

S RTP - Project Description Form #215

PART I:

Name of Schulich faculty member who will supervise the project	Keith Thompson
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Supervisor's Schulich, Western, Hospital or Lawson Email	kthomps@uwo.ca
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Schulich Department	Family Medicine
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PART II - Project Description

Title of Project	Reconciling the foundational principles of family medicine within a digital health age: A resident perspective
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Background

Dr Ian McWhinney defined 9 foundational principles for a Family Physician's world view of medical practice:

1. Family physicians are committed to the person rather than to a particular body of knowledge, group of diseases, or special technique.
2. The family physician seeks to understand the context of the illness.
3. The family physician sees every contact with his or her patients as an opportunity for the prevention of disease or the promotion of health.
4. The family physician views his or her practice as a "population at risk."
5. The family physician sees himself or herself as part of a community-wide network of supportive and healthcare agencies.
6. Ideally, family physicians should share the same habitat as their patients.
7. The family physician sees patients in their homes.
8. The family physician attaches importance to the subjective aspects of medicine.
9. The family physician is a manager of resources.

A taxonomy of visits was also described as reasons patients present:

1. Patient reaching their limit of tolerance
2. Patients reaching their limit of anxiety
3. Patients presenting with problems of living presenting as symptoms (heterothetic)
4. Preventive care interventions
5. Administrative duties

Little is known nor have there been any studies to look at the effects of digital health integrations upon these

foundational principles of family medicine

In this project we will attempt to reconcile the holistic and artisan dimensions of Family Medicine by addressing each of these principles within the context of digital health and the information and communication technologies (ICT) now becoming an increasing part of the patient's healthcare journey. We will consider the patient and provider relationships with these technologies and how they may support or hinder the traditional therapeutic alliance between Family Physicians and their patients by thematic interview of family medicine residents.

Hypothesis

Specifically, we hypothesize that there may be themes within the reconciliation of Technology with the McWhinney Principles

Digital health technologies can augment the person-centered approach of family physicians by providing personalized health data, facilitating tailored care while maintaining a focus on the individual rather than solely on their illness.

These technologies can offer deeper insights into the contextual factors influencing patients' health, enabling physicians to understand and address the broader social, environmental, and behavioral aspects of illness.

Digital tools, can transform each patient contact into an opportunity for disease prevention and health promotion, extending the reach of family physicians beyond traditional clinical settings.

The use of digital health records and data analytics will enhance the ability of family physicians to view their practice as a "population at risk," allowing for more effective identification and management of community health trends.

Integration of digital platforms will foster stronger connections within the community-wide network of healthcare, enhancing collaborative care and resource sharing.

Digital health technologies, especially telehealth, can bridge geographical distances, aligning with the principle of sharing habitat with patients by providing accessible care regardless of location.

Technologies like remote monitoring and telehealth consultations can extend the practice of family medicine into patients' homes, aligning with the tradition of home visits in family medicine.

These technologies can support the subjective aspects of medicine by capturing patient-reported outcomes and experiences, ensuring a holistic view of health that includes patients' subjective experiences.

Finally, digital tools can optimize resource management in family medicine, enhancing efficiency and potentially reducing healthcare costs, while ensuring high-quality patient care.

This study aims to empirically test these hypotheses, examining the extent to which digital health technologies can be harmonized with the core principles of family medicine, thus contributing to the evolution of the practice in the digital age.

Proposed Methodology

Methodology

Introduction of the Nine Principles and Taxonomy of Visits

Start with a comprehensive introduction to the nine principles, ensuring all participants have a clear understanding.

Present the taxonomy of visits, focusing on nuances like the limit of anxiety, tolerance or heterothetic visits

Video Demonstrations

Show two videos: a) University of Saskatchewan's remote presence technology. b) The TaliAI video demonstrating an AI-assisted visit.

These videos will provide concrete examples of digital health technologies in action, serving as a catalyst for more

informed and detailed discussions.

Overview of Digital Health Technologies

Give a brief overview of various technologies used in virtual care, emphasizing those that are Health Canada or FDA approved to ensure grounded practical technologies

Thematic Analysis of Responses

Use Case Selection and Description:

Ask residents to choose one principle from each of the three groups of foundational principles. This approach encourages diverse perspectives and avoids bias towards more straightforward principles.

Instruct them to describe a use case where digital health technology could fulfill the selected principle.

Challenges of the Use Case:

Discuss potential challenges in implementing these use cases, focusing on:

Clinical workflow integration

Funding and resource allocation issues.

Barriers to patient and provider adoption

Use Case for Marginalized Patient Groups:

Encourage residents to describe or reframe their use case for marginalized groups, such as Indigenous communities, the housing deprived, those in assisted living, or individuals with sensory or mobility challenges. This component is crucial for understanding how digital health can be inclusive and equitable.

Additional Considerations:

Data Collection: Ensure that the interviews or focus groups are structured to facilitate comprehensive thematic analysis.

Ethical Considerations: Address any ethical concerns, particularly when discussing marginalized groups

Feedback and Iteration: A feedback mechanism where residents can reflect on their peers' use cases, fostering a more collaborative and comprehensive learning environment.

Expected Outcomes

Assessment of Knowledge and Attitudes:

Gain insights into the current level of knowledge, understanding, and attitudes of residents towards digital health technologies.

Identify gaps in knowledge about the use of these technologies

Identification of Barriers and Facilitators:

Uncover barriers to the integration of digital health technologies in family medicine

Identify facilitators that could encourage the adoption of these technologies (like enhanced training, support from senior physicians, or evidence of improved patient outcomes).

Educational Implications:

Determine the need for expanding the educational curriculum of family medicine residents to include more in-depth

training in ICT

Develop recommendations for educational modules that can be incorporated into residency training programs.

Practical Application and Workflow Integration:

Understand how digital health technologies can be practically integrated into existing clinical workflows without disrupting the core principles of family medicine.

Explore the potential for these technologies to enhance efficiency, patient engagement, and care quality.

Perspectives on Patient-Centered Care:

Assess how residents perceive the impact of digital health technologies on patient-centered care

Explore potential strategies to maintain or enhance the therapeutic alliance in the age of digital health.

Inclusivity and Accessibility:

Evaluate how digital health technologies can be used to provide more inclusive and accessible care, especially for marginalized patient groups.

Understand the challenges and opportunities in using technology to bridge healthcare disparities.

Future Trends and Preparedness:

Identify trends in digital health that residents feel are most pertinent to their future practice.

Gauge the level of preparedness among residents to adopt and adapt to emerging digital health technologies.

Policy and Systemic Change Recommendations:

Formulate recommendations for policy changes or systemic adaptations needed to facilitate the integration of digital health in family medicine.

Highlight areas where healthcare systems and policies currently fall short in supporting effective use of digital health technologies.

Research Environment - Description of the number of research personnel, primary location of research, size of lab, etc

This study can be done both remotely or on site at one of the Family Medicine campuses. The only equipment needed will be the audiovisual tools needed to project the introductory materials and videos. Sessions can be recorded by Zoom and summarized to capture themes using NVivo software.

Names and titles of other individuals who will be involved with the research project?

TBD - Suggested participants, Dr Scott McKay , Dr Amanda Terry, Dr Tom Freeman , Dr Moira Stewart

Can this project be done remotely? Yes

Duration of Project Two Summers

Expected Objectives/Accomplishments for Student for Year 1?

Resident focus interviews

Expected Objectives/Accomplishments for Student for Year 2?

Thematic summary and analysis of results -Year 2 may be opportunity for further student involvement in research analysis and compiling results

PART III - Certifications

If the project will require any certification approvals from one or more of the following offices, please check the appropriate box below.

Human Ethics: If you have the protocol information, please enter it below (or

enter the status of the approval).

Pending

Note: certification approval should be obtained prior to the start of the summer. Projects without this approval will not be a priority for funding.