Objectives

• What are ‘point of care tools’?
• Overview of selected tools:
  UpToDate
  DynaMed
  BMJ Best Practice
  Cochrane Library
  Lexicomp
  The NNT
• Running a search with these tools
• Questions

By the end of today’s 90 minute session, you will feel comfortable selecting a tool and using it in the clinical setting
Haynes Evidence Pyramid

Examples of resources:

- Computerized decision support systems
- Evidence-based clinical practice guidelines
- Evidence-based textbooks
- DARE; health-evidence.ca
- Evidence-based abstraction journals
- Systematic reviews (e.g., Cochrane Library)
- Evidence-based abstraction journals
- Original articles published in journals
Evidence Pipeline Eddy Lang
What are “Point of Care” Tools?

- Fast and effective databases to be used in the clinical setting
- Designed to be simple, and can be accessed on mobile devices or computer
- Clinical evidence that is updated regularly by experts, with the touch of a button!
UpToDate

More than 9,500 clinical topics across 20 specialties

Patient information that can be printed

Detailed graphics search for images

Collection of medical tools for fast calculations

Drug/drug interaction databases (Lexicomp)
DynaMed

• Clinically-organized summaries for over 3,200 topics, and contains content from over 500 medical journals

• Updated daily—new evidence is integrated with existing content and conclusions are then changed as appropriate

• Offers levels of evidence and grades of recommendation to help you decide a course of treatment
BMJ Best Practice

- Information relating to over 10,000 diagnoses
- Each record has a standard structure including History & Exam, Diagnostic Tests, Treatment Options, and Follow up
- Includes a drug formulary for quick prescription guidance
- Information for patients to support treatment options
Cochrane Library

- Seven databases searched simultaneously, ranging from:
  - systematic reviews to
  - RCTs (randomized controlled trials) to HTAs (health technology assessments)
- Easily searchable, using keywords or MeSH terms (from PubMed)
Lexicomp

- Drug & clinical information tailored for different health professionals and environments

- Coverage includes:
  - Diseases & disorders
  - Lab & diagnostic medicine
  - Indication-specific dosing
  - Formulary information

- Also covers over 650 diseases and conditions, in partnership with DynaMed & UpToDate

- Can perform drug interaction analysis
The NNT

- Quick summaries of evidence-based medicine
- Physician developed framework evaluate therapies based on their patient-important benefits and harms (NNT or ARR)
- System to evaluate diagnostics by patient sign, symptom, lab test or study (LR)
- Use the highest quality, evidence-based studies
Fig 1 Updating curves for relevant evidence (128 systematic reviews) by point of care information summaries (log rank $\chi^2=404$, $P<0.001$).

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No of systematic reviews at risk of being cited

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Banzi R et al. BMJ 2011;343:bmj.d5856
Volume of topics covered in each database
### Ranking of Databases

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See the new list from American Association for Pediatric Ophthalmology and Strabismus. Additional lists to be released later this year and early 2014.

How can physicians and patients have the important conversations necessary to ensure the right care is delivered at the right time? Choosing Wisely® aims to answer that question.

An initiative of the ABIM Foundation, Choosing Wisely is focused on encouraging physicians, patients and other health care stakeholders to think and talk about medical tests and procedures that may be unnecessary, and in some instances can cause harm.

NEWS FEED

RT @ORmedicine: We’re working with @ABIMFoundation & #choosingwisely to increase conversations about unnecessary tests & treatments. http/... about 3 hours ago

RT @NASSspine: Join NASS @3:30pm Wed in Theater ABC for Choosing Wisely & This...
1. **Antibiotics should not be used for apparent viral respiratory illnesses (sinusitis, pharyngitis, bronchitis).**

Although overall antibiotic prescription rates for children have fallen, they still remain alarmingly high. Unnecessary medication use for viral respiratory illnesses can lead to antibiotic resistance and contributes to higher health care costs and the risks of adverse events.

2. **Cough and cold medicines should not be prescribed or recommended for respiratory illnesses in children under four years of age.**

Research has shown these products offer little benefit to young children and can have potentially serious side effects. Many cough and cold products for children have more than one ingredient, increasing the chance of accidental overdose if combined with another product.

3. **Computed tomography (CT) scans are not necessary in the immediate evaluation of minor head injuries; clinical observation/Pediatric Emergency Care Applied Research Network (PECARN) criteria should be used to determine whether imaging is indicated.**

Minor head injuries occur commonly in children and adolescents. Approximately 50% of children who visit hospital emergency departments with a head injury are given a CT scan, many of which may be unnecessary. Unnecessary exposure to x-rays poses considerable danger to children, including increasing the lifetime risk of cancer because a child’s brain tissue is more sensitive to ionizing radiation. Unnecessary CT scans also impose undue costs to the health care system. Clinical observation prior to CT decision-making for children with minor head injuries is an effective approach.
Time to Search!

Using your own clinical questions, let’s try running some searches with the point of care tools covered today.
References


- [http://www.thennt.com](http://www.thennt.com)


- Evidenced Based Emergency Care Diagnostic Testing and Clinical Decision Rules, Jessie Pines, Chris Carpenter, Ali Raja and Jeremiah Schuur Copyright © 2013 John Wiley & Sons, Ltd


- [http://www.choosingwisely.org](http://www.choosingwisely.org)