Eviscore Foundation Course

Module 2 – ACQUIRE

Worksheet 2B : Building Keywords & MeSH Terms

Estimated Time: 20 minutes
Difficulty: ⭐⭐ Beginner

Name: _____
Date: _____

Learning Objectives

After completing this worksheet, you should be able to:

- Identify keywords from a clinical question.
- Generate synonyms for each concept.
- Find appropriate MeSH terms.
- Understand when to use keywords and when to use MeSH.

Why Are Keywords Important?

Different authors may use different words to describe the same concept. Searching with only one word may cause you to miss relevant studies.

Example:

- Stroke
- Cerebrovascular Accident
- Brain Ischemia
- Ischaemic Stroke

A good search considers these alternatives.

Clinical Question

Use your question from Worksheet 2A.

Example:
In adults recovering from stroke, does robot-assisted therapy compared with conventional physiotherapy improve upper-limb function?

Step 1 – Identify the Main Concepts

Write the key concepts from your clinical question.

Concept	Your Answer
Patient / Problem	_____
Intervention	_____
Comparison (optional)	_____
Outcome (optional)	_____

Step 2 – Brainstorm Keywords

Write at least three keywords or alternative terms for each concept.

Concept	Keywords / Synonyms
Patient	_____
	_____
	_____
Intervention	_____
	_____
	_____
Outcome (optional)	_____
	_____
	_____

Step 3 – Identify MeSH Terms

Use the PubMed MeSH Database (or your instructor's guidance) to identify the most appropriate Medical Subject Headings (MeSH).

Concept	MeSH Term
Patient	_____
Intervention	_____
Outcome (optional)	_____

Step 4 – Compare Keywords and MeSH

Complete the table below.

Keywords	MeSH Terms
Free-text words found in titles and abstracts	Controlled vocabulary assigned by indexers
_____	_____
_____	_____

Step 5 – Which Search Would Retrieve More Articles?

Tick your answer.

□ Keywords only
□ MeSH only
□ Keywords and MeSH together

Why?

Step 6 – Practice Exercise

Complete the table below for this new clinical question.

Clinical Question:
In adults with hypertension, does reducing dietary salt compared with usual diet lower blood pressure?

Concept	Keywords	Possible MeSH
Patient		
Intervention		
Outcome		

Reflection

Which part of today's worksheet was most challenging?

□ Identifying concepts
□ Finding synonyms
□ Finding MeSH terms
□ Understanding the difference between keywords and MeSH

Why?

Self-Assessment

□ I can identify keywords.
□ I can generate synonyms.
□ I understand what MeSH terms are.
□ I know why combining keywords and MeSH improves a search.

Evidence Pearl

Keywords help you find recent and emerging terminology, while MeSH terms help you retrieve articles indexed under standardized concepts. Combining both usually produces a more comprehensive PubMed search.

Faculty Notes (Instructor Version)

Example Answers

Concept	Keywords	Example MeSH
Patient	Stroke, Ischaemic Stroke, Cerebrovascular Accident	Stroke
Intervention	Robot-assisted therapy, Robotic rehabilitation, Robotics	Robotics (depending on context)
Outcome	Upper-limb function, Arm function, Activities of Daily Living	Upper Extremity, Activities of Daily Living (depending on focus)

Note: MeSH terms should always be verified using the current PubMed MeSH Database because the controlled vocabulary is updated over time.

Teaching Tips

- Explain that keywords are chosen by authors, whereas MeSH terms are assigned by trained indexers after articles are entered into PubMed.
- Emphasize that very recent PubMed records may not yet have MeSH terms, so relying only on MeSH may miss newly published studies.
- Encourage learners to think of synonyms, abbreviations, and spelling variations (e.g., “ischemic” and “ischaemic”) when brainstorming keywords.

Keyword Expansion Box

Learners can keep this completed table beside them during database searching.

Clinical Concept	My Keywords	Synonyms	MeSH
Patient			
Intervention			
Outcome			

Carry Forward to Worksheet 2C

Use the keywords and MeSH terms you identified in this worksheet to build complete search strategies using AND, OR, and NOT in Worksheet 2C – Boolean Search Practice. This creates a natural progression from identifying search terms to constructing effective database queries.

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