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THE ALBERTA HTA AMBASSADOR PROGRAM

DISSEMINATION AND IMPLEMENTATION OF EVIDENCE-INFORMED PRIMARY CARE MANAGEMENT OF LOW BACK PAIN GUIDELINE

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THE ALBERTA HTA AMBASSADOR PROGRAM

Dissemination and implementation of evidence-informed primary care management of low back pain guideline

Donna Angus

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DISSEMINATION AND IMPLEMENTATION OF EVIDENCE-INFORMED PRIMARY CARE MANAGEMENT OF LOW BACK PAIN GUIDELINE

THE ALBERTA HTA CHRONIC PAIN AMBASSADOR PROGRAM

“... before guidelines could affect patient outcomes, they first had to affect doctors’ knowledge, then attitudes, and finally practice behaviours...” (Fullen 2008)

PURPOSE AND BACKGROUND

The purpose of this document is to present a plan for discussion on the dissemination and implementation of the Low Back Pain Guidelines developed by the Alberta HTA Chronic Pain Ambassador Program. The purpose of dissemination and implementation activities is to positively inform and influence the treatment of low back pain; that is, encourage and support adherence to the CPG.

A brief comment on terminology is necessary. Dissemination is about information and raising awareness and can be seen as the first step in implementation, which is about use in practice. Implementation requires another layer of engagement with the target audiences. Dissemination and implementation are different processes but are intertwined and the terms will be used together to address the purpose of this plan.

It is important to note that the way in which the Ambassador Program has approached the development of the guidelines will greatly contribute to their successful dissemination and implementation; that is, meaningful involvement of key stakeholders throughout the development of the guideline. Further, numerous dissemination and implementation activities are planned or underway. The purpose of this plan is therefore to document those activities, determine what still needs to be done, and present options for consideration.

PLANNING STEPS

The document “From Research to Practice: A Knowledge Transfer Planning Guide” from the Institute on Work and Health, supports the development of an explicit plan using evidence-based principles. The steps in developing the plan are:

- What (messages, content).
- Who (to what audiences).
- By Whom (who will carry the messages).

- How (emphasis on the importance of relationships; active engagement; exchange of information, ideas and experience).
- Impact (evaluation).

A Guideline Developer's Handbook from the Scottish Intercollegiate Guidelines Network (SIGN) recommends a similar process for developing an implementation plan but is specific to practice guideline implementation:

- Who will lead the implementation.
- What is current position (current practice).
- Preparing people – time, enthusiasm, and commitment with good communication and offers of help. Involve patient groups in planning the initiative.
- Deciding which techniques to use to promote the use of clinical guidelines into practice taking into account barriers.
- Action plan – everyone agrees to the aims with a named person responsible for the action plan.
- Evaluate progress through regular audit and feedback. Reward achievements.

The York University Centre for Reviews and Dissemination recommendation on planning tells us that as a first step, an analysis should be done of the groups who will be affected or influenced by the proposed changes. The analysis should include an assessment of:

- the target groups or audiences,
- the needs of the target group(s),
- their degree of preparedness for change,
- the characteristics of the proposed change that might influence adoption,
- identification of potential external barriers to change, and
- identification of likely enabling factors, including resources or skills.

Combining these recommendations, the suggested steps in developing a dissemination and implementation plan for the guidelines developed by the HTA Ambassador Program are:

1. Audience
 - a. Who are the target audiences (primary and secondary).
 - b. What is their current practice/state of knowledge.
 - c. What are the barriers and facilitators to change both within their practice environment and in the external environment.
2. Content
 - a. Internal to the guideline (i.e. how they were developed).
 - b. Key messages (customized for each audience).
3. Strategy and Tactics (form and delivery mechanisms) – including timing, responsibilities

4. Evaluation process and outcomes (short and long term impact).

As noted earlier, the strategy for the dissemination and implementation of the guidelines began when the guidelines were first being developed so the plan is not sequential as would be the case if this was an “end of project” activity.

1. Audience

a. Target audience

“There is evidence that guideline developers should focus on the needs of the physician, and provide clear statements, decision aids, patient education material and practical tools to manage difficult problems in practice...” (Fullen 2008)

The main or primary target audience for the Ambassador Program CPG is primary care practitioners (such as pharmacists, psychologists, physiotherapists and other therapists), particularly family practice physicians. Secondary audiences include:

- specialist physicians,
- patients,
- Alberta Health Services health regions,
- general public,
- professional associations and colleges,
- government, and
- insurers.

Information on these audiences, with an emphasis on family physicians, and the barriers and facilitators in managing chronic pain and using guidelines, was gathered from:

- the Ambassador Program Pre-videoconference Survey of Results, May 2006,
- the Alberta HTA Chronic Pain Ambassador Program, Knowledge Gaps/Needs Assessment (July 2007) that reviewed literature and surveyed 147 health care professionals who indicated perceived barriers in the management of chronic pain,
- Alberta HTA Chronic Pain Ambassador Program feedback on the Evidence-Informed Primary Care Management of Low Back Pain Guidelines, April 2008,
- a review of selected current literature on:
 - Factors affecting physician compliance with CPGs,
 - Effective patient education tools with emphasis on e-media.

b. Current state of practice and knowledge, and barriers to change (by audience)

Physicians

From the Knowledge Gaps overview and literature on physician compliance with CPGs, we know that guideline adherence is affected by a complex interplay of factors that influence practitioner beliefs, attitudes and actions. Challenges to communicating with physicians and uptake of practice guidelines include:

- Their lack of time.
- Not a homogenous group.
- Have their own beliefs and attitudes and often rely on shared beliefs and personal opinion rather than research evidence to make treatment decisions. Need evidence-mindedness to replace a belief system.
- Uncertainty about whether guidelines actually improve outcomes. While there is some evidence that following guideline recommended treatments for acute low back pain provides a slight improvement in short term results and a decrease in the likelihood of developing chronic pain; the evidence is far from definitive. Consequently practitioner attitudes are tempered by uncertainty of whether conforming to a guideline's directives will actually improve patient outcomes and reduce societal burden of disease.
- Lack of knowledge, skills.
- Opinion of colleagues; collegial culture. Peer group (local standards not in line with desired practice).
- Most practitioners are not information-seeking probabilistic decision makers. Nor are they all hi tech savvy.
- Don't appreciate passive, unsolicited information.
- Material that doesn't respect professional autonomy and physician-patient relationship.
- Opioids and associated stigma, uncertainty, regulatory scrutiny. Lack of experience, knowledge and confidence in the appropriate prescription of opioids.
- Cost and lack of health insurance coverage for some recommended treatments.
- Fear among physicians that postponing diagnostics in the absence of red flags might be perceived as a cost-cutting measure.
- Significant portion of GPs have no access to recommended multimodal pain programs for patients with chronic low back pain (LBP).
- Individual experience not aligned with guidelines.
- Not relevant to their practice and practice population.

Other Health Care Professionals

The results from the Ambassador Program Pre-videoconference survey (response from 61 of 141 participants in the workshops delivered in the first phase of the program) on barriers to using care pathways, found that most frequently mentioned barriers were:

- Not aware of pathways relevant to practice.
- Lack of time (to inform staff, to incorporate into the flow of practice).
- Inconsistent interpretation of pathways.

It is worth noting that 44% of respondents said “no” to the question, “Are there barriers to the use of care pathways in your health region?” Barriers broken out by physician and non physician responses were small numbers but affirm those in the literature and other AP reference documents.

The Alberta HTA Chronic Pain Ambassador Program, Knowledge Gaps/Needs Assessment (July 24, 2007) provided an overview of the available published evidence on the knowledge gaps in the primary care setting. The overview confirmed that there is a gap in knowledge in the management of chronic low back pain. Although many factors affect degree of compliance with guideline recommendations, two of the prime practitioner-oriented factors that determined the extent of the knowledge gap were ignorance of current evidence-based practice and deliberate non compliance.

As part of the work on the Knowledge Gaps/Needs Assessment, a survey of 147 health care professionals was also conducted asking respondents to indicate the barriers they perceived to the management of chronic pain.

The most important barriers were:

- a lack of ready access to pain management guidelines, and
- access to pain management specialists.

To a lesser extent, also noted as significant barriers were:

- patient demand for specific investigations and treatments, and
- concern about patient drug taking behaviour.

Other barriers were:

- physician prescribing practices,
- access to and support for alternative treatments,
- patient expectations and resistance to self management, and
- limited resources.

Patients

Patient preferences can be a significant barrier to guideline adherence. Patients come with preconceived notions about low back pain and old knowledge on treatments (i.e. bed rest, traction). Patients have a quick fix mentality, looking for specific reasons for the pain and a subsequent quick cure.

From a physician perspective (in their relationship with patients), research tells us that agreement with guidelines is a basic but not sufficient precondition for guideline implementation. Physicians may agree with the guideline content but believe that guideline stipulations are not congruent with patient wishes (supported by the Knowledge Gap survey). However, other research has shown that patients with LBP in primary care seek assurance and advice. Family

physicians may just be providing themselves with a welcome argument to continue traditional management of LBP, that is, acting on presumed patient expectations.

Non adherence to the guidelines and contradictory information for patients by other professional are important barriers to guideline adherence.

Public

The barriers to communicating with the general public are related to the size, cultural diversity and different populations within this audience. Any effective strategy for communicating with the general public requires a sustained effort and is likely to be very costly. Public awareness campaigns both in Australia and in Scotland, using population-based media campaigns, were successful in sustaining a change in public beliefs on back pain.

The general public has the ability to understand scientific material but needs assistance in extracting meaning and relevance, and they need an explanation of the significance of limitations.

It is useful to gauge public reaction to population-based campaigns (focus groups) before developing materials and again to review draft products. In large media campaigns, it is difficult to target media messages for particular subgroups that are at different stages of readiness. Therefore, key messages should be built on a social marketing-based KT strategy.

The public is an audience for the guidelines but can also be seen as a strategy to support dissemination and implementation with other decision-making audiences.

Government

Government representation and involvement in the Ambassador Program has been part of program from its inception. These representatives are best positioned to inform the dissemination and implementation of the guidelines both within government and the Primary Care Networks.

Professional Associations and Colleges

Professional associations and colleges are important as a means to support communications with allied health professionals. They are also an audience in their own right as the guidelines may or may not align with their professional guidelines.

Alberta Health Services health regions

The recent announcement of the dissolution of regional and provincial health authority boards and the creation of a super-board removes the health region and provincial authorities as an audience for the dissemination and implementation of the guidelines. However, the regions or service providers are still very much there and the Ambassador Program will need to work with the new environment to customize the guidelines, with due consideration for the differences between urban and rural settings.

Insurers and Others

The interest in the guidelines within this audience group will vary. For example, WCB may have more interest than the Builders' Association. The intensity of the dissemination and implementation with these groups will vary accordingly.

2. Content

a. Internal to the guideline

One of the key predictors of successful or effective dissemination and implementation, according to the Institute for Work and Health, is the “implementability” of the guidelines [which speaks to the process of their development as well as their content and format]. From the overview of literature, the factors internal to the guideline that will contribute to or hinder implementation are:

- There is an expressed need for the guidelines.
- Guidelines are based on relevant research.
- Guidelines provide information on assessment and treatment; for example, as noted in the Knowledge Gap document, guidelines in back pain management often refer to the psychosocial risk factors for developing chronic pain. However, often no clear advice is given about which factors to consider when to assess them, or how to screen for them.
- Materials (tools) are useable in the clinical setting (e.g. software compatible, short vs lengthy written documents).
- Guidelines say what to do as well as what not to do.
- When developing guidelines, there should be a policy/decision on making recommendations when there is insufficient scientific evidence. Guideline developers must decide whether to maintain complete neutrality or whether to give weight to other factors (i.e. expert opinion).
- There is broad representation (consumers, care providers) on group responsible for pulling together guidelines.
- There is clarity of definitions, language and format.
- Format varies depending on target group.
- Development involves all groups affected by the guidelines.

At a primary care focused pain conference in Edmonton in April 2008, 41 participants responded to a survey on the draft guidelines. The question asked was: “Do you see any challenges in implementing these guidelines?” Comments about challenges within the practice environment and organizational barriers were well aligned with the barriers noted above. On the content and form of the guideline itself, respondents said:

- Simplistic is good and bad.
- Make it easy for everyone to use.
- Provide information about the specific reviewed literature used to construct the guideline.
- Awareness about availability of guidelines.

b. Key messages by audience

The content of the dissemination and implementation strategy is of course the guidelines themselves. However, key messages need to be developed that:

- give meaning to the research,
- draw lessons learned from the research,
- are clear, concise, audience-focused statements,
- are actionable statements and ideas rather than data, and
- are appropriate for the intended audience in tone, content and language.

Key messages will be developed as the plan evolves, with input from the Guideline Development Group, the Advisory Committee, and others as appropriate.

3. Strategies and tactics

a. What we know are effective strategies

In general, guideline dissemination and implementation is more successful when:

- It is supported by existing relationships with audience.
- There is active engagement with key audiences in developing and implementing guidelines.
- Opportunities are provided for exchange of information ideas and experience; interactive engagement.
- It is supported by mass media.
- When reinforcement is regular, constant, repeated.
- There is summary versions and a variety of products – brochure, video, etc
- It is phased.
- Costs and benefits are noted.
- It is led by a health professional.

With the barrier and facilitators noted in the previous section, the following strategies have been found to be effective, in varying degrees, in guideline dissemination and implementation for **physicians**:

- Physicians appreciate evidence that had been appraised, summarized and published as a guideline by an independent national organization.
- Guidelines are presented in an attractive and easily accessible format.
- Guideline recommendations are adapted to the infrastructure of the health care system.
- Guidelines have an impact on the process of care rather than patient outcomes.
- Guidelines are designed to assist rather than direct.
- Lay translations are provided for healthcare professionals to use with patients.
- Guidelines offer management and treatment options for patients and their families.

- Guidelines are locally implemented with sufficient flexibility for adaptation to local circumstances. Local physicians actively participate in implementation strategies and in evaluating the application of guidelines to local settings.
- Guidelines respect professional autonomy and the physician-patient relationship.
- Guidelines are widely distributed but this alone has been shown to be ineffective in achieving changes in practice. It is likely more effective if disseminated with active educational intervention, and implemented by patient-specific reminders relating directly to professional activity.
- Education interventions can improve behaviour when they are based on actual working practices and use interactive techniques such as discussion groups, and are associated with other effective implementation strategies such as reminders.
- Implementation is done through interactive guideline-based CME.
- Use of local and other opinion leaders can have a significant influence.
- Public education and an interdisciplinary consensus are important requirements for successful guideline implementation into daily practice.
- Manual reminders and EMR reminder messages can be effective (in many but not all studies).
- Active knowledge translation strategies (audit and feedback, real time reminders, academic detailing) are effective although the effects are modest.
- Book marked sites that have been reviewed and deemed credible to serve as quick response sources.
- Strategies that use early adopters as role models.
- Targeting medical students and residents.
- Education of local multi-professional groups and education for individuals (cost implication).
- Sponsors may have a role in enhancing dissemination.
- Guideline implementation works best when it does not cause much change to existing routines and when guidelines can be implemented using valid and low cost strategies.
- Conferences (including consensus development), workshops (interactive education) and lectures.
- Patient-mediated intervention; materials designed for patients; consistent patient-directed materials.
- Dissemination of print guidelines.
- Mass media campaigns.
- Networking.

Generally speaking, these techniques are effective in implementation with **other health disciplines** as well, that is, multiple strategies are used, strategies are interactive, and strategies take into account local circumstances and practice considerations.

Techniques that influence **patient** acceptance of guidelines indicate that:

- Applying evidence in practice involves synthesizing evidence with clinical findings, and patient preferences, beliefs and values.
- A range of communication tools can increase patient understanding and knowledge. Materials (booklets, interactive computer aided tools, web-based tools, CD-ROM, etc) do help patients to make informed decisions, and packages of material are better than any one product or technique.
- Patients prefer interactive video over leaflets but leaflets are effective in the absence of video.
- Materials should support self-management, improved health behaviour, and improved outcomes.
- One systematic review (2006) found that there was no evidence that video programs alone were effective in reducing LBP. Another systematic review, this one focused on diabetes education, found that in 16 out of 19 trials, computer-aided education interventions showed improvements in at least one outcome. However, there was also a steady decrease in the percentage of significantly improved outcomes as the measures progressed from learning through to long-term improvement.
- There is some evidence that a biopsychosocial booklet is more effective than a biomedical booklet to shift patient beliefs about physical activity, pain and consequences.
- As with public campaigns, it is useful to consult with patients (focus groups) before developing materials and again to review draft products.

Arming patients with accurate information can also be seen as a strategy to support dissemination and implementation of guidelines by physicians.

Other audiences include general public, government, professional associations, health regions within Alberta Health Services, and insurers. Successful strategies with the public are likely to be broad based and multi-faceted but they are also likely to be expensive. KT strategies that are based heavily on social marketing are often used with success in public awareness and behaviour change campaigns. Reaching other audiences, such as professional associations, is best accomplished through established connections.

b. What we know about environmental factors

From a review of the literature, we know that the following environmental or context factors, in general, influence the uptake of guidelines:

- Hospital policy.
- Geography.
- Availability of specialists.

- Structural factors (e.g. financial disincentives). Payment mechanisms must support guideline recommendations. Culture eats process for breakfast.
- Organizational factors (inappropriate skill mix, lack or presence of facilities or equipment).
- Local circumstances that is, why this will or will not work in a given region. Clarify what's happening before introducing "best practice" i.e. Make sense of the information by clarifying practice, assessing its value, exploring values, group intent, support.
- Impact on workload and costs.
- Available resources to maintain updated guidelines.

From the pre-videoconference survey, the Knowledge Gaps survey and the survey of the draft guidelines, the following factors were identified as barriers and align well with the above-noted factors:

- No institutional support.
- Poor communication between departments and between professions.
- Service model in the region does not support care pathways.
- Lack of access to pain management specialists and interdisciplinary pain programs.
- Lack of access to alternative modalities.
- Lack of available rehabilitation and self-management programs particularly in rural areas.
- Lack of resources (IT, funding).
- Organization resistant to recommendations.

The suggested strategies (how audiences will be engaged) and tactics (when, how messages will be packaged and delivered, responsibility) are presented in Table 1. They will change over time as the project progresses.

4. Evaluation

The effectiveness of this KT strategy can be assessed at several levels: reach indicators for any disseminated material, usefulness indicators of material and activities, use indicators, changes in practice, changes in patient outcomes. Metrics for each of these would have to be developed but could include such things as number of hits on web site, downloads from web site, media requests, user satisfaction, research on physician practice. Desirable changes in physician behaviour, as noted in the Knowledge Gaps document are:

- Assessment of red flags.
- Reduce inappropriate ordering of DI.
- Increase provision of appropriate educations and reassurance to patients.
- Reduce inappropriate recommendations re sick leave, bed rest, and continuing activity.
- Improve correct recommendations for steroids antidepressants and muscle relaxants.
- Reduce inappropriate prescription of passive physiotherapy and injection therapy.

- Increase appropriate recommendations for spinal manipulation.
- Increase appropriate prescription for physiotherapy, active rehabilitation and patient self-management programs.
- Reduction in recommendation for traction.
- Reinforce correct use of/adherence to guidelines for: history taking and physical exam; NSAIDS and acetaminophen prescribing; administration of heat and ice, therapeutic ultrasound; and massage therapy.

The evaluation should be developed with the intent to support continuous feedback and adjustments to this strategy.

This piece of the plan will be further developed in the coming weeks following discussion at the dissemination planning meeting.

Table 1: The Dissemination and Implementation Plan

Target audience	How will they be engaged and when	Key messages	How will messages be packaged and delivered	Responsibility
COMPLETED TO DATE				
Family practice physicians	1. Develop source product in response to identified need. [<i>project beginning</i>]	Responds to identified need	a. CPG was asked for by participants in API workshops	
			b. Informal needs assessment, conducted as part of the formal evaluation of Phase 1, to discern further areas of primary care practice that would benefit from the dissemination of evidence based-information	
	2. Involve stakeholders and opinion leaders in development from the beginning and maintain throughout project. [<i>Initial and ongoing</i>]	Made every effort for this to be an inclusive process	a. Advisory Committee Representation from key stakeholders: AHW, TOP, CPSA, Associations and Colleges for other disciplines	
			b. Working Committee Representation from practitioners in family practice, pain specialists, physiotherapy, pharmacy. Regions represented (except NLHR)	
		c. At Nov 2007 meeting, associations and colleges agreed to participate in dissemination		

Family practice physicians (cont'd)	3. Guidelines are based on best evidence. Clarity in definitions, do/do not, etc <i>[Initial]</i>	Chose not to reinvent the wheel but to use existing guidelines from around the world, to rate their quality, and to be open to new evidence as it becomes available	Guideline development based on best evidence, AGREE tool applied	
	4. Guidelines kept up to date <i>[Ongoing]</i>	This is a living document and developers are committed to regular updates	A commitment has been made to continue updating (update committee - annual review and biannual updates)	
	5. Provide a variety of materials that take into account local circumstances and respect physician practice considerations <i>[1 and 10 pager complete, 100 pager for Sept 08, medication chart revisions in progress June 08]</i>	Different versions were created to cater to the needs of different users	a. 1-10-100-page versions, flow chart, and inclusion of medication chart b. Involved TOP designers to format 1-pager c. Develop Web site navigation streams for physicians and for public/patients	TOP Web site

	PROPOSED			
Family practice physicians (cont'd)	6. Consult on converting guidelines to point-of-care tools (include patient-friendly information for physicians to use with patients – see below)	E-tools would greatly support the integration of the guidelines into practice	a. Pilot test 1-10-100 pagers to inform revisions, inform wider dissemination and implementation	Pilot tested at CHA conference. Further pilot testing to be done through Working Committee. Guidelines revised depending on feedback
			b. Development of other tools; such as: Link in Electronic Medical Record to web site rather than loaded on their system or on paper, pdfs that can be loaded on MP3	Consider consultation with H & MP <i>BC physician at KT08 who has done some excellent work in guideline implementation through PDAs (PT). TOP as well</i>
	7. Regional consultation and adaptation. Consult on development of local dissemination strategies	This is what the guideline says but you know what works best in your area	a. Customized dissemination of guidelines for zones	
			b. Presentation to Alberta Health Services Medical leadership	
	8. Consultation and feedback from PCNs	These guidelines will help PCNs deal with this common problem.	Meeting with KT point person for PCNs to determine best course of action	Need to connect with BMcK (PCNs)

Family practice physicians (cont'd)	9. Coordinate a formal launch with TOP. Timing?		Board of TOP has approved, in principle, the partnership with the Ambassador Program regarding low back pain guidelines	TOP to launch
	10. Align with relevant events: <i>Could coincide with the dissemination of the CPSA launch of Opioid guideline, tentative Dec 08</i> <i>Oct 08 is Pain month</i> <i>Physicians' conference in Pain Society of Alberta conference in November 08 Banff in Feb 09</i> <i>PCN conference Apr 09</i>	CPGs have been developed on the care and treatment of low back pain. Sponsors would be pleased to present at conference	a. CPSA has shared timeline for release of opioid guideline	CPSA to provide updates on progress
			b. Presentation at conferences	CH and PT presenting at the Calgary Pain Conference in December 08
	11. Present a wide variety of face-to-face opportunities to present the guidelines. [launch date to May 09]		a. Facilitated teaching session or CME session on chronic pain; case based using the guideline.	Meeting with faculties of medicine to discuss. To be determined
			b. Rural Health CME office to present guideline at one of their sessions.	To be determined

Family practice physicians (cont'd)			c. Lunch and Learn sessions in hospitals d. Hold more Ambassador-type session with docs.	Possibly IHE will support
			e. IHE Consensus conference	
	12. Partner with Bone and Joint initiative	(They will develop their own implementation plan that will include our guideline.) APII has partnered with ABJI to ensure continuity of information.	DS on Dissemination Working Group	
	13. Ask working committee to champion in their regions. [Dec 08]		Working committee members to circulate the guidelines (1, 10, 100 pager, algorithm and medication chart to their colleagues for feedback. Provide packages for distribution.	Steering Committee to develop packages. Director Communication IHE to help
	14. Offer guidelines for course content to Faculties of Medicine	This is a validated tool to support teaching	On-line tutorial Note: prescribing course at U of C in development with CPS	Consult with H. and MacP. Responsibility and cost to be determined
15. Peer reviewed publications	(Will vary)	Article in the CMAJ	TF is writing	

Other disciplines and their professional associations and colleges: chiropractors, pharmacists, nurses, physiotherapists	1. Ask Advisory Committee to champion through their organizations [<i>launch date</i>]	To be determined	a. Approval and support of guidelines from associations and colleges invited to November 13, 2007 meeting. Provide launch package	Responsibility and cost to be determined
			b. Request meeting with Rob Burnnam and partner for advice on best approach re chiropractors	PT & DA
	2. Request link to TOP on all association and college web sites	To be determined	Letter of request	Steering Committee
	3. Request article placement in association and college newsletters and magazines	To be determined	Provide package and prepare short article for professional newsletters	Steering Committee
	4. Present guideline material at discipline conferences [<i>nurses' conference Jun</i>]	To be determined	Posters, presentations, handout material	Responsibility and cost to be determined
5. Connect with PT/OT professional development	To be determined			

Patients	1. Develop patient support materials for distribution through doctors' offices, physiotherapy clinics, chiropractic offices, clinics, EDs, urgent care clinics. [<i>launch date</i>]	To be determined	Develop pamphlet (which will also be needed to support pilot testing), DVD, handbook	GAC for handbook template. DVD developed through research funding? – to be determined
	2. Web site [<i>launch date</i>]	To be determined	Through TOP web site with links from IHE web site	To be determined
	3. Partner with Chronic Pain Association and Canadian Pain Coalition	To be determined	Link to CPC web site	
Public	1. Public education/ awareness campaign including media [<i>Jan 09</i>]		Explore possibility of reactivating the WCB campaign on staying active	To be determined Need to connect with WCB as the major sponsor of the previous campaign
Other guideline agencies	1. Share the guidelines [<i>Jan 09</i>]		Cover letter and full guideline package	Arrange meeting with GAC and CLIP

Government	1. Disseminate to Alberta Health [<i>Sept 08</i>]		Through representatives on the Advisory Committee, determine the most effective means for disseminating this within government. Pay particular attention to any financial implications from the guidelines and references to tools that may not be available	
	2. Explore link to accreditation guidelines. [<i>Aug 08</i>]		Contact DH	
Other audiences (Insurers, WCB, Builders' Association, Chambers of Commerce, rehabilitation centres)	1. Provide basic information on the guidelines and access to further information to relevant stakeholders [<i>Jan 09</i>]		a. Prepare pamphlet for distribution	Responsibility and cost to be determined
			b. Consider a presentation to WCB	Responsibility and cost to be determined
			c. Develop mailing list and mechanism to respond to requests	Responsibility to be determined

REFERENCES

Ambassador Program internal documents and presentations. API and II - Three surveys

Chenot JF, Scherer M, Becker A et al. Acceptance and perceived barriers of implementing a guideline for managing low back pain in general practice. *Implementation Science* February 7, 2008 (patient wishes, non agreement between profess).

Davis D, De Villa E, Dunn L et al. *Clinical Practice Guideline Critical Appraisal Tool*. CPG Appraisal Working Group. September 1999.

Davis DA, Mazmanian PE, Fortdis M et al. Accuracy of Physician Self-assessment Compared with Observed Measures of Competence, A Systematic Review. *JAMA* 2006;296(9).

Dijkstra R, Wensing M, Thomas R et al. The relationship between Organizational characteristics and the effects of clinical guidelines on medical performance in hospitals: a meta analysis. *BMC Health Services Research* 2006;6:53.

Fullen BM, Baxter GD, O'Donovan BG, Doody C, Daly L, Hurley DA. Doctors' attitudes and beliefs regarding low back pain management: A systematic review. *Pain* 2008.

Grimshaw J. *Medical Care* 2001;39 (8Suppl2):2–45.

Hakkennes S, Green S. Measures for assessing practice change in medical practitioners. *Implementation Science* 2006;1:29.

Institute of Health Economics. Ambassador Steering Committee. *Managing Low Back Pain in the Primary Care Setting: the Know-do Gap*. April 2007

Lomas J. *Improving Research Dissemination and Uptake in the Health Sector: Beyond the Sound of One Hand Clapping*. McMaster University Centre for Health Economics and Policy Analysis. Paper C97-1, November 1997.

Majumdar, SR, Soumerai, SB. Why most interventions to improve physician prescribing do not seem to work. *CMAJ* 2003;169(1).

NHS Centre for Reviews and Dissemination. *Getting Evidence into Practice. Bulletin on the effectiveness of health service interventions for decision makers*. University of York, February 1999, Volume 5, Number 1.

Putnam W, Twohig P, Burge F, Jackson LA, Cox JL. A qualitative study of evidence in primary care: what practitioners are saying. *CMAJ* 2002;166(12).

Ripouteau C, Conort O, Lamas JP et al. Effect of multifaceted intervention promoting early switch from intravenous to oral acetaminophen for postoperative pain: controlled prospective, before and after study. *BMJ* 2000;321:1460-63.

Reardon D, Way D, Shaw-Moxam R. *Creating a Network of Educationally Influential Primary Care Physicians for knowledge Transfer and Exchange*. Presentation on Ontario Physician Knowledge Exchange Collaboration, 2003.

SIGN 50 A guideline developer's Handbook. Scottish Intercollegiate Guidelines Network. Revised Edition, January 2008.

Trevena LJ, Davey HM, Barratt A, Butow P, Woolf SH, DiGiuseppi CG, Atkins D, Kamerow DB. Developing Evidence-Based Clinical Practice Guidelines: Lessons learned by the US Preventive Services Task Force. *Annual Review Public Health* 1996;17:511-38.