

Physical Therapy Knowledge Broker
Report: Year 2 – September 2010 to October 2011

PURPOSE OF THE DOCUMENT:

The purpose of this document is to provide the Steering Committee / funding partners with a report on the outcomes of Year Two for the Physical Therapy Knowledge Broker position.



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Physical Therapy Knowledge Broker Report Year 2	Submitted by: Alison M Hoens
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1. PROGRESS ON GOALS & DELIVERABLES

Goal 1: Establish a web presence for the PT knowledge brokering initiative

- **Develop and maintain a web page for KT within the UBC Department of Physical Therapy and PABC websites with links to funding partners. The page will host documentation from projects associated with the PT KB role, KT resources for clinicians /decision-makers / researchers, and links to other pertinent KT sites.**

The PT KB will develop the webpage by Sept 2009 and maintain the web page for the duration of the appointment. The funding partners will provide access to the required resources (eg. technical assistance and training in web management).

Year end report

- Both UBC Department of Physical Therapy and PABC websites house PT KB web pages (established Aug 09). Content includes: background information on the KB role, regular updates on the respective KB projects, the research collaboration registry and an inventory of KT links and evidence-based practice resources. Notification of updates to content on the web pages is provided by e-blasts from the PABC CEO and newsletters from both the UBC Dept of PT and PABC.

- Utilization rates: Google Analytics for Knowledge Broker pages on PABC website: Total number of hits April 1 to Sept 21 2011 for the Knowledge Centre & Library = 847 hits (*Note: due to a migration from an old to a new website platform and a reorganization of content, it is not possible to report the hit rate for the same time period as for the previous year).

	Sept 1 – Dec 8 2009	Jan 1 – Sept 10 2010	*April 1 – Sept 21 2011
Average number of hits/month	61	133	141.6

Next steps

- Continue to update webpages with progress reports on KB projects.
- Continue to develop evidence-based practice resources and post on websites.
- Continue to promote webpage content, especially that of UBC Dept of PT website, through public practice distribution email list, UBC newsletter, PABC newsletters and PABC e-blasts.

Goal 2: Facilitate PT clinician / researcher partnerships in BC

- Identify PT clinicians and researchers for potential clinician / researcher partnerships
- Link PT clinicians and researchers for integrated KT and end-of-grant KT collaboration opportunities

The PTKB will develop (by Oct 2009) and maintain a directory of clinicians and researchers with interest and capacity for partnerships and link members for potential collaborations. The funding partners will assist in circulating the call for directory membership and communicating with the PT KB all potential projects for collaboration.

Year end report

- Developed on-line research collaboration registry (May 2010). Approximately 100 PTs across BC registered themselves as researchers, decision-makers and/or clinicians in various practice areas (eg. orthopaedics, cardiorespiratory). The registry is posted on UBC & PABC websites. The registry has been used as a resource to facilitate research partnerships, most notably it was used to identify potential members for the BC Cancer Interest Network.

- Current partnerships

Partner Group	Number of participants
Clinicians	71 (provincial distribution)
Researchers	22
Decision makers	11
Students (UBC MPT)	11

Next steps

- Update registry

- Continue to work with UBC Dept of PT faculty, VCHRI, PHCRI, PABC and Practice Leaders in Health Authorities to identify opportunities for clinician & decision-maker collaborators.

Goal 3: Enhance access to evidence-based learning resources and knowledge products for PTs in BC

- Identify existing and develop new learning resources and on-line guides to assist clinicians in acquiring, appraising, synthesizing and applying knowledge into practice
- Provide on-line access to the learning resources, guides and other knowledge products

Year end report

- Performed a review of existing on-line resources (July-Aug 09) and created an inventory (Nov 09) of those which are most useful. Worked with UBC and PABC librarians to select and/or synthesize preferred resources.

- Developed (with a number of different stakeholders), disseminated, and supported the use of a number of evidence-based resources for BC PTs:

Resource	Purpose	Number of hits Apr – Sept 2011
Cryotherapy: Why, When & How	- Decision-making tool to guide safe and effective application of cryotherapy and other related interventions to manage pain, inflammation, edema and swelling	Recently posted – no hits yet
Electrophysical Agents: Contraindications and Precautions	- Decision-making tool to guide safe application of electrophysical agents	- ~10,000 mailed - 1620 hits - 822 print orders (113 in USA) - 157 electronic orders
SAFEMOB	- Decision-making tool to guide safe mobilization of acutely ill patients - Inventory of literature and links to support SAFEMOB tool - Recording of webinar demonstrating how to use the SAFEMOB tool	87
Skin & Wound – Use of electrical stimulation and	- Recording of lecture outlining the theory and evidence for use of electrical	97

ultrasound to promote wound healing	stimulation and ultrasound to promote wound healing - Recording of practical demonstration - Detailed list of required equipment - Step by step guide on the application of electrical stimulation - References - Links to additional resources	
Outcome measures for Total Joint Arthroplasty	- Inventory of valid, reliable, sensitive and specific outcome measures including information on what it measures, who to use it for, how to use it and how to score it	75
Inventory of databases for outcome measures	- List of links to databases for rehabilitation-related outcome measures	Not available
Safe Handling of Patients	- A series of 4 'alerts' with key information to guide safe handling of patients in acute care settings - Inventory of resources/links with supporting information on specific lifting and handling devices	209

- Together with the PABC Librarian, created a list of key journals, with links, for receiving table of content alerts.
- Provided five Journal Clubs via webinar for PABC members on how to appraise the quality of randomized controlled trials. Pre and post journal club evaluations demonstrated the following improvements:

	# 1 Pre N= 17 (%)	# 1 Post N= 9 (%)	# 2 Pre N= 26 (%)	# 2 Post N =25 (%)	# 3 Pre N=19 (%)	# 3 Post N=14 (%)	# 4 Pre N=21 (%)	# 4 Post N=18 (%)
Very confident	0	44. 4	3.8	20.8	15.8	24.1	9.5	27.8
Not at all confident	35.5	0	30.8	0	31.6	21.4	4.8	0
Agree / strongly agree – appraise lit review	29.4	70.6	38.4	92	47.4	64.3	63.6	100
Agree / strongly agree – appraise methods	29.4	71.8	30.8	84	42.1	57.1	50	88.3
Agree / strongly agree – appraise stats	11.8	50	23.1	56	26.3	28.6	23.8	70.6
Agree / strongly agree - assess if relevant to own patients	52.9	77.8	65.3	92	57.9	85.7	81.8	100

Sample comments from journal club participants:

“Great to learn the skill with content that is meaningful to our practical physio experiences.”

“I liked the practice analyzing the article under the guise of interesting/helpful content. I wouldn't have

thought I would do it for that reason, but now having done it once, I would do it again.”

“I was interested in the topic which, combined with the purpose of learning how to evaluate an article, was a great combination.”

“Both the evaluation skills and content were the reasons why I left the comfort of my rocking chair and TV.”

Total number of hits for journal club recordings April-Sept 2011 = 382

Next steps

- Continue to develop, post and ‘market’ these learning opportunities and resources
- Undertake an evaluation of the utility and utilization of these resources

Goal 4: Identify and facilitate a KT initiative for each of the funding partners

- Identify and facilitate an achievable project that is relevant for PT practice for each funding partner
- Ensure representation from all relevant funding partners for each KT initiative
- Ensure that the selected projects are congruent with the CIHR framework for knowledge translation

The PT KB will facilitate the collaboration between partners for development of resources/tools, implementation of resources/tools and the evaluation of the effectiveness of the interventions. The funding partners will ensure that there is assistance with resources (personnel, meeting rooms, technical support) and provide input on draft documentation.

Year end report

Project & Partners	Objectives	Status
<p>Total joint arthroplasty: Enhancing utilization of outcome measurement (TJAOM)</p> <p>- Partners: UBC Dept of PT, PABC, RAMP, VCH, PHC</p>	<p>3 synergistic projects</p> <p>(1) To establish a baseline of current utilization of outcome measurement (OM) in TJA care</p> <p>(2) To document clinician identified barriers and solutions to use of OM in TJA care</p> <p>(3) To develop learning resources and tools necessary to facilitate use of OM in TJA care</p> <p>(4) To disseminate, implement, and evaluate the uptake of the learning resources and tools using the information from objectives #1 and #2 in conjunction with evidence from implementation science</p>	<p>Completed chart audit and survey. Currently writing papers</p> <p>Completed focus group</p> <p>To be addressed</p> <p>To be addressed</p>
<p>Enhancing physiotherapy best practice in issues of skin & wound care</p> <p>- Partners: PABC, VCH, PHC, PT Skin & Wound Care Committee, Interdisciplinary Skin & Wound Care Committee; UBC Dept of Occupational Science & Occupational Therapy</p>	<p>(1) To increase the awareness of BC PTs regarding the role of PTs in the prevention, assessment & management of skin & wound care issues.</p> <p>(2) To increase the number of BC PTs who undertake a basic risk assessment and utilize basic interventions for prevention & management of skin & wound care issues.</p> <p>(3) To provide information to BC PTs on where to find guidance on and training in advanced assessment and intervention techniques.</p>	<p>Completed</p> <p>To be addressed</p> <p>Completed</p>

<p>SAFEMOB Safe mobilization of the acutely ill patient</p> <p>- Partners: UBC Dept of PT, PABC, VCH, PHC</p>	<p>(1) To develop a concise tool which guides physiotherapy clinicians in evidence-informed-decision-making (EIDM) relevant to the safe mobilization of the acutely ill patient.</p>	<p>Completed; Supporting resources also developed & disseminated</p> <p>Shared nationally</p>
<p>Seating GAWG: Seating Guideline Adaptation Working Group for provision of wheelchairs in progressive neuromuscular disease</p> <p>- Partners: BCC&W, Sunnyhill Hospital, GF Strong, UBC Dept of PT, UBC Dept of Occupational Science & Occupational Therapy</p>	<p>(1) Appraise the 2006 UK guideline using the AGREE instrument</p> <p>(2) Evaluate, synthesize and incorporate evidence from an updated comprehensive literature review and local consensus.</p> <p>(3) Incorporate information appropriate for specific progressive neuromuscular diseases.</p> <p>(4) Ensure the update guideline reflects the needs and practice environment of BC therapists.</p>	<p>Completed</p> <p>In process</p> <p>In process</p> <p>In process</p>

The SAFEMOB project subsequently expanded into 2 related projects:

1. AECOPD: Safe and effective exercise prescription in acute exacerbation of chronic obstructive pulmonary disease. Funded through CIHR (PI Dr. Pat Camp). There are two components (1) a systematic review of systematic reviews and (2) a Delphi process. Currently, the first paper from the systematic review is being drafted and the third round of the Delphi process is being undertaken. UBC Department of Physical Therapy MPT students were key contributors to Delphi process.
2. Guidelines for exercise & activity prescription in chronic conditions for patients in the community setting. Recently submitted for two grant applications (1) Vancouver Foundation and (2) CIHR Meeting & Dissemination grant.

Given the completion and progress on several projects, this year a call for proposals for new PT KB projects was undertaken. Four proposals were received and were subsequently explored to identify the potential scope, partners and impact. The Steering Committee and PT KB selected the following project:

Evidence-informed management of tendinitis & tendinopathy. Team comprised of researcher, academic, and 4 clinicians. Objective: To develop an evidence-informed decision-making tool for both acute and chronic Achilles tendinitis/tendinopathy. The literature search has been completed and the team is currently appraising each article and tabulating the results into a summary of key messages. Supporting resources will include an algorithm of a suggested treatment regime, a table providing the details of each article and a summary of the evidence regarding the etiology.

Goal 5: Collaborate on a KT initiative with the OT KB and share outcomes from all PT and OT KB activities

Using the Best practice – skin and wound care project (see above) as the joint initiative:

- Establish implementation and evaluation plans with stakeholders
- Undertake implementation and evaluation
- Analyze and report findings from evaluation

*The PT KB (in conjunction with the OT KB) will facilitate the adoption of newly created OT, PT, Nursing and Interdisciplinary Skin & Wound Care Guidelines by planning and undertaking a targeted implementation plan and performing a complementary evaluation of effectiveness. * See Goal 2 Best-Practice Skin & Wound Care. The funding partners will provide support via inclusion of pertinent membership and review, where appropriate, draft documentation.*

Year end report

As the OT KB position was completed in March 2010, and not renewed, this goal is no longer relevant and will be removed from future reports.

Goal 6: Provide progress reports and a year-end report to the funding partners

- Intermittent email updates on the progress on each of the goals
- Coordinate a meeting of funding partners in December 2009 providing a progress report and opportunity for discussion
- Provide a year-end report detailing the successes achieved in the inaugural PT KB position and recommendations for the future growth of the role

The PT KB will provide all documentation to funding partners with sufficient opportunity to review prior to meetings and will revise, within 2 weeks of receipt of revisions requested by the funding partners.

Year end report

Email updates of the progress on the goals are communicated intermittently to the Steering Committee. Updates are also provided every 6 months on the PABC and UBC Dept of PT websites. The 6 Month report was undertaken December 9 2009 , Year 1 report September 13, 2010 and Year 2 report October 20 2011.

Next steps

Continue intermittent updates via email, annual reports and 6 monthly updates on websites.

2. ADDITIONAL ACTIVITIES / DELIVERABLES

In addition to activities related to fulfilling the above-stated goals, the Physical Therapy Knowledge Broker has undertaken the following additional activities/projects/roles:

- **Meetings with Steering Committee**
 - Meeting with Steering Committee January 2011 to discuss strategies to manage workload demands
- **Needs Assessment**
 - Undertook a needs assessment in Year 1 for clinicians, academics and faculty & posted executive summary & results. Results informed Action Plan. No assessment performed in Year 2. A needs assessment will be undertaken in Year 3 in conjunction with the PABC Knowledge Team.
- **Activities for The UBC Department of PT**
 - Participation, intermittently, at faculty meetings
 - PT representative for Clinical Faculty Affairs Committee
 - Submission of articles for newsletters.
 - Facilitator for primary health care research primary health care research team planning meeting for a CIHR grant application.
- **Activities for PABC**
 - Recorded presentation for series of 10 provincial town hall meetings
 - In-person annual report to the Board of Directors
 - Presentation re Knowledge Team structure, services and outcomes to UBC MPT students
 - Participation in the National Whiplash Prevention Initiative.
 - Provided support to Safe Handling of Patients Task Force.
 - Developing a knowledge translation plan for the C-spine Rule Task Force.
 - Submission of articles for newsletter.
 - Assisting members in writing articles for newsletters.
 - Assisting PABC librarian and members with requests for interpretation of evidence for practice.

- **Activities for VCH/PHC *Overlap in role as PHC PT Research Education & Practice Coordinator**
 - Participation on PT and Interdisciplinary Skin & Wound Committees.
 - Mentor for PHC Research Challenge.
 - Presentation at VCH/PHC STEP UP PT Education & Research Day.
 - Development of practice resources: Evidence-informed practice for sternal precautions post median sternotomy; Botox for spasticity management; Evidence-informed practice for secretion clearance techniques and incentive spirometry.

- **Presentations**
 - Provincial Physiotherapy Practice Forum.
 - Canadian Physiotherapy Congress (3 presentations – 2 accepted and 1 invited)
 - World Congress of Physical Therapy.
 - Canadian Agency for Drugs and Technologies in Health.

- **Continuing Education in Knowledge Translation**
 - Knowledge Translation for Scientists Training Course.
 - Member: BC Knowledge Translation Community of Practice (with MSFHR).

- **Publications**
 - Challenges in understanding functional decline, prognosis and transitions in advanced illness. Topics in Geriatric Rehabilitation. 2011. 27(1), 21-31.
 - Client education: communicative interaction between physiotherapists and clients with subacute low back pain in private practice. Physiotherapy Canada. 2011. 32(2), 212-222
 - Electrophysical Agents. Contraindications and precautions. An evidence-based approach to clinical decision-making in Physical Therapy. Physiotherapy Canada. 2010. 62(5). Special Issue.
 - 'I think it but don't often write it'. Barriers to charting in private practice. Physiotherapy Canada. 2010. 61(4).

Articles submitted for publication:

- Behavioral-based intervention increases inspiratory muscle training prescription by a multidisciplinary team. Journal of Continuing Education for Health Professions.

Abstracts for conferences at which PT KB was not present:

- American College of Rheumatology: Survey of Physical Therapists' Use of Outcome Measures In Total Hip and Knee Arthroplasty.
- Canadian Librarians Association: The sum of the parts: How a clinical librarian, knowledge broker and technology lead can promote evidence-informed practice for physiotherapists in BC.

3. RESEARCH GRANT ACTIVITY

Year 1: 3/7 grant applications successful; Total funding secured = \$374,319

Year 2:

TITLE	FUNDING AGENCY	PI	PT KB Role	\$	RESULT
FEATHER: Functional engagement in assisted therapy through exercise robotics	NSERC – CHRP	Dr. M. van der Loos Dr. L Boyd Dr. N Virji-Babul	Collaborator	537, 600	Awaiting result

FEATHER: Functional engagement in assisted therapy through exercise robotics	Peter Wall Solutions Initiative	Dr. M. van der Loos Dr. L. Boyd Dr. N Virji-Babul	Lead KT plan	384,000	Awaiting result
Patient Oriented Guidelines Project	CIHR Meetings & Dissemination Grant	Dr. M. Dawes	Co-applicant	24,940	Awaiting result
Physical Activity Guidelines for Middle Aged British Columbians	Vancouver Foundation	Dr. D. Reid Dr. G. Mazowita	Co-applicant	40,508	Not funded
Resting-state networks in infants: Development and Risk	Sick Kids	Dr. Nazin Virji-Babul	Developed KT plan	244,517	Not funded
Muscle oxygenation and hemodynamics during repetitive inspiratory loading or arm exercise in people with COPD	Canadian Lung Association	Dr. D. Reid		25,000	Funded
Building on Strength: Arthritis-Digital Media Catalyst Network in Knowledge Translation	CIHR	Dr. L. Li	KT support	600,000	Not funded

4. IMPRESSIONS AND RECOMMENDATIONS

- **Despite the increase in FTE from 0.4 to 0.5 the workload continues to exceed 0.5.** Consequently, recent grant applications have included budget items specifically to support KT activities, most notably salary for an assistant who would undertake KT work under the direction of the PT KB. Further enhancement of the FTE may be required in future.
- **A plan to address additional funding needs** (eg. education, travel to conferences etc) needs to be developed.
- **A performance evaluation** within the next year would be helpful to identify and address opportunities for improvement.