PEDIATRIC CLERKSHIP

Packet Contents

I. Overview of the Pediatric Clerkship
   A. What Is Pediatrics?
   B. Learning Philosophy on Pediatrics

II. Goals for the Clerkship
   A. Overall Goals
   B. Humanistic Doctoring
   C. Personal Goals
   D. Other Requirements

III. Resources for the Clerkship
   A. Attendings, Residents, Interns and Students
   B. Texts
   C. Points on the Pediatric Physical Exam
   D. Psychosocial Assessment of the Pediatric Patient
   E. Working on the Wards
   F. Presentation Tips
   G. Writing Progress Notes
   H. Admission Write Ups
   I. Evaluation Process
   J. Attachments
      - Immunization Schedules
      - Self Evaluation and Evaluation Forms
      - Case Presentation and Lecture Schedule
      - Developmental Checklist
      - Pediatric Patient Logs
I. Overview of the Pediatric Clerkship

What Is Pediatrics?

Welcome to Pediatrics, a field you might think is markedly different from other medical fields during the major clinical year. Much of what you learn during this clerkship, however, will be applicable during the rest of your clinical experience. Aspects of the learning experience that have relevance for development of your general skills that are expressed uniquely in pediatrics include:

- **Level of illness** Assessment of a sick child can be challenging: does the child require immediate attention such as hospitalization or can the child be treated as an outpatient? In this rotation, you will have the opportunity to perform such assessments. You will learn key principles and criteria through your reading, day-to-day work, computer cases and conferences.

- **Differential diagnosis** Half of this rotation is spent in the outpatient department, providing you the opportunity to generate your own differential diagnoses (as opposed to having patients already labeled and packaged with a diagnosis). For example, when a patient complains of a headache, you will generate a list of possibilities and a rationale supporting the most likely diagnosis, be it tension headache or brain tumor. You will learn the principles behind coming to a working diagnosis.

- **Development and families** Many of the concepts you've learned during your pre-clinical years require special consideration because of patient age and developmental status. You will learn to use the principles embodied in several developmental models during your interactions with patients. In addition, pediatric cases require you as clinician to work closely with the child's caregiver(s), not only as you gather patient history and examination findings, but also as you prescribe or enact treatment.

- **Specialty focus** Pediatrics tends to be dominated by three specialties: infectious disease, cardiovascular and pulmonary. Take advantage of this opportunity to learn these fields well.

Learning Philosophy on Pediatrics

**Active Learning.** Learning is always best accomplished by taking an active part. Passively watching others can increase your knowledge, but you will learn much more by taking responsibility. It is okay to step into the flow of things slowly at first, but if you wait too long you will miss too much of the clerkship.

Active learning on this rotation involves attempting to function as a primary physician for your patients. Do this by picking up patients (the more the better) and getting a history and doing a physical. You should then be able to put things together enough to present this information coherently. You may not know exactly what to do, but you should at least be able to ask the right kind of questions. For example, if you are stuck without knowing the patient's diagnosis you should tell your intern or resident, "Now I need to generate a differential diagnosis, but I am not sure what the differential for wheezing includes." This is preferable to staring blankly after you have presented the history and physical.

An active learning mindset may be enhanced by thinking of yourself as the primary caretaker of your patients. That means that you should consider it your responsibility that the patients get the best care. Do not assume that you are "just a medical student" and therefore it is not your place or responsibility to become intimately involved with all aspects of your patient's care. Read about each patient's problems and make sure he or she and the family understand what is going on. Find a way to build rapport and guide patients and families through stressful times. A good guideline is to think of the patients as if they were a niece or nephew -- close enough to care deeply about them yet distanced enough to keep some objectivity.

☐ **Act as Primary Physician for Your Patients, NOT Just a Medical Student; Treat Patients like Nieces or Nephews**

**Altruism.** Keeping the patient's interests first, above your own, is an important change from the pre-clinical years where, in general, learning activities centered on the needs of the students. Maybe it sounds obvious, but with the demands of day-to-day life as a third year student, you can easily forget the interests of others. Again, this does not mean you are "just a medical student;" rather, you are a student doctor with the dual responsibilities of caring for your patients and learning to become a doctor. Those two responsibilities are interlaced, creating a challenge: place the patient first with your learning a close second. Strive on this clerkship to develop an identity as a humanistic physician (there's more on this in the next
Patient Needs Come Before Your Own

Feedback. Feedback about your performance enables you to develop as a professional. Be sure to push your colleagues to give you prompt, constructive feedback on how you are doing. That means push them to critique your write-ups, presentations and overall care for your patients immediately after you have done something. Retrospective feedback is generally vague and of less value than immediate and specific feedback.

Effective feedback must be specific, must describe changeable behavior, and must be based on direct observation. In order for you to receive effective feedback, you must place your self in situations where you are observed by house staff, attendings, mentors, etc. Many of us still need work on our feedback skills, so don't settle for "good job" or "that was a fine physical exam" or "your presentation was disorganized." Ask for specific details when given vague answers. Find out what exactly was good and what exactly wasn't. Again, you'll get the best results with an active behavior.

In addition, be aware of other barriers to eliciting feedback. Feedback differs from evaluation in that feedback is not primarily a judging or rating behavior; don't you (or the person you've asked for feedback) confuse the two. Some barriers can be internal. Feeling the need to be right or perfect can interfere with asking for and learning from feedback. Some may feel they are imposing by asking for feedback. During this clerkship we are committed to giving you effective feedback, so never be afraid to ask.

Ask Regularly for Immediate Feedback; Feedback Describes Specific, Changeable Behavior; Beware of Barriers

II. Goals for the Clerkship

Overall Goals

<table>
<thead>
<tr>
<th>Goals and Objectives</th>
<th>Tools/Assistance/Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. Clinical Skills</strong></td>
<td></td>
</tr>
<tr>
<td>A. History</td>
<td></td>
</tr>
<tr>
<td>1. Identify the chief complaint</td>
<td>* Observed history during:</td>
</tr>
<tr>
<td>2. Identify any hidden agendas (chief concern)</td>
<td>- Inpatient admissions</td>
</tr>
<tr>
<td>a. Patient</td>
<td>- ER/Clinic visits</td>
</tr>
<tr>
<td>b. Parents</td>
<td>- Mentoring experience</td>
</tr>
<tr>
<td>3. Obtain a complete history (inpatient)</td>
<td>- Teaching resident rounds</td>
</tr>
<tr>
<td>4. Obtain a focused history (outpatient)</td>
<td>* Computer cases</td>
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<tr>
<td>5. Identify pertinent positives</td>
<td></td>
</tr>
<tr>
<td>6. Identify pertinent negatives</td>
<td></td>
</tr>
<tr>
<td>7. Determine level of illness (dangerously ill vs. sick but stable)</td>
<td></td>
</tr>
<tr>
<td><strong>II. Data Gathering</strong></td>
<td></td>
</tr>
<tr>
<td>A. History</td>
<td></td>
</tr>
<tr>
<td>1. Perform a complete physical (inpatient)</td>
<td>* Observed physical during:</td>
</tr>
<tr>
<td>2. Perform a focused physical (outpatient)</td>
<td>- Inpatient admissions</td>
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<tr>
<td>3. Identify pertinent positives</td>
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<tr>
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<td>- Mentoring experience</td>
</tr>
<tr>
<td>5. Determine level of illness (dangerously ill vs. sick but stable)</td>
<td>- Teaching resident rounds</td>
</tr>
<tr>
<td>6. Develop specific pediatric physical exam skills</td>
<td>* Model technique by watching</td>
</tr>
<tr>
<td>a. Newborn exam</td>
<td>residents and attendings</td>
</tr>
<tr>
<td>b. Hip exam</td>
<td>* Computer cases</td>
</tr>
<tr>
<td>c. Genitalia (normal / abnormal)</td>
<td></td>
</tr>
<tr>
<td>d. Ears (se the tympanic membrane)</td>
<td></td>
</tr>
<tr>
<td>e. Throat</td>
<td></td>
</tr>
<tr>
<td>f. Murmurs</td>
<td></td>
</tr>
<tr>
<td>g. Lung sounds</td>
<td></td>
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<tr>
<td>h. Abdominal exam</td>
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</table>
*Data Synthesis*

* Problem List
  * Group patient issues systematically and by importance
* Differential Diagnosis
  * Develop appropriate working diagnosis for each patient (core knowledge)
  * Develop a differential diagnosis of at least 3 for common complaints with rationale
* Treatment Plan
  * Formulate plans for each problem
  * Consider cost and invasiveness in approach
  * Identify criteria for calling consults
  * Call consults with specific questions
  * Use consult information effectively
  * Identify criteria for and benefits of inpatient and outpatient treatment
* Problem Anticipation (included in each problem on the list)
* Patient Summary (Bullet)
  * Synthesize key H&P findings, labs/studies and treatment plan / progress in 4 - 5 sentences
* Communicate effectively with colleagues by:
  * Writing clear, complete progress notes that identify and prioritize the patient's problems
  * Writing admission notes that fully describe your thought process
  * Presenting concisely and effectively on work rounds
  * Presenting concisely and effectively to attendings
  * Completing two inpatient write-ups
  * Be able to present patients in 3 ways: Bullet Vs. Work Rounds Vs. Admission
  * Be able to flexibly change format of presentation depending on time and venue at a moment's notice.

*Knowledge*

*Core*
* Mechanisms
  * Disease
  * Diagnostic
* Treatment
  * Development

*Depth*
* Critical Assessment of Current Literature
  * Evaluate findings from variety of articles
  * Evaluate quality of studies for each article

*Patient Management/Professional Development*

*Approach to Potential Conflict with Patient's and Others*
* Understand multiple perspectives (development, gender, race,
* Culture
  *Physician
  * Patient
  * Family
  * Significant others
  * Choose patient's perspective over your own (altruism)

•
•

**Level of Responsibility for Patients and for own Education:**
* Demonstrate initiative and eagerness to learn
  * Observer -- watch what happens
  * Reporter -- describe what happens
  * "Editorial writer" -- offer some opinions as to what happens
  * Independent worker -- perform most tasks autonomously/
  * anticipate problems

* Communicate effectively and honestly with patients and families regarding:
  * Differential diagnosis
  * The working diagnosis and prognosis
  * Effects of hospitalization on children and family
  * Preparation for potentially frightening and painful procedures
  * Treatment instructions and anticipatory guidance

**Interpersonal Skills**
* Share knowledge effectively with peers
  * Actively teach and learn from other students
  * Facilitate collegial interaction by sharing credit
* Work effectively with other healthcare professionals
  * Attendings
  * House staff
  * Nurses
  * Other hospital staff
  * Other students
  * Develop effective therapeutic relationships with patients
  * Choose to place patient needs above your own

• Ask for feedback from peers

• Ask for feedback from attendings, house staff and peers

* Negotiate your role effectively (e.g., without complaints or putting others on the spot)

* Discuss patient relationships with attendings and house staff

**Humanistic Doctoring**

Clinical medicine, and pediatrics in particular, fundamentally involves personal interaction and the development of personal relationships. In 1927, Francis Peabody noted: "The significance of the intimate personal relationship between the physician and patient cannot be too strongly emphasized, for in an extraordinarily large number of cases both diagnosis and treatment are directly dependent on it....One of the essential qualities of the clinician is interest in humanity, for the secret of the care of the patient is in caring for the patient."

The emphasis in your medical education to date, as far as sheer number of hours, has been upon knowledge. During your clinical year it is important to continue to acquire knowledge and begin to develop technical skills, but it is equally important to develop interactive skills with your patients. Creating effective therapeutic relationships with your patients (and their families) has been shown not only to increase patient satisfaction but also patient compliance.

During this clerkship, strive to place patient needs above your own and truly empathize with each patient and family situation. Be aware of natural barriers to keeping the patient's interests first, including ideas such as "I'm paying a lot
of tuition so my learning comes first," "These kids are so vulnerable, I shouldn't really be their primary caretaker anyway," and "The team doesn't really need me to take care of this patient."

**Personal Goals**

Development as a physician occurs in three general areas: clinical skills, knowledge, and professional attitudes (please refer to the evaluation form in the Attachments section [III.J.] of this packet for details). Choose at least three personal objectives for this clerkship and list them below. At the conclusion of this clerkship, we will measure your progress toward these goals.


**Other Requirements**

1. **Developmental Checklist** You are required to complete the attached developmental checklist using observations from your interactions with patients at specific developmental stages. This task provides important core knowledge and should help you appreciate the wide range of developmentally-related perspectives in the pediatric population. This will be collected at the end of the clerkship.

2. **Inpatient Write Ups** A total of two write ups about inpatients you admit to the service are required. See section III. H. for more details about the content of these write ups.

3. **Evidence Based Medicine Project:** See attached for details. I recommend using the EBM Handbook by David Sackett et al and the enclosed handouts.

4. **Reflection Piece:** Due at end of the 4th week, spend 15-30 minutes writing about any memorable experience from the rotation. It should be something that you are willing to share with the group.

5. **Conflict:** Describe a conflict that you have witnessed between a patient and anyone else who is a member of the medical team (MD, resident, nurse, yourself). This should be only about a half a page long – this is meant for discussion – hand writing it is fine – no more than ½ page long.
III. Resources for the Clerkship
Attendings, Residents, Interns and Students

Your attendings, residents and interns are all aware that medical student education is an integral component of the department's mission. Ask them for regular feedback about your performance. Ask them specific questions about pediatric topics or formulating differential diagnoses or patient management. Ask them to cover ‘core’ cases. Buddying up with a specific resident while on inpatient provides a great opportunity to do all of the above. In addition, this may be the sole exposure you have to pediatrics for the rest of your career; take charge of the experience and gather all the information you can from all the pediatricians you encounter.

In addition, you should work together as a team of students, sharing knowledge and helping to teach each other. Only in this way will you truly maximize the learning potential available on the clerkship.

Texts

A variety of texts will be useful during your pediatrics clerkship. To evaluate and solve your patients' problems (around four per day as outpatient, three or more total as an inpatient), you will need to read from a major textbook or use Medline to familiarize yourself with the current literature. Because the clerkship is so short, it is strongly recommended that you skim an abbreviated textbook to obtain an appropriate overview of the field of pediatrics. Furthermore, in both the inpatient and outpatient settings, students have found the handbooks below to be valuable quick references. You may also find books for differential diagnosis helpful, especially in the outpatient setting.

You must also read the core articles presented to you in the attached packet.

The books below are sold at the Book Store, are available for local use on some wards and clinics, and are on reserve at the Health Sciences Library. In addition, there are small libraries in Babies Hospital and in each of the affiliated hospitals. Check them out and learn how to look up articles when necessary.

Pediatrics Textbooks


Abbreviated Textbooks


Handbooks

- The Harriet Lane Handbook, Edited by Mary Grigorian Green, Year Book Medical Publishers, (most recent edition).

Other handbooks include 1) Schwartz’ manual and 2) Manual of Pediatric Emergency Medicine by E. Crain

Differential Diagnosis

- The Textbook of Pediatric Emergency Medicine, Edited by S. Ludwig, M.D. and G. Fleister, M.D., (most recent edition).
- Pediatric Diagnosis, Edited by Morris Green, M.D., (most recent edition).
Points on the Pediatric Physical Exam: (Skim this as a reference)

I. The Pediatric Examination Is Performed under the Critical Eye of the Parent

The good historian should be sensitive to the mother's anxieties; the competent examiner should make certain that these anxieties are relieved. The area of concern should be examined with special care and all findings of the entire examination should be explained to the parent as simply and thoroughly as possible.

The behavior of the mother during the examination may tell the examiner much about her, her reactions to stress, and her attitude toward the child. Parental presence during the examination sometimes intensifies patient resistance. Handle each situation individually; skill in this area comes with experience.

II. The Child Is an Unwilling Subject

The pediatrician often deals with an uncooperative patient who can disrupt the examination in a number of ways. The child can scream, kick, fight, urinate or vomit, all or any of which can interfere with the orderly sequence of any examination.

The examiner must plan a course of action which serves to put the child at ease, relieve the child's fears, and give the child a chance to become accustomed to the situation. The examiner may pretend to ignore the child completely at first while talking to the mother, allow a wary toddler to play with his stethoscope, or chat for a short time with an older child. Any ploy which makes the examiner less threatening to the child may prepare him better for the subsequent examination.

The prudent examiner may find it necessary to listen to the child's heart and lungs while he is held in his mother's arms, or palpate the child's abdomen while the child is spread across her lap. Never examine the child's ears and throat first.

In short, the best general rule to follow performing a pediatric physical examination is to be flexible. Thoroughness is essential, but the order and method one follows in examining a child is not important.

III. Observation is the First and Most Important Step in the Examination

Considerable information can be gained by observation of the child before proceeding with the actual examination. This information will be of great value in assessing the severity of the illness and will provide valuable clues in arriving at a diagnosis.

Does the child appear to be well, acutely ill or chronically ill? Lethargic, alert? Does he or she appear to be in pain? What is his or her state of nutrition? In the older child, is the patient apprehensive? Facies is important, both from the point of view of severity of illness and a variety of clinical entities. Are the eyes sunken? Is nystagmus present? What is the color of the skin -- pale, cyanotic, icteric? (In black children, pallor and cyanosis can best be determined by inspection of the mucous membrane and nail beds. Icterus can be evaluation by inspection of the sclerae.) Is a rash present and if so, is it macular, papular, petechial or vesicular?

What is the character of the cry? Is it weak (a seriously ill infant or child), strong (often a good sign, but may indicate pain), hoarse (laryngitis, epiglottitis, foreign body in the larynx, hypothyroidism, intrinsic laryngeal pathology, congenital mitral stenosis), high-pitched (intracranial pathology), infrequent (mongolism, hypothyroidism), excessive ("colic," pain, parental anxiety), unusual (cri du chat)?

What is the character of the respirations? Rate (consider age, fever, crying), depth, dyspnea (flaring of nose, grunting, retractions, use of accessory muscles of respiration - thoracic & abdominal), wheezing (with bronchiolitis, asthma, foreign body, vascular ring), stridor (laryngeal pathology, foreign body in larynx), brassy cough (tracheobronchitis in early stages, extrinsic pressure on trachea), loose cough (upper respiratory infection, pneumonia)?

Observe the position of the child. Is the head tilted to one side (torticollis, cerebellar tumor) or held in a retracted position (retropharyngeal abscess, tumor at base of tongue)? Patients with peritoneal inflammation (appendicitis) may lie on the unaffected side and keep the leg flexed at the hip and knee. Patients who have pain due to an inflammatory process of the pleural cavity may lie on the affected side in order to sling this side, avoiding pain with
respiration

Does the child have an odor of any kind? *Mousy odor* (PKU disease), *maple syrup odor of urine* (maple syrup urine disease), *fetid odor from nose* (foreign body), *fetid mouth odor* (gingivostomatitic of numerous cases, dental caries), *acetone breath* (diabetic ketoacidosis), *noxious mouth odor* (ingestion of agents such as kerosene, bleach, glue, alcohol),

*fetid ear odor* (chronic otitis media or externa), *foul odor of umbilical area* (omphalitis), *foul odor of vaginal area* (poor hygiene, foreign body).

Are there any unusual muscular movements present? Tremors, twitching of facial muscles, tonic, clonic choreiform or athetoid movements of various muscles, extremity or truncal, absence of movement from one or more extremities.

Before the examiner even touches the patient, he or she has had an opportunity to make several important observations which may, by their presence or absence, help him in his evaluation of the child.

**IV. The Child is a Growing Dynamic Subject and Normality Must Be Evaluated in the Context of Age**

In evaluating the child from infancy through adolescence, the pediatrician is confronted with an enormous range of physical and developmental patterns that he must interpret as normal or abnormal. The child is constantly changing and a dynamic subject; the younger the child, the greater the rate of change and variability in findings.

Therefore, it is essential for a pediatrician to know normal standards at different ages for a variety of factors - weight, height, body proportions, head circumference, organ size, developmental patterns of psychomotor achievement and the accepted ranges of normal. He or she must be able to assess the rate of change in a particular child in relationship to his state of health, environmental factors, and genetic factors. The pediatrician must decide whether or not a problem exists and if treatment is indicated. It is only with thorough knowledge of the normal values at any given age that the pediatrician will be able to evaluate a patient intelligently and treat him or her judiciously.

**Psychosocial Assessment of the Pediatric Patient**

Although the pediatrician is not a social worker, certain minimal information about the psychosocial aspects of a child/adolescent's life will clearly enhance the care you are attempting to provide in the pediatric clinic. When a chart is reviewed without information about the psychosocial aspects of a child's life, the reviewer will assume that you did not ask about this area. As there is often confusion as to what constitutes a psychosocial history, the following information may help you to better direct your inquiries. Once you have obtained this information, record it in the visit note!

**Psychosocial Assessments**

According to Nelson, a psychosocial assessment considers the child's emotional and social development and its deviations and disturbances in interactional terms between the fetus, infant, or child and his environment. The issues addressed in the assessment will vary dependent upon the age of the child. It is heavily dependent upon biological endowment and parental/guardian factors, the environment and the culture in which the child is raised. The assessment should cover such aspects as:

- caretaker attachment
- gender identification
- physical activity
- toilet training
- sibling and peer relationships
- fears and significant concerns
- behavior
- other age dependent factors

The family should be questioned about adoptive/foster care status, number and frequency of moves, separation and death (especially of a previously important person in the child's life), television watching, school attendance and
For all aged children, inquiries should be made as to who is caring for the child during the day (the primary caretaker). Does the parent work? Who helps the parent during the day? Has there been a change in the household composition, is there someone who frequently visits the home? What is the parental concept of age-appropriate behavior for this child and is that concept developmentally appropriate? Issues of safety and discipline should always be discussed, for these may not match current developmental status. Always ask about parental concerns. This gives a sense of parental involvement and indicates areas where additional anticipatory guidance may be needed.

For the younger age child, much of this assessment will be based on the parental/guardian history of certain development/behavioral issues (speech, cognitive skills, social adjustment, etc.) If the child is living with the parent and this is an infant, you might inquire as to maternal acceptance of this child. Was this a wanted pregnancy? How is the child fitting into the family? Does the mother have any help with the child? Is there a father figure in the picture? You can observe the parent in your office -- how does she hold the child? making eye contact? or holding the child like a "sack of potatoes." Ask about feeding behaviors and routines. Inquire about maternal responses to crying and other infantile behavior patterns. Does the parent play with the child, take delight in the child and his/her activities? Or does the parent ignore the child?

For the toddler and early preschool-age child, one needs to inquire about activities that begin to indicate striving for autonomy on the part of the infant. (Please note that strivings for autonomy occur at an earlier age, but may not be perceived as that.) Often parents interpret these initial efforts as being issues of discipline and punish the child rather than view the efforts for what they are. Many parents are unable to separate discipline from punishment. Discipline involves setting limits and teaching rules. Punishment is meted out in response to violation of rules. Until the child is able to understand what the rules are, punishment is inappropriate. One must also remember that for many parents, punishment = spanking, something that may be inappropriate for the age of the child. Positive and negative behaviors need to be explored as well as parental responses to both. Can the child separate from the parent? Is there age-appropriate stranger anxiety?

For the school-aged child, school is the "work" of a child and responses to school experiences are very important. Are the learning problems, behavior problems? Does the child have friends? When the child is not in school is he/she supervised or is he/she in self-care? Are there opportunities for large muscle activities or is free time spent in front of the television? Does the child enjoy the school experience? Is the child developing self-confidence? Although this period is called the latency period, it is in fact a very active period of growth. The child develops interpersonal skills as well as other cognitive skills which form the background for the next developmental stage. As is true for the other ages, unless the child masters the tasks of the age level, there will be significant unresolved issues brought into the next period, i.e. adolescence.

During the preadolescent period, in addition to the usual aforementioned information gathered about the child, one must begin to explore sexual development and other social issues that are charged with emotion (sexual activity, smoking, drugs, alcohol use/abuse). The issues need to be discussed before they become problem issues for both parent and child. The changes in the body that occur during this time period are of significant concern to the preadolescent/adolescent. How is he/she adjusting to these normal changes? School performance and life goals remain concerns of both the preadolescent/adolescent and the parent. The increasing independence of the child makes it important to ask the child and the parent separately about these issues. If you have seen this child over a period of time, you can very easily begin to lay the ground work for the child-physician interaction. Without a positive relationship at this time, information gathered will be limited and help with problems will not easily be accepted.

Although parents may feel that they have limited influence with children at this time, they need to be reminded to remain in touch with their preadolescents and adolescents. While there may be many stormy encounters and wide swings in the behavior of the preadolescent/adolescent during this period, if the parent is able to remain objective and open to communication, as this period draws to a close, the adolescent may be more receptive to their advice. As adolescence progresses, risk-taking behaviors become more common and often become a source of conflict between parent and child. The physician has to be very careful to retain the trust of the adolescent without alienating the parent. Where possible, continue to encourage the adolescent-parent relationship.

**Psychosocial Problems**
Psychosocial problems are manifest by disturbances in:

- feeling (depression, anxiety, euphoria)
- bodily function (psychosomatic disorders, eating disorders)
- behavior (conduct disturbance, passive-aggressive behavior, excessive risk-taking activities)
- performance (learning disorder, school failure).

The above list is not inclusive and other issues may be identified in the course of the psychosocial assessment. When the above or other problems are identified, there may be a need for further evaluation by either a social worker, psychologist, or psychiatrist.

Further information and suggested formats for eliciting information concerning psychosocial issues at the various stages of life can be found in Guidelines for Health Supervision II, Committee on Psychosocial Aspects of Child and Family, 1985 - 1988 published by the American Academy of Pediatrics in 1988.

**Working on the Wards**

Following are some key points to help you work effectively on the wards and in the outpatient clinics:

- Be on time.
- Post your call schedule a location where it will be seen by interns, residents and attendings (e.g., the Peds ER if you are at Babies, at the nurses station for inpatient, etc.).
- Always let your intern / resident know what is happening with your patients. Also, keep them aware of your schedule.
- Get permission for all absences. Students sometimes experience acute respiratory or gastrointestinal illness during pediatric rotations. If this happens, promptly notify your intern / resident.
- Avoid the spread of infection by washing your hands before and after examining patients.
- Patients should be undressed when examined. Provide children with privacy, and see that infants are dressed again when you finish your examination.
- Always have a chaperone when examining any adolescent.
- Raise the sides of the crib when you leave the patient even for a moment.
- Discussion of a patients’ illness in the presence of the patient or visitors, or on elevators, often leads to misinterpretation and unmitigated anxiety.
- Do not give out information over the telephone to doctors or others calling from the outside; refer such calls to the resident, the intern, or the nurse.
- Always consider the emotional reactions of the patient, parent, and other children and visitors to diagnostic procedures.

**Presentation Tips**

Work Rounds Presentations are typically given by identifying the patient and then giving current information following a "SOAP" template (subjective, objective, assessment, plan). An example follows:

<table>
<thead>
<tr>
<th>General Guideline</th>
<th>Example</th>
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<tbody>
<tr>
<td>Present your child to the team by giving the patient name, age, gender and chief complaint or working diagnosis / reason for being in the hospital</td>
<td>&quot;Juan Medina is a seven year old boy who presented with a chief complaint of difficulty breathing.&quot;</td>
</tr>
<tr>
<td><strong>•</strong> Provide subjective data about the patient's current status, including any events that have occurred since the last time the team rounded</td>
<td>&quot;He had an uneventful night and says he's breathing a little easier this morning, but he still has some retractions. He doesn't complain of any further fever or rhinorrhea.&quot;</td>
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<tr>
<td><strong>•</strong> Provide objective data, including temperature (maximum and current), current blood pressure, heart rate, respirations, and ins and outs.</td>
<td>&quot;Physical exam notable for retractions, an inspiratory: expiratory ratio of 1:2, with scattered wheezes on auscultation just before his neb treatment. Heart was regular rate and rhythm no murmurs rubs or gallops. Abdomen benign. The rest of his exam is benign, unchanged from admission.&quot;</td>
</tr>
<tr>
<td><strong>•</strong> Describe findings from your most recent physical exam.</td>
<td>&quot;Physical exam notable for retractions, an inspiratory: expiratory ratio of 1:2, with scattered wheezes on auscultation just before his neb treatment. Heart was regular rate and rhythm no murmurs rubs or gallops. Abdomen benign. The rest of his exam is benign, unchanged from admission.&quot;</td>
</tr>
<tr>
<td><strong>•</strong> Describe any recent labs</td>
<td>“His only lab from yesterday was an aminophylline level of 16.4.”</td>
</tr>
</tbody>
</table>
| **•** Assess the patient by problems and provide treatment plans for each, explaining your rationale for any change. Alternatively, your resident may prefer assessment by organ system. Clarify with your resident on the first day. | "So by problems:

**Reactive Airways** -- he continues on Proventil nebs q4 hours, the aminophylline drip at 1.0 mg/kg/hr and day 2 of IV solumedrol at 1.0 mg/kg q6h with some improvement.

Plan is to continue the current regimen since he's still somewhat uncomfortable. He's taking good pos, so I'd like to d/c the aminophylline drip and switch to po at 20 mg/kg/day divided q8 and then recheck the blood level to make sure it hasn't drifted up or down. If he deteriorates I'm not sure what to add, as he's already on a beta agonist, an anti-inflammatory and a phosphodiesterase inhibitor to cover both the early and late phase of asthma. I'll check him again at noon. If his exam continues to improve, we can heplock the IV an switch him to po steroids.

**URI** -- he defervesced yesterday afternoon. That with his rhinorrhea and lymphocytosis on initial CBC suggest a viral URI. Plan is to follow his temperature curve and treat the fever symptomatically if it recurs.

**Disposition** -- I also plan to contact his regular provider to discuss long term follow-up." |

Note that **new patients** should be fully presented on work rounds following the structure of the admission note.

**Writing Progress Notes**

Daily progress notes should be in the form discussed on work round presentation. A quick example follows:

**Subjective**
Juan is a seven year old with Reactive Airway Disease; day 2 of hospitalization. Improved overnight but continuing in mild respiratory distress. No complaints of fever and decreasing rhinorrhea. Resting fairly comfortably this a.m.

**Objective**

- **98.6 PR**
- **BP 90/60 HR 90 RR 28**
- **In: 750 IV, 750 po**
- **Out: 500 cc (1.2 cc/kg/hr)**

**PE:**
- **HEENT:** MMM, slight nasal discharge evident, oropharynx clear without exudate
- **Chest:** Mild intercostal retractions, I:E 1:2, diffuse bilateral mild wheezing with good air entry
- **Heart:** RRR, nl s1s2 no m/r/g
Abd: Soft, NT, ND
Ext: Warm and well-perfused
Labs: Aminophylline level 16.3 (12 hrs of drip @ 1.0 mg/kg/hr)

Assess/Plan #1 Reactive Airway Disease
Improving on current regimen of Proventil nebs q4 hours, aminophylline drip at 1.0 mg/kg/hr and IV solumedrol 1.0 mg/kg q6h. Taking good POs, so will d/c aminophylline drip and switch to po aminophylline 20 mg/kg/day divided q8 and recheck blood level. Still symptomatic, so continue the current regimen of a beta agonist, an anti-inflammatory and a phosphodiesterase inhibitor to cover both the early and late phase of asthma. If respiratory status improves, consider switch to PO steroids. Consider leukotriene inhibitors or cromolyn at home to reduce exacerbations (8 hospitalizations in last 18 months).

#2 URI
Symptoms resolving. He defervesced yesterday afternoon, now with decreasing rhinorrhea. Fever and rhinorrhea at admission with lymphocytosis on initial CBC suggest a viral URI. Plan is to follow his temperature curve

#3 Disposition
Will contact PMD regarding long term management of Juan's asthma.

Signature
CC3

Admission Write Ups

<table>
<thead>
<tr>
<th>Component</th>
<th>Details and Specific Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID/Chief Complaint</td>
<td>Always identify the patient by name, age and gender. For the chief complaint, use the informant's own words if possible. Identify any crucial identifiers of the patient that are pertinent to the diagnosis. Example: &quot;This is a 6 year old boy with SS disease who present with fever or one day duration.&quot;</td>
</tr>
<tr>
<td>Informant and Reliability</td>
<td>Include all sources of information for your history and their reliability (the patient, the family, outside M.D., etc.)</td>
</tr>
</tbody>
</table>
### History of Present Illness

A good HPI can frequently identify the diagnosis. Begin with a statement that summarizes the recent past medical history and the patient's current health. Example: "Wayne was in his usual state of health, characterized by well-controlled asthma, until two days prior to presentation when he began to..."  

The signs and symptoms should be described in chronological order with appropriate paragraphing and underlining for emphasis so that the reader may obtain maximal information in minimum reading time. Include all recent outside medical treatments and the name of the physician who saw the child.

If the history suggests a particular disease, inquire about signs and symptoms characteristic of the disease. Include all pertinent positives and negatives, as they are of great value in differential diagnosis. Note similar illness in the family and always inquire about recent exposure to contagious diseases. Include how the disease is affecting the patient's vital life functions, i.e., level of activity and intake and output.

### Past Medical History

#### Prenatal
- Obtain as complete a past medical history as possible:
  - Pregnancy planned or unplanned; duration; any complications including bleeding, edema, hypertension, glycosuria, illness (when?); weight gain during pregnancy, unusual exposures (radiation, etc.); medications taken during pregnancy; onset of prenatal care; serology results; Rh and blood type

#### Birth
- Date, place, weight; duration of labor; complications during labor; type of delivery (spontaneous, c-section, forceps); presentation (vertex, breech)

#### Neonatal
- Apgars (HR, respirations, tone, irritability, cry); complications (convulsions, cyanosis, jaundice, rash, vomiting, bleeding, infection, congenital anomalies, resuscitation or oxygen required); good suck and cry; did baby go home with mother and if not, why not?

#### Feeding
- Breast - entirely, partially, not at all. How long?  
- Artificial - when started, formula type, current formula, # feedings qd and quantity usually taken  
- Solids - when started, how tolerated.  
- Vitamins - type, amount, when started  
- Present diet - cereal, vegetables, fruit, egg, meat, amount of milk  
- Feeding problems - type, time of onset (emphasis depending on age and chief complaint)

#### Growth and Development
- (refer to Erikson and Piaget)  
- Weights at various periods plus linear growth. Age when smiled, held head, rolled over, sat without support, crawled, stood with support, walked, began teething, spoke words, spoke sentences. Left or right handed. Toilet training begun, completed. How does patient compare with siblings?

#### Personal – Social Behavior
- Behavior problems (tantrums, breathholding, etc.); ability to get along with siblings & other children; school adjustment - grade ability; fears, speech disorders, habits (thumbsucking, nailbiting), sleep habits, recent behavioral changes.
## Specific Illnesses
- Contagious: note age, complications. Measles, German measles, mumps, chicken pox, pertussis, scarlet fever, polio. *Recent exposures*
- Other medical: dysentery, meningitis, pneumonia, rheumatic fever, renal problems, tuberculosis, anemia, asthma (exposures), etc.
- Operations, accidents: any difficulties (bleeding, transfusions etc.)
- Hospitalizations: in chronological order; when, where, dx, tx.

## Immunizations
- Diphtheria, pertussis, tetanus (DPT); polio; measles, mumps, rubella (MMR); BCG. Dates, boosters, complications. *Last PPD placement.*

## Medications
- List all, including specific regimens for asthma, seizure, etc.

## Allergies
- List specifics of any untoward reactions to medications or foods (rash, gastrointestinal, sleepiness, irritability, etc.)

## Review of Systems
- **Skin**
  - Do not repeat information found elsewhere.
  - Rashes, petechiae, jaundice, infection.
- **HEENT**
  - Frequency and nature of complaints. Otitis, nasal discharge, colds, sore throats, coughs, nosebleeds, swollen glands, snoring, coughing or choking with feedings.
- **Respiratory**
  - Frequency and nature. Chest pain, difficult breathing, wheezing.
- **Cardiovascular**
  - "Heart trouble," murmur, dyspnea, cyanosis, edema, easy fatiguability.
- **Gastrointestinal**
  - Appetite, abdominal pain, vomiting (onset, type, color, frequency, relation to feeding), bowel habits (constipation, diarrhea, number, color and character of stools, bleeding), pruritis ani, parasites, pica.
- **Genitourinary**
  - Urinary control, infection, hematuria, enuresis (diurnal, nocturnal, age of onset), vaginal discharge, menstrual history (if appropriate), circumcision.
- **Musculoskeletal**
  - Joint or muscle pain, joint swelling, "growing pains," weakness, deformities, limp or gait abnormalities.
- **Neurologic**
  - Convulsions (febrile or afebrile, onset, type, frequency, how controlled), syncope, paralysis, tics, staring spells, head trauma, headache, changes in personality, motor coordination
- **Special senses**
  - Vision, hearing, speech

## Family History
- Familial diseases, including diabetes mellitus, rheumatic fever, allergy, blood dyscrasia, renal problems, epilepsy, mental illness, congenital anomalies, tuberculosis, syphilis. Causes of death for close relatives (grandparents, other siblings, etc.)

## Social History
- Parents: age, ethnicity, religion, education, state of health / date of death & cause if not living, consanguinity, marital status
- Siblings: list in chronological order of pregnancy giving sex, age, and health / date of death & cause, duration of pregnancy.
- Socio-economic: living conditions (size of dwelling, who lives there permanently/temporarily, sleeping arrangements, condition of dwelling [plumbing, heating, hot & cold water, refrigeration, rodents, pets, etc.], length of time at address. Any baby sitters? Relationships? Is child cared for at home? Sources of household income, insurance. Day-to-day life of child.
### Physical Exam

The list below is meant as an exhaustive overview; not all findings must be checked on each patient. **Thoroughness is essential, however.** Be pertinent and focused in reporting your results. This means that if meningitis is in your differential diagnosis, document the state of the anterior fontanel, suppleness of neck, and +/- Kernig's and Bredzinski signs. The child must be completely undressed, but not always all at once (depending on the age); feelings and modesty of the child should be respected.

- **Vital Signs**
  - Temperature, pulse, respiration, blood pressure (both upper extremities, lower if indicated). Pulse oximetry readings should be noted if applicable.

- **Measurements**
  - Weight and height (state percentiles). Up to age 2 years: head circumference.

- **General Appearance**
  - Development, nutrition, hygiene, state of health (acute or chronically ill, apparently well). State of consciousness, facial expression, cooperation, irritability, speech, cry, posture, gait. Obvious signs of distress (i.e., respiratory, obvious deformities, odor [source]).

- **Skin**
  - Texture, color, pallor, cyanosis, jaundice, temperature, turgor, subcutaneous fat, evidence of weight loss, pigmentation, rashes (describe type and distribution), petechiae, purpura, local swelling, edema, dilated veins, insect bites, scars, signs of injury.

- **Lymph Nodes**
  - Cervical, occipital, post-auricular, axillary, epitrochlear, inguinal, other superficial nodes. Note size (mm), tenderness, consistency, mobility.

- **Head**
  - Size, shape, position, fontanels (size, tension), sutures, bossing, craniotabes, transillumination, bruits, condition of hair and scalp, lesions

- **Eyes**
  - Color, sclerae, cornea, conjunctivae; lid margins; eyebrows; palpebral fissure, ptosis, edema; ocular tension; tearing; discharge; extra-ocular movements, strabismus, nystagmus; gross visual fields; pupils (size, equality, reaction to light & accommodation); ophthalmoscopic exam: fundus, disc, opacities. Dilate if necessary (check first with resident). DOES CHILD SEE?

- **Ears**
  - Configuration, position, pre- or post-auricular swelling or excoriation, mastoid tenderness, external canals, discharge; otoscopic exam: tympanic membrane color, light reflex, landmarks, bulging, perforation. DOES CHILD HEAR?

- **Nose**
  - Flaring of alae nasi, obstruction, discharge, septum, turbinates, mucous membranes, sinus tenderness

- **Mouth and Throat**

- **Neck**
  - Masses, torticollis, rigidity, retraction, webbing, bruits, range of motion. Structures: neck vessels, thyroid, trachea. Palpate clavicles in the newborns

- **Chest**
  - Contour, symmetry, expansion, prominence of costochondral junctions, bulging or retraction of interspaces. Breasts.

- **Lungs**
  - Respirations - type, depth, regularity. Findings on palpation, percussion and auscultation with comparison of both sides.
| • Heart | Inspection and palpation: visible apex beat, point of maximum impulse, thrills (location & time). Percussion: borders of heart. Auscultation: rate, rhythm, quality and intensity of heart sounds, splitting, 3rd or 4th sound, friction rub. Murmurs: location, time intensity, pitch, quality, transmission, effect of position & respiration. |
| • Abdomen | Contour, visible peristalsis, umbilicus, bowel sounds, shifting dullness, fluid wave, hernia, muscle tone, tenderness (direct, rebound). Liver: if palpated, record size in cm, consistency, character of surface and edge, tenderness. Spleen: if palpated, record size in cm, describe as above. Kidneys: bladder distention, other masses. |
| • Genitalia and Anal Area | Male: circumcision, phimosis, meatus, testicles descended, hydrocele, urinary stream, hernia. Female: irritation, discharge, urethral and vaginal orifices, synechiae, clitoral enlargement, signs of puberty, anomalies, evidence of infection, hernia. Anal region: excoriations, fissures, rectal prolapse; patency of anus in newborn; rectal examination as indicated. |
| • Back and Extremities | Back: lordosis, scoliosis, kyphosis; motion of spine; vertebral or costovertebral tenderness; tufts of hair, dimples, discolorations, cysts or masses. Extremities: peripheral pulses (radial & femoral, equality & volume), cyanosis, clubbing, edema; anomalies, length, shape, symmetry, deformities. Joints: range of motion, swelling, redness, tenderness. In infants, test specifically for hip dislocation. Musculature: tone, atrophy, hypertrophy, tenderness, spasm, paralysis. |
| • Neurologic | Motor and sensory function, coordination, deep tendon reflexes, superficial reflexes (abdominal, cremasteric), clonus, tremor, twitching, choreiform movements, athetosis, spasticity, rigidity, paresis, paralysis; Kernig, Brudzinski, Chvostek, Babinski. Examination should be more detailed when indicated and depending on age. In infant, Moro, tonic neck, reflex grasp, such, cry. Evaluation of motor and mental development |

Labs Present all lab results obtained on admission, including imaging studies. Circle abnormal results

Summary Give a 1/4 to 1/2 page summary (much as a lawyer gives a short summation of a long case). Mention all pertinent positives and negatives of the history, physical and labs to sell your working diagnosis to the reader/listener.
### Assessment/Plan

Develop a problem list and discuss each problem using both the textbook and medical literature if you can. The first problem should always be the differential diagnosis. You should discuss the differential in a way that shows you are trying to decide which diagnoses are the most likely and least likely. This is how you develop "clinical judgment." When discussing each problem, use pathophysiology to back up your assessment of what is going on and to justify your plan to solve the problem. Be sure to include all problems, not just the differential. Also, please list any references that you used to prepare the write up.

Also, remember, hand one copy to the teaching resident and one to Dr. Miller. The write ups are due 3 days after your first and second calls. Also, you should finish a less formal admission note for the chart before you leave your call.

### Evaluation Process

Your intern, supervising resident and attending physicians will assess your performance. The evaluation is based on medical knowledge, clinical skills (the quality and accuracy of your histories and physical examination, your ability to synthesize information and formulate a plan, etc.) and professionalism. Consistency, is the criteria for grading. I am certain that everyone will do Honors level work at times during the rotation.

Please look at the objectives and the evaluation sheet to see the criteria for evaluations.

We also ask you to evaluate your experience, make constructive suggestions, and comment on individuals who made positive contributions to your progress. To this end (and to aid in your evaluation), all students at Babies Hospital should keep a list of all house staff and attending physicians (including mentors) they work with on the wards and in the ER. Give this list to Jakki Outlaw in the education department (BHN 517) at the beginning of the third week and at the beginning of the fifth week. She will track these people down and get written evaluations from them. Dr. Steve Miller will speak with everyone as well in gathering information for your evaluation. Similar evaluation processes will occur for the students at Harlem and St. Luke’s-Roosevelt, but will be coordinated at those sites.

You will have an exam that covers core pediatrics subject matter, drawn especially from the core articles and from your preceptor meetings. Details, including how the exam contributes to your final evaluation, will be discussed later in the clerkship.

### Attachments

(see following pages, please)