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

Karen M. Smith1, Danielle N. Naumann1,2, Colin Mascaro3, Simon Kitto4, Joan Sargeant5, Francesca Luconi6, Bob Parson7, Heather Stenerson8, Ivan Silver9, Elaine Chow Baker10


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

Methodology:


• 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 & Science, 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

• 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

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

636 records identified through database search for brief review of title and abstract

Papers For Thorough Abstract Review (N=740)

Papers excluded based on brief review (N=896)

Excluded Records (N=625)

• Non-Canadian
• Non-CPD
• Non-physician
• Non-SDL
• Duplicate intervention
• Non-intervention

Other SDL activities participated in by Canadian physicians:

Non-Canadian
Non-physician

1636 records identified through database search for brief review of title and abstract

Papers For Thorough Abstract Review (N=740)

Papers excluded based on brief review (N=896)

Excluded Records (N=625)

• Non-Canadian
• Non-CPD
• Non-physician
• Non-SDL
• Duplicate intervention
• Non-intervention

Additional articles obtained through grey literature and hand-searching (N=46)

Total Studies for Full Text Review (N=161)

Studies Retained for Full Text Review (N=115)

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

Key References: