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Search Process Checklist

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Search Process Checklist

Problem/Issue/Question:

Check to see if there is an established way of doing things:

<input type="checkbox"/>	Talked with hospital/unit experts, nurse clinicians and/or nurse manager.	<input type="checkbox"/>	Checked for available protocols.									
<input type="checkbox"/>	Checked for available hospital/ unit policy	<input type="checkbox"/>	Checked for systematic review/meta-analysis									
<input type="checkbox"/>	Checked for practice guideline:											
	<table border="1"> <tr><td>TRIP Database</td></tr> <tr><td>Professional Orgs. (ex.AORN)</td></tr> <tr><td>Scientific Societies (ex. American Heart Assoc.)</td></tr> <tr><td>Point of Care Tools (ex. Up to Date, Clinical Key)</td></tr> <tr><td>US Preventative Services Task Force</td></tr> </table>	TRIP Database	Professional Orgs. (ex.AORN)	Scientific Societies (ex. American Heart Assoc.)	Point of Care Tools (ex. Up to Date, Clinical Key)	US Preventative Services Task Force		<table border="1"> <tr><td>PubMed/Medline</td></tr> <tr><td>CINAHL</td></tr> <tr><td>Cochrane Database of Sys. Rev.</td></tr> <tr><td>EMBASE</td></tr> </table>	PubMed/Medline	CINAHL	Cochrane Database of Sys. Rev.	EMBASE
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Stakeholders/Those Affected by Project: _____
(May Need to Talk with These People or Departments - Could be Potential Teammates on Project)

Constructing Your Question:

- Start with a background question (broad) and move towards a foreground question (focused – PICO format)

PICO Format – Not Applicable in All Situations

Other Question Formats

PICO Components	Describe PICO Components
P – Patient, Population, Problem, Program: Important Characteristics	
I – Intervention: Drug/treatment, diagnostic/screening test, exposure, etc.	
C – Comparison Intervention (If Applicable): Alternative being considered (placebo, std. therapy, no treatment, gold std.)	<i>What is Being Done Presently</i>
O – Outcome What to measure, accomplish, improve, affect (reduced mortality/morbidity, improve quality of life, accurate & timely diagnosis)	
T – Type of Question	
T – Type of Study	





Search Process Checklist

The Type of Question Can Determine Type of Studies Needed:

- *Always want a clinical practice guideline, systematic review or meta-analysis when possible. Most of the time you will find only primary studies*

Type of Question	Best Type of Study
Therapy : How to select treatments to offer patients that do more good than harm and that are worth the efforts and costs of using them.	Randomized Control Trial (RCT)
Prevention: How to prevent a disease or condition	RCT / Cohort Study / Case Control
Prognosis: How to estimate the patient's likely clinical course over time and anticipate the likely complications of disease.	Cohort Study / Case Control / Case Series or Case Report
Diagnosis: How to select and interpret diagnostic tests.	Blind RCT / Compared to Gold Standard (Best Treatment / Test for Diagnosis)
Etiology/Harm: How to identify causes for disease.	RCT / Cohort Study /Case Control
Cost analysis: Economic costs of all facets of a intervention or disease treatment.	Economic Analysis

Users' guides to the medical literature :A manual for evidence-based clinical practice (2008). In Rennie D. (Ed.), McGraw-Hill Medical: McGraw-Hill Medical : New York.

Restatement of Question Using PICO Components: *(Needs to be answerable/measurable)*

Searching for the Literature or Evidence

Search Terms / Concepts:

PICO Components	Primary Search Terms	Alternative Terms
P		
I		
C		
O		

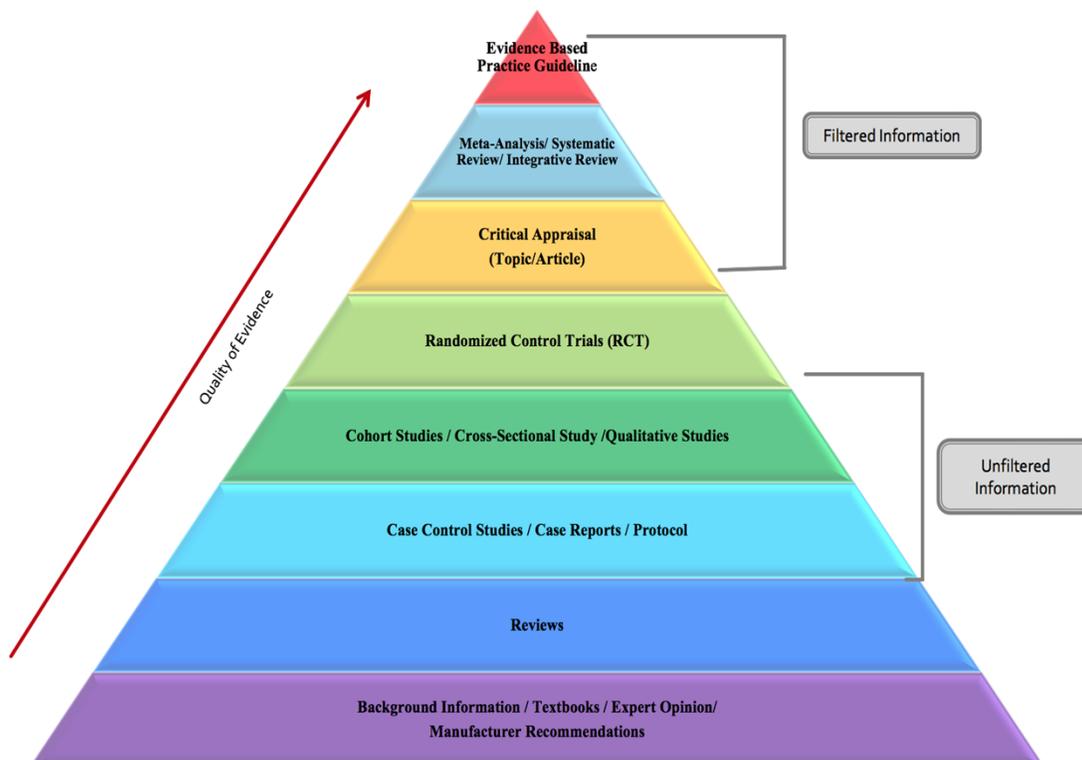


Search Process Checklist

★ **Contact a librarian to discuss your search strategy, possible databases and other aspects of the literature search or other issues concerning your EBP project / question.**

Evidence Pyramid:

- *Try to find evidence towards top of pyramid and work your way down .*



Possible Limits to Apply :

Gender:

- Male
- Female

Species:

- Humans
- Animals

Age Groups: (May Differ Between Databases)

- All Ages
- Newborn (< 1 month)
- Infant (1 - 23 months)
- Pre-School (2 - 5 yrs.)
- Child (6-12 yrs.)
- Adolescent (13-18yrs.)
- Adult (19 - 44 yrs.)
- Middle Aged (45-64 yrs.)
- Elderly (65 - 79 yrs.)
- Aged (> 80 yrs.)

Languages:

- English Only
- Other Languages _____

Years Covered:

- Last 5 Years
- Last 10 Years
- Year Range _____ to _____

Citations Found That are Related to the Topic :

Known Authors or Researchers in the Field :





Search Process Checklist

Useful Keywords or Subject Headings By Database :

- If you find a good article, search for it in PubMed, CINAHL or another database that has a controlled vocabulary and see how it is indexed. This will allow you to find terms that may be useful to find articles on the same topic.

Database #1:	Database #2:	Database #3:

Appraisal of the Evidence Found – Is There Enough?

- Appraising the evidence when it comes to EBP and should be done as team with more than one person appraising each article or piece of evidence. Remember that EBP is a team process and that each person may have a different strength when it comes to appraising evidence.

Proceed with Evidence Based Practice Project / Question	
<input type="checkbox"/> Yes	<ul style="list-style-type: none"> • Questions: Contact Your Nurse Clinician, Nurse Manager or VCU Health Nursing Research and Evidence-Based Leadership Council. • Next Steps: <ul style="list-style-type: none"> ○ Finalize Team Members & Schedule Meetings ○ Assess translation of evidence into practice setting ○ Gather Pre-Intervention / Pre-Project Data ○ Create Action Plan to Implement Change ○ Gather Post Intervention / Project Data ○ Report Results to Decision Makers ○ Adopt Change & Identify Next Steps ○ Disseminate – Poster, Paper, Podium Presentation
Proceed with Research Project	
<input type="checkbox"/> No	<ul style="list-style-type: none"> • Next Steps: <ul style="list-style-type: none"> ○ Contact the VCU Health Nursing Research and Evidence-Based Leadership Council ○ Find or Be Assigned a Mentor ○ Formulate IRB Proposal and Submit for Approval ○ Collect and Analyze Data ○ Determine Impact or Outcome of the Study ○ Disseminate – Poster, Paper, Podium Presentation





Search Process Checklist

Basic Rules of Doing a Good Search

1) Break Search into Concepts

- Easier to Manipulate Your Search to Get Desired Results
- Start with Two Most Important Concepts from Your Question
- Combine with Boolean Operators - **AND, OR, NOT**



2) Come up with Alternative Terms or Concepts for Your Topic

- Databases = Different Audiences
- Remember Terms People Use Are Based on Background/Perspective
- Sources for:
 - Index/Entry Terms of Subject Headings
 - Terms from Related Articles
 - Google Scholar

	Concept/ Term	Synonyms/ Related Concepts (Other Ways to Describe)
Concept/ Term #1		OR
AND	Concept/ Term #2	OR
AND	Concept/ Term #3	OR

Truncation - Train* (*Trained, Trainer, Training, etc.*)
Be careful where you place * as it could return unrelated articles.

Grouping - Use Quotation Marks
Use to search as a phrase - "Pressure Ulcer" instead of "Pressure AND Ulcer"

Compound Words – May need to search word together and separate. (ex. "Health Care"/ "Healthcare")

Title and Abstract – Two Best Fields to Search
PubMed - [TIAB] or Advanced Search/Drop Downs
CINAHL - Use drop down beside Search box / Not Always Necessary





Search Process Checklist

3) Use Subject Heading When Possible

- PubMed – Medical Subject Headings (MeSH)
- CINAHL – CINAHL Headings
- Useful Tools:
 - *MeSH on Demand*: <https://www.nlm.nih.gov/mesh/MeSHonDemand.html>
 - *Yale MeSH Analyzer*: <http://mesh.med.yale.edu/>

	Advantages	Disadvantages
Controlled Vocabulary (Subject Heading)	<ul style="list-style-type: none"> • May provide terms that can broaden or narrow search • Accounts for most common synonyms • Retrieve all items in database indexed under the topic 	<ul style="list-style-type: none"> • Recently coined terms may not have a subject term assigned • Can be difficult to find if no list of subject terms is included in the database
Keyword	<ul style="list-style-type: none"> • Retrieve synonyms, jargon, new or distinctive words • Identify relevant articles quickly to find appropriate controlled vocabulary 	<ul style="list-style-type: none"> • May retrieve irrelevant articles • Your search must account for synonyms and alternative terms

4) Start Your Search Broad and Then Focus

- Use Limits/Filter of the Database (*Publication/Study Types, Language, Gender/Sex, Etc.*)
 - Start at the Top of the Evidence Pyramid and Work Down
- Add an Additional Concept or Term

Finding Too Many Articles? Ways to <i>Decrease/Focus</i> Your Results	Not Finding Enough? Ways to <i>Expand/ Increase</i> Your Results
<ul style="list-style-type: none"> • Do not explode • Restrict subject heading to major focus • Choose any relevant subheadings • Utilize limits to English language, human subjects, review articles, etc. 	<ul style="list-style-type: none"> • Explode whenever possible • Do not restrict subject headings to major focus • Do not choose subheadings • Consider searching back in time, look at citations • Consider doing a keyword search





Search Process Checklist

5) Always Search at Least Two Databases – *Unique Articles in Each Database*

- Provide different ways to access same information base and may find evidence in one database using terminology that would not be found in another database.



Contains biomedical literature. Good when question is medical in nature or when you are not sure where to start



Contains nursing and allied health literature. Good when question falls within the scope of nursing and allied health practice.



Contains psychological literature. Good when question addresses psychological issues.



Resources that contains several different databases, one of those being the database of systematic reviews. Good when you need a systematic review, economic evaluation, and randomized control trials.

Original version appeared in the following article:

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Libraries
Tompkins-McCaw Library
for the Health Sciences

Search Process Checklist

Notes

Roy Brown, MLIS, AHIP
Research and Education Librarian
Nursing Liaison

Email: rebrown2@vcu.edu
Phone: 804-828-1592

Nursing Research Guide.
<https://guides.library.vcu.edu/nursing>

