

Self-Directed Learning in Continuing Professional Development: A Scoping Review

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What is the scope and nature of “self-directed learning” activities in Continuing Professional Development for Canadian physicians?

Objective: To highlight the initial trends in the literature of an ongoing scoping review on the nature of self-directed learning (SDL) activities in Continuing Professional Development (CPD) for Canadian physicians

Background:

- With emergence of CanMEDS 2015 competency-based medical education model, Canadian approach to ensuring physician competency has shifted:

TRADITIONAL, CREDIT-BASED SYSTEM → SELF-DIRECTED LEARNING SYSTEM

- System based on active engagement in self-assessment of learning needs in CPD
- Based on results from an initial, non-systematic literature search, existing reviews do not reflect the unique characteristics of the physician learners currently engaging in CPD
- There is a need for a systematic review of research evaluating the efficacy of SDL in CPD
- The overarching objective of the proposed review is to gather a comprehensive set of data on self-directed learning in CPD that can be used to inform the development of effective opportunities for SDL, leading to measurable changes to clinical practice
- This scoping review will answer the following questions:
 - 1) *What is the scope and nature of “self-directed learning” activities in continuing professional development for Canadian physicians practicing within the CanMEDS competency framework?*
 - a) *How are each of the CanMEDS competencies represented in the self-directed learning components of continuing professional development?*
 - b) *Are there any trends in the deployment and evaluation of self-directed learning interventions related to each of the CanMEDS Roles?*
 - c) *What are the best practices for self-directed learning in CPD?*

Methodology:

Six-stage York scoping review (Arksey & O'Malley, 2005), using enhancements from Daudt et al (2013) and Levac et al (2010)

- Stage 1: Identify research question:** See Background
- Stage 2: Identify Relevant Studies:** See Figure 1
 - Comprehensive, computer aided search on MedLINE; Education Source; EBSCO; PsychINFO; Academic Source Online databases. Specific search strategy developed for each database with assistance from experienced librarians in each faculty (Health Sciences, Arts& Sciences, Education, Engineering) by combining MeSH terms and other relevant key terms
- Stage 3: Select Studies for Inclusion:** See Table 1
 - All assessment tools independently pre-tested using 40 studies, comparing results and discussing discrepancies. Researchers also met on a bi-weekly basis throughout data analysis and refinement in order to ensure consistent approach
 - Title and abstract inspection of all retrieved references
 - Individual assessment of abstracts (and, if necessary, full papers) for relevant papers to determine if inclusion criteria fulfilled
 - Possible cases labelled for “further investigation” and reviewed together by both reviewers
 - Reference lists of key articles to be scanned for relevant articles
 - “Grey literature” scanned, including environmental scan of physicians’ professional websites and colleges
 - Primary investigators and expert advisory committee consulted throughout the process and guided refinement of study selection
- Stage 4: Chart Data (emerging analysis)**
 - CanMEDS roles guiding analysis and categorization of each CPD event featured in literature. Qualitative analysis of database will be conducted
- Stage 5: Collate, summarize and report the results of the review**
 - Findings will be summarized as they pertain to the listed objectives
- Stage 6: Consult With Key Stakeholders**
 - Considered an “optional” stage in original framework
 - Our expert panel is represented by investigators in our research team
 - Panel includes physicians, adult education and CPD researchers and directors/leaders of CPD offices who have direct influence in the CPD offered at many Canadian universities
 - Expert panel contributes feedback on the analysis on a regular basis
 - Cross-Canada representation of expertise in SDL and CPD

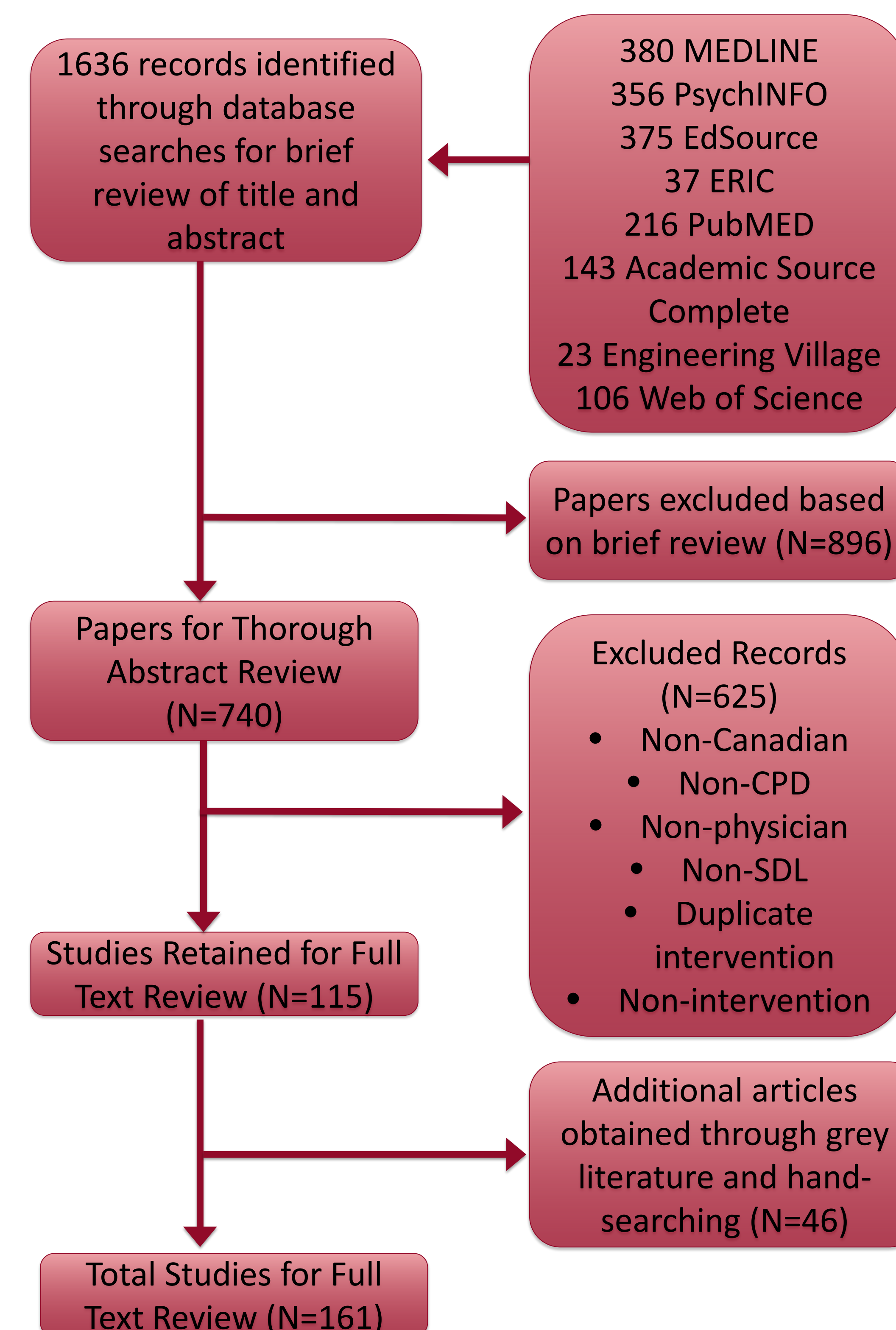


Figure 1: Flow Diagram of Included and Excluded Studies

Inclusion Criteria	Exclusion Criteria
English Language	Non-physician or residents as focus (medical students excluded)
Studies Canadian physicians and/or medical residents	Non-Canadian study
Published since 2005	Does not include a continuing professional development component
Describes self-directed learning; self-regulated learning or self-assessment	Describes a clinical intervention for patient outcomes, rather than an educational intervention
Includes a specific intervention associated with SDL	

Table 1: Study inclusion and exclusion criteria

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Preliminary Findings:

- Family physicians most extensively studied with interventions pertaining to SDL
- Rural physicians are more likely to participate in SDL
- Themes relating to “reflection” and “self-assessment” were prevalent, though physicians are not necessarily effective at assessing their own competence or educational needs
- Other SDL activities participated in by Canadian physicians include:
 - Web-based or “spaced” education
 - Social Interaction
 - Point-of-care learning

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