

**A BEME Review of the Effectiveness of Teaching Strategies Used in the Clinical Setting on  
the Development of Clinical Skills Among Health Professionals  
Progress Report 10/2017**

Our review is well under way and progressing according to our timeline as outlined in the review protocol. We have dedicated the prior six months primarily to two time intensive tasks: 1) refining our search strategy to ensure completeness 2) completing the first exclusion step based on title/abstract review of the publications our search yielded.

The primary author (C Pierce) and the group's librarian (B Harnke) held frequent, extensive meetings throughout the spring and summer to ensure our search strategy was adequately comprehensive and, more importantly, consistent across the various search databases. The products of these meetings were threefold: 1) the addition of search keywords based on known, important, and relevant literature and 2) matching search terms with their associated terms within the MESH and EMBASE (Emtree) subject headings. 3) Translation of the search strategy to the other databases included for our review.

Following revisions to our OVID/Medline search strategy (see attached for updated search), we performed the first step of our literature search, as outlined in the protocol. The search yielded 49,993 unique publications after de-duplication. While this number of potential publications of interest was several-fold higher than what we initially estimated, we have already completed title and abstract review of these 49,993 identified publications. The initial title and abstract review step identified 1,991 (4.0%) publications that are potentially relevant, or that lacked an abstract, precluding our making a determination about inclusion or exclusion without additional information. We are currently obtaining the full texts of all publications lacking an abstract to allow final determination about inclusion or exclusion for our review. Additionally, we are adjudicating publications where authors have disagreed about inclusion or exclusion and we are building a supplementary database of other potential relevant literature based on key articles referenced in the relevant literature we have identified from key, relevant articles resulting from our search. We are approximately  $\frac{1}{4}$  of the way through reviewing in more detail these remaining 1,991 publications.

In the process of performing the title and abstract review of the initial 49,993 publications, we importantly identified several described teaching strategies used in the clinical setting that were not pre-specified by the review group—supporting the effectiveness of our search strategy. We also identified using our search strategy a review protocol published contemporaneously by a separate group in *Systematic Reviews* with a similar aim.<sup>1</sup> Our review, while seeking to answer a similar question, differs as we include undergraduate learners training in a clinical setting.

Our steps over the next six months will be: 1) to reach consensus about inclusion or exclusion of the remaining 1,991 publications (goal completion by 11/2017) 2) begin data extraction for those articles meeting inclusion criteria (goal start date 12/2017) 3) completing step 2 of our search strategy, e.g re-searching the literature for any residual publications related to the effectiveness of specific teaching strategies we have identified with our already completed search (begin by 1/2018). By adhering to this

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<sup>1</sup> Wiese A, Kilty C, Bergin C, Flood P, Fu N, Horgan M, et al. Protocol for a realist review of workplace learning in postgraduate medical education and training. *Systematic reviews*. 2017;6(1):10.

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timeline, we intend to begin drafting the manuscript by spring of 2018 with a goal completion date of October 2018.

Run on 8/29/2017

Database(s): Ovid MEDLINE(R) Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily, Ovid MEDLINE and Versions(R)

Search Strategy:

#	Searches	Results
1	((communication or reasoning or decision making or interpersonal or inter-personal or diagnos* or problem solving or document* or synthesiz* or thinking or conception or conceptual or teaching) adj2 (ability* or knowledge or skill* or competenc* or higher level)) or ((doctor or physician or faculty or therap* or profession*) adj3 (nurse or patient or student) adj3 relation*) or empath* or (clinic* adj2 (ability* or knowledge or skill* or competenc* or higher level or communication or reasoning or decision making or diagnos* or problem solving or synthesiz* or thinking or documentation or teaching)) or ((patient* or physical) adj2 (exam or exams or examination* or history or histories or assessment or reassessment)) or (bedside adj3 (manner or skill* or psychology)) or (patient adj1 physical) or palpation or percussion or auscultation or medical interview* or professionalism or heuristic* or (diagnos* adj2 (differential or reasoning or possibility*)) or treatment plan* or critical thinking or (Humanis* adj2 (development or education or principle*)) or Patient interaction* or (therap* adj2 (alliance or relationship*)) or ((learner or student or patient or person) adj3 (centered* or centred*)) or learn* environment).tw,kf. or physical examination/ or exp auscultation/ or exp palpation/ or percussion/ or Medical History Taking/ or Patient-Centered Care/ or Clinical Competence/ or Clinical Decision-Making/ or exp Problem Solving/	688499
2	((train or training or educat* or pedagog* or didactic or andragog* or instruct* or learn* or teach*) adj3 (strateg* or model* or method* or plan* or intervention* or prompt or cue)) or (bedside adj2 teaching) or mnemonic or memory aide* or near-peer).tw,kf. or exp models, educational/ or Teaching/mt or Teaching Rounds/mt or Preceptorship/mt	120886
3	1 and 2	22210
4	limit 3 to yr="1970 -Current"	22162
5	limit 4 to english language	21014

The above search strategy is for OVID/Medline only. The results number does not include publications obtained from searching the other databases. Thus, this number differs from the total number of publications that were included for initial title/abstract review, as described above.