Pediatrics Objectives and Course Outline
Topics in Medicine – 2005-2006

View class Web page at:
http://medstat.med.utah.edu/library/edumaterials/ecourses/SoMedicine/topics_peds/
Path: Eccles Library home page; Educational Materials > Medicine, School of > Topics In Medicine 7140 > scroll to Pediatrics and click on Topics In Medicine: Pediatrics

COURSE OBJECTIVES

• Students will use the handheld device issued to locate, install and use clinically relevant PDA applications
• Students will use a handheld device to manage personal and clinical information
• Students will develop strategies to search and critically evaluate relevant journal literature in clinical medicine
• Students will develop strategies to generate and prioritize differential diagnoses using a variety of computer aided instruction tools including CLIPP and Pediatric Decision Making Tutorial
• Students will be able to describe and demonstrate the appropriate technique for intravenous access in pediatrics
• Students will develop and practice skills in presenting clinical information in concise and descriptive terms

Week 1: "Know Your Palm" and Evidence-based Medicine Workshop including Frona Tutorial

Objectives

• Set up and configure a personal digital assistant (PDA)
• Develop strategies for searching the literature on a clinical question
• Develop strategies for critically appraising a relevant research article

At the end of this session participants will have:

• Used the basic Palm OS applications (desktop, calendar, address book, etc.)
• Downloaded and installed Acrobat Reader
• Developed strategies to critically appraise a clinical topic
• Student will list electronic resources that assist in the practice of evidence-based medicine

Evaluation

• Successfully run your Palm
• Successfully install the selected applications
• Successful completion of the Frona tutorial for using evidence-based medicine strategies and tools

Assignments

• Finish installing any applications not completed during the class session
• Team up with a classmate to evaluate the assigned application for presentation during Week 2
• Find and evaluate a new application for presentation during Week 2. This can be done with or without a classmates
• Develop a clinical question to search the literature and critically evaluate an article during Week 2
Week 2: Evaluation and Presentation of an Assigned or a New Application

Objectives
- Critically evaluate an assigned application (work with a classmate) AND a new application (work with a partner or on your own) for presentation to peers
  TOTAL PRESENTATION TIME 10 MINUTES PER APPLICATION
- Develop a clinical question, search the literature for evidence, retrieve and critically evaluate an article
  - Student will apply the PICO principle to construct a searchable query and execute the search using MEDLINE
  - Student will critically review a research article in the medical literature to determine validity and applicability using worksheets that are available on the Internet
  - Student will use PDA applications to assist with calculations for odds ratio, relative risk, NNT etc. and interpret the numeric results

By the end of this session participants will:
- Have presented a critical evaluation of a Palm Application based on the points outlined on the assignment worksheet
- Have demonstrated the application for peers and instructor/facilitator
- Developed a searchable clinical question and conducted a search of the literature to find a relevant publication addressing the clinical question.
- Completed an appropriate EBM worksheet to critically review the identified article.

Evaluation
- Feedback by peers and faculty
- Attendance and Participation

Assignments
- Prepare group presentation for Week 3 TIM about the clinical question, the search strategy, and the critical review of the article.
- Use the Palm resources, applications, tools to assist with patient care

Week 3: Presentations of Clinical Search Strategies and appraisal of the article.

Objectives
- Prepare and PowerPoint presentation to describe and review your small groups clinical search strategy (you can sync the PPT to your Palm and present using the handheld device)
- Critical appraisal of an article in the pediatric literature
- Efficiently manage a differential diagnosis list using computerized cases
- Students will develop strategies to generate and prioritize differential diagnoses using a variety of computer aided instruction tools including CLIPP and Pediatric Decision Making Tutorial

By the end of this session participants will:
- Have presented a critical evaluation based on the points outlined on the assignment worksheet
- Contributed to group discussion about strategies in generating differential diagnosis
- Worked interactively in group to generate and narrow differential diagnosis using a computer case.

Evaluation
- Feedback by peers and faculty on presentation of application evaluation
- Attendance and participation

Assignments
- Use the Palm resources, applications, tools to assist with patient care
- Utilize skills for searching the literature on clinical questions for your ward patients.
Week 4: Differential Diagnosis Using Computer Aided Instruction, Intravenous Access Workshop

Objectives:
- Acquire strategies to develop and prioritize a differential diagnosis around a clinical symptom
- Students will be able to describe and demonstrate the appropriate technique for intravenous access in pediatrics

By the end of this session participants will:
- Participated in practicing intravenous access on simulated veins or colleagues
- Attained knowledge of anatomic locations for intravenous access in children
- Contributed to group discussion about strategies in generating differential diagnosis
- Worked interactively in group to generate and narrow differential diagnosis using a computer case.

Evaluation – Same as Week 2

Assignments
- Use the Palm resources, applications, tools to assist with patient care
- Utilize skills for searching the literature on clinical questions for your ward patients.
- Utilize skills for generating expanded and focused differential diagnosis for care of patients.

Week 5: Differential Diagnosis Using Computer Aided Instruction, Pediatric Board game

Objectives:
- Acquire strategies to develop and prioritize a differential diagnosis around a clinical symptom.
- Practice presenting patient information in concise and descriptive clinical terms.
- Discuss and learn about common problems in pediatrics in small groups in the form of a facilitated board game.

By the end of this session participants will:
- Contributed to group discussion about strategies in generating differential diagnosis
- Worked interactively in group to generate and narrow differential diagnosis using a computer case.

Evaluation – Same as Week 2

Assignments – Same as Week 4

Week 6: Evidence-based Medicine

Objectives:
- Evaluate and review landmark articles in the management of a common pediatric problem
- Discuss a critical appraisal of the design of this study and analysis

By the end of this session participants will:
- Complete a critical appraisal via the use of EBM worksheets of a clinical study pertinent to the pediatric population
- Discuss and contrast study design, strengths and weaknesses in review of two articles.

Evaluation – Same as Week 2

Assignments - Return devices to the Eccles Health Sciences Library circulation desk.