SOUTHLAKE REGIONAL HEALTH CENTRE

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ETHICS APPROVAL
Southlake Regional Health Centre Research Ethics Board

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The Arthritis Program Interprofessional Training Program (TAP-ITP): An evaluation of a successful interprofessional curriculum

BACKGROUND:

The Arthritis Program (TAP) is an award-winning, innovative, interprofessional model of care providing exemplary patient services at Southlake Regional Health Centre since 1991.

TAP has granted numerous requests to health-care professionals who hoped to learn about the model of care. Visiting colleagues have had the common objective of learning how components of the TAP model could be applied to their home-based sites to further interprofessional care.

Given the recognized burden of arthritis and chronic disease *(Bombardier 2011)* and impending reduction in human health resources *(Health Canada 2003, Hanly 2001)*, innovative, interprofessional models of care will be mandatory for the Canadian health-care system.

IPC = Interprofessional Care: Occurs when multiple health workers from different professional backgrounds provide comprehensive health services by working with patients, their families, carers and communities to deliver the highest quality of care across settings *(WHO 2010).*

THE ARTHRITIS PROGRAM

Interprofessional Training Program (TAP-ITP):

- A national needs survey on models of care and interprofessional team practice conducted in 2009 guided curriculum development. *(Bain 2011)*
- TAP-ITP was designed for health professionals working on teams in a chronic disease setting and aspiring to further an IPC culture.
- An Appreciative Inquiry approach was used as a means to facilitate change management strategies.

Appreciative Inquiry: A method of questioning and thinking about possibilities which builds on an organization's strengths and enhances what already works *(Patrick 2010)*

- TAP-ITP is designed to be delivered with four distinct learning formats. These learning formats include: classroom work, a virtual community network, e-learning, and an independent project.
- These formats were blended in a customized way for each of the four training modules.
- Four learning modules were developed. Module topics include:

Module 1:
Creating the Infrastructure for an Interprofessional Team

Module 2:
Defining Roles, Responsibilities and Key Competencies Needed for an IPC Model of Care

Module 3:
Delivering Successful Patient Education in an IPC Clinic

Module 4:
Creating the Business Plan – The Statement of Work

- The timing of TAP-ITP delivery was customized and tailored to meet the needs of each of the participating teams as well as to the individual learners. This varied from: four full-day sessions (two-day sessions delivered four months apart); four consecutive full-day sessions; and seven full-day sessions delivered monthly.

OBJECTIVES:

To evaluate the effectiveness of TAP-ITP in creating and promoting improved interprofessional collaboration amongst individual learners and their clinical teams.

1. To evaluate the effects (short- and long-term) of the TAP-ITP training program in advancing the knowledge, skills, and attitudes of learners in the area of IPC
2. To evaluate the ability of TAP-ITP to promote change in the model of care within the learner's clinical setting by applying the learning acquired through TAP-ITP
3. To determine the learners satisfaction with TAP-ITP
4. To evaluate the sustainability of the learner's new learning to create enhanced IPC (learners not yet completed one-year follow up)

METHODS:

Recruitment: Inclusion:

1) Health care professionals working within hospital and community-based arthritis programs;
2) Trainees enrolled in the Advanced Clinician Practitioner in Arthritis Care (ACPAC) program 2010/2011 cohort.

Design: Mixed methods based on the Embedded Experimental Model *(Creswell & Plano Clark 2011).*

- Qualitative component (learner and team contracts) embedded within a predominant quantitative design (pre-post single group). *See Figure 1*

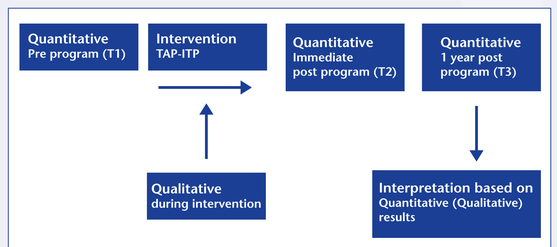

Figure 1. Embedded Experimental Design

Data collected at the beginning of program, immediate post-program, and after one year (not yet completed)

Measures included:

Quantitative

- Demographics
- Attitudes Toward Health Care Teams (ATHCT) *(Heinemann 1999)*
- Bruyère Clinical Team Self-Assessment on Interprofessional Practice *(Patrick 2010)*
- W[e] Learn Interprofessional (IP) Program Assessment, Interprofessional Collaborative Competencies Attainment Survey (ICCAS) *(MacDonald 2010)*

Qualitative

- Interprofessional (IP) Learner and Team Contracts *(MacDonald 2010)*

Analyses included both descriptive and inferential statistics. Comparative analyses included repeated measures.

The following include a selection of **learning outcomes** from the learner/team contracts:

"I feel more confident sharing my clinical opinions and that they are valued by the rheumatologists" (learner contract).

"[We are] more effective at collaboratively discussing clinical issues" (team contract).

"[We] feel our opinions are valued" (team contract).

RESULTS:

22 learners participated (n=15 professionals from 4 distinct clinical teams across Canada; n=7 ACPAC trainees).

Objectives 1 & 2:

Learners' Perception of their Team's Readiness for IPC

PRE-POST MEASURES OF STAGES OF READINESS FOR IPC: 4-LEVELS

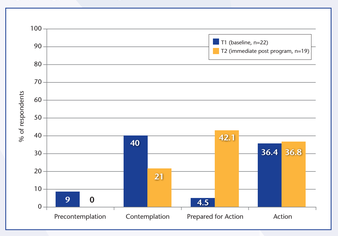

Figure 2

Prior to attending TAP-ITP, 60% of learners felt that their team was in the pre-contemplation/contemplation stage of their team's readiness for IPC. Immediate post-program, there was a shift to 80% of the learners believing that their team was in the prepared for action/action stage. *See Figure 2*

Change in Perception of Team Function Relating to IPC Competencies

ICCAS scores revealed statistically significant differences in pre- to immediate post-program perceptions of IPC competencies (19 of 20 competency statements, $p<0.05$). These findings may indicate greater team function in the following areas: communication, collaboration, roles and responsibilities, collaborative patient/family-centred approach, conflict management/resolution, and team functioning.

Paired t-tests for each pre- to immediate post-program score were all significant ($p<0.05$) for each of the Bruyère subscale and overall scores, ATHCT Quality of Care/Process and borderline significant for the Physician Centrality scale ($p=0.06$). *See Figures 3, 4, 5, 6*

Objective 3:

Satisfaction with TAP-ITP

The W(e) Learn program assessment indicated that participants were very satisfied with TAP-ITP. Mean scores ranged from 6.02 (program content) to 6.6 (program structure), each item scored out of 7=positive learning experience.

PRE-POST: ATTITUDES TOWARDS HEALTH CARE TEAMS (QUALITY OF CARE/PROCESS SUBSCALE)

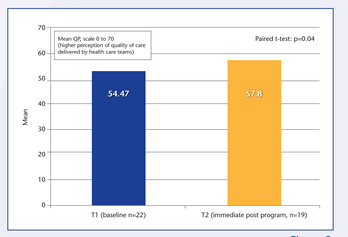

Figure 3

PRE-POST: ATTITUDES TOWARDS HEALTH CARE TEAMS (PHYSICIAN CENTRALITY SUBSCALE)

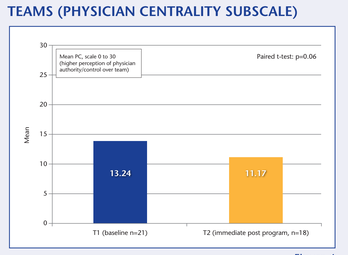

Figure 4

PRE-POST: BRUYÈRE CLINICAL TEAM SELF ASSESSMENT ON INTERPROFESSIONAL PRACTICE: SUBJECTIVE EVALUATION

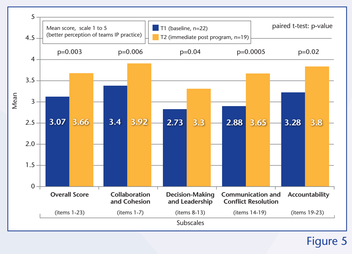

Figure 5

PRE-POST: BRUYÈRE CLINICAL TEAM SELF ASSESSMENT ON INTERPROFESSIONAL PRACTICE: OBJECTIVE EVALUATION OF TEAM PRACTICES ASSOCIATED WITH IPC

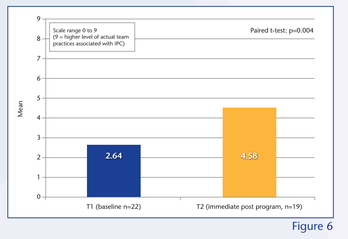

Figure 6

CONCLUSIONS:

- This study provides evidence that the TAP-ITP program improves knowledge, skills and attitudes in interprofessional patient-centred collaboration in both individual learners and teams enrolled in the curriculum.
- Teams showed advancement in competencies related to: communication, collaboration, roles and responsibilities, collaborative patient/family-centred approach, conflict management/resolution and team functioning.
- Immediate post-program the learners perceived that their team had shifted in their readiness for IPC from precontemplation/contemplation stage to prepared for action/action stage.
- Learners were very satisfied with the training that was provided and the way it was provided.

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