

# CLIPP CASES and CONFERENCES FOR 2008-2009

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## Welcome!

The **Computer-assisted Learning in Pediatrics Project** (CLIPP) is a comprehensive Internet-based learning program for use by third-year medical students during their pediatric clerkship. CLIPP's 31 interactive cases are designed to cover all of the core content of the curriculum of the Council on Medical Student Education in Pediatrics (COMSEP). It is expected that each CLIPP case will take a student approximately 45 minutes to complete, so that students may work through the full learning program over the course of an average six-week clerkship.

CLIPP is designed to supplement traditional clerkship teaching and patient care activities. It provides medical students and clerkship directors access to peer-reviewed learning materials that provide a solid foundation in pediatric medical knowledge appropriate to the level of the third-year student.

## About CLIPP

The CLIPP project is based on the premise that current computer-assisted instruction materials are underutilized, and that computer-assisted instruction has so far failed to live up to its potential. The CLIPP project aims to increase CAI use by:

- Starting with a sound educational strategy, developed by a group of leaders in pediatric education from throughout the country;
- Basing the case content on a comprehensive, nationally accepted curriculum; and
- Developing teaching cases nationally with a broader group of Pediatric educators.

CLIPP cases are interactive, frequently requiring the student to make decisions about diagnoses and clinical management, but providing support from an Expert — the case author. CLIPP cases incorporate multimedia extensively, yet are designed to run acceptably over a standard Internet connection.

A unique feature of the CLIPP software is the [Diagnostic Network](#), which focuses the student's learning on clinical reasoning. At key points in the case the student is required to develop a differential diagnosis based on the case findings. The student is also asked to justify the differential diagnosis by showing whether findings argue for or against the differential diagnosis.

# Registering and Logging In

Once you have registered, you can log in to the CLIPP cases using your new login and password. Note: Please register only once!

## Registering to Use CLIPP

1. Click **Go to Cases** at left. The CLIPP login page will open.
2. Click the **Registration** link, which appears after the question, "You are a new user?":  
**You are a new user?**  
Please click here to register.  
[→ register](#)
3. The Userdata window will open.
4. In the Userdata window, type your medical school e-mail address (i.e., Jane.Doe@medicalschoo.edu), your first name and your last name.
5. Click **OK**.
6. The system will send you a Login and Password (a randomly generated 6-digit number) in two e-mail messages. *Note: There may be a delay of several hours before you receive the e-mail from the CLIPP system.* Be sure to save the Login and Password for future use. Your Login name cannot be changed. To edit your password, see the instructions for "Editing Your Registration" below.

## Logging In to CLIPP After You Register

Once you have your Login and Password:

1. Go to **www.clippcases.org**.
2. Click **Go to Cases** in the left frame.
3. On the Login page, type your Login and Password.
4. Click **Login**. The Case Selection page opens.
5. On the Case Selection page, click the name of the desired case (or click **Open case...** to the right of the name). The case will open.

**If you left a case and want to start where you left off:** On the case selection page, click the **Resume session** link below the name of the author:

**20. 7-year-old with a headache - Nicholas**

**Authors:** Mary C. Moran, M.D. - MCP Hahnemann School of Medicine

**Resume session:** → **13 Card(s) finished, Friday, August 1, 2003**

The case opens at the last-completed card.

## Forgot Your Password?

If you have forgotten your password, here's what to do:

1. Go to [www.clippcases.org](http://www.clippcases.org).
2. Click **Go to Cases** in the left frame.
3. At the Login page, click the **Get new password** link below the Login box:



4. On the Forgot Password? page, type your login.
5. Click **OK**. The system will send you a new password.

## Changing Your Password

Once you have your Login and Password:

1. Go to [www.clippcases.org](http://www.clippcases.org).
2. Click **Go to Cases** in the left frame.
3. At the Login page, type your Login and Password.
4. Select the **Edit user data** check box under the Password textbox.
5. Click **Login**.
6. On the User Profile page, enter your desired Password (you cannot change the Login name). Enter it a second time.
7. Click **OK**.

**Problems?** If you have any difficulty registering or logging in, or if you forgot your login or password, please send an e-mail to [CLIPPcases@mac.dartmouth.edu](mailto:CLIPPcases@mac.dartmouth.edu).

Please be sure to include your full name in your e-mail message. Additional questions or comments about CLIPP can be sent to [CLIPPcases@mac.dartmouth.edu](mailto:CLIPPcases@mac.dartmouth.edu).

## **The CLIPP Cases:**

1. **Prenatal and newborn visits**
2. **Infant well child (2, 6 and 9 months)**
3. **3-year-old well-child check**
4. **8-year-old well-child check**
5. **16-year-old girl's health maintenance visit**
6. **16-year-old boy's presport physical**
7. **Newborn with respiratory distress**
8. **6-day-old with jaundice**
9. **2-week-old with lethargy**
10. **6-month-old with a fever**
11. **5-year-old with fever and adenopathy**
12. **10-month-old with a cough**
13. **6-year-old with persistent cough**
14. **18-month-old with congestion**
15. **6-week-old with vomiting**
16. **7-year-old with abdominal pain and vomiting**
17. **3-year-old refusing to walk**
18. **2-week-old with poor weight gain**
19. **16-month-old with first seizure**
20. **7-year-old with a headache**
21. **6-year-old boy with a rash**
22. **16-year-old with abdominal pain**
23. **11-year-old girl with lethargy and fever**
24. **2-year-old with altered mental status**
25. **2-month-old with apnea**
26. **9-week-old not gaining weight**
27. **8-year-old with abdominal pain**
28. **16-month-old with developmental delay**
29. **Infant with hypotonia**
30. **2-year-old with sickle-cell disease**
31. **5-year-old with puffy eyes**

# Navigating a CLIPP Case

How to navigate through a CLIPP case is fairly obvious, but each case nonetheless includes instructions on how to proceed. Below are the navigation buttons and tips on using them.



The case is divided into Cards. When you complete a card, click the **Forward** button at the bottom-right of the screen to advance to the next card.



To step backward to previous cards in the case, click the **Back** button.



As you advance through the case, you can click the **Clipboard** button to navigate to specific, previously seen cards. You cannot skip forward!



After answering a question, click the **Solution** button to see the expert's answer. You must click **Solution** to proceed past a card with a question.



If there is additional information in the Expert window, the **Expert** button at the bottom of the screen will be highlighted. Directions in the card will tell you when to click the **Expert** button.



The left- and right-pointing arrows beneath an image allow you to see a second or third image if the card has more than one image. Directions in the card will tell you when there is more than one image.



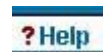
Some images can be magnified. To see a magnified image, click the magnifying-glass icon at the bottom-left of the image.



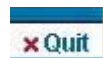
If a card has a sound or movie file, it may take a few seconds for it to load (or much longer if you are using a slow modem). When the file has loaded, click the Play button to see the movie or hear the sound. You may play the file as many times as you want.



Click the **Network** button to open a diagnostic network that you have already created.



For directions on using the software, click the **Help** button in the top-right corner of the screen.



To quit a case, click the Quit button in the top-right corner of the screen. You are then given a choice to quit the software or to select another case.

Review Curriculum and Handout

## **PEDIATRIC HISTORY AND PHYSICAL EXAM-HANDOUT**

The purpose of the medical record is to provide an accurate record of a series of events and their outcomes to ensure communication among a large number of professional and administrative personnel responsible for the care of the patient. The medical record serves as a document for the training of physicians and other medical personnel, and as a vehicle for the recording and retrieval of information for research purposes. It will be made available for review by the Medical Staff and/or Professional Standards Review Organization (PSRO) for completeness, evidence that it reflects events as they occurred, and the quality of care rendered. This audit may address length of stay (LOS), numbers and types of tests, indications for procedures, drug utilization, etc.; and the outcome of the medical course. The medical record is a legal document and as such is subject to subpoena for a variety of reasons, including substantiation of a patient's injury or functional state, documentation of procedures for the purpose of obtaining payment, and evidence of the adequacy or inadequacy of the care rendered.

For these reasons, records should include certain types of information, as noted below. The frame for recording ("traditional" or "problem oriented") provides a mechanism for ensuring the inclusion of the required information. As with any legal document, no changes should be made in medical records without date and signature.

### **TAKING THE MEDICAL HISTORY**

1. It is important to communicate on a level which the patient or parents can understand.
  - a. Begin by addressing the aspect of the problem, which seems most important to the parent.
  - b. Ask open ended questions. Parents may be easily led to give the answer which they believe the physician expects, and therefore inadvertently provide inadequate histories.
  - c. Observe facial expressions of patient or parents for evidence of understanding.
  - d. Re-phrase questions if necessary in order to obtain adequate information.
  - e. Older children and adolescents can often provide more accurate histories than their parents and should be addressed directly.
  - f. When making inquiries in emotionally charged areas, such as those involving possible abuse or sexual activity, it may be essential to interview patient and parents separately.
2. Information obtained from previous medical records and/or referring physicians should be included.

3. Organize material in a logical sequence, usually chronological order.
4. Demonstrate in your history, understanding of the disease and/or symptom complex which the patient presents, by including pertinent positive and negative findings.

## **RECORDING INFORMATION CONCERNING THE PRESENT ILLNESS**

### **Traditional Record**

History obtained from: List individual(s) and reliability of informant, referral source, old records etc.

Chief complaint: Orients the individual reviewing the record as to who the patient is, why he/she is there, and the duration of the illness.

Example- C.C. this is the first MCCG visit of a 5 y.o. BF with a 2 week history of severe cough.

Present illness should contain:

1. When was the patient last in good health?
2. What were the initial signs/symptoms and how did they develop?
3. Were any studies done?
4. What was done for the patient?
5. Who made the recommendation?
6. What happened as a result of the treatment?
7. What is the patient's present condition?
8. Include all pertinent positive and negative history.

“The statement of present illness should be the record of the relevant facts about the problem or a series of problems. Each problem should be discussed separately. All available information concerning a given problem should be presented. If particular information is believed to be of doubtful reliability, then either doubt becomes an important element of the related statement or the statement is altogether omitted.” (Weed)

### **Problem-Oriented Record**

For first visit, may be similar to traditional. Each problem should be listed separately.

## **RECORDING THE PAST MEDICAL HISTORY**

**Perinatal History** is always of importance in pediatrics but is of particular value under the following circumstances:

1. Prematurity
2. Inappropriate development for gestational age
3. Growth retardation
4. Developmental retardation
5. Family history of fetal wastage, unexplained infant mortality, familial disease or congenital anomaly.

The prenatal history should include information concerning complications of this or previous pregnancies (nutritional problems, infectious diseases, exposure to x-rays or toxins including medications, alcohol and tobacco, or abnormalities of fetal size or movement, diabetes, or bleeding). The birth history should include duration and complications of labor if any, type of delivery and condition at birth including Apgar scores if known. Neonatal history should include history of jaundice, pallor, bleeding, cyanosis, dyspnea, seizures, or irritability, and define any complication which required infant to remain in the hospital. Birthweight, length and head circumference should be recorded if known.

**Immunization and Infectious Disease** - Record all immunizations with dates and where they were obtained, if known. If necessary, record “up to date” or “completed prior to school”. If unable to obtain history, record “unknown”. Document all childhood illnesses and dates of infection.

**Nutrition** - The nutritional history should indicate the adequacy of the child’s diet both in quantity and quality. Refusals or excesses of particular categories of food which may indicate inadequate nutrition should be recorded. Intake of vitamins and fluoride supplementation should be recorded as positive or negative findings.

**Allergy** - Record known allergies (food, inhalant, contact, insect). Allergic manifestations should be defined by type, severity, and frequency. State basis for diagnosis (history, skin test, etc.). List medications used, dose, and frequency.

**Accidents, Injuries, Poisonings, Operations** - Self-explanatory.

**Growth** - Should be recorded on the growth chart for each child on each admission. It is ideal to obtain previous measurements from old records if available.

**Development** - Refers to the progression of physical and cognitive skills, which accompany growth in every child. It is essential to evaluate the developmental status of each child on every admission. Exceptions may be made for those children who are admitted frequently at short intervals such as those on weekly chemotherapy. Developmental milestones should be recorded in the developmental guide provided and should indicate the normality or abnormality of the child’s progress in the following areas: visual, gross motor, fine motor, speech, and psychosocial. For school age children, school progress is an important indicator of overall function. If adequate evaluation is not possible because of illness on admission, evaluation should be completed prior to discharge.

**The Behavioral History** - Should reflect the overall assets and liabilities in the child’s temperament. It should indicate the ease or difficulty with which the child and his parents have accomplished such necessary tasks as toilet training, eating, dressing and entry into school. Methods of discipline should be mentioned. Problems with temper tantrums or excessive pliability or aggressiveness should be recorded and problem areas which concern the parents should be emphasized. Describe normal or abnormal peer and sibling relationships.

**The Family History** - Should be recorded in the diagrammatic manner and should include the ages and health of parents and siblings. Record known causes of death in close relatives and known instances of diabetes, cardiovascular disease, collagen vascular disease, allergy,

tuberculosis, congenital anomaly (e.g. hydrocephalus, cleft lip and palate, Down's Syndrome) and familial disease such as muscular dystrophy, cystic fibrosis, childhood cancers, etc. The diagrammatic representation should be extended to include maternal and paternal aunts and uncles if known, siblings, half-siblings, nieces and nephews, if any.

**The Social History** - Should reflect the environmental factors, which affect the child in his daily living. These will usually include family constitution, type of housing, general financial condition of the family, and other family problems which affect the child such as alcoholism in a parent. Specify jobs held by parent, parental absences from home if frequent or prolonged, other relatives with whom the child may live, and foster care or welfare arrangements. Sleeping arrangements and daytime childcare arrangements should be recorded.

**Review Of Systems-** Should record any problem in the past medical history which is either serious or recurrent, which is referable to any given system or group of systems, and which has not been addressed in the present illness or in an other areas of the past medical history. Attention should be directed to the following areas:

**General History** - excessive weight gain or loss, fever, chills, weakness, fatigue, syncope, pain, swelling, pallor, or hypertension

**Skin** - rashes or pigmentary changes

**Head** - headache, concussion

**Eyes** - irritation or infection, visual abnormalities, strabismus

**Ears** - otitis media and externa, otalgia, hearing deficits

**Nose** - discharge, epistaxis or obstruction

**Mouth** - abnormalities of the gingiva, cleft lip or palate

**Pharynx** - recurrent pharyngitis or tonsillitis

**Dental** - abnormalities of dentition, dental caries, toothache

**Respiratory** - chronic cough, pneumonia, bronchitis, wheezing, dyspnea, chest pain

**Breasts** - pain, discharge, enlargement

**Cardiovascular** - congenital heart disease, rheumatic fever, palpitation, exercise intolerance, murmurs, chest pain, dyspnea, cyanosis

**Gastrointestinal** - recurrent abdominal pain, constipation, diarrhea, nausea (with or without vomiting), jaundice, intestinal parasites, melena

**Adolescents only** - menstrual history including length of cycle, duration of flow, dysmenorrhea, vaginal or urethral discharge, sexual history including evidence of venereal disease, abnormalities of function, and use of contraception

**Endocrine** - evidence of thyroid disease including goiter; diabetes, adrenal disease

**Hematologic** - anemia, sickle cell, G6PD deficiency, adenopathy, or bleeding diathesis

**Neurological** - ataxia, seizures, gait abnormalities, sensory deficits, paresthesias, paralysis, and abnormalities of coordination

**Musculoskeletal** - trauma, swelling, arthritis, deformities

## **THE PHYSICAL EXAMINATION**

The physical examination is always an important part of the evaluation of a patient's problems. This is particularly so in pediatrics, since many children are unable to express their subjective sensations or localize pain. The validity of the examination of the pediatric patient depends to a large extent on the ability of the examining physician to obtain the cooperation of the patient. For this reason it is important to consider the level of the child's development when deciding on a most appropriate and effective approach. Patients of all ages and particularly children are responsive to the moods of the examining physician. It is essential for the child to sense that the physician likes and respects him and his parents and cares about the problem which is bothering him or about his general health and growth. In general, time spent becoming acquainted with the child and allaying his fears and anxieties is well worth the investment, as the return is an adequate and informative examination.

**GENERAL INFORMATION** - The hands should be washed with warm water prior to the examination. This is important not only for general hygienic purposes, but because cold hands can undo the most sophisticated approach to the patient.

Infants and young children can usually be disrobed well before the initiation of the examination so that this distracting and sometimes unpleasant procedure does not upset the child at the initiation of the examination. Apprehensive children can sometimes be examined adequately without completely removing other clothing and keeping shirt and pants on may allay their anxiety. Abnormal events such as vomiting and seizures, etc. which occur during the exam should be recorded and described.

**EXAMINATION OF THE INFANT** - Until six to eight months of age, the infant tends to be trusting and inquisitive. Examinations at this age can usually be done without difficulty on the examining table, although an occasional child will object and may be examined on the mother's lap. The infant should be approached directly and warmly with gentle manipulation and quiet vocalizations which indicate interest and reassurance. Those areas of the examination which require the greatest cooperation on the part of the patient should be first, specifically, the examination of the abdomen, heart and lungs; and those which are most apt to stimulate crying such as examination of the ears and throat, should be deferred until last. Examination of the older infant and young toddler are often accomplished best by allowing him or her to remain on the mother's lap. Otherwise the examination is very similar to that of a young infant.

**EXAMINATION OF THE TODDLER** - It is generally agreed that the age from 12 to 15 months to approximately 3 years is the most difficult to examine. While inquisitive and confident in familiar environments, they may be reserved with strangers and anywhere from apprehensive to terrified in the physician's office. Parental reassurance is often, but not always, helpful in dealing with this problem. Much of this examination can also be accomplished with the child in the parent's lap. It is important to tell the child what you are going to do in a warm and friendly way, to allow him to observe and to handle instruments which may be used. The occasional child who is completely out of control should be adequately restrained and examined as thoroughly as possible and then be dressed and reassured that the examination is completed and returned to the parent. This will often alleviate the child's anxiety. It is rarely necessary to have a staff member remove the child from the examining room in order to communicate adequately with the parent.

**EXAMINATION OF THE CHILD** - Be yourself. Be honest with the child concerning what you are trying to do and explain procedures in a way which the child can be expected to understand at his age. Children will respond to genuine interest in things which concern them, but they do not expect adults to be children.

**THE OLDER CHILD AND ADOLESCENT** - These patients are particularly modest and their modesty should be respected. This applies to both girls and boys, and may extend to opposite sex parents. When this is true, and the examining physician is of the opposite sex from the patient, it is preferable to have another staff member in the examining room during the course of the examination.

*End of handout on Pediatric History and Physical Exam*