FINDING THE EVIDENCE:
PART 1

PHYSICAL THERAPY RESEARCH GUIDE

CHARLOTTE BECK, LIBRARIAN
NEXT 3 CLASSES

- **Finding the Evidence I** - Jan 21
  - Explore clinically relevant PT resources
  - Introduction to search techniques

- **Finding the Evidence II** - Mar 11
  - PT databases
  - Structured Search in Medline (Ovid)

- **Tutorials** - Mar 18
  - Practice for Exam on Mar 22
Survey feedback

• Effective, efficient, comfortable
• Quality Physical Therapy sources
• Search techniques
• Critical appraisal
• UBC Library
• Handling technical difficulties
• References
OBJECTIVES/SCHEDULE

– Create a clinical question using PICO
– Explore and appraise Key PT EBP
– Discover search tools in Pubmed
– Introduce CINAHL
Discovery Tools

- Summon
- UBC Full text
- Google Scholar
- Google
Specific sources of evidence in EBP

Explore the 6S Pyramid

- **SYSTEMS**: are electronic systems which can be sophisticated enough to link to patient records and to prompt practitioners about guidelines for care.
- **SUMMARIES**: provide an outline of management options for a given health issue. Summaries incorporate the highest quality and most synthesized sources of research evidence.
- **SYNOPSIS OF SYNTHESIS**: summarize the findings and implications of high quality systematic reviews.
- **SYNTHESIS**: are systematic reviews that provide rigorous summary of all primary research evidence that could be found relevant to a particular focused question.
- **SYNOPSIS OF SINGLE STUDIES**: provide brief summaries of results and implications of single high-quality studies.
- **STUDIES**: are related to a particular focused question.
What evidence is there that exercising with video gaming systems improves balance in aged people who have had a stroke?
PICO(T)

P  Aged people who have had a stroke
I  Video gaming systems
C  [none]
O  Improve balance
CLINICAL QUESTION

Among people who have had a stroke (P)
Do video systems such as wii, Kinect, etc. (I)
Improve balance (O)?
Activity: PICO

• Review the scenarios
• Identify the P I C O elements
• Write a clinical question
• Review
UBC LIBRARY

- [www.library.ubc.ca](http://www.library.ubc.ca)
- Login with CWL; AskAway; Research help
- General search & other tabs
  - Summon: Full text, books/ebooks
  - Folders and citing
- **Physical Therapy Research Guide**
  - Orientation; PT resources; workshop slides
Sources of Information

- Different information sources
- Have different uses
- At different times
Question topic

Do I know nothing about this?

No

Is there a PT guideline?

Check Point of Care resource

What recent research is there?

End

Yes

Check Definition, Background

Check for Systematic Reviews, RCTs etc.
Levels of Evidence
Types of Sources

• Background questions:

• Use:
  – Textbooks; EBP resources; Internet websites

• Search technique:
  – 1 or 2 concepts from PICO
Definitions Activity

Places to find definitions:

• Physiopedia
• Wikipedia

Evaluating reliable sources

• Merck Manual (via Indexes and Databases)
• MedlinePlus
Background Activity

Check out some textbooks:

General medical eg Harrison’s,
Physical Therapy eg Broddom’s
• Via Access Medicine
• Via ClinicalKey
Tips

• Textbooks - general information;
  – Look in PT books specifically
  – Look for a chapter
  – Consider manifestation of the disease eg paresis for stroke
Types of Sources

Hierarchy

- Systems
  - Summaries
    - Synopses of Syntheses
      - Syntheses
        - Synopses of Studies
          - Studies

Type of source

- Computerised decision support systems
- Evidence-based clinical practice guidelines
- Evidence-based abstract journals
- Systematic Reviews
- Evidence-based abstract journals
- Original articles published in journals

Examples of reputable sources

- BMJ Clinical Evidence, DynaMed, eMedicine, PIER, First Consult, UpToDate
- ACP Journal Club, DARE
- Cochrane Database, PubMed Clinical Queries, OTSeeker, PEDro, PsycBITE, SpeechBite, Joanna Briggs Institute
- ACP Journal Club, Evidence Updates, Evidence-Based Nursing, Evidence-Based Medicine
- PubMed/Medline, EMBASE, CINAHL, RAHAB+, OTSeeker, PEDro, PsycBite, Speechbite, PsychINFO


Full list of links (pdf)
A Systematic Review attempts to identify, appraise and synthesize all the empirical evidence that meets pre-specified eligibility criteria to answer a given research question using explicit methods aimed at minimizing bias to inform decision making.

Cochrane Handbook for Systematic Reviews of Interventions: http://handbook.cochrane.org
FINDING SR and Studies

• Pubmed Clinical Queries
  – Systematic Reviews
  – Clinical topics: therapy, diagnosis etc.

• Go to Pubmed via Library homepage
  – Search your question using Clinical Queries
Database searching

Efficiency: working in a well-organized and competent way

• Well Organized
  – Structured searching

• Competent
  – Subject headings, keywords, boolean operators, limits
Licensed topical databases

- PUBMED/
  MEDLINE
- EMBASE
- CINAHL
- Other

Peer reviewed
Specific
Specialised
Scholarly
Search tools and techniques

Logical combinations

mORe

OR
Search tools and techniques

Logical combinations

Less

AND
CINAHL

• Ebsco interface
• AH = Allied Health
• Use of subject headings
• Combining searches
• Limits
• Save search
Limits or Refine

- Person characteristics
  - Age, Sex, Ethnicity

- Publication characteristics
  - Type, Date, Language
WRAP UP

• TODAY WE COVERED:
  – UBC Library services and resources
  – How to use PICO to design search process
  – Pre-appraised evidence sources for Rehab
  – Search tools in Pubmed and CINAHL

• Any questions
Resources

• PT Research Guide
  – Finding the Evidence I 21st January 2019

• Course Guide PHTH 526
  – Slides and Handouts
  – OVID Tutorials

• Library
  – Librarians email: wd.ref@ubc.ca
  – Information Desk
NEXT STEPS

Next session on Mar 11 at
Woodward Library
Computer Lab
(3 groups check Canvas)