Finding Evidence-based Information

- The Joanna Briggs Institute
- MEDLINE
- Cochrane Library
- BMJ Best Practice
- CINAHL Plus Full Text
- informit
The Process to finding evidence-based information

1. Analyse your topic
2. Plan your search
3. Decide where to search
4. Evaluate and manage
A sample case study

You are a recently graduated RN working with a child health nurse. One of her patients is 5 year old Sam who suffers from nocturnal enuresis. His mother said it is a constant problem and it was affecting Sam more lately as he is now getting to the age when children like to have a sleep-over. Sam was reluctant to accept invitations because of his embarrassment.

The conventional therapies include medication (desmopressin in antidiuretic hormone or arginine vasopressin, either of which decrease night-time urine production), and enuresis alarms. His mother is unconvinced about the safety of Sam taking ‘drugs’ and wants to try using a bed wetting alarm. You decide to find out which treatment is more effective by doing a search to find the evidence.
The Process

- Analyse your topic
- Plan your search
- Decide where to search
- Evaluate and Manage

Identify an answerable question.
Analyse your case study – important issue

Identify the answerable question – ask the core question that requires evidence-based information from which to make a decision for the best treatment etc.

You are a recently graduated RN working with a child health nurse. One of her patients is 5 year old Sam who suffers from nocturnal enuresis. His mother said it is a constant problem and it was affecting Sam more lately as he is now getting to the age when children like to have a sleep-over. Sam was reluctant to accept invitations because of his embarrassment.

The conventional therapies include medication (desmopressin in antidiuretic hormone or arginine vasopressin, either of which decrease night-time urine production), and enuresis alarms.

His mother is unconvinced about the safety of Sam taking ‘drugs’ and wants to try using a bed wetting alarm.

You decide to find out which treatment is more effective by doing a search to find the evidence.
In this sample case study, a few key points from the patient interview have been identified. This will enable us to work through the steps to find the best-evidence on which to make a decision for the most appropriate patient care.

In the case study it is identified that:
• Sam is a 5 year old child.
• Sam suffers from nocturnal enuresis
• Sam’s mother advised that it is a constant problem and is affecting Sam.
• Sam’s mother would like to avoid the use of drugs as a form of treatment.

The answerable question for this case study could be:

Is the use of a bedwetting alarm an effective treatment for nocturnal enuresis in young children?

This is a quantitative answerable question, being based on statistics and randomised control trials.

Make sure your research question is specific and that it is a question and not a statement.
Is the use of a bedwetting alarm an effective treatment for nocturnal enuresis in young children?

<table>
<thead>
<tr>
<th>Question parts/concepts</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>5 year old child suffering from Nocturnal Enuresis</td>
</tr>
<tr>
<td>Intervention</td>
<td>Bed wetting alarm</td>
</tr>
<tr>
<td>Comparison</td>
<td>Medications such as Desmopressin or Arginine vasopressin</td>
</tr>
<tr>
<td>Outcome</td>
<td>No bed wetting</td>
</tr>
</tbody>
</table>

The PICO Search Strategy Worksheet can help when designing an effective search strategy.
Plan your search

1. Analyse your topic
2. Plan your search
3. Decide where to search
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Part A: Creating a smart search strategy

- Decide which terms (words) you should use to search.
- Focus on the **who** (is it meant to treat), **what** (disease, condition etc.) and the **Intervention**, as the searchable concepts
- For each concept consider any synonyms & alternative terms

Fundamental to smart searching is to identify all the different ways each concept can/might be expressed - **list them in Database Search Strategy Form.**  
You can do this using dictionaries, thesaurus, the simple internet searches etc.

In doing this you will ensure a comprehensive search strategy from which to find relevant information relating to the research question. This will provide you with the best results.
### Search Terms

<table>
<thead>
<tr>
<th>Question parts (concepts)</th>
<th>Search terms</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>P</strong> 5 year old child suffering from Nocturnal Enuresis</td>
<td>Child/ infant Nocturnal enuresis</td>
</tr>
<tr>
<td><strong>I</strong> Bed wetting alarm</td>
<td>Bed wetting alarm Bedwetting alarm</td>
</tr>
<tr>
<td><strong>C</strong> Medications such as Desmopressin or Arginine vasopressin</td>
<td>Not required due to Sam’s mothers concerns about the use of drugs</td>
</tr>
<tr>
<td><strong>O</strong> No bed wetting</td>
<td></td>
</tr>
</tbody>
</table>
How to find alternative search terms

The description tab in a record in ECU Worldsearch can provide possible alternative search terms (keywords/alternative terms).
How to find alternative search terms

The Major and Minor Subjects listed in an article sourced from a Database can also provide possible alternative search terms (keywords/alternative terms).
**Smart searching**

**Quotation marks** around a phrase:
“Heart attack”

**Truncation** to find different endings for a word:
Nurs* will find Nurse, Nurses, Nursing, Nursed

**Australian v. American spelling**
behavi*r will find Behaviour, Behavior

**Connectors:** AND, OR, NOT
AND to combine terms:
Nurse AND “Patient education”

OR between similar terms
Origin OR History OR Development

More information on [Getting Started](#) in the Nursing Library Guide
## Search Strategy

<table>
<thead>
<tr>
<th>Patient Problem/Population</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Nocturnal Enuresis”</td>
<td>“Bedwetting alarm*”</td>
</tr>
<tr>
<td>Enuresis</td>
<td>“Bed wetting alarm*”</td>
</tr>
<tr>
<td>“Bed wetting”</td>
<td>“Buzzer alarm*”</td>
</tr>
<tr>
<td>Bedwetting</td>
<td>“Enuresis alarm*”</td>
</tr>
<tr>
<td>“Urinary incontinence”</td>
<td>“Behavi<em>r therap</em>”</td>
</tr>
</tbody>
</table>

A potential search strategy:

(“nocturnal enuresis” OR enuresis OR “bed wetting” OR “urinary incontinence”)

AND

(“bed wetting alarm*” OR “buzzer alarm*” OR “enuresis alarm*” OR “behavi*r therap*”)

Library Learning
Questions you may have:

• You may not need to include ‘child’ as a search term, because some databases have the option to refine the search results by age groups. However you may have to include ‘child’ in the search strategy if a database does not have this option.

• The actual search terms used in the search strategy will depend on the database you are using. Use more terms for CINAHL and MEDLINE, use just the medical terms for JBI and Cochrane Library.

• Where do I find the information I need?

• What date parameters will I use?

• Check your assignment guidelines.
Decide where to search

- Analyse your topic
- Plan your search
- Decide where to search
- Evaluate and Manage
Databases and Evidence-based Practice

Identify and use databases that cover the topic area.

**Significant Health Science Databases:**

- CINAHL Plus with Full Text
- MEDLINE

**Specific evidence-based health Databases:**

- The Joanna Briggs Institute
- Cochrane Library
- BMJ Best Practice
- PsycINFO
Access these databases via the Library website homepage or via the Library Guides homepage.
Conducting the Search - CINAHL

In CINAHL, as do most databases the Boolean operator of AND is already populated for you.

Search results: 16
Refine by article (excludes books): N/A as Databases do not contain books
Refine by Academic Journal: 14
Date range – last 10 years: 7
English language: N/A as the 7 results are in English language.

(N.B. that the SNM Assignment Guidelines usually state 5 years or less)
Access this database the same way as you accessed CINAHL

The JBI Database contains systematic reviews, Evidence Summaries, Evidence Based Recommended Practices Consumer Information Sheets, Systematic Review Protocol and Technical Reports. It is a small database with only 3000 records.

Click on the Multi-field search link to search similar to CINAHL

Note: Keep the search strategy simple because of the limited number of records held in this database.
Evaluating and Managing search results

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2. Plan your search
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Evaluate - Scanning & Skimming

Scanning and skimming the search results is a quick process to identify relevant articles.

<table>
<thead>
<tr>
<th>Scanning</th>
<th>Skimming</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading to find specific information to answer a question/solve a problem.</td>
<td>This is a quick initial reading of the piece of information such as an article or evidence summary or randomized control trial to:</td>
</tr>
<tr>
<td>Use your knowledge of how information is organised to quickly find relevant content (e.g., abstract, introduction, conclusion, summary, tables, etc.). This will enable you to:</td>
<td>• establish usefulness and/or</td>
</tr>
<tr>
<td>• locate the relevant sections; and</td>
<td>• obtain an overview (the gist).</td>
</tr>
<tr>
<td>• read only as much as you need to find the relevant information.</td>
<td>Read the title and abstract,</td>
</tr>
</tbody>
</table>

REMEMBER: You still need to analyse for content credibility and relevancy. This will include looking at the quality of the evidence (e.g., was the randomised control trial conducted in the prescribed way) and the relevancy of the conclusions/outcomes.
Relevance - Scanning & Skimming

1. Read the title of the article
2. Read the abstract – relevant?
3. Add to the folder
4. Click on Folder View: and select full articles to read in full
Manage resources

• The Nursing Library Guide: http://ecu.au.libguides.com/nursing
Some useful links


The Workshop recordings

Semester 2 2018: Unit Specific Workshop Dates and links to the Recordings

Below is a list of Unit specific workshops that Maureen Buckingham (Senior Learning Adviser for the School of Nursing and Midwifery) and I will be running in Semester Two 2018. The Weeks align to the School semester timetable (not the generic ECU semester timetable).

These Workshops are in addition to any Unit Drop-ins delivered as part of the Unit Teaching by your Unit Coordinator/Tutor. Refer to your Unit Blackboard site for details of these.

The workshop recordings will be hyper-linked to the Workshop Title when they become available.

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Time</th>
<th>Location</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Wed Sept 12</td>
<td>12:30 - 1:30 pm</td>
<td>JO21.313</td>
<td>Search strategy and using the library databases to find credible information for your essay</td>
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<tr>
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<td>Slides</td>
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<td></td>
<td></td>
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<td>Recordings</td>
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