Scoping review protocol

1. Review Title & Question

**Title:** Librarian involvement in competency-based medical education: a scoping review

**Review question:**

Is there demonstrable evidence of librarian involvement in competency-based medical education?

**Core question:**

- How are librarians supporting CBME?
- What outcomes have been used to measure the impact of librarian work in CBME?
- Is there evidence that any of these outcomes affect clinical competence?
- What is the most impactful role played by librarians in supporting CBME?

2. Databases to be searched

Databases: Ovid/Medline or PubMed, Embase, ERIC, CINAHL, Scopus, LITA/LISA/LISTA(?)
For citations: Google Scholar, Web of Science, or SCOPUS
Grey Lit: (MLA, Chapters, ACRL, SLA GEA, AAMC, National Medical Association)

3. PICO

**Problem:** Competency-Based Medical Education

**Exposure(s):** Health Sciences Librarians

**Outcome(s):** TBD

4. List synonyms, related concepts, and controlled vocabulary for each concept
**Problem:** CBME

Competency based medical education
Competency-based medical education
CBME
Entrustable professional activities
EPA(s)
Self-directed learning
Evidence based medicine
Evidence based practice
IPE
Interprofessional education
Quality improvement
System based practice
Health systems science
Health services research
Translational research (+ education?)
Shared decision making
Case based learning
Problem based learning

**Exposure(s):** Health Sciences Librarians

library
libraries
librarian*
Informationist*
Information professional*

**Outcome(s):** TBD

**Eligibility Criteria**

- **Inclusion**
  - UME only (except for GME reflecting on UME training?)
  - United States only
  - LCME accredited only? (look into DO competency based education)
  - Include librarian in intervention
• **Exclusion**
  o non-English language publications

From Molly -- In terms of dates, really you could back up to 1998 (that’s when – in my opinion - the very first AAMC movements towards libraries + CBME began to emerge – see AAMC - Medical School Objectives Project - Report II - Contemporary Issues in Medicine - Medical Informatics and Population Health

• **Types of study to be included**

Any study design or article type will be included?

5. **Build a search**
   • **Concept #1**

   • **Concept #2**

   • **Concept #3**

7. **Risk of Bias & Data Extraction**

**Data extraction (selection and coding)**

Charting as described in Arksey & O’Malley as “a technique for synthesizing and interpreting qualitative data by sifting, charting and sorting material according to key issues and themes….”

Variables for extraction
   • Author, pub year
   • Year study conducted
   • study location
     o Country
     o State
     o Institution
   • UME y/n excluded from data collection form for now
   • Intervention, exposure
   • Librarian role - leader, collaborator, curriculum designer
   • Study aims
   • Domain - EBM, IPE, etc.
● Methodology or design - program evaluation, curriculum development / evaluation, curriculum review, case report / study
● Outcome measures - satisfaction, competency-based, other?
  ○ Specific instrument?
● Findings - positive, no change, negative as related to measure

Risk of bias (quality) assessment

All studies vs. subset?

8. Data Analysis

Strategy for data synthesis

● Descriptive analysis of the extent, nature and distribution of the studies included in the review
● Organize thematically by:
  ○ Content of librarian-led instruction
  ○ change in student attitude / perception of EPA?
  ○ change in student comfort / knowledge of CBME skills?
  ○ change in behaviors / practice?
  ○ stratify / categorize in terms of Kirkpatrick hierarchy?
● Tables / graphs summarizing evidence

Analysis of subgroups or subsets
9. Miscellaneous Information

- Contact details for further information

- Organisational affiliation of the review

- Review team members and their organisational affiliations

- Anticipated or actual start date

- Anticipated completion date

- Funding sources/sponsors

- Conflicts of interest

- Stage of review

- Details of any existing review of the same topic by the same authors