Finding Evidence-Based Information
Assignment 1

- Using the template provided in Blackboard, identify a PICO question that you have developed that is related to an element of a cardiovascular assessment. Your question could be delineated by age, gender, ethnicity, socio-economic status, or it could be related to part of the process.

- When you have finalised your PICO question, develop a search strategy, identifying key words and terms.

- Use ECU Library databases to search for relevant articles.

- Your assignment will comprise the PICO question, search strategy and results, and will also require discussion on the topic of the PICO question and a rationale for the databases selected.
Why use PICO?

- To get the question clear
- To identify the information needed to answer the question
- To translate the question into searchable terms
- To develop and refine your search approach

**Population/Problem**
- Describe the characteristics of your population
- Age, gender, condition

**Intervention**
- What therapy, diagnostic test, exposure or prognosis are you interested in?
- The central part of the PICO framework

**Comparison**
- What is the alternative option?
- The comparison may be ‘usual care’

**Outcome**
- The desired result; better treatment, more accuracy, fewer risks, reduce or eliminate the problem.
Develop an answerable question

Does a physical exercise programme help prevent falls among the elderly?

Explain the importance of your topic
- Lack of evidence, eliminate harmful side effects, new/better treatment
- Your argument needs to be supported by scholarly literature

Make sure your research question is specific and that it is a question and not a statement.
PICO/PICo frameworks

- The PICO search strategy worksheet from the Nursing library guide: Getting Started page.

- Decide which framework you are going to use.

- **PICO (Quantitative)**
  - Population, Intervention, Comparison, Outcome

- **PICo (Qualitative)**
  - Population, Phenomenon of Interest, Context
Question types

On the back of the PICO worksheet there are examples of different types of question.

**Therapy**

In _________, how does _______ compared to _________ effect _________?

- In children with pain and fever how does aspirin compare to ibuprofen to relieve pain and fever.

**Etiology (study of causation or origin)**

Are _______ who have _______ at _______ risk for/of _______ compared to _______ with/without _______?

- Are 30-50 year old women with atrial fibrillation at increased risk of stroke compared to 30-50 year old women without atrial fibrillation?

**Diagnosis or Diagnostic Test**

Are (is) ______ more accurate in diagnosing _______ compared to _______?

- Are mammograms more accurate in diagnosing breast cancer compared to ultrasounds?

**Prevention**

For ______ does the use of ______ reduce the risk of ______ compared to ______?

- For adult patients in the ICU, do basin-less baths reduce the risk of acquisition of resistant microorganisms (e.g. MRSA) compared to basin baths?
Keywords/alternative terms

Does a physical exercise programme help prevent falls among the elderly?

<table>
<thead>
<tr>
<th>Population/Problem</th>
<th>Intervention</th>
<th>Comparison</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elderly</td>
<td>Physical exercise programme</td>
<td>Usual Care</td>
<td>Fall prevention</td>
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</table>

Where do I find related terms?

- Use your own knowledge
- Thesaurus or dictionary
- Wikipedia
- Subject headings/Keywords

- Check the references of relevant articles
- Google & Google scholar
Finding alternative terms:
ECU Worldsearch

From the results list click on the title. View description shows more detailed information.

This includes subjects used to identify the article.
Finding alternative terms: CINAHL Plus

From the results list click on the title.

There are related terms that may be useful for to add to your searches.

**Fall-Prevention Exercises With or Without Behavior Change Support for Community-Dwelling Older Adults: A 2-Year Follow-Up of a Randomized Controlled Trial.**

Authors: Arkukangas, Marina; Tuuemo Johnson, Susanna; Hellstrom, Karin; Anens, Elisabeth; Tonkonogi, Michael; Larsson, Ulf

Source: Journal of Aging & Physical Activity (J AGING PHYS ACTIVITY), Feb 2020; 28(1): 34-41. (8p)

Publication Type: Article - research, tables/charts, randomized controlled trial

Language: English

**Major Subjects:**
- Accidental Falls -- Prevention and Control -- In Old Age
- Therapeutic Exercise -- In Old Age
- Behavioral Changes -- In Old Age
- Support, Psychosocial -- In Old Age
- Physical Performance -- In Old Age
- Physical Activity -- In Old Age
- Self-Efficacy -- In Old Age
- Quality of Life -- In Old Age
- Community Living -- In Old Age

**Minor Subjects:**
- Human; Randomized Controlled Trials; Aged; Aged, 80 and Over; Walking; Motivational Interviewing

**Abstract:**
This study investigates the effectiveness of two fall prevention exercise interventions targeting physical performance, activity level, falls-related self-efficacy, health-related quality of life, and falls: the Otago Exercise Programme (OEP) with and the OEP without behavior change support. In this
Search Tips

**Keywords/main concepts**
Synonyms, Related Items

**Quotation Marks “...”**
Search for a phrase
“health care”

**Truncation:**
Finds alternative endings of a word.
Nurs* finds nurse, nurses, nursed, nursing

**Wildcard:** ?
For different spelling of a word.
P?diatric for paediatric, pediatric
Search operators: OR / AND

**OR:** Between similar terms

Broadens your search, either concept will be in the results.

**Elderly OR Older person**

**AND:** Combine terms

Narrows your search, both concepts must appear.

**Older person AND Exercise**
### PICO logic grid

Does a physical exercise programme help prevent falls among the elderly?

<table>
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<tr>
<td>Age*</td>
<td>Exercise</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Old*</td>
<td>“Physical activity”</td>
<td>“Fall reduction”</td>
<td></td>
</tr>
<tr>
<td>Senior*</td>
<td>“Physically active”</td>
<td></td>
<td></td>
</tr>
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</table>

No need to search for **Comparison** if it is ‘Usual Care’
Use the ‘how to’ guides and tip sheets for each database.

This will help you get the best results.
Search using CINAHL or MEDLINE

Place all related/ alternative terms in one field using the connector OR. Join different terms with AND.

Population/Problem
old* OR elder* OR age* OR senior*

Intervention
AND "physical* activ**"

Outcome
AND "fall prevention" OR "fall reduction"

Including the **Outcome** in the search is not always necessary. For example if you are looking for a more accurate test, a shorter hospital stay, less side effects; this will be included in the discussion/results section of the article.

Tip: You may need to search for a comparison separately to an intervention. There may not be articles that discuss the **intervention** and **comparison** directly.
Limit the search on the left side of the screen under **Refine Results:**

- Year range
- Academic journal
- Major Heading
- Language
CINAHL: Limiting the search

To narrow a search you can filter by Major Heading in CINAHL.

Use the arrow next to Major Heading.

Click on Show More

Select as many headings as you like.

Update
Searching CINAHL, MEDLINE & PsycInfo

Click on **Choose databases**.

Select CINAHL, MEDLINE and PsycInfo by ticking the box.

Then **OK**
Levels of evidence

- Systematic reviews; the gold standard
- Randomised control trials
- Cohort studies
- Case-control studies
- Case series, case reports
- Editorials, Expert opinions
Evidence-Based Practice Databases

The Joanna Briggs Institute (JBI)
- Evidence summaries
- Recommended practices
- Best Practice Information sheets
- Systematic reviews
- Systematic review protocols
- Information is current
- Small database; approx. 3000 records

Cochrane Library
- Systematic reviews
- Register of clinical trials
- Provides high quality independent evidence
JBI search

Use the Multi-field Search

Keep the search simple.

Click this link to view the Evidence summary
JBI search

3. The effectiveness of complex falls prevention interventions in residential aged care settings.
   AN: JBI24742
   Year of Publication
   2020

26. Experiences of community-dwelling older adults with the use of telecare in home care services: a qualitative systematic review.
   JBI Database of Systematic Reviews & Implementation Reports. 15(12):2913-2980, 2017.
   AN: JBI18838
   Year of Publication
   2017

There is no need to limit a search in JBI because it is a selective database with current information.
Results are listed in tabs. Here there are 9 Cochrane reviews and 837 trials.
Referencing

• The Library Referencing guide provides examples and explanations

• Workshops are available

• Quick guide can be printed and should be used with the Library Referencing guide

• Librarians can provide help with APA Referencing
Referencing: JBI & Cochrane

Use the *Nursing specific reference page* for:

- Johanna Briggs Institute
- Cochrane library

Include the database name in Title Case and *italics*.

Include the homepage URL (JBI) or DOI (Cochrane library).
Further help

Academic Skills Centre

Online resources: [http://ecu.edu.au/academicskills](http://ecu.edu.au/academicskills)

Book an online, phone or face-to-face appointment with a [Learning Adviser](mailto:learningadviser@ecu.edu.au)

Email: learningadviser@ecu.edu.au

Library Services

Online resources: [http://ecu.edu.au/library](http://ecu.edu.au/library)

Book an online, phone or face-to face appointment with a [Librarian](mailto:library@ecu.edu.au)

Email: library@ecu.edu.au

Assignment and Referencing Drop-ins

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Time</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-13 (Excl mid semester)</td>
<td>Thursdays</td>
<td>10-11.30am</td>
<td>JO31.106</td>
</tr>
</tbody>
</table>

No need to register, just drop-in. Support from the SNM Senior Learning Adviser, Librarian and a Numeracy Learning Adviser.

Ctrl + Click (PC) or Cmd +Click (Mac) on the images to link directly to the pages above.