

# Librarian Participation in “Hands-On” Evidence Based Medicine Rounds with Pediatric Residents

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## Background

- Evidence based medicine is part of the curriculum for all pediatric residency programs
- ACGME states to achieve competency in patient care, residents must demonstrate ability to “locate, appraise and assimilate evidence from scientific studies related to their patient health problems”
- Many residents learn about EBM in formal settings as opposed to a clinical setting

## Next Steps

- Hold a Resident Focus group to discuss potential improvements to EBM rounds
- More focus on teaching efficient search strategies
- Obtain grant funding for laptops/iPads to better facilitate EBM rounds

## Objectives

- To increase real-time pediatric resident practice of EBM
- To prepare pediatric residents to discuss EBM on inpatient rounds
- To examine if patient care is supported or changed based on resident acquired findings



## Methods

- All pediatric residents rotating on the inpatient floor are invited to attend rounds
- Held bi-weekly (twice per month) and typically last one hour
- Residents formulate PICO questions based on current inpatients with the aid of the medical librarian and attending physician
- After the residents have their question, they perform a literature search and find the best evidence to answer the question
- Residents fill out a PICO worksheet and review their findings with the attending physician
- The following day during ward rounds, a senior resident observes and completes a checklist to see whether or not the residents discussed their findings and whether or not patient care was supported or changed

## Results

- Residents became more familiar and comfortable with using PICO to formulate their clinical questions
- Residents are more prepared to search the literature systematically
- Residents are more prepared to accurately interpret the findings of their literature search

## References

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3. The Pediatric Milestone Project: A Joint Initiative of The Accreditation Council for Graduate Medical Education and The American Board of Pediatrics. Jan 2013. <http://acgme.org/acgmeweb/Portals/0/PDFs/Milestones/PediatricsMilestones.pdf>
4. Kersten HB, Randis TM, Giardino AP. Evidence-based medicine in pediatric residency programs: where are we now? Ambulatory Pediatrics. 2005;5(5)302-5..
5. Flores-Mateo G, Argimon JM. Evidence based practice in postgraduate healthcare education: A systematic review. BMC Health Services Research. 2007;7:119.
6. Jacobson RM. Pediatrics and evidence-based medicine revisited. Journal of Pediatrics. 2007;150:325-6.
7. Malick S, Das K, Khan KS. Tips for teaching evidence-based medicine in a clinical setting: lessons from adult learning theory, Part two. Journal of the Royal Society of Medicine. 2008;101(11):536-43.

**PICO Worksheet and Search Strategy** Name: \_\_\_\_\_

1. Define your question using PICO by identifying: Problem, Intervention, Comparison Group and Outcomes.  
 Your question should be used to help establish your search strategy.  
 Patient/Problem: \_\_\_\_\_  
 Intervention: \_\_\_\_\_  
 Comparison: \_\_\_\_\_  
 Outcome: \_\_\_\_\_  
 Write out your question: \_\_\_\_\_

Example:  
 You see a 2-year old who has bilateral myringotomy tubes in your clinic. He has fever and is on discharge. You diagnose him with R-ACM and you are trying to decide on how to treat him. Do you need to use oral antibiotics? Or since he has myringotomy tubes, can you treat him with ear drops?  
 P: child who has ACM with myringotomy tubes  
 I: antibiotic ear drops  
 C: oral antibiotics  
 O: resolution of ACM  
 Is treating a child with ACM with myringotomy tubes with ear drops just as effective as oral antibiotics in resolving the child's infection?

2. Type of question/problem:  
 Circle one: Therapy/Prevention Diagnosis Etiology Prognosis

3. Type of study (Publication Type) to include in the search:  
 Check all that apply:  
 Meta-Analysis  Systematic Review  Randomized Controlled Trial  
 Cohort Study  Case series or Case Report  
 Editorials, Letters, Opinions  Animal Research  In Vitro/Lab Research

4. List main topics and alternate terms from your PICO question that can be used for your search:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 List your inclusion criteria –gender, age, year of publication, language:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 List irrelevant terms that you may want to exclude in your search:  
 \_\_\_\_\_  
 \_\_\_\_\_

5. List where you plan to search, i.e. PubMed, Google Scholar, DynaMed  
 \_\_\_\_\_  
 \_\_\_\_\_

Senior Resident Name: \_\_\_\_\_ Date: \_\_\_\_\_  
 Intern Name: \_\_\_\_\_  
 Brief description of PICO Question and Evidence:  
 \_\_\_\_\_  
 \_\_\_\_\_

Did the interns present their EBM findings during rounds to the attending?  
 Please circle one: YES / NO

YES

NO

Why did the interns not present their findings?  
 Please circle one:  
 Limited time during rounds  
 Interns did not feel comfortable discussing findings  
 Unsure  
 Other reason (please comment): \_\_\_\_\_

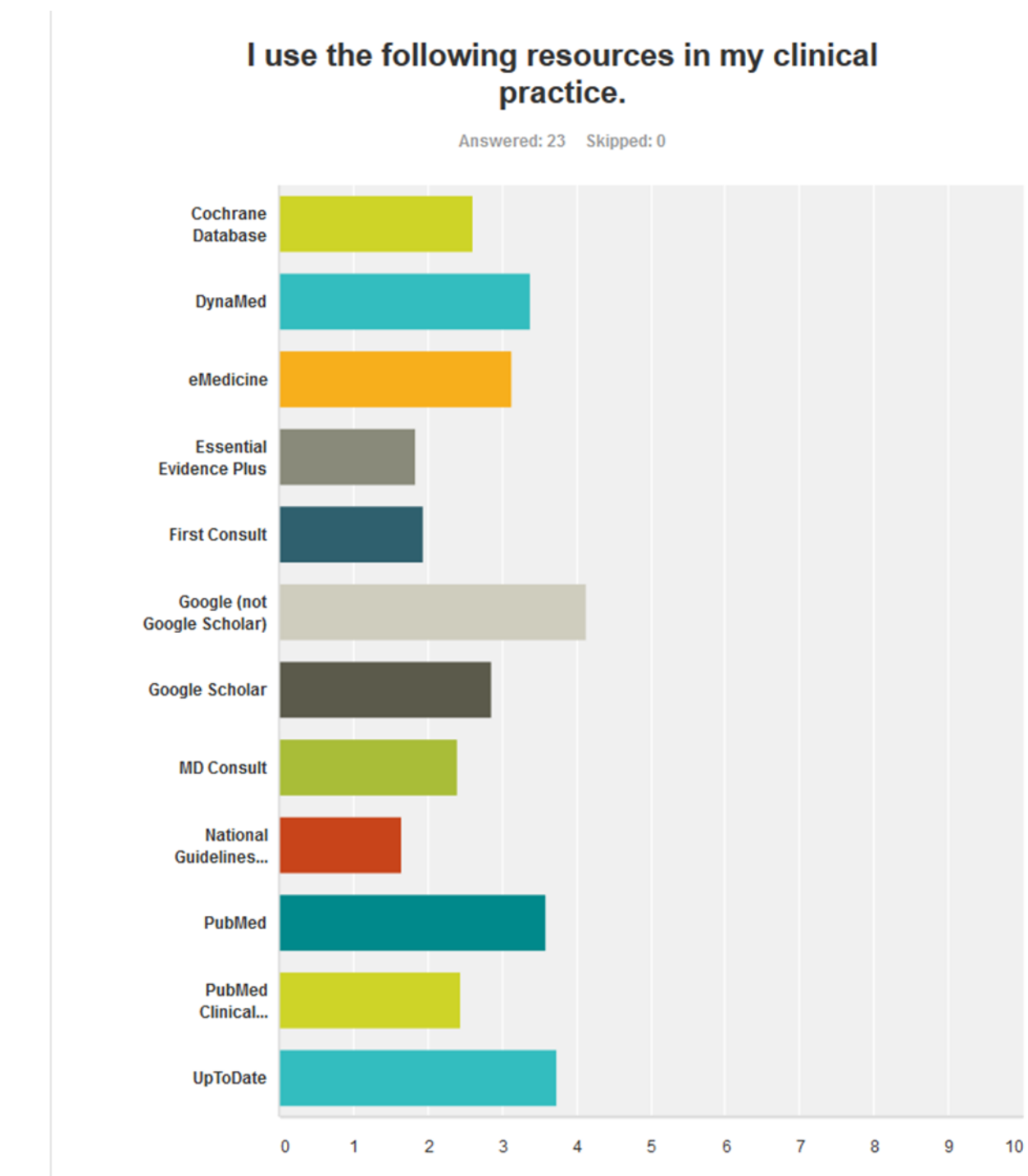
Was patient care either supported or changed based on the EBM findings?  
 Please circle one: YES / NO

YES

NO

Why was patient care not supported or changed by the EBM findings?  
 Please circle one:  
 Attending decision  
 Conflicting evidence presented by attending or other member of team  
 Unsure  
 Other reason (please comment): \_\_\_\_\_

Please return completed forms to Beth Goodman (office ME330a, cell 980-300-3060, email beth.goodman@rutgers.edu)



## PICO Questionnaire

## Day After Rounding Chart

## Resources Used to Answer Clinical Questions

