

# **Evidence-Based Medicine Searching PubMed**

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# Goals

- Develop a PICO Question
- Use PubMed to locate articles
- Compare PubMed and Google searching
- Explain My NCBI

“Half of what you’ll learn in medical school will be shown to be either dead wrong or out of date within five years of your graduation; the trouble is nobody can tell you which half—so the most important thing to learn is how to learn on your own.”

Dr. David Sackett

# Searching for the Evidence

- 1. Start with the patient
- 2. Translate the clinical question into a searchable question
- 3. Determine best type of study
- 4. Perform literature search

# The Well Built Clinical Question



# PICO

- What is PICO?
  - P – Patient/Problem
  - I – Intervention
  - C – Comparison (if any)
  - O – Outcome (the outcome expected to occur due to the intervention)
- PICO s are written BEFORE you search

# Asking the PICO question

- A 44 year old woman comes to the office. She has been diagnosed with depression. She explains to you that she will not be taking “drugs” as it conflicts with her beliefs. She wants to know if St. John’s Wort is an effective alternative to traditional antidepressants for her symptoms.

# The PICO question

- P – 44, female, clinical depression
  - I – St. John's Wort
  - C – Antidepressants
  - O – Decrease symptoms of depression
- 
- In a 44 woman with clinical depression, is St. John's Wort as effective as antidepressants in treating her symptoms



**Search MEDLINE/PubMed via PICO with Spelling Checker**

*Patient, Intervention, Comparison, Outcome*

[go.usa.gov/xFn](http://go.usa.gov/xFn)

**Patient/Problem:**

**Medical condition:**

**Intervention:**

(therapy, diagnostic test, etc.)

**Compare to:**

(same as above, optional):

**Outcome:**

(optional)

Select Publication type:

Not specified ▼

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# PICO Feature

# <http://pubmedhh.nlm.nih.gov>

# http://babelmesh.nlm.nih.gov/pico.php?in1=ENG

## PICO Linguist [\(Beta\)](#)

(PICO=Patient, Intervention, Comparison, Outcome)

Search MEDLINE/PubMed

[go.usa.gov/xFK](http://go.usa.gov/xFK)

Select input language: [\[Arabic\]](#) [\[Chinese\]](#) [\[Dutch\]](#) [\[Finnish\]](#) [\[French\]](#) [\[German\]](#) [\[Italian\]](#) [\[Japanese\]](#) [\[Korean\]](#) [\[Portuguese\]](#) [\[Russian\]](#) [\[Spanish\]](#) [\[Swedish\]](#) [\[English\]](#)

Patient/Problem:

Age Group:

Gender:

Intervention:

Comparison [leave blank if none]:

Outcome (optional):

Select a publication type:

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# PICO Activity

- Develop a PICO for two of the scenarios in your notebook



Excellent video about evidence  
based practice...

<http://youtu.be/QUW0Q8tXVUc>



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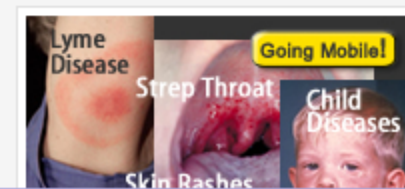
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## PubMed

PubMed comprises more than 23 million citations for biomedical literature from MEDLINE, life science journals, and online books. Citations may include links to full-text content from PubMed Central and publisher web sites.

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## Search NCBI databases

Search : PubMed

Search

Hint: clicking the "Search" button without any terms listed in the search box will transport you to that database's homepage.

## Saved Searches

Search Name	What's New	Last Searched
<b>PubMed Searches</b>		
"ECT--Ma [REDACTED]"	0	7 days ago
("Cochrane Database Syst Rev") ("ACP J Club")	4844	6 years ago

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Your bibliography contains **no items**.

Use the "Send to > My Bibliography" menu in PubMed to add citations,  
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<a href="#">Other Citations</a>	<a href="#">edit</a> 0	<a href="#">Private</a>	Standard

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## Recent Activity

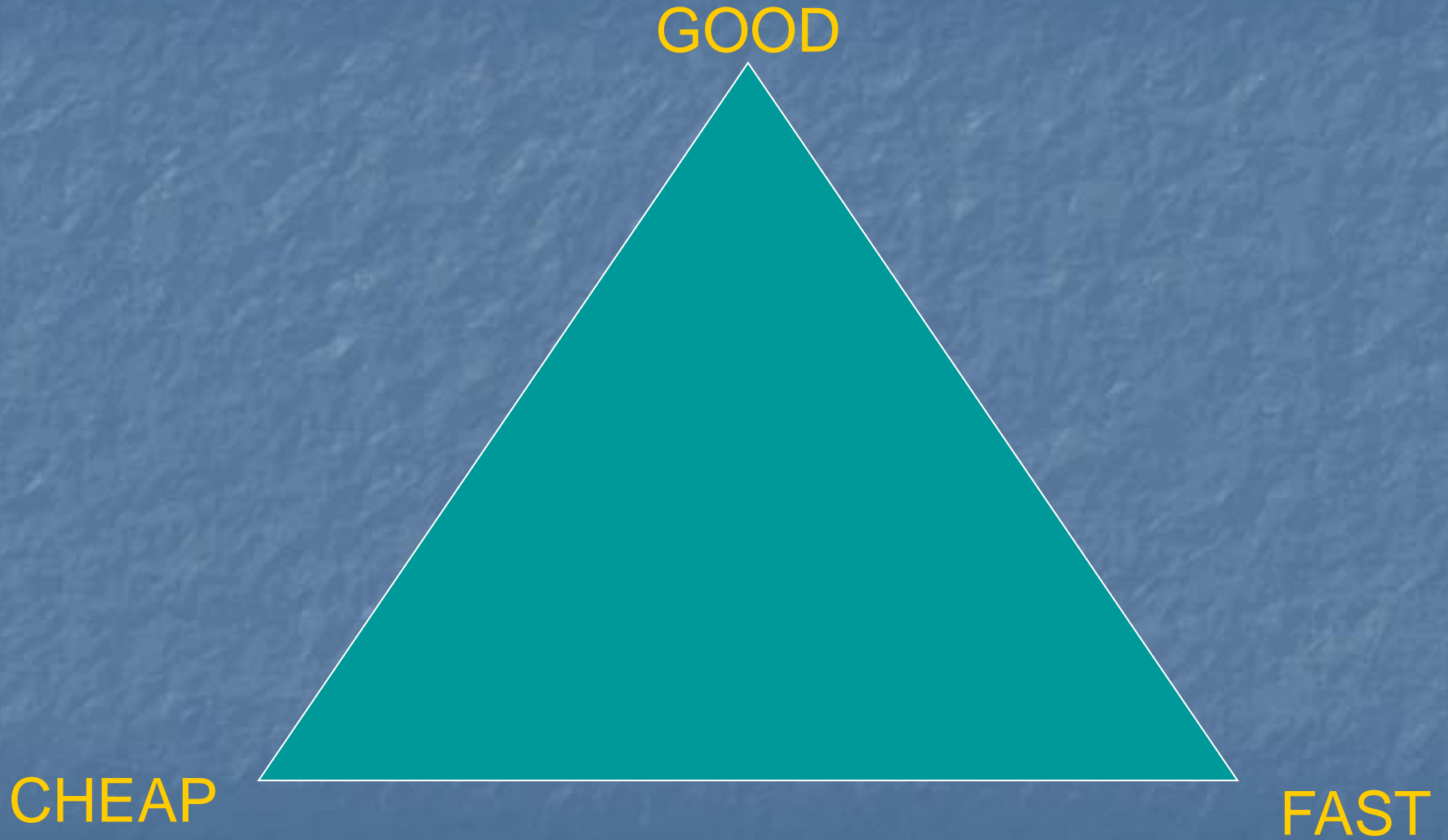
Time	Database	Type	Term
12:49 PM	PubMed	search	("Cochrane Database Syst Rev")["Journ...
12:48 PM	PubMed	search	Using Preferences: My NCBI Help

## Filters

Filters for: PubMed (2 active)

Active	Name	Type
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# “Trilemma”





# Searching for Peanut Allergy

- Google → 5,290,000 million hits
- Google Scholar → 3,400 hits
- PubMed → 1,678 hits
- PubMed with MeSH → 663 hits

# Google/Google Scholar

- Searches full text
- Useful when lack good Mesh heading
- Phrase searching
- Newly published/ahead of print
- $\neq$  include all PubMed
- Less specific
- Ranking of results