1. COVER SHEET

PROTOCOL FOR PROPOSED BEME TOPIC REVIEW GROUP

TITLE:

A SYSTEMATIC REVIEW OF THE APPROACHES TO MULTI-LEVEL LEARNING IN THE GENERAL PRACTICE CONTEXT: A REALIST SYNTHESIS

Topic Review Group (TRG) (alphabetical)

Katrina Anderson, Associate Professor, Academic Unit of General Practice, Australian National University Medical School, Australia
Gerald D. Denton, Associate Professor of Medicine and Assistant Deputy Head of School,
Ochsner Clinical School, The University of Queensland, Louisiana, USA.
Marie-Louse Dick, Associate Professor, Discipline of in General Practice, The University of Queensland, Australia
Margaret Henderson, Lecturer, Discipline of General Practice, The University of Queensland, Australia
David King, Senior Lecturer, Discipline of General Practice, The University of Queensland, Australia
Jill Thistlethwaite, Professor, Health Professions Education Consultant, Sydney
Yi Wei, Medical Student, The University of Queensland, Australia

Lead reviewer contact details

Marie-Louise Dick | Associate Professor
Discipline of General Practice
School of Medicine | The University of Queensland
Level 8, Health Sciences Building | Royal Brisbane and Women's Hospital Complex
Herston Road | Herston |Brisbane QLD 4029
Phone +61 7 3365 5380 | Facsimile +61 7 3346 5178
Email m.dick@uq.edu.au

ABSTRACT

Globally there has been a large increase in the number of medical schools, medical students and medical graduates over recent decades. Concurrently, there has been an increase in the shift of medical education from teaching hospitals to the community setting. General practitioners (family physicians / family doctors) already play a major role in the supervision and training of medical learners at various stages of their professional development, however there is clearly a need for effective strategies to meet the increasing demand for general practice teaching capacity and for learner placements.

"Multi-level learning", in which education is shared across the different levels of learners such as medical students, registrars / residents, junior doctors and specialists, has traditionally been widely utilised in hospital settings, but much less so in the community-based general practice context. It has been proposed that multi-level learning approaches in community-based settings could increase the capacity for learner supervision in the community and also provide a variety of valuable experiences for teachers and learners.

This proposed BEME review aims to use a realist synthesis approach to evaluate and subsequently inform future practice of the approaches and benefits of multi-level learning in the general practice context by asking "What works, for whom, in what circumstances, in what respects and why?" It is anticipated that it may also inform and potentially enhance the understanding and implementation of multi-level learning in other educational settings.

2. BACKGROUND TO THE TOPIC

Overview:

Globally, in recent decades, there has been a large increase in the number of medical schools and medical students. For example, the intake of medical students into Australian medical schools has been increasing since 2000, with the number of first year students nearly doubling from 1889 students in 2003 to 3886 in 2012. England has seen medical intake numbers increase from 3972 in 1999/00 to 6377 in 2011/12 (1), and the USA is anticipated to meet the 30% increase in medical student numbers proposed in 2006 by the Association of American Medical Colleges (AAMC) to occur by 2020, three years ahead of schedule - by 2017. (2). A flow-on effect of this rapid expansion of medical student education has been the increased number of medical graduates undertaking vocational specialty training.

Also over this same time period, there has been an increase in the shift of medical education from teaching hospitals into the community setting, as was advocated by the World Federation for Medical Education in 1988. (3) The requirement for medical students and doctors in training to have work-based training and supervision in clinical settings, along with the economic pressures for shorter-in-patient stays with early hospital discharge into the community(4) (with resultant less time for medical trainee exposure to hospital patients), support the need for educational supervision in community settings.

Work-based vocational specialty training for most of the medical specialties takes place predominantly in the hospital setting, where vocational trainees are supervised by hospital-based specialists. Vocational training in the specialty of general practice (family medicine) however, commonly takes place in the community setting with only a small part taking place in the hospital setting, the time varying in different countries.

In Australia, general practice is defined as a specialty that provides "person-centred, continuing, comprehensive and coordinated whole person healthcare to individuals and families in their communities". (5) Terms such as 'family medical practitioner', 'family physician' and 'family doctor' are also used to describe the primary care medical practitioner in the international literature. (6) For the purpose of this protocol, further use of the word general practitioner (GP) will be taken to incorporate these additional terms.

Australian GPs play a major role in the supervision and training of medical learners at various stages of their professional development. The range of medical practitioner learners supervised by Australian GPs includes medical students and general practice registrars (medical graduates who are vocational trainees in the specialty of general practice, also referred to as "residents" in the international literature), and more recently also junior doctors.

An increase in educational activity in general practice is also reported in Ireland and the UK. (7, 8)

The community setting has a wealth of learning opportunities for medical education, with general practitioners being the first point of care for patients in many countries. Here, medical learners have the opportunity to see undifferentiated clinical presentations, experience clinical skills development, post-hospital discharge care, chronic disease management, and continuity of care, in addition to a range of acute and palliative care.

General practice placements provide learners with valuable exposure to community-based medicine, yet at the same time increase the demand on GPs to provide supervision and teaching of learners. There is clearly a need for effective strategies to meet the increasing demand for general practice teaching capacity and for learner placements, without overburdening the teaching load for already busy general practitioners.

"Vertical integration" of teaching and learning has been identified as one method to help address the rising demand for teaching capacity within the general practice context. Many definitions, interpretations and applications of vertical integration in the context of medical education have been proposed. A frequently cited and accepted definition of vertical integration of general practice education and training is that proposed by GPET (General Practice Education and Training - the Australian Commonwealth Government body established in 2001 to administer vocational general practice training in Australia) as: "*the coordinated, purposeful, planned system of linkages and activities in the delivery of education and training throughout the continuum of the learner's stages of medical education*". (9)

General Practice Supervisors Australia go on to describe the 'vertical' component of learning integration as relating to "shared learning and teaching within the four stages of GP training and learning: medical student; prevocational doctor; registrar; and GPs participating in continued professional development" (10); i.e. each level is involved in teaching learners in levels below, and different levels of learners learn together.

We are particularly interested in this concept of vertical integration of learning in general practice, i.e. the shared learning across the learner stages, or as we call it in this project "multi-level learning".

Whilst hospital registrars/residents and junior doctors have for many years assisted specialist supervisors in providing teaching and training of medical students and junior doctors in hospital settings - with benefits reported for both students and registrar equivalents when teaching skills courses have been provided (11, 12) - historically this has not been the case in Australian community-based general practices. Instead, GP supervisors have provided most medical student training and supervision, in addition to also supporting other medical learners in their practices. However, in recent years this situation has changed.

In Australia, the use of vertical integration initiatives in general practice is increasing. Stocks et al. reported in 2011 that 11 out of 17 Australian general practice regional training providers (responsible for delivering specialist vocational education and training for general practice registrars) have developed some vertical integration initiatives, including registrars teaching junior doctors and medical students, general practitioner supervisors running multi-level educational sessions, and the provision of basic teaching skills training for GP registrars to facilitate their teaching of other medical learners in the practice.(13)

We know that the uptake of vertical integration in teaching and learning in terms of multi-level / shared / near-peer learning has also been adopted in general practice contexts in the United Kingdom (14-16), and that the importance of registrars / residents developing educational skills and being involved in teaching is clearly spelt out by registrar / resident training bodies in many countries including Australia (6), the UK (17) and Canada (18) and also by some US Family Medicine Residency Programs, for example that of University of Virginia. (19) Training in general practice / family medicine does vary across countries however it also has many similarities.

It has been proposed that multi-level learning approaches in community-based settings could assist with the delivery of education to medical learners, thereby reducing the educational burden on already-busy general practitioners (20, 21), increasing the capacity for learner supervision in the community, as well as providing a variety of different and valuable experiences for teachers and learners. (21) We believe the topic of multi-level learning is of relevance globally, and has the potential to be of relevance not only in community-based general practice settings, but also to health professions and disciplines outside of general practice.

This systematic literature review aims to identify the approaches to multi-level learning in the general practice context internationally, and to summarise these approaches and their reported outcomes including benefits and disadvantages.

Some general reviews incorporating aspects of multi-level learning in the vertical integration of teaching and learning in general practice already exist in the published peer-reviewed literature (for example papers by Rushforth et al. 2010 - looking at general practice registrars as teachers, and O'Regan et al. 2013) (22, 7), and in the grey literature (for example reports by General Practice Education and Training Ltd 2011 and General Practice Supervisors Australia)(23,10). Our proposed BEME review will add to the literature by using a formal systematic review methodology to identify and evaluate empirical studies reporting on the approaches to multi-level learning in the general practice context, their benefits, disadvantages, enablers and facilitators, and by adopting realist methods (described below) to evaluate the studies. Additionally, we have identified in our preliminary scoping literature search, several papers relevant to the topic that have been published since the previous reviews, and that should be considered for inclusion in our systematic review (for example papers by Ahern et al. (2013), and Kleintiz et al, Morrison et al, Thomson et al, and van de Mortel et al, all published in 2014). (24-28)

3. REVIEW QUESTION(S) / OBJECTIVES, TYPE OF REVIEW AND KEYWORDS.

The aim of this project is to systematically explore and evaluate the published literature to identify the approaches to multi-level learning in the general practice context, and to summarise these approaches and their reported benefits and disadvantages. We plan to evaluate these approaches from a realist perspective, with a view to informing future teaching and learning practice internationally and identifying current deficits in knowledge that may be addressed in future research.

A realist evaluation in medical education, "seeks to establish what works, for whom, in what circumstances, in what respect, to what extent, and why" {Wong, 2012 } (34) page 89, by identifying mechanisms, contexts and outcomes (M,C,O) through the development and testing of hypotheses. (29) A realist review (also known as a realist synthesis) is the application of realist methods to secondary research; it is considered to be an approach particularly suited to education research. (30) It "applies realist philosophy to the synthesis of findings from primary studies that have a bearing on a single research question. It uses interpretive cross-case comparison to understand and explain how and why observed outcomes have occurred in the studies included in a review." (30) page 93. In undertaking our realist review, we will refer to the list of key steps to be undertaken as developed by Pawson et al. (2005) (31). These steps fall under the following headings, but with further detail found in Pawson et al. 2005, (31) Box 1 page 24.

Step 1: Clarify scope

- *Identify review questions / Refine the purpose of the review / Articulate key theories to be explored*

Step 2: Search for evidence

- *Exploratory background search; progressive focusing; refining inclusion criteria; purposive sampling to test a subset of theories; final search for additional studies*

Step 3: Appraise primary studies and extract data

- *Use judgment to supplement formal critical appraisal checklists, and consider 'fitness for purpose'*
- *Determine relevance and rigour*
- *Develop 'bespoke' set of data extraction forms and notation devices*

Step 4: Synthesize evidence and draw conclusions

- *Synthesize data to determine what works for whom, how and under what circumstances*
- *Allow purpose of review to drive the synthesis process*
- *Present conclusions as a series of contextualized decision points*

Step 5: Disseminate, implement and evaluate

The key review questions include:

1. What approaches to multi-level learning and teaching have been used in the general practice context?
2. What are the reported benefits and disadvantages of these approaches for each of the participant groups? (e.g. for medical students, junior doctors, general practice registrars , GP supervisors, patients, general practice administration staff, and others (this may include other health professionals working in general practice, and associated educational bodies e.g. universities, registrar training organisations, General Practice Colleges.).
3. What factors are reported facilitators and enablers for the multi-level learning approach in the general practice context?

Hypotheses

The realist review seeks the articulation of key theories to be explored. "Realist review is about refining theories and second thoughts can (and should) occur at any stage as new evidence emerges from the literature or peer review raises questions about the emerging explanations." (31) page 24.

The following hypotheses / theories are proposed to inform the realist review. This list may be modified / refined as new evidence emerges from the literature review.

1. There is a range of approaches in use to facilitate multi-level learning in the general practice setting.
2. Multi-level learning can enhance participant learning by increasing the range of learning experiences for participants (e.g. students, prevocational graduates, registrars and GP trainers/preceptors).
3. Near-peer teaching and facilitation utilised in multi-level learning is effective because of the similar experiences of the teachers and learners.

4. Multi-level learning approaches can enhance the acquisition of teaching skills for participants (e.g. registrars and GPs)
5. Multi-level learning can foster enthusiasm for general practice amongst medical students and junior doctors.
6. Multi-level learning approaches can contribute positively to increasing teaching capacity in the community by sharing the teaching and learning load amongst increased numbers of medical learners in the practice.
7. Multi-level learning approaches can facilitate time efficiencies for GP supervisors by sharing the teaching and learning roles amongst learner levels.
8. Organisation support and planning is important for multi-level learning approaches to be beneficial

Key words are:
General / family practice, family / primary care physician, general practitioner
Multi-level learning, vertical integration, teaching and learning / shared learning / near-peer learning

4. STUDY SELECTION CRITERIA

INCLUSION CRITERIA	EXCLUSION CRITERIA
• Studies that report approaches to multi-level learning that have been principally implemented in the general practice setting (some components may also be implemented in hospital / other community-based settings) • Participants must include general practitioner supervisors and at least two other learner levels (e.g. GP registrars and medical students), or two learner levels (not including GP supervisors) • Studies that have evaluation data relating to the process/ outcomes / benefits of the multi-level learning initiative. • In English	• Studies that only focus on the traditional 'GP-supervisor as a teacher' models • Studies with no evaluation data, including commentaries or opinion pieces without empirical data • Studies not published in English

5. SEARCH SOURCES AND STRATEGIES

We propose to search for relevant publications using the following:

Databases

Pubmed, CINAHL, EMBASE
We will also do key word searches in ERIC, BEI, Web of Science and the
Australian Educational Index (AEI).

We will search for studies published in entire electronic databases (i.e. from
their earliest records to the present, to maximise the detection of relevant
articles).

Other sources
- Hand searching titles of articles of appropriate journals in general practice and
  medical education, over the past 10 years.
- Internet searches for key policy documents and grey literature
- Hand searching citation lists of relevant identified articles using Web of
  Knowledge

Proposed primary search terms will include:
- **((Physicians, Family[MeSH] OR Primary Health Care[MeSH] OR Family
  Practice[MeSH] OR "General Practice"[MeSH] OR "General
  Practitioners"[MeSH] OR Family Physician[tiab] OR Family
  Physicians[tiab] OR Primary Health Care[tiab] OR Primary
  Healthcare[tiab] OR Primary Care[tiab] OR Family Practice[tiab] OR
  General Practice[tiab] OR General Practitioner[tiab] OR General
  Practitioners[tiab] OR Family Medicine[tiab] OR "family doctor")) AND
  (Multilevel learning[tiab] OR Multi-level learning[tiab] OR "Near peer"
  OR "Assisted learning" OR "shared learning" OR "vertical Integration" OR
  ("Peer Group"[MeSH Terms] AND ("Learning"[MeSH Terms] OR
  "Teaching "[MeSH Terms])) OR "Models, Educational"[MAJR])**

A scoping search of electronic databases has been undertaken and is shown in
Appendix 1. It has informed the authors' decisions on research questions, aims and
objectives.

6. EXTRACTING DATA

After performing the literature searches, all titles and abstracts identified will be
independently reviewed by two topic review group (TRG) members to identify papers
that meet the study selection criteria. Where differences in opinion between members
occur, and consensus cannot be reached, a third TRG member will review the abstract.
If necessary, the full publication will be retrieved to determine its suitability for
inclusion.

Full publications for the included titles and abstracts will then be retrieved. Each full
paper will be read independently by two TRG members and then discussed to reach
agreement about whether the paper should be retained and coded (i.e. whether the
paper satisfies the inclusion criteria). Where differences in opinion between members
occur, and consensus cannot be reached, a third TRG member will review the paper.

The contents of the papers determined suitable for inclusion will be summarised in a Word document coding sheet /Excel spreadsheet.

Data extraction for two papers will initially be undertaken by all TRG members independently, followed by a review and discussion regarding standardisation of data entries. After that, data entries will be compared between the two reviewers, and consensus reached. If no consensus can be met, than a third TRG member will be involved in the review process.

The proposed spreadsheet will be based on the standard BEME coding sheet and will include the following headings to guide data extraction.

- Paper Title
- Authors
- Location (e.g. City and Country)
- Inclusion criteria satisfied?
    - Setting (e.g. general practices, and in some cases general practice multi-level learner approaches extend beyond the physical boundaries of a given general practice to other teaching and learning sites including hospitals)
    - Multi-level learner involvement (e.g. medical students, junior doctors, general practice registrars / residents, overseas trained doctors)
    - Paper written in English
    - Paper has evaluation data relevant to one or more of the research questions
- If satisfies inclusion criteria, to then document:
    - Study design
    - Study aims / objectives
    - Approaches to multi-level learning used (e.g. registrar teaching student; shared tutorials; involvement of practice management staff in planning and coordination; learning to teach sessions)
    - Methods of evaluation (e.g. self-report, examination results) and Outcomes reported (including outcomes incorporated into hypotheses)
    - Number of practices and participants involved in the evaluation
    - Appraisal of the studies

7. APPRAISAL OF STUDIES

The quality of any included quantitative studies will be assessed according to guidelines suggested in the assessment tools in The Cochrane Handbook for Systematic Reviews of Interventions. (32)

Qualitative research will be appraised using the Critical Appraisal Skills Programme (CASP) checklist for appraising the report of qualitative research. (33)

A "bespoke" coding sheet will be designed for this as part of the BEME review.

Two papers will initially be coded and discussed by all TRG members independently. The coding sheet will be amended if required.

Appraisal of each included paper will be undertaken independently by two TRG members. (TRG members will not review papers that they co-authored.)
Where differences in opinion between members occur, and consensus cannot be reached, a third TRG member will independently review the paper and participate in discussions.

8. SYNTHESIS OF EVIDENCE AND TRANSFER TO RESEARCH AND PRACTICE

The TRG will undertake an analysis of the results reported in included papers, looking at key outcomes regarding the approaches to multi-level learning that are being implemented, examining for evidence / data to confirm or refute the hypotheses listed in Section 3, and exploring possible underlying mechanisms using the realist method of evaluation. (30, 31) Reviewers will also identify any further new hypotheses that may become apparent in reviewing the papers.

Suggested analysis and synthesis processes are discussed in Wong et al. 2013 (34) and include principles such that:
- The analysis and synthesis processes will occur iteratively, with iterative testing and refinement of theoretically based explanations using empirical findings in data sources.
- The data analysis will seek to generate an explanation for causation, i.e. an outcome (O) of interest was generated by relevant mechanism(s) (M) being triggered by context (C).
- There will be a description of how all individuals were involved in the analysis and synthesis processes.

We will attempt to identify prominent recurrent patterns of contexts and outcomes in the data, and then seek to explain these through the mechanisms by which they occur, with reference to our hypotheses.

In doing this, the reviewers will consider the 'evidence' for quality of included studies. This will then be taken into account in our final conclusions and recommendations.

We propose that data synthesis will be undertaken by 2 or more TRG members, and shared and discussed with the review team to ensure validity and consistency in the inferences made.

In relation to multi-level learning in the general practice context, we will seek "to establish what works, for whom, in what circumstances, in what respect, to what extent, and why". (30) We plan to follow recommended guidelines for reporting the synthesis of our realist evaluation. (34)

List of items to be included when reporting a realist synthesis.(34)
1. Title
2. Abstract
3. Introduction
   a. rationale for review
   b. objectives and focus of review
4. Methods
   a. Changes in the review process
   b. Rationale for using realist synthesis
   c. Scoping the literature
   d. Searching processes
   e. Selection and appraisal of documents
   f. Data extraction
   g. Analysis and synthesis processes
5. Results
   a. Document flow diagram
   b. Document characteristics
   c. Main findings
6. Discussion
   a. Summary of findings
   b. Strengths, limitations and future research directions
   c. Comparison with existing literature
   d. Conclusion and recommendations
   e. Funding

This proposed BEME review aims to inform future practice of the approaches and benefits of multi-level learning in the general practice context and to identify current deficits in knowledge that may be addressed in future research. It is hoped that it may also inform and potentially enhance the understanding and implementation of multi-level learning in other settings.

PROJECT TIMETABLE

The review will commence upon approval of protocol.

	Anticipated duration of time	Estimated Dates
Protocol submission		September 2015
Refining literature search protocol and coding sheet	1 month	November 2015
Literature search	2 months	January and February 2016
Data abstraction	3 months	March, April, May 2016
Draft report	2 months	June, July 2016
Final report	2 months	August, September 2016

9. CONFLICT OF INTEREST STATEMENT

Several members of the review team have co-authored published literature related to the topic of multi-level learning and vertical integration in teaching and learning in general practice. We will ensure that published articles satisfying the inclusion criteria will NOT be critically appraised by co-authors.

Funding: The medical student participating in the project received Summer Scholarship funding from her university of study to work on this systematic review. No other funds have been received.

10.   PLANS FOR UPDATING THE REVIEW

The review team would be happy to update this review in future when appropriate. This may be dependent on the availability of team members at the time of review.

11.   CHANGES TO THE PROTOCOL

Minor amendments to the review topic, protocol or data extraction sheets will be recorded along with a rationale for the changes. Any significant changes to the protocol will be submitted to BEME for approval.

APPENDIX 1: Scoping Search September 2015

Search results

Using the search terms listed below for each listed electronic database, resulted in a total of 670 articles.

> PubMed -385
> Embase - 159
> CINAHL -160
> ERIC -5
> Web of Science -72
> BEI – Not held by University of Queensland and so not included in this scoping search, however but we plan to include this database in our definitive search
> AEI – no useful results
>
> Total 781
> 11 duplicates removed for final number of 670
> Final Total 670

The 670 results have been saved into an Endnote database ready for each title and abstract to be reviewed independently by two members of the review team. If a title only is available for a given article, then the full paper will be retrieved for assessment.

Search Terms

PubMed

((Physicians, Family[MeSH] OR Primary Health Care[MeSH] OR Family Practice[MeSH] OR "General Practice"[MeSH] OR "General Practitioners"[MeSH] OR Family Physician[tiab] OR Family Physicians[tiab] OR Primary Health Care[tiab] OR Primary Healthcare[tiab] OR Primary Care[tiab] OR Family Practice[tiab] OR General Practice[tiab] OR General Practitioner[tiab] OR General Practitioners[tiab] OR Family Medicine[tiab] OR "family doctor")) AND (Multilevel learning[tiab] OR Multi-level learning[tiab] OR "Near peer" OR "Assisted learning" OR "shared learning" OR "vertical Integration" OR ("Peer Group"[MeSH Terms] AND ("Learning"[MeSH Terms] OR "Teaching "[MeSH Terms])) OR "Models, Educational"[MAJR])

Embase

Query	Results
#1 AND **#2** AND [embase]/lim	**159**
#1 AND **#2**	**498**
multilevel AND **learning**:ab,ti OR **'multi level'** AND **learning**:ab,ti OR **'near peer'** OR **'assisted learning'** OR **'shared learning'** OR **'vertical integration'**OR **'educational model'**/exp OR (**'peer group'**/exp AND (**'learning'**/exp OR **'teaching'**/de))	**9982**

Query	Results
'general practitioner'/exp OR **'primary health care'**/exp OR **'general practice'**/exp OR **'family physician'**:ab,ti OR **'family physicians'**:ab,ti OR **'primary health care'**:ab,ti OR **'primary healthcare'**:ab,ti OR **'primary care'**:ab,ti OR **'family practice'**:ab,ti OR **'general practice'**:ab,ti OR **'general practitioner'**:ab,ti OR **'general practitioners'**:ab,ti OR **'family medicine'**:ab,ti OR **'family doctor'**:ab,ti	**295153**

CINAHL

#	Query	Limiters/Expanders	Results
S14	S5 AND S13	Search modes - Boolean/Phrase	160
S13	S6 OR S7 OR S12	Search modes - Boolean/Phrase	2,442
S12	S8 AND S11	Search modes - Boolean/Phrase	84
S11	S9 OR S10	Search modes - Boolean/Phrase	11,957
S10	(MH "Teaching")	Search modes - Boolean/Phrase	3,404
S9	(MH "Learning")	Search modes - Boolean/Phrase	9,080
S8	(MH "Peer Group")	Search modes - Boolean/Phrase	5,115
S7	(MH "Models, Educational")	Search modes - Boolean/Phrase	1,731

S6	Multilevel learning OR Multi-level learning OR 'Near peer' OR 'Assisted learning' OR 'shared learning' OR 'vertical Integration'	Search modes - Boolean/Phrase	646
S5	S1 OR S2 OR S3 OR S4	Search modes - Boolean/Phrase	75,184
S4	'family Physician' OR 'Family Physicians' OR 'Primary Health Care' OR 'Primary Healthcare' OR 'Primary Care' OR 'Family Practice' OR 'General Practice' OR 'General Practitioner' OR 'General Practitioners' OR 'Family Medicine' OR 'family doctor'	Search modes - Boolean/Phrase	75,184
S3	(MH "Family Practice")	Search modes - Boolean/Phrase	10,866

S2	(MH "Primary Health Care")	Search modes - Boolean/Phrase	31,532
S1	(MH "Physicians, Family")	Search modes - Boolean/Phrase	8,514

ERIC

("family physician" or "family physicians" or "primary health care" or "primary healthcare" or "primary care" or "family practice" or "general practice" or "general practitioner" or "general practitioners" or "family medicine" or "family doctor") AND ("Multilevel learning" OR "Multi-level learning" OR "Near peer" OR "Assisted learning" OR "shared learning" OR "vertical Integration" OR "educational model")
Web of Science
Web of Science
4   72   #3 AND #2 AND #1
3   5,742   TOPIC: ("Multilevel learning" OR "Multi-level learning" OR "Near peer" OR "Assisted learning" OR "shared learning" OR "vertical Integration" OR "educational model")
2   1,437,927   TOPIC: (Educat* OR teach* Or train*)
1   156,728   TOPIC: ("family physician" or "family physicians" or "primary health care" or "primary healthcare" or "primary care" or "family practice" or "general practice" or "general practitioner" or "general practitioners" or "family medicine" or "family doctor")

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