Locating Evidence

A sample database search for the clinical question:

*What is the effectiveness of restraints in reducing the occurrence of falls in patients 65 and over?*

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STEP 1: Write out your clinical question.

For questions of therapy/intervention, use the **PICO** formula to identify the following elements in your question:

- **Patient/Problem:**
- **Intervention:**
- **Comparison:**
- **Outcome:**
Using the **PICO** formula for this question:

*What is the effectiveness of restraints in reducing the occurrence of falls in patients 65 and over?*

you can identify the following elements:

- **Patient/Problem:**
  - Patients 65 and over, falls

- **Intervention:**
  - restraints

- **Comparison:**
  - No restraints; other intervention; education; other safety measures

- **Outcome:**
  - Reduced falls
What is the effectiveness of restraints in reducing the occurrence of falls in patients 65 and over?

- **Patient/Problem:**
  - Falls in patients 65 and over

- **Intervention:**
  - Restraints

- **Comparison:**
  - No restraints; other intervention; education; other safety measures

- **Outcome:**
  - Reduced falls

**TIP:** Consider **Patient/Problem** and **Intervention** first when planning your search strategy for database search terms. (Most likely, you will determine the **Comparison** and **Outcome** from the article abstracts and full text.)
STEP 2: Select a specialized database.

- **CINAHL Plus** (Cumulative Index to Nursing and Allied Health Literature); indexes nursing and allied health literature

- **MEDLINE/PUBMED** premier biomedical database

- **PsycINFO**: International coverage of the professional and academic literature in psychology, medicine, psychiatry, nursing, sociology, education, pharmacology, physiology, linguistics, and other areas.

- **Cochrane Database of Systematic Reviews**, presynthesized sources

- **MORE** recommended specialized databases in health sciences…
  http://arch.library.nyu.edu/databases/subject/nursing-medicine-allied-health

*Nursing topics are often interdisciplinary; START WITH BOTH CINAHL and MEDLINE*
STEP 2: Select a specialized database

From the libraries home page, http://library.nyu.edu/
select Articles via Databases, then choose a database from the A to Z list
For this question we will start with **CINAHL Plus**
STEP 3: Plan a search strategy by identifying the major elements of your question, in this case \( P=\text{falls} \) AND \( I=\text{restraints} \) and translate to the database vocabulary. Use the online thesaurus or notice the subject heading descriptors highlighted on the left of the search screen:

A keyword search on \( \text{falls} \) AND \( \text{restraints} \) suggests the Major Headings:

- accidental falls
- restraint, physical
Perform a more focused search, using the MH exact subject heading terms accidental falls AND restraint, physical.

Then, locate the Search Options tab to apply LIMITS.
Limits: raising the level of evidence

• In CINAHLPlus, click on Search Options tab to limit to Publication type: “research” OR “systematic review” or try the Clinical Queries

• In Medline/PubMed, use Limits to apply categorical limits, such as age groups, publication types, dates…

• Use Medline/PubMed Advanced Search, More Resources, “Clinical queries” or Medline/Ovid Additional Limits button to select from “clinical queries” Clinical queries include the ability to search for systematic reviews or limit to a clinical study category. More info at: http://www.nlm.nih.gov/bsd/pubmed_subsets/sysreviews_strategy.html

• In PsycINFO, click on Limit a Search, limit by Methodology; try using Clinical Queries.
What is the effectiveness of restraints in reducing the occurrence of falls in patients 65 and over?

In all databases, use Categorical limits on the database LIMITS page for age groups, e.g., aged, child, young adult (rather than keywords such as “elderly”) In this example we want to limit to patients 65 and over.
In CINAHL Plus, use the **Age groups** limit. In this case, limit to "age 65 and over".

In CINAHL, Limit Results by Publication type: Research

When all limits have been selected click on **Search**
Search steps schematically…

Accidental Falls/ AND Restraint, physical/

Falls AND Restraints

CINAHL Plus term: Accidental Falls/
CINAHL Plus term: Restraint, Physical/
Search steps schematically…

Accidental Falls/ CINAHL Plus term: Accidental Falls/

AND

Restraint, physical/

Falls AND Restraints

CINAHL Plus term: Restraint, Physical/
Adding LIMITS…

Accidental Falls/ AND Restraint, Physical/ AND Age group 65 and over

Accidental Falls/ AND Restraint, Physical/

AND

Age group 65 and over
Expanding with OR:

Restraint, Physical/Expanding with OR:

Side rails

Bedside safety rails

Use the OR connector to link synonyms...expand a search with keywords, OR retrieves more...
Search steps schematically…

Accidental Falls

Restraint, Physical OR
side rails OR
Bedside safety rails

AND
Accidental Falls/ AND Restraint, physical/ AND Age group 65 and over AND Publication type: research [CINAHL]
1. **FRAME QUESTION**, Translate the terms of the question to the controlled vocabulary of the database, when possible; use keyword searching when necessary

2. **FINDING**: Select a database (CINAHL Plus, MEDLINE…)

3. Use **AND** to combine terms and narrow a search:
   - accidental falls AND restraint, physical

   Use **OR** to expand a search using synonyms
   - (restraint, physical OR restraints OR side rails OR bed rails)

   Apply categorical limits for publication type, year, age groups:
   - For example:
     - Limit to age group “Aged, 65 and over”
     - Limit to publication type: “research”

4. **ASSESSMENT**: critical appraisal, other sources, other databases
Summary…Remember to try other databases:

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- **PsycINFO**: International coverage of the professional and academic literature in psychology, medicine, psychiatry, nursing, sociology, education, pharmacology, physiology, linguistics, and other areas.

- Cochrane Database of Systematic Reviews, presynthesized sources

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*Nursing topics are often interdisciplinary; START WITH BOTH CINAHL and MEDLINE*
Locating the full text of articles...

• Look for a link from citation to “full text” or

• Search Bobcat to locate Bobst holdings
  [http://www.bobcat.nyu.edu/](http://www.bobcat.nyu.edu/)
  – journals may be held in print on the 9th floor Current Periodical
    Shelves, bound in the stacks by call number, electronically, or on
    microform on A-level

  – journals may be linked electronically in Bobcat

• Interlibrary loan: [http://library.nyu.edu/services/ill.html](http://library.nyu.edu/services/ill.html)
Locating the full text of articles:

1. Effective assessment of use of sitter by nurses in inpatient care settings. (includes abstract); Tzeng H; Yin C; Grunawalt J; Journal of Advanced Nursing, 2008 Oct; 64 (2): 176-83 (journal article - questionnaire/scale, research, tables/charts) ISSN: 0309-4889

2. Commentary: use of sitters and volunteer observers by nurses in inpatient settings. (includes abstract); Evans D; Journal of Advanced Nursing, 2008 Oct; 64 (2): 170-6 (journal article - commentary) ISSN: 0309-4889

3. Use of the acute confusion protocol: a research protocol. (includes abstract); Kratz A; Journal of Nursing Care Quality, 2008 Jan-Feb; 23 (1): 32-38 (journal article - research, tables/charts) ISSN: 0889-3214

4. Older people falling out of bed: restraint, risk, and safety. (includes abstract); Hughes R; British Journal of Occupational Therapy, 2006 Sep; 71 (9): 389-92 (journal article - cartoon, editorial) ISSN: 0308-0226

5. Physical restraint initiation in nursing homes and subsequent resident health. (includes abstract); Engberg J; Castle NS; McCaffrey D; Gerontologist, 2008 Aug; 48 (4): 442-52 (journal article - equations & formulas, research, tables/charts) ISSN: 0016-9013

Click on the NYU icon for full text options.
Effective assessment of use of sitters by nurses in inpatient care settings.
Source: Journal of advanced nursing [0309-2402] Tzeng H yr.2008 vol.64 iss.2 pg.176

Options may link to article full text or...
For some articles you will have the option to check Bobcat for hard copies or order from Interlibrary Loan.
Evidence is hierarchical. Explore the resources linked to the pyramid at: [http://tinyurl.com/nyupyramid](http://tinyurl.com/nyupyramid)
Take home messages

• Evidence is hierarchical
• Exploit the structure of databases
• Start early…
• Ask for help
Getting more help:

• **Watch slide show:**
  Magnet in a Haystack: filtering the literature for research studies.
  [http://tinyurl.com/nyuhealthslides](http://tinyurl.com/nyuhealthslides)

• **Citing your sources in APA style:**
  [http://nyu.libguides.com/citations](http://nyu.libguides.com/citations)

• **Health Resources Page**
  [http://nyu.libguides.com/health](http://nyu.libguides.com/health)