Injury and illness prevention</li> <li>c. Nutrition</li> <li>d. Oral health</li> <li>e. Prevention of substance use/abuse (middle childhood, adolescence)</li> <li>f. Physical activity and sports</li> <li>g. Interpretation of screening procedures</li> <li>h. Prevention of violence</li> </ul>	PC	CC, L, CE, Pr, R	Obs, PtPr, CR.
4. Perform physical exam with special focus on age-dependent issues and patient/family concerns.	PC	CC, L, CE	Obs.
5. Order or perform and interpret additional age-appropriate screening procedure, using nationally-recognized periodicity schedules and local or state expectations (e.g., newborn screening, lead, hematocrit, hemoglobin for sickle cell, blood pressure, cardiovascular risk assessment, vision, hearing, dental assessment)	PC		Obs, CR., PtPr
6. Perform age-appropriate immunizations using nationally-recognized periodicity schedules.	PC	L, Pr	CR
<b>GOAL: Evaluate and manage common signs, symptoms or conditions associated with the practice of PC pediatrics in the Continuity Clinic/ Outpatient Primary Care office and document</b>			
7. Evaluate and manage the signs and symptoms and conditions that commonly present in the context of health care promotion.	PC	L, CC, CE, Pr., R	Pt. present., Obs, chart rev., self assessment
8. Appropriate use and interpretation of common testing /labs in Primary Care setting: <ul style="list-style-type: none"> <li>a. Fasting glucose, Hemaglobin A1C</li> <li>b. Cholesterol</li> <li>c. Routine laboratory screening tests (e.g., neonatal metabolic screen, hematocrit, lead)</li> </ul>	MK	CE, L, R	Obs, PtPr, CR
<b>GOAL: Monitoring and Therapeutic Modalities (Continuity Clinic and Primary Care OPD). Understand how to use physiologic monitoring and special technology in the Continuity Clinic and Primary Care Pediatric Outpatient Department, including issues specific to care of the chronically ill child.</b>			
9: Demonstrate understanding of monitoring and special treatments commonly used in the primary care for chronic diseases (Obesity, ADHD, Asthma, CP/DD): <ul style="list-style-type: none"> <li>a. Discuss indications, contraindications and complications.</li> </ul>	MK	CC, L, CE, Pr	PtPr, Obs, CR

University of Rochester Medical Center: Department of Pediatrics Residency Program

b. Demonstrate proper use of technique or treatment for children of varying ages. c. Interpret results of monitoring based on method used, age and clinical situation.			
10. Describe the following tests or procedures, including how they work and when they should be used; competently perform those commonly used by the pediatrician in practice. a. ADHD home and school questionnaires b. Behavioral screening questionnaire c. Developmental screening test d. Hearing screening e. PPD: interpretation f. Tympanometry evaluation: interpretation g. Vision screening interpretation	PC	L, CE, Pr.	Obs, PtPr, CR
11. Describe the following technical and therapeutic procedures, including how they work and when they should be used; competently perform those commonly used by the pediatrician in practice. a. Inhalation treatment (MDI and spacer) b. PPD: placement (ID) c. Medication, Immunization delivery: IM/SC/ID	PC	L, CE, Pr	Obs, 360 (RN)
12. Demonstrate the knowledge, skills, attitudes needed for continuous self-assessment to investigate, evaluate, and improve own patient care practice	PBL	ILP, QI, Pr	PtPr, QI activity if applies, SE
<b>GOAL: Interpersonal Skills and Communication. Demonstrate interpersonal and communication skills that result in information exchange and partnering with patients, their families and professional associates.</b>		CE	360, Obs.
13. Teach and supervise peers and students, (supervisors/staff?)	PBL	CE, CC, L	Obs.
14. Create and maintain medical records that are timely, legible, and comprehensive.	COM	CE	Chart rev.
15. Provide sensitive support to patients and their families in the outpatient setting.	COM	CE	360
16. Demonstrate personal accountability to the well being of patients (e.g., following-up lab results, writing comprehensive notes and seeking answers to patient care questions).	PRO	CE	Obs, chart rev, 360
17. Demonstrate a commitment to professional behavior in interactions with staff and professional colleagues.	PRO	CE, L?	360, Obs
18. Adhere to ethical and legal principles and be sensitive to diversity.	PRO	CE, L, CC, R	Obs, 360
<b>GOAL: Systems-Based Practice. Understand how to practice high quality health care and advocate for patients within the context of the health care system.</b>			
19. Identify key aspects of health care systems (insurance type) as they apply to the primary care provider, e.g. role of the PCP in decision-making, referral, and coordination of care.	SBP	L, R	CR, ?360 (SW), Obs.
20. Demonstrate sensitivity to the costs of clinical care in the outpatient setting, and take steps to minimize costs without compromising quality.	SBP	L, R, CE	Obs.
21. Recognize and advocate for families who need assistance to deal with system complexities, such as lack of insurance, multiple medication refills, multiple appointments with long transport times, or inconvenient hours of service.	SBP	CE, R	360, Obs, Chart rev
22. Recognize one's own limits.	PRO		CE, Obs, SE

**Teaching methods**

CC, L – case conference, lecture - preclinic conference attendance  
Pr – presentation (give lecture/lead clinic conference)  
CE – clinical encounter  
R – Reading, self initiated or encouraged/suggested  
ILP – individual learning plan

**Evaluation methods**

Obs. - Direct Observation (includes miniCEX and gestalt)  
PtPr - Patient presentation/case presentation  
360 –RN/LPN, clinic staff (SW, secs, office admin) and pts  
CR - Chart review  
SE – Self-evaluation

## CONTINUITY SELF-EVALUATION CHECKLIST

<b>Name:</b>  <b>Year:</b> I _____ II _____ III _____	<b>Resident's self-rating of competence:</b> 1= No knowledge 2= Minimal knowledge 3= Evaluate/Manage routine pts 4= Evaluate/Manage all but most complex pts 5= Evaluate/Manage all/complex pts						
<b>Date:</b>	<b>PL-1 Blk 1</b>	<b>PL-1 Blk 2</b>	<b>PL-2 Blk 1</b>	<b>PL-2 Blk 2</b>	<b>PL-3 Blk 1</b>	<b>PL-3 Blk 2</b>	<b>Final target</b>
<b>Common Signs and Symptoms:</b> Evaluate and manage the signs and symptoms and conditions that commonly present in the context of health care promotion							
<b>Infancy</b>							
Tracheomalacia							
Heart murmur							
Vaginal bleeding and/or discharge							
Foul smelling umbilical cord with/without discharge							
Undescended testicle							
Breast discharge							
Sleep disturbances							
Feeding (breast/bottle/difficulty)							
Dysconjugate gaze							
Abnormal head shape or size							
Evidence of abuse or neglect							
Abnormal muscle tone							
Colic							
Congenital hip dislocation							
Constipation							
Strabismus							
Parent-infant interactional issues							
Sleep problems							
Child care decisions							
Separation protest							
Stranger anxiety							
Rashes							
Teething							
<b>General</b>							
Constitutional symptoms							
Dental caries							
Excessive thumb-sucking or pacifier use							
Sleep disturbances							
Difficult behaviors							
Variations in appetite							
Variations in toilet training							
Overactivity							

University of Rochester Medical Center: Department of Pediatrics Residency Program

Somatic complaints							
Poor school performance							
Attention problem							
Lead exposure							
Strabismus							
Family issues (financial stress, divorce, depression, tobacco, alcohol or substance abuse, domestic violence, inadequate support networks)							
<b>Allergy/immunology</b>							
Allergic rhinitis							
Asthma							
Food allergies							
<b>Cardiorespiratory</b>							
Chronic/recurrent cough							
Hypertension							
<b>Dermatology</b>							
Acne							
Atopic dermatitis							
Verruca vulgaris							
<b>EENT</b>							
Dysconjugate gaze							
Recurrent respiratory and ear infections							
<b>Endocrine</b>							
Growth disturbance							
Short stature							
Normal and abnormal timing of pubertal changes							
<b>GI/nutrition/fluids</b>							
Constipation							
Encopresis							
Inadequate intake of calories/FTT							
Obesity							
GER(D)							
<b>Genito-urinary</b>							
Enuresis							
Undescended testicle							
<b>Gynecology</b>							
Labial adhesions							

Delayed onset of menses							
Missed or irregular periods							
<b>Hematology</b>							
Anemia							
Iron deficiency							
<b>Musculoskeletal</b>							
Metatarsus adductus							
Genu valgum/varum							
Hip click							
Tibial torsion							
Scoliosis							
Femoral anteversion							
Growing pains							
In-toeing							
<b>Neurologic</b>							
Delays in developmental milestones							
Hearing concerns							
Seizures (evaluation and adjustment of medications)							
Learning disabilities							
<b>Pharmacology/toxicology</b>							
Ingestion avoidance (precautions)							
Substance abuse							
<b>Psychiatric/psychosocial</b>							
Anxiety							
Behavioral concerns							
Depression							
ADHD							
Discipline issues							
Temper tantrums							
Biting							

**CONTINUITY SELF-EVALUATION CHECKLIST:  
LONGITUDINAL PERFORMANCE BENCHMARKS  
(Sample: One goal only)**

**Expected level of competence:**

1 = No knowledge

University of Rochester Medical Center: Department of Pediatrics Residency Program

2= Minimal knowledge 3= Evaluate/Manage routine pts 4= Evaluate/Manage all but most complex pts 5= Evaluate/Manage all/complex pts						
	<b>PL-1 Blk 1</b>	<b>PL-1 Blk 2</b>	<b>PL-2 Blk 1</b>	<b>PL-2 Blk 2</b>	<b>PL-3 Blk 1</b>	<b>PL-3 Blk 2</b>
<b>Common Signs and Symptoms:</b> Evaluate and manage the signs and symptoms and conditions that commonly present in the context of health care promotion						
<b>Infancy</b>						
Tracheomalacia	2	3	3	3	3	3-4
Heart murmur	2	2-3	3	3-4	3-4	4
Vaginal bleeding and/or discharge	1-2	2	3	3	3	3
Foul smelling umbilical cord with/without discharge	1-2	2	3	4	4	4
Undescended testicle	2	2	3	3	3	3
Breast discharge	1-2	2	3	3	3	3
Sleep disturbances	1	2	3	3	4	4
Feeding (breast/bottle/difficulty)	1-2	2	2	3	3	3-4
Dysconjugate gaze	1	2	2	3	3	3-4
Abnormal head shape or size	1	2	3	3	3	3
Evidence of abuse or neglect	1-2	2-3	3	3	3-4	4
Abnormal muscle tone	2	2	3	3	3	4
Colic	1-2	2-3	3	3	3-4	4
Congenital hip dislocation	1-2	2	3	3	4	4
Constipation	1-2	2	2	3	3	4
Strabismus	1-2	2	2-3	3	3-4	4
Parent-infant interactional issues	1-2	2	3	3	3-4	4
Sleep problems	1-2	2	3	3	3	3-4
Child care decisions	1-2	2	2-3	3	3	3
Separation protest	1-2	2	2-3	3	3	3-4
Stranger anxiety	1-2	2	3	3	3	3-4
Rashes	1-2	2	2	3	3	4
Teething	1-2	3	3	4	4	4

**Longitudinal benchmarks are also available for this form**

<b>Continuity Clinic: Objectives-based Evaluation of Resident</b> Resident Name: _____	<b>Rating:</b> 0 – No interaction 1 – Remedial 2 – Novice 3 - Developing Competency 4 – Competent 5 – Proficient					
Completed by: _____ Date: _____ 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____	Blk 1	Blk 2	Blk 3	Blk 4	Blk 5	Blk 6
<b>GOAL: Health Promotion and Screening. Provide comprehensive health care promotion, screening and disease prevention services to infants, children, adolescents and their families in the ambulatory setting.</b>						
1. Perform health promotion (well child care) visits at recommended ages based on nationally recognized periodicity schedules (e.g., AAP Health Supervision Guidelines, Bright Futures, GAPS). a. Infant b. Toddler/preschool c. School age d. Adolescent	PC					
2. Perform a family centered health supervision interview including age-appropriate developmental surveillance and screening, school performance monitoring a. Identify patient and family concerns. b. Discuss goals for visit, prioritize agenda with family c. Identify risks to optimal developmental progress	PC					
3. Provide age-appropriate anticipatory guidance to parent(s) or caregiver(s), and the child or adolescent, according to recommended guidelines (e.g., AAP TIPP program, Bright Futures, GAPS). Address topics including: a. Promotion of healthy habits (e.g., physical activity, reading, etc.) b. Injury and illness prevention c. Nutrition d. Oral health e. Prevention of substance use/abuse (middle childhood, adolescence) f. Physical activity and sports g. Interpretation of screening procedures h. Prevention of violence	PC					
4. Perform physical exam with special focus on age-dependent concerns and patient or family concerns.	PC					
5. Order or perform and interpret additional age-appropriate screening procedure, using nationally-recognized periodicity schedules and local or state expectations (e.g., newborn screening, lead, hematocrit, hemoglobin for sickle cell, blood pressure, cardiovascular risk assessment, vision, hearing, dental assessment)	PC					
6. Perform age-appropriate immunizations using nationally-recognized periodicity schedules.	PC					
<b>GOAL: Evaluate and manage common signs, symptoms or conditions associated with the practice of PC pediatrics in the Continuity Clinic/ Outpatient Primary Care office and document</b>						
7. Evaluate and manage the signs and symptoms and conditions that commonly present in the context of health care promotion.	PC					
8. Appropriate use and interpretation of common testing /labs in Primary Care setting: a. Fasting glucose, Hemaglobin A1C b. Cholesterol c. Routine laboratory screening tests (e.g., neonatal metabolic screen, hematocrit, lead)	MK					
<b>GOAL: Monitoring and Therapeutic Modalities (Continuity Clinic and</b>						

University of Rochester Medical Center: Department of Pediatrics Residency Program

<b>Primary Care OPD). Understand how to use physiologic monitoring and special technology in the Continuity Clinic and Primary Care Pediatric Outpatient Department, including issues specific to care of the chronically ill child.</b>							
9: Demonstrate understanding of monitoring and special treatments commonly used in the primary care for chronic diseases (Obesity, ADHD, Asthma, CP/DD): a. Discuss indications, contraindications and complications. b. Demonstrate proper use of technique or treatment for children of varying ages. c. Interpret results of monitoring based on method used, age and clinical situation.	MK						
10. Describe the following tests or procedures, including how they work and when they should be used; competently perform those commonly used by the pediatrician in practice. a. ADHD home and school questionnaires b. Behavioral screening questionnaire c. Developmental screening test d. Hearing screening e. PPD: interpretation f. Tympanometry evaluation: interpretation g. Vision screening interpretation	PC						
11. Describe the following technical and therapeutic procedures, including how they work and when they should be used; competently perform those commonly used by the pediatrician in practice. a. Inhalation treatment (MDI and spacer) b. PPD: placement (ID) c. Medication, Immunization delivery: IM/SC/ID	PC						
12. Demonstrate the knowledge, skills, attitudes needed for continuous self-assessment to investigate, evaluate, and improve own patient care practice	PBL						
<b>GOAL: Interpersonal Skills and Communication. Demonstrate interpersonal and communication skills that result in information exchange and partnering with patients, their families and professional associates.</b>							
13. Teach and supervise peers and students, (supervisors/staff?)	PBL						
14. Create and maintain medical records that are timely, legible, and comprehensive.	COM						
15. Provide sensitive support to patients and their families in the outpatient setting.	COM						
16. Demonstrate personal accountability to the well being of patients (e.g., following-up lab results, writing comprehensive notes and seeking answers to patient care questions).	PRO						
17. Demonstrate a commitment to professional behavior in interactions with staff and professional colleagues.	PRO						
18. Adhere to ethical and legal principles and be sensitive to diversity.	PRO						
<b>GOAL: Systems-Based Practice. Understand how to practice high quality health care and advocate for patients within the context of the health care system.</b>							
19. Identify key aspects of health care systems (insurance type) as they apply to the primary care provider, such as the role of the PCP in decision-making, referral, and coordination of care.	SBP						
20. Demonstrate sensitivity to the costs of clinical care in the outpatient setting, and take steps to minimize costs without compromising quality.	SBP						
21. Recognize and advocate for families who need assistance to deal with system complexities, such as lack of insurance, multiple medication refills, multiple appointments with long transport times, or inconvenient hours of service.	SBP						
22. Recognize one's own limits.	PRO						
<b>Comments by faculty:</b>							
<b>Comments by resident:</b>							

**Pediatric Residency Program:**

## Competency-based Curriculum Planning

We have designed a new approach to resident education, starting at the rotation level, that:

- Empowers faculty to focus their teaching on what they think is most important for residents to learn
- Provides residents with a fairer evaluation process
- Makes evaluation simpler, more rational, and less stressful for teacher and learner alike

This approach is helping our program adapt to the new ACGME competency requirements, and simultaneously improve education. Briefly, we are asking rotation directors and faculty to select a short list (<1 page) of well defined, top priority educational objectives for residents, and then use these essential objectives to plan related learning activities and evaluation methods.

Once the rotation plans are complete, we will collate the information on the rotation planning tables and develop a program-wide curriculum that shows how competency domains are addressed throughout the program. This table will provide a blueprint for continuous program improvement.

### Planning Process

1) **Create a list of goals and objectives (G/O)** that reflects what the faculty actually teach residents on a given rotation. A relatively short list (e.g. 3-4 pages) is the most useful for rotation planning.

2) **Develop a Curriculum Planning Table** (see below), to organize teaching and evaluation activities around the G/O list.

- Insert the G/O list into column 1 of the planning table.
- In column 2, rank the importance of each objective for resident education (1=optional, 2=important, 3=essential).
- Move highest priority objectives to the top of the table.
- Leave the lower priority G/Os below the list of essential objectives. They will enrich the rotation and provide residents with learning choices that go beyond the core curriculum.

3) **Link objectives to ACGME competency domains.** In the Curriculum Planning Table, column 3, mark which of the six competency domains is addressed by each objective. (Not all of competencies must be included in one rotation; all must be covered collectively in all the rotations.)

4) **Link teaching/learning activities to each objective.** Decide what learning opportunities – patient encounters, small group discussions, rounds, lectures, assigned reading, etc – should be linked to the objectives, and list these in column 4 of the Curriculum Planning Table (use codes or brief descriptors).

5) **Decide how to evaluate residents on their accomplishment of the essential objectives (only!).** Match your evaluation method to the objective: e.g., multiple choice question exam for knowledge objectives; direct observation with feedback for clinical skills.

## **Implementation Process**

- 1) **At start of the rotation:** Resident completes individual learning plan based on comprehensive list of goals and objectives. Resident and faculty review list of high priority and self-selected objectives, discuss evaluation process and develop learning plan.
- 2) **At midpoint of rotation:** Resident and faculty review progress toward high-priority and self-selected objectives with feedback. Resident and faculty plan for improvement, if needed.
- 3) **At end of rotation:** Resident and faculty discuss resident's performance of high-priority and self-selected objectives. Resident evaluates learning experience. [They develop a plan for long-term remediation, only if needed.]

### Model of the Curriculum Planning Table

Column 1	2	3	4	5
<b>Curriculum Planning Table:</b>  _____ <b>Rotation</b>	<b>Priority for Teaching/Evaluation</b> (1= optional, 2=important, 3=essential)	<b>Primary Competency Domain</b> (see codes)	<b>Teaching Methods</b> (see codes)	<b>Evaluation Methods</b> (see codes)
<b>Essential Educational Objectives</b>				
1	1			
2	1			
3	1			
Etc (aim for about 12)	1			
<b>Other Important Educational Goals and Objectives</b>				
Goal 1				
Objectives for Goal 1	2 or 3			
Goal 2				
Objectives for Goal 2	2 or 3			
etc				

<b>SAMPLE CODING BAR</b>		
<b>Primary Competency Domain</b>	<b>Possible Codes for Teaching/Learning Activities</b> (modify list to match your activities)	<b>Possible Codes for Evaluation Methods</b> (modify list to match your methods)
<b>PC=</b> Patient Care	<b>1.</b> Clinical encounters	<b>a.</b> Global rating
<b>MK=</b> Medical Knowledge	<b>2.</b> Lecture	<b>b.</b> Direct observation with checklist
<b>PBLI=</b> Practice-based Learning and Improvement	<b>3.</b> Seminar/Small Group discussion	<b>c.</b> Expert opinion/comparison
<b>ISC=</b> Interpersonal Skills and Communication	<b>4.</b> Assigned reading	<b>d.</b> 360° ratings
<b>PRO=</b> Professionalism	<b>5.</b> Case conference	<b>e.</b> Written examination
<b>SBP=</b> Systems-based Practice	<b>6.</b> Morning report	<b>f.</b> Patient surveys
	<b>7.</b> Presentation	<b>g.</b> Case/procedure logs
	<b>8.</b> AV media module	<b>h.</b> Conference attendance log
	<b>9.</b> Web-based module	<b>i.</b> EBM activity
	<b>10.</b> Journaling activity	<b>j.</b> QI activity
	<b>11.</b> M&M conference	<b>k.</b> Systems error activity
	<b>12.</b> Portfolio	<b>l.</b> Self assessment
	<b>13.</b> QI activity	<b>m.</b> Individual learning plans
	<b>14.</b> Supervisory activity	<b>n.</b> Critical incidents
	<b>15.</b> Other _____	<b>o.</b> Other _____
	<b>16.</b> Other _____	<b>p.</b> Other _____

## Evaluation System Reminder Card

### RESIDENCY EVALUATION SYSTEM A Competency-Based Plan

- Two to three days before your next rotation you will receive:
  - An **individual learning plan (ILP)** with 8-12 essential objectives (EOs). The EO's must be completed by the end of the block (partially completed for split blocks). Please review and download the EO & lower priority objective list & select, using the priority rating system, which additional (non-essential) objectives are important to your own learning.
  - A **rotation planning table** that identifies learning opportunities available to meet the EOs (e.g. case conferences) and methods by which you will be evaluated (e.g. DO=direct observation, MOE=mini oral examinations).
- At the beginning of the rotation, meet with your faculty supervisor to **review the EOs & your personal selection of additional learning objectives**, and decide on a plan to meet your personal objectives. At this time, you may receive a rotation-specific mini-CEX card and a reading compilation linked to the EOs.
- Request a **formative evaluation** (how to improve your performance), at least at the mid-point of the rotation, but ideally more often.
- Two to three days prior to the end of the rotation, meet with your supervisor for a summative evaluation to **assess your performance of the EOs, review the mini-CEX card (if provided), and discuss your accomplishment of personalized objectives**. Any unmet EOs should be completed before the end of the rotation. You will also receive an online **debriefing form** at this time. Please fill out this form carefully and comprehensively for future improvements to the process. For repeating rotations such as inpatient, ED, and illness clinic, you will receive an on-line, rollover self-assessment form or self evaluation checklist that needs to be completed at the end of each rotation. These forms are another type of ILP, may substitute for ILPs on some repeating rotations, and will be reviewed at your semi-annual meetings with your program director.
- Remember to complete your online **evaluations of attendings and the rotation** at the end of each block.

### COMPETENCY RATINGS; BEHAVIORAL ANCHORS

Rating:	Behavioral Anchors:
0 = NO INTERACTION	-----
1 = REMEDIAL	-Inadequate effort -Skills, knowledge-are not appropriate for level
2 = NOVICE	-Developing an approach to the dx/mangt of routine pts & the performance of routine tasks
3 = DEVELOPING COMPETENCY	-Able to apply knowledge/skills to dx/mangt of routine pts and performance of routine tasks
4 = COMPETENT	-Able to manage most pts/tasks including those with mod-high acuity and/or complexity
5 = PROFICIENT	-Able to manage almost any pt/task regardless of acuity or complexity

### BENCHMARKS

	<u>½ year</u>	<u>end of year</u>
PL-1	2	2 – 3
PL-2	3	3 – 4
PL-3	4	4

## SMALL GROUP ACTIVITY I

### Rotation Choices:

1. Inpatient (Senior)
2. NICU
3. Rheumatology
4. Hematology/Oncology
5. ED (Senior)
6. Nephrology

<b>Rotation Planning Coding Bar</b>	<b>Primary Competency Domains</b>	
	<p><b>PC</b>= Patient Care</p> <p><b>MK</b>= Medical Knowledge</p> <p><b>PBLI</b>= Practice-based Learning and Improvement</p> <p><b>COM</b>= Interpersonal Skills and Communication</p> <p><b>PRO</b>= Professionalism</p> <p><b>SBP</b>= Systems-based Practice</p>	
<b>Codes for Teaching Activities</b>		<b>Codes for Evaluation Methods</b>
<ol style="list-style-type: none"> <li>1. Clinical encounters</li> <li>2. Lecture</li> <li>3. Seminar/Small Group discussion</li> <li>4. Assigned reading</li> <li>5. Case conference</li> <li>6. Morning report</li> <li>7. Presentation</li> <li>8. AV media module</li> <li>9. Web-based module</li> </ol>	<ol style="list-style-type: none"> <li>10. Journaling activity</li> <li>11. M&amp;M conference</li> <li>12. Portfolio</li> <li>13. QI activity</li> <li>14. Supervisory activity</li> <li>15. Other_____</li> <li>16. Other_____</li> <li>17. Other_____</li> </ol>	<ol style="list-style-type: none"> <li>a. Objective-based summative evaluation</li> <li>b. Direct observation with checklist</li> <li>c. Expert opinion/comparison</li> <li>d. 360° ratings</li> <li>e. Written examination</li> <li>f. Patient surveys</li> <li>g. Case/procedure logs</li> <li>h. Conference attendance log</li> <li>i. EBM activity</li> <li>j. QI activity</li> <li>k. Systems error activity</li> <li>l. Self assessment</li> <li>m. Individual learning plans</li> <li>n. Critical incidents</li> <li>o. Other _____</li> <li>p. Other _____</li> </ol>

<b>Inpatient Rotation Planning Table: SENIORS</b>  <b>Essential Learning Objectives:</b>	<b>Primary Competency Domain</b>	<b>Teaching Methods</b>	<b>Evaluation Methods</b>
(1) Obtains an accurate and comprehensive history and performs a thorough physical examination on each inpatient; Demonstrates an ability to effectively communicate this data verbally and in writing; Writes an informative, analytic, evidence-based senior note.			
(2) For patients with illnesses that commonly present to the inpatient units, demonstrates a satisfactory fund of knowledge, and appropriately evaluates and manages the patient, using best evidence and consultations as indicated.			
(3) Demonstrates an understanding of the common diagnostic tests and imaging studies used in the inpatient setting, including indications, limitations, test properties, interpretation, and cost-effectiveness			
(4) Appropriately seeks out and integrates consultative assistance			
(5) Demonstrates an appropriate understanding of pathophysiologic mechanisms of various disease states			
(6) Communicates effectively and builds relationships with patients and their families; is a proponent for family-centered care on work and attending rounds.			
(7) Communicates and works effectively and collaboratively with peers, supervisors, other health care professionals as a member of an interdisciplinary health care team			
(8) Demonstrates effective supervisory, leadership, and administrative skills in the management of the health care team			

University of Rochester Medical Center: Department of Pediatrics Residency Program

(9) Demonstrates time management skills to interns and medical students during work rounds, other floor activities			
(10) Effectively teaches other members of the health care team and efficiently seeks answers to questions generated; facilitates student/intern learning at the bedside.			
(11) Assumes appropriate responsibility and makes responsible decisions when carrying out patient care duties; Delegates tasks appropriately to other health care team members			
(12) Demonstrates humanistic and ethical health care; and is an effective advocate for patients			
(13) Works effectively within health care systems to provide comprehensive, best practice care including discharge planning, cost control, and measures to ensure patient safety			

<b>Neonatology (NICU/SCN) Rotation: Planning Table</b>  <b>Essential Learning Objectives:</b>	<b>Primary Comp Domain</b>	<b>Teaching Methods</b>	<b>Evaluation Methods</b>
<b>37. Perinatal Prevention</b> Identify and describe strategies to reduce fetal and neonatal mortality, including <ul style="list-style-type: none"> <li>• use of group B strep prophylaxis</li> <li>• prenatal steroids</li> </ul>			
<b>38. Perinatal Complications</b> Recognize potential adverse outcomes for the fetus and neonate of prenatal and perinatal conditions, and demonstrate the pediatrician's role in assessment and management strategies to minimize the risk to the fetus and/or newborn in: <ul style="list-style-type: none"> <li>• Maternal infections/exposure to infection during pregnancy</li> <li>• Fetal exposure to harmful substances (alcohol, tobacco, street drugs)</li> <li>• Maternal diabetes (insulin-dependent and gestational)</li> <li>• Placental abnormalities (placenta previa, abruption)</li> <li>• Pre-eclampsia, HELLP syndrome</li> <li>• Chorioamnionitis</li> <li>• Polyhydramnios, Oligohydramnios</li> <li>• Multiple gestation</li> <li>• Fetal distress</li> <li>• Premature labor, premature ruptured membranes</li> <li>• Complications of anesthesia and delivery</li> <li>• Post-partum maternal fever or infection</li> <li>• Maternal blood group incompatibilities</li> </ul>			
<b>39. Resuscitation and Stabilization:</b> Explain and perform steps in resuscitation and stabilization, particularly airway management, vascular access, volume resuscitation, indications for and techniques of chest compressions, resuscitative pharmacology and management of meconium deliveries.			
<b>40. Evaluation and Management</b> Evaluate and manage common signs and symptoms of disease and newborns: <ul style="list-style-type: none"> <li>• General                             <ul style="list-style-type: none"> <li>• Prematurity (including &lt;28 weeks)</li> <li>• Hypothermia, hyperthermia</li> <li>• IUGR, LGA</li> <li>• Poor weight gain</li> <li>• Birth trauma</li> <li>• Poor parental attachment</li> </ul> </li> <li>• Metabolic                             <ul style="list-style-type: none"> <li>• Electrolyte disturbance (hypoglycemia, hypermagnesemia)</li> </ul> </li> <li>• Respiratory                             <ul style="list-style-type: none"> <li>• Acute respiratory distress</li> <li>• Chronic respiratory insufficiency</li> <li>• Apnea and bradycardia</li> </ul> </li> <li>• Cardiac                             <ul style="list-style-type: none"> <li>• Cyanosis</li> <li>• Heart murmur</li> <li>• Hypotension, shock</li> </ul> </li> <li>• GI                             <ul style="list-style-type: none"> <li>• Bloody stools</li> <li>• Failure to pass stools</li> <li>• Feeding intolerance / abd distension</li> <li>• Hyperbilirubinemia</li> </ul> </li> <li>• Hematologic                             <ul style="list-style-type: none"> <li>• Anemia, polycythemia</li> <li>• Thrombocytopenia, neutropenia</li> </ul> </li> <li>• Neurologic                             <ul style="list-style-type: none"> <li>• Lethargy, hypotonia</li> </ul> </li> </ul>			

<b>Neonatology (NICU/SCN) Rotation: Planning Table</b>  <b>Essential Learning Objectives:</b>	<b>Primary Comp Domain</b>	<b>Teaching Methods</b>	<b>Evaluation Methods</b>
<ul style="list-style-type: none"> <li>• Birth depression, acidosis</li> <li>• Jitteriness, seizures</li> <li>• Renal                             <ul style="list-style-type: none"> <li>• Hematuria, oliguria</li> </ul> </li> <li>• Dermatologic                             <ul style="list-style-type: none"> <li>• Petechiae/rash</li> </ul> </li> <li>• Genetic                             <ul style="list-style-type: none"> <li>• Congenital malformations</li> </ul> </li> </ul>			
<p><b>41. Diagnostic Testing</b> Use appropriately the following evaluations and lab tests when indicated::</p> <ul style="list-style-type: none"> <li>• Imaging                             <ul style="list-style-type: none"> <li>○ Chest X-ray</li> <li>○ Abdominal X-rays</li> <li>○ GI contrast study</li> <li>○ Cranial ultrasound</li> <li>○ Abdominal ultrasound</li> </ul> </li> <li>• Chemistry                             <ul style="list-style-type: none"> <li>○ Arterial, capillary, and venous blood gases</li> <li>○ Blood chemistries: electrolytes, glucose, calcium, magnesium, phosphate</li> <li>○ Tests of hepatic damage (liver enzymes, bilirubin) and function (PT, albumin)</li> <li>○ Renal function tests</li> <li>○ CRP</li> <li>○ Urinalysis</li> </ul> </li> <li>• Heme / Blood Bank                             <ul style="list-style-type: none"> <li>○ CBC with differential, platelet count</li> <li>○ Direct and indirect Coomb's tests</li> </ul> </li> <li>• Micro                             <ul style="list-style-type: none"> <li>○ Detection of bacterial, viral, and fungal pathogens</li> <li>○ Serologic and other studies for transplacental infection</li> <li>○ Serologic tests for infection (e.g., hepatitis, HIV)</li> <li>○ CSF analysis</li> </ul> </li> <li>• EKG</li> <li>• Neonatal drug screening</li> <li>• Therapeutic drug concentrations</li> <li>• Pain and drug withdrawal scales</li> <li>• Newborn screening tests</li> </ul>			
<p><b>42. Monitoring and Therapeutic Modalities</b> Use appropriately the following treatments and techniques , monitoring effects and anticipating potential complications specific to each procedure.</p> <ul style="list-style-type: none"> <li>• Venous access by peripheral vein</li> <li>• Umbilical arterial and venous catheterization</li> <li>• Arterial puncture</li> <li>• Oxygen administration by hood, CPAP or assisted ventilation</li> <li>• Endotracheal intubation</li> <li>• Positive pressure ventilation and basic ventilator management</li> <li>• Administration of surfactant therapy</li> <li>• Lumbar puncture</li> <li>• Phototherapy</li> <li>• Central hyperalimentation and parenteral nutrition</li> <li>• Enteral nutrition</li> <li>• Analgesic and sedatives</li> <li>• Blood and blood product transfusions</li> <li>• Vasoactive drugs</li> <li>• Judicious use of antibiotics</li> <li>• Administration of medications specific to the needs of the newborn (e.g., Vitamin K)</li> </ul>			
<p><b>43. Teamwork and Consultation</b></p> <ul style="list-style-type: none"> <li>• Communicate and work effectively with fellow, residents, attendings, consultants, nurses, nurse practitioner, lactation</li> </ul>			

<b>Neonatology (NICU/SCN) Rotation: Planning Table</b>  <b>Essential Learning Objectives:</b>	<b>Primary Comp Domain</b>	<b>Teaching Methods</b>	<b>Evaluation Methods</b>
consultants, nutritionists, pharmacists, respiratory therapists, social workers, discharge coordinator, referring physicians, and parents/families of critically ill neonates. <ul style="list-style-type: none"> <li>• Understand and know how to appropriately access neonatal transport systems</li> </ul>			

<b>Pediatric Rheumatology Rotation: Planning Table</b>  <b>Essential Learning Objectives:</b>	<b>Primary Component</b>	<b>Teaching Methods</b>	<b>Evaluation Methods</b>
44. Perform a comprehensive musculoskeletal exam.			
45. Recognize abnormal findings in a joint exam (swelling, tenderness, warmth, erythema, pain with movement, loss of motion/contracture).			
46. Describe the classification of, and correctly diagnose juvenile idiopathic arthritis.			
47. Recognize clinical manifestations of systemic lupus erythematosus, and correctly interpret relevant laboratory data.			
48. Recognize clinical manifestations of dermatomyositis.			
49. Distinguish arthralgia from arthritis.			
50. Discuss the consequences of chronic illness and communicate in a supportive fashion with families/patients who deal with chronic illness.			

University of Rochester Medical Center: Department of Pediatrics Residency Program

51. Describe the indications, risks, and benefits of NSAIDS and discuss these with families.			
52. Discuss the importance of psychosocial influences on pain and disability.			

<b>Emergency Medicine Rotation: Senior Resident Planning Table</b>  <b>Essential Learning Objectives:</b>	<b>Primary Competency Domain</b>	<b>Teaching Methods</b>	<b>Evaluation Methods</b>
1. Recognize, assess, resuscitate, and stabilize critically ill children.			
2. Demonstrate effective airway management including intubation for children of all ages.			
3. Recognize, assess, resuscitate, and stabilize critically ill children –Trauma ABCDEs, C-spine immobilization, primary survey, secondary survey, evaluation, and resuscitation.			
4. Assess and manage: <ul style="list-style-type: none"> <li>a. Seizure</li> <li>b. Severely altered mental status</li> <li>c. Severe head injury</li> <li>d. Acute abdomen</li> <li>e. Anaphylaxis</li> <li>f. Acute scrotum</li> <li>g. SVT</li> <li>h. Severe dehydration</li> <li>i. Severe extremity trauma</li> <li>j. Diabetic ketoacidosis</li> <li>k. Shock</li> <li>l. Severe burns</li> <li>m. Ectopic preg/threatened AB</li> </ul>			
5. Describe and discuss the basic organization of the prehospital system, appropriate utilization of the services, and basics of EMTALA.			
6. Demonstrate proficiency at: <ul style="list-style-type: none"> <li>a. IO placement</li> <li>b. Lumbar puncture including informed consent</li> <li>c. Basic ECG interpretation</li> <li>d. Incision and drainage of superficial abscesses</li> </ul>			
7. Demonstrate effective and professional communication skills (including relating poor outcomes and diagnoses to families).			
8. Demonstrate ability to use a logical clinical approach to emergency care and prioritize tasks involving multiple			

University of Rochester Medical Center: Department of Pediatrics Residency Program

patients.			
9. Assess and manage pain by: a. Regional blocks			
10. Appropriately use, understand the indications for, and interpret diagnostic and radiologic testing.			
11. Demonstrate ability to identify the correct disposition for patients including a. Admission b. Discharge c. Referral d. PICU admission e. Transfer/COBRA			
12. Demonstrate ability to acquire, interpret, and apply new medical knowledge.			

<b>Pediatric Hematology/Oncology Rotation: Planning Table</b>  <b>Essential Learning Objectives:</b>	Primary Competency Domain	Teaching Methods	Evaluation Methods
1. Describe the common pediatric malignancies – including basic epidemiology and clinical presentations (brain tumors, neuroblastoma, Wilms tumor, rhabdomyosarcoma, lymphomas, bone tumors including osteosarcoma and Ewing’s family of tumors)			
2. Describe the basic epidemiology, presentation, and outline of therapy of acute leukemias in childhood and adolescence			
3. Recognize abnormalities of red cell, white blood cell, and platelet morphology and number on a peripheral smear			
4. Describe the differential diagnosis of bruising and bleeding, with presentations and initial evaluation (including hemophilia, von Willebrand’s disease, thrombocytopenia)			
5. Describe the presentation, evaluation, and options for management of immune thrombocytopenic purpura (ITP)			
6. Work up a pediatric oncology patient with fever and neutropenia			
7. Recognize and describe the presentations/complications of malignancies and their therapy which constitute oncologic emergencies (fever and neutropenia, hyperleukocytosis, SVC syndrome, spinal cord compression, tumor lysis syndrome, typhlitis)			

University of Rochester Medical Center: Department of Pediatrics Residency Program

8. Describe the genetics and health care maintenance for patients with a sickle hemoglobinopathies			
9. Manage a vaso-occlusive crisis in a patient with sickle cell disease and be able to describe the presentation and management other crises that occur in patient with sickle cell disease: splenic sequestration, aplastic crisis, and acute chest syndrome			
10. Describe the indications for hematopoietic stem cell transplantation (HSCT) and describe the basic concepts of HSCT			
11. Provide pain management to patients with chronic diseases such as sickle cell disease, and pain associated with malignancies			
12. Describe the common late effects of therapy for pediatric and adolescent malignancy			
13. Describe the spectrum/definition of pediatric palliative care			
14. Participate in discharge planning for a hematology or oncology patient with multiple medical and home care needs			
15. Participate, with faculty or fellow, in discussion of consent or treatment with patient/family			

<b>Nephrology Rotation: Planning Table</b>  <b>Essential Learning Objectives:</b>	<b>Primary Competency Domain</b>	<b>Teaching Methods</b>	<b>Evaluation Methods</b>
1. Evaluate and initially manage a patient with glomerulonephritis			
2. Evaluate and initially manage a patient with nephrotic syndrome			
3. Evaluate and initially manage a patient with hypertension			
4. Evaluate and initially manage a patient with kidney stones/hypercalciuria			
5. Evaluate and manage chronic kidney disease/end stage renal disease			
6. Describe indications for and complications of kidney transplantation			
7. Calculate maintenance fluids and manage fluids and electrolytes in patients with renal disease			
8. Evaluate a patient with acute renal failure			
9. Communicate effectively with a patient/family with chronic renal disease			
10. Handle questions from multiple sources within the nephrology care system			

11. Make an evidence-based presentation on a renal patient case or problem			
--	--	--	--

## Composite List of Essential Objectives Sorted by 4 Domains (ISC, PBLI, PRO, SBP)

<b>Rotation Planning Coding Bar</b>	<b>Primary Competency Domains</b>																																			
	<p><b>PC=</b> Patient Care</p> <p><b>MK=</b> Medical Knowledge</p> <p><b>PBLI=</b> Practice-based Learning and Improvement</p> <p><b>COM=</b> Interpersonal Skills and Communication</p> <p><b>PRO=</b> Professionalism</p> <p><b>SBP=</b> Systems-based Practice</p>																																			
<b>Codes for Teaching Activities</b>	<b>Codes for Evaluation Methods</b>																																			
<table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">1. Clinical encounters</td> <td style="width: 50%;">10. Journaling activity</td> </tr> <tr> <td>2. Lecture</td> <td>11. M&amp;M conference</td> </tr> <tr> <td>3. Seminar/Small Group discussion</td> <td>12. Portfolio</td> </tr> <tr> <td>4. Assigned reading</td> <td>13. QI activity</td> </tr> <tr> <td>5. Case conference</td> <td>14. Supervisory activity</td> </tr> <tr> <td>6. Morning report</td> <td>15. Other _____</td> </tr> <tr> <td>7. Presentation</td> <td>16. Other _____</td> </tr> <tr> <td>8. AV media module</td> <td>17. Other _____</td> </tr> <tr> <td>9. Web-based module</td> <td></td> </tr> </table>	1. Clinical encounters	10. Journaling activity	2. Lecture	11. M&M conference	3. Seminar/Small Group discussion	12. Portfolio	4. Assigned reading	13. QI activity	5. Case conference	14. Supervisory activity	6. Morning report	15. Other _____	7. Presentation	16. Other _____	8. AV media module	17. Other _____	9. Web-based module		<table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">a. Objective-based summative evaluation</td> <td style="width: 50%;">i. EBM activity</td> </tr> <tr> <td>b. Direct observation with checklist</td> <td>j. QI activity</td> </tr> <tr> <td>c. Expert opinion/comparison</td> <td>k. Systems error activity</td> </tr> <tr> <td>d. 360° ratings</td> <td>l. Self assessment</td> </tr> <tr> <td>e. Written examination</td> <td>m. Individual learning plans</td> </tr> <tr> <td>f. Patient surveys</td> <td>n. Critical incidents</td> </tr> <tr> <td>g. Case/procedure logs</td> <td>o. Other _____</td> </tr> <tr> <td>h. Conference attendance log</td> <td>p. Other _____</td> </tr> </table>		a. Objective-based summative evaluation	i. EBM activity	b. Direct observation with checklist	j. QI activity	c. Expert opinion/comparison	k. Systems error activity	d. 360° ratings	l. Self assessment	e. Written examination	m. Individual learning plans	f. Patient surveys	n. Critical incidents	g. Case/procedure logs	o. Other _____	h. Conference attendance log	p. Other _____
1. Clinical encounters	10. Journaling activity																																			
2. Lecture	11. M&M conference																																			
3. Seminar/Small Group discussion	12. Portfolio																																			
4. Assigned reading	13. QI activity																																			
5. Case conference	14. Supervisory activity																																			
6. Morning report	15. Other _____																																			
7. Presentation	16. Other _____																																			
8. AV media module	17. Other _____																																			
9. Web-based module																																				
a. Objective-based summative evaluation	i. EBM activity																																			
b. Direct observation with checklist	j. QI activity																																			
c. Expert opinion/comparison	k. Systems error activity																																			
d. 360° ratings	l. Self assessment																																			
e. Written examination	m. Individual learning plans																																			
f. Patient surveys	n. Critical incidents																																			
g. Case/procedure logs	o. Other _____																																			
h. Conference attendance log	p. Other _____																																			

<b>Competency 6. Systems-Based Practice</b> Understand how to practice quality health care and advocate for patients within the context of the health care system.
6.1 Know how types of medical practice and delivery systems differ from one another with respect to how they control health care costs, allocate resources, and assure quality.
6.2 Practice cost-effective health care and resource allocation that does not compromise quality of care.
6.3 Advocate for patients in one's practice by helping them with system complexities and identifying resources to meet their needs.
6.4 Work with health care managers and providers to assess, coordinate, and improve patient care, consistently advocating for high quality.
6.5 Advocate for the promotion of health and the prevention of disease and injury in populations.
6.6 Acknowledge medical errors and develop practice systems to prevent them.

<b>SYSTEMS-BASED PRACTICE</b>				
Rot	Objs	Comp Domain (element)	Teach	Eval
SKLS BK	1. Discuss healthcare delivery systems, the economics of pediatric practice, payor systems, and medical costs	SBP 6.1	Small gr disc	DO/checklist
Adol	1. Describe and support the legal rights of minors <ul style="list-style-type: none"> <li>• Consent</li> <li>• Confidentiality</li> </ul>	SBP 6.3	Clinical encounters, lecture, Small gr disc, Assig.	Obj-based eval

## University of Rochester Medical Center: Department of Pediatrics Residency Program

			reading	
Adol	2. Work effectively with various health professionals who care for adolescents	SBP 6.4	Clinical encounters, Case conf	Obj-based eval, DO/checklist, 360 eval
Adol	3. Recognize situations where adolescents benefit from the skills of professionals trained in the care of adolescents	SBP 6.4	Clinical encounters	Obj-based eval
Anesth	1. Recognize circumstances when optimal care of the child requires the services of an anesthesiologist.	SBP 6.4		
Card	1. Describe the cardiovascular clearance for competitive sports.	SBP 6.5	Clinical encounters	Obj-based eval, writ exam
CC	1. Identify key aspects of health care systems (insurance type) as they apply to the primary care provider, such as the role of the PCP in decision-making, referral, and coordination of care.	SBP 6.1, 6.4	Lecture, reading	Chart review, 360 eval, DO
CC	2. Demonstrate sensitivity to the costs of clinical care in the outpatient setting, and take steps to minimize costs without compromising quality.	SBP 6.2	Lecture, reading, Clinical encounters	DO
CC	3. Recognize and advocate for families who need assistance to deal with system complexities, such as lack of insurance, multiple medication refills, multiple appointments with long transport times, or inconvenient hours of service.	SBP 6.3	Clinical encounters, Readings	360 eval, DO, Chart rev
Dev/Beh	1. Describe the primary care pediatrician's role in referral, advocacy, and ongoing care within key systems that support children with delays and disabilities ages 0-21	SBP 6.3, 6.4	Small gr disc, community observ, Clinical encounters	Written/oral examination
Dev/Beh	2. Discuss advantages and challenges associated with educating children and adolescents with developmental disabilities alongside non-disabled peers	SBP 6.3	Small gr disc, community observ	Written/oral examination
Dev/Beh	3. Discuss the challenges associated with transition from adolescence to adulthood in individuals with developmental disabilities, including sexuality, health care decision making, autonomy, and school-to-work transitions.	SBP 6.3, 4	Small gr disc, community observ, Clinical encounters	Written/oral examination
ED Intern	1. Describe and discuss the basic organization of the prehospital system, appropriate utilization of the services, and basics of EMTALA.	SBP 6.1	Case-based discussion	written/oral exam
ED Intern	2. Demonstrate ability to determine the correct disposition for patients- admit, discharge, referral.	SBP 6.4	Crit Eval, Case-based discussion	DO/checklist written/oral exam
ED Senior	1. Describe and discuss the basic organization of the prehospital system, appropriate utilization of the services, and basics of EMTALA.	SBP 6.1	Case-based discussion	written/oral exam
ED Senior	2. Demonstrate ability to identify the correct disposition for patients including a. Admission b. Discharge c. Referral d. PICU admission e. Transfer/COBRA	SBP 6.4	Crit Eval, Case-based discussion	DO/checklist, written/oral exam
Hem/Onc	16. Participate in discharge planning for a hematology or oncology patient with multiple medical and home care needs	SBP 6.3, 4	Clinical encounters	Obj-based eval, DO/checklist, Writ exam
ID	1. Review the role of the specialist when dealing with patients who have complex or life threatening illnesses, such as the use of static vs. bactericidal drugs, drug	SBP 6.4	Clinical encounters, Lecture, Small	Writ exam

University of Rochester Medical Center: Department of Pediatrics Residency Program

	combination, and drug penetration.		gr disc	
Inpt Int	1. Works effectively within health care systems to provide comprehensive, best practice care including discharge planning, cost control, and measures to ensure patient safety	SBP 6.2	Clinical encounters, Work Rounds, Assign. Read, Present	Obj-based eval, DO/checklist
Inpt Sen	1. Works effectively within health care systems to provide comprehensive, best practice care including discharge planning, cost control, and measures to ensure patient safety	SBP 6.2	Clinical encounters, Work Rounds, Assigned reading, Present	Obj-based eval, DO/checklist
Neph	12. Handle questions from multiple sources within the nephrology care system	SBP 6.3, 4	Clinical encounters	DO/checklist
Newborn	1. Provide appropriate follow up based on the time of discharge of the newborn and risk assessment. <ul style="list-style-type: none"> <li>Identify babies who are appropriate for very early (&lt;24 hrs), early (&lt; 48 hrs) discharge</li> </ul>	SBP 6.3, 4	Clinical encounters, Supervisory activity	Obj-based eval, DO/checklist
PICU	2. Provide family-centered care	SBP 6.2, 3, 4, 6	Clinical encounters, Disc	Obj-based eval
Psych	2. Advocate for patients with special developmental, behavioral, and educational needs.	SBP 6.3	Clinical encounters, case-based disc	DO/checklist, Mini oral exam
Rad	5. Use radiology consultation effectively for design of workup and diagnosis; provide key patient information to the radiologist and follow up as needed.	SBP 6.4	Clinical encounters, ssig. reading	DO/checklist
Sports Med	1. Refer patients to physical therapists, understanding their role in the rehabilitation of joint and soft tissue injuries	SBP 6.4	Clinical encounters, Small gr disc	DO/Checklist, Mini oral exam
MR	1. View each case from multiple perspectives, e.g., considering generalist or subspecialist concerns, or identifying individual, family, or community issues.	SBP 6.4, 5	Case discussion	Evals in Cont Clinic and Adol Med, PLC/CARE
Port	Critical Incident	SBP 6.6	Skills Block	Program director review
Port	Cost-Effectiveness Project	SBP 6.2	Skills Block	Program director review
SKLS BK	2. Review the basis of and necessity for employment contracts	SBP 6.1, 2, 4	Small Gr Disc	DO/checklist
SKLS BK	3. Conduct and report on a quality improvement or safety project	SBP 6.6	Present	QI Assessment
SKLS BK	4. Review the definitions and epidemiology of malpractice and discuss risk management as well as the effect of a law suit on physicians	SBP 6.1, 6	Small Gr Disc	DO/checklist
SKLS BK	5. Assess how business models of management may be beneficial to the practice of pediatrics	SBP 6.1, 2, 4	Small Gr Disc	DO/checklist

<b>Competency 3. Communication Skills</b>	Demonstrate interpersonal and communication skills that result in information exchange and partnering with patients, their families and professional associates.
3.1	Communicate effectively in a developmentally appropriate manner with patients and families to create and sustain a therapeutic relationship across the broad range of socioeconomic and cultural backgrounds.
3.2	Communicate effectively with physicians, other health professionals, and health-related agencies to create and sustain information exchange and teamwork for patient care.
3.3	Develop effective approaches for teaching students, colleagues, other professionals and lay groups.
3.4	Work effectively as a member or leader of a health care team, and collaborate productively with professional organizations.
3.5	Serve as a consultant on pediatric matters to other physicians and health professionals.
3.6	Maintain comprehensive, timely and legible medical records.

<b>INTERPERSONAL SKILLS AND COMMUNICATION</b>				
<b>Rot</b>	<b>Objs</b>	<b>Comp Dom</b>	<b>Teach</b>	<b>Eval</b>
Adol	4. Demonstrate interpersonal skills in communications with adolescents and families <ul style="list-style-type: none"> <li>• Developmentally appropriate</li> <li>• Family-centered care</li> <li>• Adolescents in nontraditional living situations, with chronic disease, or cultural barriers</li> </ul>	ICS	Clinical encounters	Obj-based eval, DO/checklist
Aller/IM	1. Discuss with a family the principles and evidence underlying the use of allergen immunotherapy.	ICS	Clinical encounters, Assig. reading	Obj-based eval written exam
CC	4. Create and maintain medical records that are timely, legible, and comprehensive.	ICS	Clinical encounters	Chart review
CC	5. Provide sensitive support to patients and their families in the outpatient setting.	ICS	Clinical encounters	360 eval
Hem/Onc	17. Participate, with faculty or fellow, in discussion of consent or treatment with patient/family	ICS	Clinical encounters	Obj-based eval, DO/checklist, written exam
Inpt Int	2. Communicates effectively and builds relationships with patients and their families; presents patients thoroughly and succinctly at the bedside.	ICS	Clinical encounters, Present.	Obj-based eval, DO/checklist
Inpt Int	3. Communicates and works effectively and collaboratively with peers, supervisors, and other health care professionals as a member of an interdisciplinary health care team	ICS	Clinical encounters, work rounds, Assign. Reading, Present.	Obj-based eval, DO/checklist
Inpt Sen	2. Communicates effectively and builds relationships with patients and their families; is a proponent for family-centered care on work and attending rounds.	ICS	Clinical encounters, Present.	DO/checklist
PICU	3. Communicate effectively and sensitively with patients, other health care providers, and consultants	ICS	Clinical encounters, Disc, Present.	Obj-based eval
Anesth	2. Assist in the psychosocial preparation of the child and parents for anesthesia.	ISC		
Card	2. Counsel an adolescent about healthy heart habits.	ISC	Clinical encounters	Obj-based eval, written/oral exam
CC	GOAL: Interpersonal Skills and Communication. Demonstrate interpersonal and communication skills that result in information exchange and partnering with patients,	ISC	Clinical encounters	360 eval, Obs.

University of Rochester Medical Center: Department of Pediatrics Residency Program

	their families and professional associates.			
ED Intern	3. Demonstrate effective and professional communication skills covering basic medical information to families, nurses, support staff, EMS, consultants, and primary care providers.	ISC	Crit Eval, Case-based discussion	DO/checklist
ED Senior	f. Demonstrate effective and professional communication skills (including relating poor outcomes and diagnoses to families).	ISC	Crit Eval, Case-based discussion	DO/checklist
Gen	1. Provide routine genetic preventive counseling to all parents and patients that addresses disorders identified in the neonatal screening program.	ISC	Clinical encounters, Case conference	DO/checklist
Inpt Sen	3. Communicates and works effectively and collaboratively with peers, supervisors, other health care professionals as a member of an interdisciplinary health care team	ISC	Clinical encounters, Work Rounds, Attending rounds, Present.	Obj-based eval, DO/checklist
Inpt Sen	4. Demonstrates effective supervisory, leadership, and administrative skills in the management of the health care team	ISC	Work Rounds, Attending Rounds, present.	Obj-based eval, DO/checklist
Inpt Sen	5. Demonstrates time management skills to interns and medical students during work rounds, other floor activities	ISC	Work Rounds, Attending Rounds, present.	Obj-based eval, DO/checklist
Neph	13. Communicate effectively with a patient/family with chronic renal disease	ISC	Clinical encounters	DO/checklist
Newborn	3. Promote, protect and support breastfeeding <ol style="list-style-type: none"> <li>Be able to discuss the child health benefit of breast vs. infant formula feeding</li> <li>Know the contraindications (and what is not a contraindication) to breastfeeding</li> <li>Be able to evaluate the infant-mother breast feeding relationship</li> <li>Discuss techniques/ methods of breastfeeding with a mother</li> <li>Be able to assess when there are medical indications for supplementation of breastfeeding</li> </ol>	ISC	Clinical encounters, lecture, Case conference	Obj-based eval, DO/checklist
Newborn	4. Discuss newborn care with caregivers <ol style="list-style-type: none"> <li>Feeding</li> <li>Jaundice</li> <li>Voiding/ stooling patterns after discharge</li> <li>Anticipatory guidance (e.g. sleep position, car seats, environmental tobacco smoke exposure, umbilical cord care)</li> </ol>	ISC	Clinical encounters, Supervis activity	Obj-based eval, DO/checklist
NICU Int	1. Teamwork and Consultation <ul style="list-style-type: none"> <li>Communicate and work effectively with fellow, residents, attendings, consultants, nurses, nurse practitioner, lactation consultants, nutritionists, pharmacists, respiratory therapists, social workers, discharge coordinator, referring physicians, and parents/families of critically ill neonates.</li> </ul>	ISC	Clinical encounters, Case conference	DO/checklist
NICU Int	2. Teamwork and Consultation <ul style="list-style-type: none"> <li>Communicate with families effectively</li> <li>Examine patients daily and document the exam</li> </ul>	ISC	Clinical encounters, Case conference	DO/checklist

University of Rochester Medical Center: Department of Pediatrics Residency Program

	<ul style="list-style-type: none"> <li>Write progress notes and "called to see" notes consistently</li> <li>Write a complete admission note at least two times per week</li> </ul>			
NICU Sen	<p>1. Teamwork and Consultation</p> <ul style="list-style-type: none"> <li>Communicate and work effectively with fellow, residents, attendings, consultants, nurses, nurse practitioner, lactation consultants, nutritionists, pharmacists, respiratory therapists, social workers, discharge coordinator, referring physicians, and parents/families of critically ill neonates.</li> <li>Understand and know how to appropriately access neonatal transport systems</li> </ul>	ISC	Clinical encounters, Case conference	DO/checklist
NICU Sen	<p>2. Demonstrate appropriate informed consent for:</p> <ul style="list-style-type: none"> <li>Blood transfusion</li> <li>Circumcision</li> </ul>	ISC	Clinical encounters, Case conference	DO/checklist
NICU Sen	<p>3. Communication</p> <ul style="list-style-type: none"> <li>Communicate with families effectively</li> <li>Examine patients daily and document the exam</li> <li>Write progress notes and "called to see" notes consistently</li> <li>Write a complete admission note at least two times per week</li> </ul>	ISC	Clinical encounters, Small gr disc, Present	DO/checklistcs
NICU Sen	<p>4. Deliver bad news effectively and supportively</p>	ISC	Clinical encounters, Case conference	DO/checklist
Psych	<p>1. Demonstrate effective communication to insure accurate history-taking, patient and family understanding, mutual decision-making, and adherence to therapy.</p>	ISC	Clinical encounters, case-based disc	DO/checklist, mini oral exam
Rheum	<p>1. Discuss the consequences of chronic illness and communicate in a supportive fashion with families/patients who deal with chronic illness.</p>	ISC	Clin encounters, case-based disc., role modeling, OR teaching seminar, assigned readings	Objective-based eval, DO, mini oral exam OR chart review
Rheum	<p>2. Describe the indications, risks, and benefits of NSAIDS and discuss these with families.</p>	ISC	Clin encounter, case-based disc., role modeling, teaching seminar, assigned readings	Objective-based eval, DO, mini oral exam
MR	<p>2. Develop confidence and skill in asking probing questions and expressing one's ideas and opinions.</p>	ISC	Case discussion	Prog Director review
Teach	<p>1. Identify in each teaching encounter your educational objectives and the learner's educational needs; use this information to direct your selection of content and teaching methods.</p>	ISC	Case discussion Noon conference	Eval in clinical rotations, noon conf evals
Teach	<p>2. Develop a repertoire of teaching and supervision methods that enhance a learner's knowledge base,</p>	ISC	Case discussion Noon conference	Eval in clinical rotations,

University of Rochester Medical Center: Department of Pediatrics Residency Program

	clinical skills, and attitudes/behaviors, including: a. Bedside teaching b. Teaching during work rounds c. Lectures or case-based discussions using multimedia presentation methods d. Role modeling for learners, with articulation of thought processes			noon conf evals
Teach	3. Facilitate learning by maximizing participation of all learners in small group discussions and by summarizing the main teaching points of a discussion.	ISC	Case discussions	Eval in clinical rotations
Teach	4. Directly observe learners in clinical settings, using valid and reliable methods that assess their performance fairly.	ISC	Case discussions	Eval in clinical rotations
Teach	5. Provide learners with sensitive, timely, constructive and behaviorally specific feedback, and follow-up by helping them develop plans to improve in identified areas of weakness or concern.	ISC	Case discussions	Eval in clinical rotations
SKLS BK	6. Discuss different communication techniques and approaches and how these may affect medical teams	ISC	Small gr disc	DO
SKLS BK	7. Learn and discuss effective techniques for evaluation and feedback	ISC	Small gr disc	DO

<b>Competency 4. Practice-based Learning and Improvement</b> Demonstrate knowledge, skills and attitudes needed for continuous self-assessment, using scientific methods and evidence to investigate, evaluate, and improve one's patient care practice.	
4.1	Use scientific methods and evidence to investigate, evaluate and improve one's own patient care practice; continually strive to integrate best evidence into one's daily practice of medicine.
4.2	Systematically assess the health care needs of one's practice population, and use this information to direct population-based problem-solving, with special attention to preventable morbidity and risk.
4.3	Demonstrate willingness and capability to be a life-long learner by pursuing answers to clinical questions, using journal articles, texts, information resources, patients, colleagues and formal teaching conferences.
4.4	Be prepared to alter one's practice of medicine over time in response to new discoveries and advances in epidemiology and clinical care.
4.5	Seek and incorporate feedback and self-assessment into a plan for professional growth and practice improvement (e.g., use evaluations provided by patients, peers, superiors and subordinates to improve patient care).

<b>PRACTICE-BASED LEARNING AND IMPROVEMENT</b>				
<b>Rot</b>	<b>Objs</b>	<b>Comp Dom</b>	<b>Teach</b>	<b>Eval</b>
CC	6. Demonstrate the knowledge, skills, attitudes needed for continuous self-assessment to investigate, evaluate, and improve own patient care practice	PBLI	ILP, QI, Present	Pt Pres, QI activity if applies, self-eval
CC	7. Teach and supervise peers and students, (supervisors/staff?)	PBLI	Clin encounters, case conf, lecture	DO
ED Intern	4. Demonstrate ability to acquire, interpret, and apply new medical knowledge.	PBLI	Case-based discussion	DO/checklist, writ/oral exam
ED Senior	g. Demonstrate ability to acquire, interpret, and apply new medical knowledge.	PBLI	Case conference	DO/checklist o
Inpt Int	4. Efficiently seeks answers to generated questions	PBLI	Work Rounds, Attending rounds, Present	DO/checklist, Obj-based eval
Inpt Sen	6. Effectively teaches other members of the health care team and efficiently seeks answers to questions generated; facilitates student/intern learning at the bedside.	PBLI	Work Rounds, Attending rounds, Present, Self-dir reading	DO/checklist, Obj-based eval
Neph	14. Make an evidence-based presentation on a renal patient case or problem	PBLI	Present, Small gr disc	DO/checklist
MR	3. Identify a variety of approaches to manage situations where the problem is complex or ambiguous and the science is inadequate.	PBLI	Case discussion	Eval in clinical rotations
Teach	6. Describe the typical effects of evaluation on the motivation and learning priorities of medical students and residents. Explain how learners benefit from knowing their learning goals at the start of an educational experience.	PBLI	Case discussions	Eval in clinical rotations
Port	Quality Improvement Project	PBLI	Skills Block	Program director review
Port	CME/CPD Self Prescription	PBLI	Skills Block	Program director review
JC-EBM	1.21.1 : Demonstrate effective approaches to acquiring	PBLI	Skills Block	Program director

University of Rochester Medical Center: Department of Pediatrics Residency Program

	new or additional information.			review
JC-EBM	1.21.2 : Describe the processes for determining a staff physician's CME requirements necessary for maintaining hospital credentials and state licensure.	PBLI	Skills Block	Program director review
JC-EBM	1.21.3 : Assess one's own strengths and weaknesses with respect to professional knowledge and skills, and identify a process to remediate or make allowance for them in information gathering, decision-making, and professional development.	PBLI	Skills Block	Program director review
JC-EBM	1.21.4 : Identify one's knowledge gaps in the course of providing patient care, and cultivate the habit of continuous inquiry to expand one's knowledge of medical advances.	PBLI	Case discussions	Eval in clinical rotations
JC-EBM	1.21.5 : Seek and incorporate feedback and self-assessment into a plan for professional growth as well as provide constructive feedback to others.	PBLI	Rotation evaluations	Eval in clinical rotations
JC-EBM	1.21.6 : Demonstrate a habit of critical thinking, evidence-based decision-making and continuous, quality improvement.	PBLI	Case discussions	Eval in clinical rotations
JC-EBM	1.21.7 : Continually strive to integrate best evidence into one's daily practice.	PBLI	Case discussions	Eval in clinical rotations
JC-EBM	1.21.8 : Describe one's own style of learning, gathering and storing information, and decision-making, and translate this understanding into an approach to professional development.	PBLI	Skills Block	Program director review
SKLS BK	<b>8.</b> Complete an educational prescription and actively participate in EBM discussions	PBLI	As, Small Gr Disc	DO/checklist, EP Review
SKLS BK	<b>9.</b> Discuss the principles and applications of quality assurance/quality improvement in the health care system	PBLI	Small Gr Disc	DO/checklist
SKLS BK	<b>10.</b> Learn and demonstrate effective teaching techniques for learners at multiple levels	PBLI	Small Gr Disc	DO/checklist
SKLS BK	<b>11.</b> Describe how you will manage your self-directed learning program after residency, including use of specific methods for continuous medical education and professional development	PBLI	Small Gr Disc	DO/checklist

<b>Competency 5. Professionalism</b>	Demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to diversity.
5.1	Demonstrate commitment, responsibility, and accountability for patient care, including continuity of care.
5.2	Be honest and use integrity in your professional duties.
5.3	Consistently use compassion and empathy in one's role as a physician.
5.4	Maintain professional boundaries in one's dealings with patients, family, staff, and professional colleagues.
5.5	Place the needs of patients and society over your own self-interest.
5.6	Demonstrate sensitivity and responsiveness to patients' and colleagues' gender, age, culture, disabilities, ethnicity, and sexual orientation.
5.7	Meet high standards of legal and ethical behavior.
5.8	Develop a healthy lifestyle, fostering behaviors that help balance personal goals and professional responsibilities. Recognize and respond to personal stress and fatigue that might interfere with professional duties.

<b>PROFESSIONALISM</b>				
<b>Rot</b>	<b>Objs</b>	<b>Comp Dom</b>	<b>Teach</b>	<b>Eval</b>
CC	8. Demonstrate personal accountability to the well being of patients (e.g., following-up lab results, writing comprehensive notes and seeking answers to patient care questions).	PRO	Clinical encounters	DO, chart rev, 360 eval
CC	9. Demonstrate a commitment to professional behavior in interactions with staff and professional colleagues.	PRO	Clinical encounters, lecture	360 eval, DO
CC	10. Adhere to ethical and legal principles and be sensitive to diversity.	PRO	Clinical encounters, lecture, readings, case conf	DO, 360 eval
CC	11. Recognize one's own limits.	PRO		Clin encounter, DO, self-eval
Inpt Int	5. Assumes appropriate responsibility and makes responsible decisions when carrying out patient care duties; Delegates tasks appropriately to other health care team members	PRO	Clinical encounters, Work rounds, Assign read, Present	Obj-based eval, DO/checklist
Inpt Int	6. Demonstrates humanistic and ethical health care; and is an effective advocate for patients	PRO	Clinical encounters, Work rounds, Assign read, Present	Obj-based eval, DO/checklist
Inpt Sen	7. Assumes appropriate responsibility and makes responsible decisions when carrying out patient care duties; Delegates tasks appropriately to other health care team members	PRO	Clinical encounters, Work rounds, Assign read, Present	Obj-based eval, DO/checklist
Inpt Sen	8. Demonstrates humanistic and ethical health care; and is an effective advocate for patients	PRO	Clinical encounters,	Obj-based eval, DO/checklist

University of Rochester Medical Center: Department of Pediatrics Residency Program

			Work rounds, Assign read, Present	
PICU	4. Demonstrate commitment to knowledge improvement	PRO	Clinical encounters, Lecture, Disc, Assign read	Obj-based eval, writ exam
Teach	7. Maintain ethical standards in one's educational activities, maintaining learner confidentiality, avoiding excessive demands on students/learners, exercising fairness in evaluation, and strictly avoiding harassment and discrimination based on ethnicity, gender or sexual orientation.	PRO	Case discussions	In clinical rotations
Teach	8. Consistently use compassion and empathy in teaching and modeling the physician's role, recognizing the many factors that cause stress in the lives of physicians-in-training.	PRO	Case discussions	In clinical rotations

## Program-wide Educational Assessment by Residents

### Condensed Version: System-Based Practice Domain only, and Required Rotations/Experiences only

Required Rotations And Experiences	Morning Report	Gr Rounds/Noon Conference	Skills Block	Journal Club/EBM/Portfolio	Experiences as Teacher	Inpatient	PICU	NICU	Newborn Nursery	Outpatient/Illness Clinic	Continuity Clinic	Behavior/Development	Emergency Department	Adolescent Medicine	Community-Advocacy (PLC)	Development	Teaching Quality: 1-5 1=poor 5=excellent	Evaluation Quality: 1-5 1=poor 5=excellent
<b>Competency 6: Systems-based Practice.</b> Understand how to practice high-quality health care and advocate for patients within the context of the health care system																		
6.1 Know how types of medical practice and delivery systems differ from one another with respect to how they control health care costs, allocate resources, and assure quality.																		
6.2 Practice cost-effective health care and resource allocation that does not compromise quality of care.																		
6.3 Advocate for patients in one's practice by helping them with system complexities and identifying resources to meet their needs.																		
6.4 Work with health care managers and providers to assess, coordinate, and improve patient care, consistently advocating for high quality.																		
6.5 Advocate for the promotion of health and the prevention of disease and injury in populations.																		
6.6 Acknowledge medical errors and develop practice systems to prevent them.																		
<b>Comments:</b>																		

## Data from Residents' Program-wide Assessment of Systems-based Practice

Required Rotations: Where Learned							Required Rotations: Evaluation by Residents 1= Poor 5= Excellent					
System-based Practice Elements	Total # Teaching Settings			Total # Evaluation Settings			Ratings of Teaching Quality			Ratings of Evaluation Quality		
	n	Mean	Range	n	Mean	Range	n	Mean	% 4 or 5	n	Mean	% 4 or 5
6.1	16	4.63	0 - 11	8	7.75	0 - 10	16	2.94	31	11	2.45	27
6.2	16	5.31	0 - 14	11	5.91	0 - 10	14	3.00	29	12	2.75	25
6.3	17	6.41	2 - 13	7	8.43	0 - 10	16	3.63	38	11	2.82	27
6.4	15	5.87	0 - 11	6	9.50	0 - 10	13	3.46	54	11	2.73	36
6.5	17	6.82	1 - 16	7	5.14	0 - 10	16	3.50	50	11	2.91	36
6.6	14	5.50	1 - 13	7	5.43	0 - 10	13	3.31	23	11	2.55	27
		<b>Sum</b> <b>34.5</b>			<b>Sum</b> <b>42.2</b>			<b>Mean</b> <b>3.31</b>	<b>Mean%</b> <b>38</b>		<b>Mean</b> <b>2.70</b>	<b>Mean%</b> <b>30</b>

Elective Rotations: Where Learned							Elective Rotations: Evaluation by Residents 1= Poor 5= Excellent					
System-based Practice Elements	Total # Teaching Settings			Total # Evaluation Settings			Ratings of Teaching Quality			Ratings of Evaluation Quality		
	n	Mean	Range	n	Mean	Range		Mean	% 4 or 5	n		% 4 or 5
6.1	5	3.40	0 - 8	7	6.00	0 - 7	6	2.17	17	11	1.73	9
6.2	5	3.00	0 - 8	8	5.88	0 - 9	12	2.50	17	11	1.73	9
6.3	13	4.85	0 - 8	8	6.50	0 - 8	13	2.85	31	9	2.56	22
6.4	10	4.70	0 - 8	7	6.43	0 - 8	10	2.90	30	10	2.00	10
6.5	13	3.69	0 - 8	8	6.00	0 - 8	10	3.80	80	11	1.91	18
6.6	2	6.50	0 - 8	5	5.40	0 - 8	5	2.40	20	8	1.88	13
		<b>Sum</b> <b>26.1</b>			<b>Sum</b> <b>36.2</b>			<b>Mean</b> <b>2.77</b>	<b>Mean</b> <b>32.5</b>		<b>Mean</b> <b>1.97</b>	<b>Mean</b> <b>13.5</b>

### Notes:

Number of respondents=17 of 22 pairs at same level; included Peds PL2-3, Med-Peds PL3-4

In table, column data for n = number who responded to that item

Systems-Based Practice Domain elements (6.1 – 6.6) are listed on previous page.

### Brief Summary of Results:

1. All elements of SBP are taught in multiple settings.
2. Teaching and evaluation of SBP are more frequent among **required** experiences than **elective** rotations.
3. More rotations are considered settings for evaluation than for teaching.
4. Teaching of SBP elements are not in general very highly rated by residents, except for advocacy, which is emphasized in Pedi Links to the Community (PLC) experience.
5. Advocacy (6.3 and 6.5) appears to be prominently taught.
6. Responses were extremely variable among residents, and many skipped items, suggesting the need for better orientation to the assessment process.

### Other questions that might be asked:

1. Are all competency elements taught in all domains? What elements need strengthening?
2. After implementation of the new comp-based curriculum, how will the patterns of data change?
3. How do residents rate teaching and evaluation rotation-by-rotation? What do the higher and lower ratings tell us?
4. How will residents' assessment of the curriculum relate, domain by domain, to faculty evaluations of the residents?
5. How can this process be improved to get more consistent data from the residents?
6. How can this process be used to educate residents about their educational program? E.g., are they not recognizing teaching when it happens through non-conventional methods, such as role modeling?

<b>Pediatric Competencies with Elements</b>	
<b>Competency 1. Patient Care</b>	Provide family centered patient care that is developmentally and age appropriate, compassionate, and effective for the treatment of health problems and the promotion of health
1.1	Gather essential and accurate information using the following clinical skills: medical interviewing, physical examination, diagnostic studies and developmental assessments.
1.2	Make informed diagnostic and therapeutic decisions based on patient information, current scientific evidence and clinical judgment, using clinical problem-solving skills, recognizing the limits of one's knowledge and expertise, gathering appropriate information and using colleagues and consultants appropriately.
1.3	Develop and carry out patient care plans, using principles of evidence-based decision-making and appropriate prioritization, and taking into account the needs, beliefs and resources of patient and family.
1.4	Effectively use common therapies within the scope of general pediatric practice, including a variety of prescription and non-prescription medications, intravenous fluids, and inhalation treatments, as well as special diets and nutritional supplements. Be familiar with therapies commonly used by subspecialists and other professionals who care for children.
1.5	Prescribe and perform competently all medical procedures considered essential for the scope of general pediatric practice; be familiar with those procedures commonly used by subspecialists and other professionals who care for children.
1.6	Counsel patients and families in a supportive manner so they can understand their illness or injury and its treatment, share in decision-making, make informed consent and participate actively in the care plan.
1.7	Provide effective preventive health care and anticipatory guidance to patients and families.
<b>Competency 2. Medical Knowledge</b>	Understand the scope of established and evolving biomedical, clinical, epidemiological and social-behavioral knowledge needed by a pediatrician; demonstrate the ability to acquire, critically interpret and apply this knowledge in patient care.
2.1	Demonstrate that you know or can efficiently access the knowledge base needed for effective patient care.
2.2	Critically evaluate current medical information and scientific evidence and modify your knowledge base accordingly.
2.3	Recognize the limits of one's knowledge and expertise by seeking information needed to answer clinical questions and using consultants and referrals appropriately. Use this process to guide life-long learning plans.
2.4	Apply current medical information and scientific evidence effectively to patient care (e.g., use an open-minded, analytical approach, sound clinical judgment, and appropriate attention to priorities).
<b>Competency 3. Communication Skills</b>	Demonstrate interpersonal and communication skills that result in information exchange and partnering with patients, their families and professional associates.
3.1	Communicate effectively in a developmentally appropriate manner with patients and families to create and sustain a therapeutic relationship across the broad range of socioeconomic and cultural backgrounds.
3.2	Communicate effectively with physicians, other health professionals, and health-related agencies to create and sustain information exchange and teamwork for patient care.
3.3	Develop effective approaches for teaching students, colleagues, other professionals and lay groups.
3.4	Work effectively as a member or leader of a health care team, and collaborate productively with professional organizations.
3.5	Serve as a consultant on pediatric matters to other physicians and health professionals.
3.6	Maintain comprehensive, timely and legible medical records.

<p><b>Competency 4. Practice-based Learning and Improvement</b> Demonstrate knowledge, skills and attitudes needed for continuous self-assessment, using scientific methods and evidence to investigate, evaluate, and improve one's patient care practice.</p>	
<p>4.1 Use scientific methods and evidence to investigate, evaluate and improve one's own patient care practice; continually strive to integrate best evidence into one's daily practice of medicine.</p>	
<p>4.2 Systematically assess the health care needs of one's practice population, and use this information to direct population-based problem-solving, with special attention to preventable morbidity and risk.</p>	
<p>4.3 Demonstrate willingness and capability to be a life-long learner by pursuing answers to clinical questions, using journal articles, texts, information resources, patients, colleagues and formal teaching conferences.</p>	
<p>4.4 Be prepared to alter one's practice of medicine over time in response to new discoveries and advances in epidemiology and clinical care.</p>	
<p>4.5 Seek and incorporate feedback and self-assessment into a plan for professional growth and practice improvement (e.g., use evaluations provided by patients, peers, superiors and subordinates to improve patient care).</p>	
<p><b>Competency 5. Professionalism</b> Demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to diversity.</p>	
<p>5.1 Demonstrate commitment, responsibility, and accountability for patient care, including continuity of care.</p>	
<p>5.2 Be honest and use integrity in your professional duties.</p>	
<p>5.3 Consistently use compassion and empathy in one's role as a physician.</p>	
<p>5.4 Maintain professional boundaries in one's dealings with patients, family, staff, and professional colleagues.</p>	
<p>5.5 Place the needs of patients and society over your own self-interest.</p>	
<p>5.6 Demonstrate sensitivity and responsiveness to patients' and colleagues' gender, age, culture, disabilities, ethnicity, and sexual orientation.</p>	
<p>5.7 Meet high standards of legal and ethical behavior.</p>	
<p>5.8 Develop a healthy lifestyle, fostering behaviors that help balance personal goals and professional responsibilities. Recognize and respond to personal stress and fatigue that might interfere with professional duties.</p>	
<p><b>Competency 6. Systems-Based Practice</b> Understand how to practice quality health care and advocate for patients within the context of the health care system.</p>	
<p>6.1 Know how types of medical practice and delivery systems differ from one another with respect to how they control health care costs, allocate resources, and assure quality.</p>	
<p>6.2 Practice cost-effective health care and resource allocation that does not compromise quality of care.</p>	
<p>6.3 Advocate for patients in one's practice by helping them with system complexities and identifying resources to meet their needs.</p>	
<p>6.4 Work with health care managers and providers to assess, coordinate, and improve patient care, consistently advocating for high quality.</p>	
<p>6.5 Advocate for the promotion of health and the prevention of disease and injury in populations.</p>	
<p>6.6 Acknowledge medical errors and develop practice systems to prevent them.</p>	
<p><b>Source:</b> Kittredge, D., Baldwin, C. D., Bar-on, M. E., Beach, P. S., Trimm, R. F. (Eds.). (2004). APA Educational Guidelines for Pediatric Residency. Ambulatory Pediatric Association Website. Available online: <a href="http://www.ambpeds.org/egweb">www.ambpeds.org/egweb</a>. [Accessed 12/21/2006]. Project to develop this website was funded by the Josiah Macy, Jr. Foundation 2002-2005.</p>	

## Residents: Post Rotation Debriefing Form

**[NOTE: Responses from n=14 residents shown at the left]**

We need your help in continuing our development of improved teaching and evaluation processes for the residency program. Please give us your **candid views** on the questions below. Space is provided for written comments—use back of sheet if needed.

Check all statements with which you **AGREE**.

**1) How did the identification of high priority learning objectives affect your learning on this rotation/experience?**

- 0  High priority learning objectives were not shared with me on this rotation.
- 14  It was reassuring to know exactly what was expected of me on the rotation.
- 14  I used the list of essential objectives to guide my learning activities outside the clinical setting.
- 0  I was not very motivated to learn broadly about things not identified as essential objectives.
- 0  It didn't really change the way I managed my learning.
- 3  I don't think the revised process made much difference in how my attending taught and evaluated me.
- 7  The evaluation I received was more specific and informative than other evaluations that I have received.
- 1  I prefer a global evaluation that covers all of my knowledge and skills, not just "essential" objectives.
- 0  I think the "short list" of objectives over simplified the whole process of teaching and learning.
- 11  Medical education is often overwhelming in its breadth, and this approach gave me more confidence and focus as a learner.
- Other comments?**

**2) Did creating an Individual Learning Plan at the beginning of this rotation change the way you managed your learning?**

- 0  I was not asked to conduct a self-evaluation or create an individual learning plan.
- 1  I don't think the self-evaluation process affected my experience on this rotation.
- 13  I knew what I was expected to learn, and this focused my work.
- 12  I was more motivated to meet self-identified learning needs.
- 10  I was better organized in planning ways to fill gaps in my knowledge and skills.
- 0  The Individual Learning Plan confused the learning process for me.
- 2  I was uncomfortable having to identify my weaknesses at the beginning of the rotation.
- 1  The long list of learning goals and objectives felt overwhelming.
- 0  This process was a waste of my time.
- 6  This process provided me with a useful model for planning my future learning.
- Other comments?**

**3) Did you benefit from receiving focused, face-to-face feedback during the rotation and evaluation at the end?**

- 0  I received little or no feedback during the rotation.
- 1  I received more feedback than usual, but it was not very helpful in improving my learning.
- 10  I feel I learned better after receiving specific and focused feedback from my attending faculty.
- 0  The end-of-rotation evaluation was no more helpful than other evaluations I have received.
- 0  I did not meet with the faculty at the end of the rotation.
- 13  I ended this rotation with a clear picture of what I had learned and what I still need to work on.
- Other comments?**

**4) All in all, I would prefer to:**

- 14  Continue to receive focused feedback and evaluation on high priority learning objectives in future rotations.
- 10  Continue to conduct personalized goal setting for future rotations.
- 0  Repeat this process with significant modifications (please note below).
- 0  Abandon this process in the future.

**My suggestions for modification are:**

**What I liked MOST about the new approaches to teaching and evaluation:**

**6) What I liked LEAST about the new approaches to teaching and evaluation:**

**Many thanks for providing open and honest feedback to us about this new educational process!**

**BRIEF SUMMARY OF WRITTEN COMMENTS:**

- Liked the readings linked to Essential Objectives and the final oral exam.
- We need to explain and emphasize the role of lower priority objectives in the ILP.
- The Direct Observation Cards got mixed reviews: some residents considered cumbersome, others found they were taught more using the cards.

**Faculty: Post Rotation Debriefing Form on Objectives-based Education**

*We need your help in evaluating new improved teaching and evaluation processes developed for the residency program. Please give us your **candid views** on the questions below. Written comments are appreciated—use back if you need more space.*

1. For this rotation, did you use the program's new approach to teaching and evaluation?
  - Yes, I used the new methods in my teaching, .
  - I taught during this period, but I didn't use the new methods.
  - No, I was not involved . **(If not involved, please stop here!)**
2. Did the new approach to teaching and evaluation meet your needs as a teacher? **Check all statements with which you AGREE.**
  - I liked having a clear teaching agenda defined by the short list of essential learning objectives.
  - The short list of essential learning objectives was too abbreviated—my teaching is not this focused.
  - I liked focusing my teaching on learning priorities which I personally helped to develop.
  - I liked letting the residents develop their own learning objectives to supplement the essential objectives.
  - I would prefer to evaluate residents only on the required objectives, and not on their own objectives.
  - It was helpful to be able to tell residents what was expected of them from the start of the rotation.
  - It was easier to evaluate residents when I could focus on the essential learning objectives. I prefer global evaluations to focused, objectives-based evaluations.

**Other comments:**

3. How did residents respond to the new approach? **Check all statements with which you AGREE.**
  - I found that residents were intimidated by a list of absolute essentials for learning.
  - Residents liked knowing exactly what they were required to learn.
  - Residents enjoyed receiving more frequent feedback.
  - Residents seemed to enjoy adding their own learning objectives to the short list.
  - Residents refused to engage in individual planning of their learning agenda.

**Other comments:**

4. Was the new approach more or less efficient in its use of your time as a teacher?  
More efficient   1   2   3   4   5   Less Efficient    Not Sure
5. Was the new approach more or less efficient in its use of the resident's time as a learner?  
More efficient   1   2   3   4   5   Less Efficient    Not Sure
6. Was the new approach sufficiently thorough in exposing residents to the important elements of your discipline?  
Very thorough   1   2   3   4   5   Too superficial    Not Sure
7. Would you like to revise further the list of of essential objectives?
  - I would revise extensively
  - I would make minor revisions
  - I think they are about right as they stand

8. What did you like MOST about the new approach to teaching and evaluation?
9. What did you like LEAST about it?

## Pearls for Competency-based Curriculum Development

**Contributors:** Sue Guralnick, Ray Baker and Melissa Klein, Marcie Billings, Deidre Caplin, Bill Graessle, Elisa Zenni, Connie Baldwin, Carrin Schottler-Thal, Miriam Bar-on, Trish Beach, Franklin Trimm

1. Conduct a user-friendly (efficient) needs assessment to inform the change process and enhance buy-in.
2. Build a core group of workers, advocates and stakeholders to fuel and guide the project (you need faculty, residents, and educational leaders).
3. Begin with 1-2 rotations to pioneer, test the development process, and create champions to sell to other rotations.
4. Meet one-on-one with rotation faculty, first to get them on board, and later to get their active participation during implementation of the new curriculum.
5. Make the job as easy for rotation faculty as possible by providing simple instructions, starter lists, and examples of final products. Designate one person to create consistency among forms as they are developed and to help faculty create these forms when needed.
6. Keep it short and simple: don't propose too many objectives per rotation, or evaluation will be impossible.
7. Coordinate across rotations of the program to avoid duplications and gaps. Don't force all rotations to address all competency domains.
8. Plan rotation curriculum forms so they can be compiled easily for program-wide planning.
9. Make the curriculum development process a faculty development initiative. Teach residents and faculty to use the system as it was intended. Use curriculum to help faculty and residents focus on key educational objectives. Help residents learn to self-evaluate, and faculty learn to use the new evaluation forms as designed.
10. Develop a realistic timeline: plan for a couple of years of work, and take it one step at a time. Once established, curriculum refinement should become an iterative process, so plan for the long haul.
11. Make the curriculum (objectives and evaluation tools) available online for anywhere, anytime access.
12. Carefully monitor resident and faculty opinions during the first year of roll-out, so problems can be solved before they escalate, and acceptance/enthusiasm can be shared.

## **Test Driving A Practical, Competency-based Curriculum for Residents Workshop Feedback Form**

- |  |                |   |   |   |                     |
|--|----------------|---|---|---|---------------------|
| 1) Was the workshop what you expected from its title?  | Poorly titled  | 1 | 2 | 3 | Well titled         |
| 2) Was this session well planned and run?              | Disorganized   | 1 | 2 | 3 | Well organized      |
| 3) Did the workshop keep you active and interested?    | Too passive    | 1 | 2 | 3 | Active, interesting |
| 4) Were the handouts well designed and useful?         | Not useful     | 1 | 2 | 3 | Very useful         |
| 5) Did the workshop teach you what you hoped to learn? | Learned little | 1 | 2 | 3 | Learned a lot       |

### Plus-Delta Comments:

[E.g.: comments on content, participation, hand-outs, slides, break-outs, pacing, logistics]



**What aspects of this session were especially useful, valuable, interesting, or new?**



**If this session were to be repeated, what recommendations do you make for change?**

**What change(s) would you like to make in your program as a result of what you learned today?**