

Taking the Pulse of Canadian Family Physicians:

USING A MIXED METHODS APPROACH TO EXPLORE PHYSICIAN LEARNING NEEDS

CONTEXT

Continuing professional development (CPD) programs should be based on physician learning needs. Traditional methods of self-assessment of learning needs rely on internal unguided processes and are not reliable. The application of externally driven reflection may avoid some of the shortcomings of traditional methods of self-assessment and help inform educational content and programming.

OBJECTIVE & RESEARCH QUESTIONS

The objective of this proposed research is to explore whether and eventually how the Information Assessment Method (IAM) [<http://iam2009.pbworks.com/FrontPage>], a tool for guided reflection, may contribute to identifying and prioritizing Family Physician (FP) learning needs at the population level. Quantitative (QUAN) and qualitative (QUAL) data are being collected to answer the following two research questions:

- 1) What FP learning needs are revealed through the reflective process prompted by the IAM? (QUAN)
- 2) What is the meaning of the highlight ratings for the identification and prioritization of Canadian FP learning needs? (QUAL)

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DESIGN, SETTING, PARTICIPANTS, & INTERVENTION

Design Mixed methods explanatory sequential design (Creswell & Plano Clark, 2007).

Within the overall design, quantitative and qualitative descriptive strategies are employed

Phase	Setting/ Participants	Data Collection	Data Analysis	Outcomes
QUANTITATIVE	CFPC* member family physicians Approximately 4300	IAM questionnaire linked to e-Therapeutics+@ highlights	Descriptive statistics	Population level learning needs trends and rankings
QUALITATIVE	10 continuing professional development key informants	Structured telephone interviews	Inductive thematic analysis	Meaning of Rankings Implications for CME

*CFPC = College of Family Physicians of Canada

Integration arrow from Quantitative to Qualitative phase

Analyses

QUAN: Descriptive statistic analyses

QUAL: Inductive thematic analysis from verbatim transcriptions

Outcomes

QUAN: IAM items referring to learning (1.2 I learned something new), motivation (1.3 I am motivated to learn more), and relevance (2.1 Totally relevant)

QUAL: Inductive themes regarding the meaning of IAM measures

QUAN Data Collection: FPs complete a reflective online CME individual learning activity to potentially identify their learning needs



QUAL Data Collection: CPD key informants (administrators and researchers) provide context to and meaning of the quantitative results collected in Phase 1 via a structured interview



What is Qualitative Description (QD)?

- Theoretical underpinnings: firmly rooted in previous knowledge
- Gets to the Who, What, Where, When, Why?
- Thematic Analysis of data
- Stays close to data: first-hand accounts of experiences in participants' own language
- Suited for limited time and resources
- Applicable without formal theoretical training e.g. clinician researchers
- Especially useful in mixed methods studies
- Can take on the flavour of other methodologies
- Outcomes of QD studies often point to areas for further research

Sandelowski 2010

The Information Assessment Method (IAM)

- Documents self-reported "reflection on relevance, cognitive impact, use and health outcomes" of information objects delivered by email (www.iam2009.pbworks.com).
- In the context of individual learning, IAM corresponds to the participation (LEVEL 1) and learning (LEVEL 3A) levels of Moore's Expanded Continuing Medical Education Framework (Moore & al, 2009).
- In this project the information objects are 'highlights' which are green text embedded within a larger chapter. These chapters are an electronic version of the Canadian Pharmacists Association's publication *Therapeutic Choices*. These highlights were selected as appropriate for family physicians in consultation with the College of Family Physicians of Canada.

CONCLUSIONS

- A multi-method descriptive approach to assessing the impact of guided reflection on family physician learning needs may provide novel and useful information for planning CME programs.
- Descriptive quantitative and qualitative methods can be used in combination to provide rich details about new phenomena.

REFERENCES

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