

Physical Therapy Knowledge Broker Report: Year One - June 2009 to September 2010

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 One for the Physical Therapy Knowledge Broker position.



Physiotherapy Association
of British Columbia



PROVIDENCE HEALTH CARE
Research Institute

Vancouver
CoastalHealth
Research Institute
Healthier lives through discovery



Vancouver
CoastalHealth

Providence
HEALTH CARE



Physical Therapy Knowledge Broker Report Year One	Submitted by: Alison M Hoens
Date: September 13, 2010	Version Number: 2

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 and PABC websites house 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: For the PABC website Google Analytics recorded 1, 197 hits from January 1, 2010 to Sept 9th 2010 (an average hit rate of ~ 133 hits/month which was increased from an average of 61 hits/month from Sept 1 to Dec 8 2009). Thus, there is a notable increase in traffic to these web pages. In contrast, Google Analytics reveals that the access to the PT KB webpage & its child pages on the UBC Dept of PT website has been extremely limited (9 hits between January 1 2010 and September 9 2010).

Next steps

- Continue to update webpages with progress reports on KB projects.
- Continue to develop evidence-based practice resources and post on websites. Focus on appraisal & application of research findings.
- 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.
- Explore setting up links from VCHRI and PHCRI websites.

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 will be used as a resource to facilitate research partnerships. Of note, as of Sept 9, 2010 Google Analytics recorded 76 hits for the registry.
 - Facilitated partnerships of researchers, decision-makers and clinicians for specific projects (see specific KB projects and grant activity sections for details).

Next steps

- Update registry annually.
- 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.
- Provided first Journal Club via webinar for PABC members on how to appraise the quality of a quantitative journal article. Pre and post journal club evaluations demonstrated the following improvements:

	Pre-test	Post-test
Very confident in ability to assess the quality of an article	0%	44.4%
Not at all confident in ability to assess the quality of an article	35.5%	0%
Agree or strongly agree that able to determine whether the literature review was adequate	29.4%	70.6%
Agree or strongly agree that able to determine whether the methodology was adequate	29.4%	71.8%
Agree or strongly agree that able to interpret the statistical findings	11.8%	50%
Agree or strongly agree that able to determine whether the findings should be applied to my patient population	52.9%	77.8%

Next steps

- Post links and synthesis comparing advantages and disadvantages of resources.
- Explore videoconferencing with FOM and/or webinars with PABC to demonstrate how to use 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	Current status	Next steps
<p>Total joint arthroplasty: Enhancing utilization of outcome measurement (TJAOM)</p> <p>- Partners: UBC Dept of PT, PABC, RAMP, VCH, PHC</p>	<p>- Established scope and responsibilities for each of 4 synergistic & unique sub projects.</p> <p>Objectives</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>Progress</p> <p>Objective 1 Baseline</p> <p>- Provincial Rehab Advisory Group: Enriched membership to include representation across the continuum of care and spectrum from research to practice; RAMP supporting process; ethics approval granted without changes; survey distributed via CPTBC; MPT students involved in data entry & analysis. <i>Aim is to determine <u>which and how</u> outcome measures are <u>reported</u> by PTs as currently being utilized.</i></p> <p>- Vancouver Coastal Health Research Institute (VCHRI) Program Evaluation Course (PEC): recruited team, representing continuum of care and clinical/administrative perspectives to attend VCHRI PEC; supported team through development of project. Project completed. Results documented and presented at CPA Congress. <i>Aim was to determine <u>what PTs document</u> regarding use of OM in TJA.</i></p>	<p>Objective 1 Baseline</p> <p>- Complete data collection & analysis. Publish survey findings and incorporate findings into KT implementation plan including development of learning resources</p> <p>- Incorporate findings into KT implementation plan including development of learning resources.</p>

	<p>Objective 2 Identification of barriers & solutions - Identification of clinician-acknowledged barriers and solutions to use of OM in TJA (MSc project). Provided guidance & assistance. In final stages of write-up. <i>Aim was to determine <u>why</u> outcome measurement is or is not being used to inform practice.</i></p> <p>*Key focus was on liaising with members of each of the 3 sub projects to ensure that there was unique and complementary contribution to the overall project.</p> <p>Objective 3 Development of learning resources & tools - This objective requires information collected from activities undertaken in pursuit of objectives 1&2 and thus activities directly associated with this objective have not yet been undertaken.</p> <p>Objective 4 Disseminate and implement and evaluate uptake of learning resources & tools - This objective requires information collected from activities undertaken in pursuit of objectives 1, 2 &3 and thus activities directly associated with this objective have not yet been undertaken.</p>	<p>Objective 2 Identification of barriers & solutions - Incorporate findings into KT implementation plan including development of learning resources.</p> <p>Objective 3 Development of learning resources & tools - Incorporate findings of objectives 1&2.</p> <p>Objective 4 Disseminate and implement and evaluate uptake of learning resources & tools - Incorporate findings of objectives 1,2&3 into implementation plan and develop evaluation plan (working with partner organizations).</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>Objectives (1) To increase the awareness of BC PTs regarding the role of PTs in the prevention, assessment & management of skin & wound care issues. (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. (3) To provide information to BC PTs on where to find guidance on and training in advanced assessment and intervention techniques.</p> <p>Progress - In order to inform the activities to address the above objectives, it was necessary to establish a baseline of current awareness of this issue and practice patterns. Accordingly, a survey, was undertaken in Nov/Dec 09. Results were disseminated and informed the following completed tasks: - Development & mail out of 'awareness' targeted message ("PTs & skin – We've</p>	

	<p>got you covered”) on sticky notes distributed to all PABC members</p> <ul style="list-style-type: none"> - Development of an inventory of learning resources for advanced practice (housed on PABC website). - Workshops scheduled for Oct/Nov to teach theory & practical application of Ultrasound & Electrical stimulation for wound healing - Ongoing PT KB representation on the Interdisciplinary VCH/PHC Skin & Wound Committees and the BC PT Skin & Wound Knowledge Translation Committee. 	<ul style="list-style-type: none"> - Theory session to be recorded for rural access - Practical session to be filmed and be made available via PABC
<p>SAFEMOB Safe mobilization of the acutely ill medical or post-surgical patient</p> <p>- Partners: UBC Dept of PT, PABC, VCH, PHC</p>	<p>- Given the complexity of the literature for this request and the relative risk associated with the outcome, the decision was made to proceed with this by the formal systematic review (SR) process. Also, in recognition of the significant gaps in the literature a national Delphi process will be undertaken. CIHR funding for this was secured in conjunction with Dr. Pat Camp. Other partners include key researchers across Canada, clinicians, and Master of Physical Therapy students at UBC. However, as there is a need for guidance prior to completion of this project, a group of content experts (Drs Dean & Reid from UBC Dept of PT and 3 clinicians) was convened to produce a tool to guide clinician decision-making. Feedback on the tool has been solicited from clinicians across the province and the committee has been expanded to facilitate the implementation of the tool.</p> <p>Objective</p> <ul style="list-style-type: none"> - To develop a concise tool which guides physiotherapy clinicians in evidence-informed-decision-making (EIDM) relevant to the safe mobilization of the acutely ill medical or post-surgical patient. <p>Progress</p> <ul style="list-style-type: none"> - Currently revising eighth draft of the collation of contributions by content experts. 	<ul style="list-style-type: none"> - When final version from the content experts is complete, the tool will be piloted with clinicians in an array of critical care and acute care settings. Revisions, based on their input will be incorporated. A distribution, implementation and evaluation plan will be developed with input from all stakeholders.
<p>Seating GAWG: Seating Guideline Adaptation Working Group for provision of wheelchairs in progressive neuromuscular disease</p>	<ul style="list-style-type: none"> - The BC W/C Seating Guideline Adaptation Working Group (Seating GAWG) was assembled to appraise, update and adapt the 2006 UK Guidelines Best Practice Guidelines of “Wheelchair Provision for Children and Adults with Muscular Dystrophy and other Neuromuscular Disorders” for the BC setting. The guidelines will be targeted to occupational and physical therapists who prescribe wheelchairs and seating systems for clients of all ages with 	<ul style="list-style-type: none"> - Continue to support working group and a team of reviewers to update and adapt the guideline to the BC context. When finalized, load on CANCHILD network and develop communication plan.

<p>- Partners: BCC&W, Sunnyhill Hospital, GF Strong, UBC Dept of PT, UBC Dept of Occupational Science & Occupational Therapy</p>	<p>neuromuscular disorders or provide training for wheelchair use.</p> <p>Objectives (1) Appraise the UK guideline using the AGREE instrument (2) Evaluate, synthesize and incorporate evidence from an updated comprehensive literature review and local consensus. (3) Incorporate information appropriate for specific progressive neuromuscular diseases. (4) Ensure the update guideline reflect the needs and practice environment of BC therapists.</p> <p>Progress - Assembled, in conjunction with the OT KB, a team that comprises the continuum of care. Developed and revised Terms of Reference; established communication strategy utilizing Google Groups; completed appraisal with the AGREE instrument; and currently facilitating the update and adaptation of the guideline.</p>	
--	---	--

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

The OT and PT KB collaborated on two projects: (1) Enhancing best practice in Skin & Wound Care and (2) Seating GAWG. The actions of the KBs in the skin & wound care project have been in parallel (OT and PT working on their own objectives but ensuring complementary processes and outcomes). The actions of the KBs in the Seating GAWG project were in harmony – co-facilitating the project.

The OT and PT KB ensured that there was awareness of each other’s activities/progress and shared relevant deliverables (KT template for grant applications; Summary of effectiveness of various strategies to implement clinical practice guidelines).

Next steps

The OT KB position was completed in March 2010. Given the clear mutual benefits of collaboration, the PT KB will work with OT leaders in securing funding to re-establish the OT KB position.

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 & deliverables were communicated to all relevant stakeholders and regular updates were provided on the PABC and UBC Dept of PT websites. The 6 Month report was undertaken on Dec 9, 2009 and the Year End report on September 13, 2010.

Next steps

Continue regular updates via email and webpages and annual reports to Steering Committee.

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:

- **Needs Assessment**
 - Undertook needs assessment for needs of clinicians, academics and faculty (not distributed through PABC); posted executive summary & results. Results informed Action Plan.
- **Review of the literature and summary of effectiveness of strategies to implement clinical practice guidelines**
 - Undertook literature review and collated results of effectiveness of various strategies used to implement clinical practice guidelines. Posted on PABC and UBC KB web pages.
 - Presented role, goals and deliverables to VCH/PHC PT practice leaders.
- **Activities for The UBC Dept of PT**
 - Faculty meeting: presentation on KB role, goals and deliverables. Posted Action Plan and re-distributed after strategic planning session.
 - Participated in selection process for Assistant Professor positions.
 - Participated in strategic planning retreat.
 - Contributed to recruitment for Clinical Faculty workshops (strategies for teaching to 80 students, designing MCQs & OSCE).
 - PT representative for Clinical Faculty Affairs Committee
 - Explored visit of neuroscience specialist (in conjunction with Dr. Lara Boyd).
 - Submission of articles for newsletters.
 - Presentation re KB role at CPA Congress 2010.
- **Activities for PABC**
 - Development of tool to synthesize literature for the Primary Health Care Task Force.
 - Input to National Whiplash Prevention Initiative.
 - Providing support to No Lift Task Force.
 - Contributed to revisions of criteria for PABC award for research excellence.
 - Submissions of articles to newsletter: updates on role/projects; special issue on how to interpret conflicting evidence – in conjunction with PABC librarian and a PABC clinician member.
 - Assisting PABC librarian and members with requests for interpretation of evidence for practice.
 - Presentation at PABC/College of Physical Therapists of BC AGM April 2010.
 - Presentation regarding KB role at Canadian Physiotherapy Association Congress 2010.
- **Activities for VCH/PHC**
 - Professional Practice Leaders Practice Council Meetings (presentation re KB role & consultation on clinical practice documents).
 - Participation on PT and Interdisciplinary Skin & Wound Committees.
 - Coordination of roles & development of synergies with PHC Practice Consultant for Interdisciplinary Practice

- Education & Research (Marion Briggs).
- Coordination of roles & development of synergies with VCH Professional Practice Director for Nursing and Allied Health - Richmond (Monica Redekopp).
- Presentations at STEP UP Education & Research Day in March 2010.
- 3 presentations at Canadian Physiotherapy Association Congress 2010.
- **Exploration of additional resources/supports**
 - Center of Excellence in Simulated Education and Innovation (CESEI).
 - UBC Center for Health Services and Policy Research (Meeting with Dr. Charlene Black, Associate Director).
 - Canadian Agency for Devices and Technologies in Health (CADTH); Meeting with Ann Vosilla, Liaison Officer
 - Center for Health Care Management (meeting with Linda Peritz Director).
 - OsteoArthritis Service Integration System (OASIS) (Meeting with Cindy Roberts, Director).
 - UBC Information systems: alternatives to Survey Monkey– VOVICI EMF, private company that created systems for on-line outcome measurement data capture at The Joint Preservation Center of BC.
 - EBioposter: on-line poster presentations.
 - Training at UBC and VCH Diamond Center for FOM videoconferencing.
- **Other**
 - Publication of clinical decision-making tool for application of electrophysical agents “ Electrophysical Agents. Contraindications and Precautions: An Evidence-Based Approach to Clinical Decision Making in Physical Therapy” Physiotherapy Canada. Special Issue 2010. 62(5) ISSN-0300-0508
 - Contracted to develop targeted messages for BC Rheumatologists in pharmaceutical management of Rheumatoid Arthritis.

3. RESEARCH GRANT ACTIVITY

TITLE	FUNDING AGENCY	PI	PT KB Role	\$	RESULT
Think Tank on Translational Research in Rehabilitation Management of Chronic Diseases	CIHR – Meetings, Planning & Dissemination Grant	Dr. Linda Li	Organizing Committee	\$17,474	Funded
Safe & effective exercise prescription in acute exacerbation of Chronic Obstructive Pulmonary Disease	CIHR – Knowledge Synthesis Grant	Dr. Pat Camp	Principle Knowledge User	\$99,730	Funded
Interhemispheric contributions to neuroplasticity and motor learning after stroke	CIHR – Operating Grant	Dr. Lara Boyd	Letter of Support to involve clinicians for subject recruitment	Avg of \$85,705 X 3 years	Funded
Perceptions and practices related to mobilizing patients in intensive care: An exploratory study	MSFHR / BCNRI – Research Project Competition	Dr. E Dean Sandra Lauck	Team leader Develop KT plan	\$65,484	*Invited to second stage / awaiting result

Brain connectivity in Autism, Cerebral Palsy and Down syndrome	NeuroDevNet	Dr. Nazin Virji-Babul	Developed KT plan	\$79,000 requested	Awaiting result
Reorganization of the Brain after Stroke	Heart & Stroke	Dr. L Boyd	Developed KT Plan Letter of support to involve clinicians for subject recruitment	\$392,219	Awaiting result
Motor learning in the child with development	March of Dimes	Dr. L Boyd	Letter of support to involve clinicians for subject recruitment	\$449, 696	Not funded
Tendinopathy & Extracorporeal Shock Wave Therapy	Worksafe BC	Dr. A Scott	Develop KT plan	In process of submission	In process of submission

4. IMPRESSIONS AND RECOMMENDATIONS

- **Despite the increase in FTE from 0.4 to 0.5 the workload exceeds the 0.5 level. Consequently, 2 recent grant applications have included budget specifically to hire assistance for KT activities. This may need to be a more consistent strategy in future to enable the role to meet the needs of the stakeholders. Further enhancement of the FTE may have to undertaken in future.**
- Given the travel requirements of working at 11 sites, it is impractical to have a landline as the only form of telecommunication. Continuing use of the PHC pager and personal cellphone is untenable. Accordingly, **provision of a Blackberry or I-Phone** would greatly improve the efficiency of this position.
- **Formal performance evaluation** within the next year would be helpful to identify and address opportunities for improvement.
- In light of the successful expansion in FTE and duration of the contract, the quantity of both the requested additional activities by the stakeholders and the exciting opportunities for additional projects and collaborations, **consensus on priorities for the position** is imperative. The following priorities, ranked from greatest to least, are proposed for the consideration of the Steering Committee:
 1. Facilitate practice-informed evidence e.g. research collaborations with PT clinicians/decision-makers/researchers/students/other disciplines
 2. Facilitate evidence-informed practice e.g. incorporation of research into practice
 3. Undertake additional projects for stakeholders as time permits.
- As noted in the 6 month report, variation in resources between partners is both a challenge and an asset. The banquet of funding partner resources has resulted in availability of a specific resource from one partner when it is not available from another.
- Project work often takes precedence over the deliverables as a result of the significant time commitment required to organize meetings, travel between sites, develop required documentation and provide direct support for individuals/groups to guide the required processes and for mentoring development of required skill sets. Accordingly, the project work often takes precedence over the other deliverables (e.g. enhancement of web presence and development of learning resources). Work on deliverables will remain a lower priority than project work – especially when meeting grant deadlines.
- Continuing exploration of supporting resources is essential to ensure sustainability of the position.