

Education for People with Chronic Pain

**Where we've been, where we're
going**

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Objectives

- Describe how self-management education can be an adjunct to usual care
- Describe the Chronic Pain Self-Management Program (CPSMP)
- Evidence & implications from 2 RCTs
- Musings on the future of chronic pain self-management education

Prevalence

- The prevalence of chronic pain is huge
 - affects all ages from children to the aged
- An estimated 25% of adults over 18 suffer from chronic pain
 - That's over 8 million Canadians
- About 2/3 of them suffer moderate to severe pain



Impact

- Deep distress
- Functional limitations
 - Depression
 - Sleep problems
 - Low self esteem
- Job change or job loss
- Change in social relationships
 - Effects on the family

Brevik et al. (2006); Boulanger et al. (2007)

Cost to society

- An estimated cost to society of \$50 B per year in Canada:
 - direct and indirect health care costs
 - lost productivity
 - disability costs
 - financial burden on the person and family



The problem of access

- In spite of high prevalence & impact, access to specialty multi-disciplinary pain services is limited by:
 - nature of the referral process
 - geographic location
 - cost and resource constraints
 - sheer size of the problem – what can we do at the primary care level as an adjunct to usual care?

Need for community-based programs - 1993

“an intervention that can be widely disseminated even if it is only moderately effective, may have greater impact on patient care than a more effective treatment approach that is more restricted in terms of numbers of patients that can be treated” (Turk, et al., 1993)

Also in 1993 - ASMP

- One successful approach was the ASMP from Stanford's Patient Education Research Centre:
 - **strong theoretical base (self-efficacy theory)**
 - **adherence to proven educational principles**
 - | **relevance**
 - | **reinforcement**
 - | **feedback**
 - | **individualization**
 - | **facilitation for skills acquisition**

Lorig, K., Holman, H. Arthritis self-management studies: a twelve-year review. Health Education Quarterly, 1993; 20; 17-28.

Turk & Holzman (1986)

- Success of psychosocial interventions for chronic pain:
 - Foster optimism & combat demoralization
 - Individualize treatment
 - Active patient participation & responsibility
 - Skills acquisition
 - Foster self-efficacy
 - Self-attribution of success

ASMP Outcomes in 4 RCTs (n=938)

- Significant improvements in:
 - knowledge (32%),
 - exercise and relaxation behaviors (80%)
 - pain (22%),
 - positive trends in depression (14%) , disability (6%)
 - improvements were maintained and reduced health care costs up to 4 years post-intervention
 - improvements linked to increased self-efficacy

Lorig, K., Holman, H. Arthritis self-management studies: a twelve-year review. Health Education Quarterly, 1993; 20; 17-28.

What is Self-Management?

- “ The individual’s ability to manage the symptoms, treatment, physical and social consequences and lifestyle changes inherent in living with a chronic condition”.

- (Barlow et al, 2002)

What is Self-Management Education?

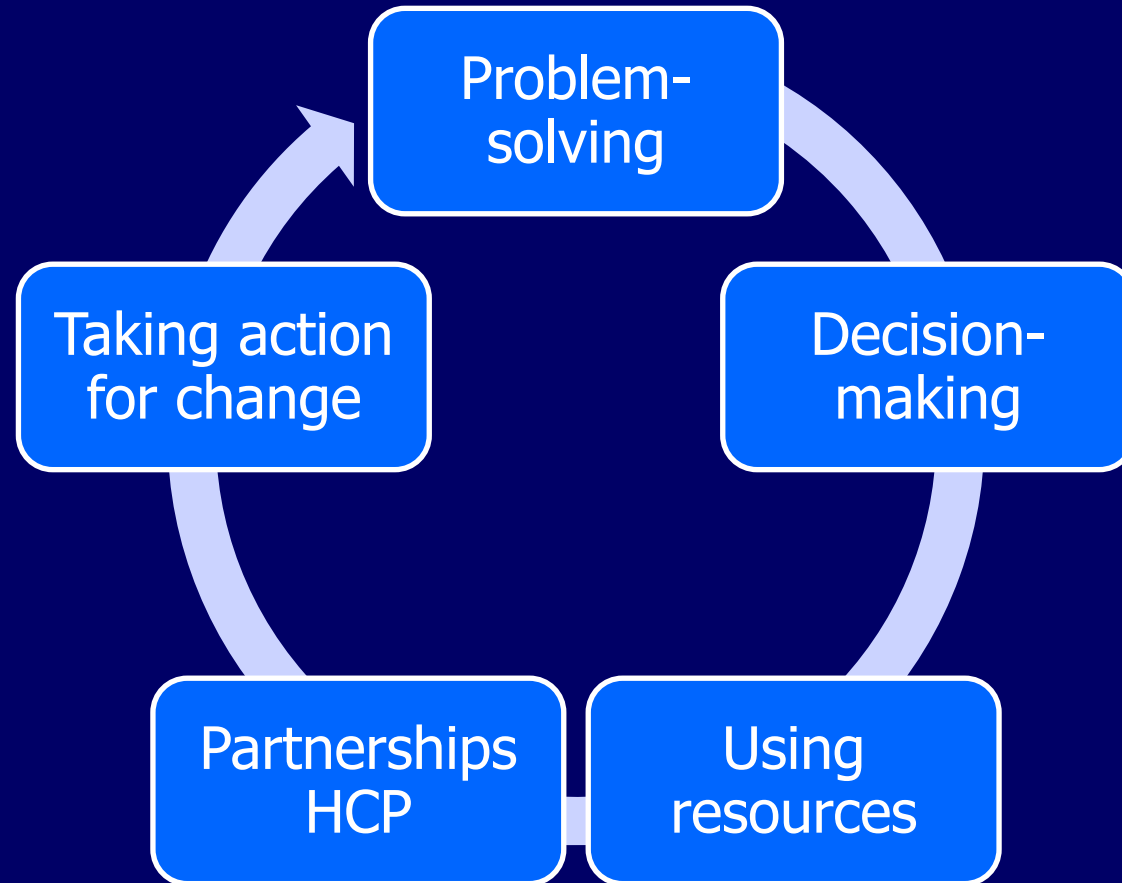
- Programs, based on adult learning principles, that provide people with the skills to live an active and meaningful life with their chronic condition(s).

(Lorig, 2003)

Self-Management: Underlying Principle & Tasks

- Willing to learn about and take responsibility for daily management of their chronic condition
- Tasks:
 - Take care of overall health
 - Carry out normal activities and roles in life
 - Manage emotional changes

Five Core Self-Management Skills



Why is self-management so important?

- Patient self-management is inevitable.
- Outcomes are better when patients are actively involved, have skills to deal with the consequences of chronic conditions, and believe in their ability to do so (self-efficacy).
- The professional's role is to be in partnership with the patient.
 - Professionals are experts about diseases and treatments; patients are experts about their own lives.

CPSMP description

- Standardized program
- Community-delivered
- 10-15 people per group
- 2.5 hrs /wk for 6 weeks
- Adapted from the ASMP & CPSMP
- Train-the-trainer model of dissemination –
- Leaders – peers or hcp



CPSMP: Program Content and Format

TOPICS	WEEK					
	1	2	3	4	5	6
Self-help principles	✓					
Debunking myths	✓					
What is chronic pain?	✓					
Balancing rest/activity	✓			✓		
Exercise/ROM Dance	✓	✓	✓	✓	✓	✓
Pain management/ relaxation		✓	✓	✓	✓	✓
Depression			✓			
Nutrition				✓		
Evaluating non- traditional treatments					✓	
Problem-solving	✓	✓	✓	✓	✓	✓
Communication skills		✓			✓	
Medications						✓
Fatigue						✓
Feedback/contracting	✓	✓	✓	✓	✓	✓

PAIN SELF-MANAGEMENT TOOLBOX

Physical Activity/Exercise	Problem-Solving
Managing Fatigue	Using your Mind
Pacing & Planning	Healthy Eating
Relaxation & Better Breathing	Communication
Medications	Understanding Emotions
Working with Health Professionals	Finding Resources

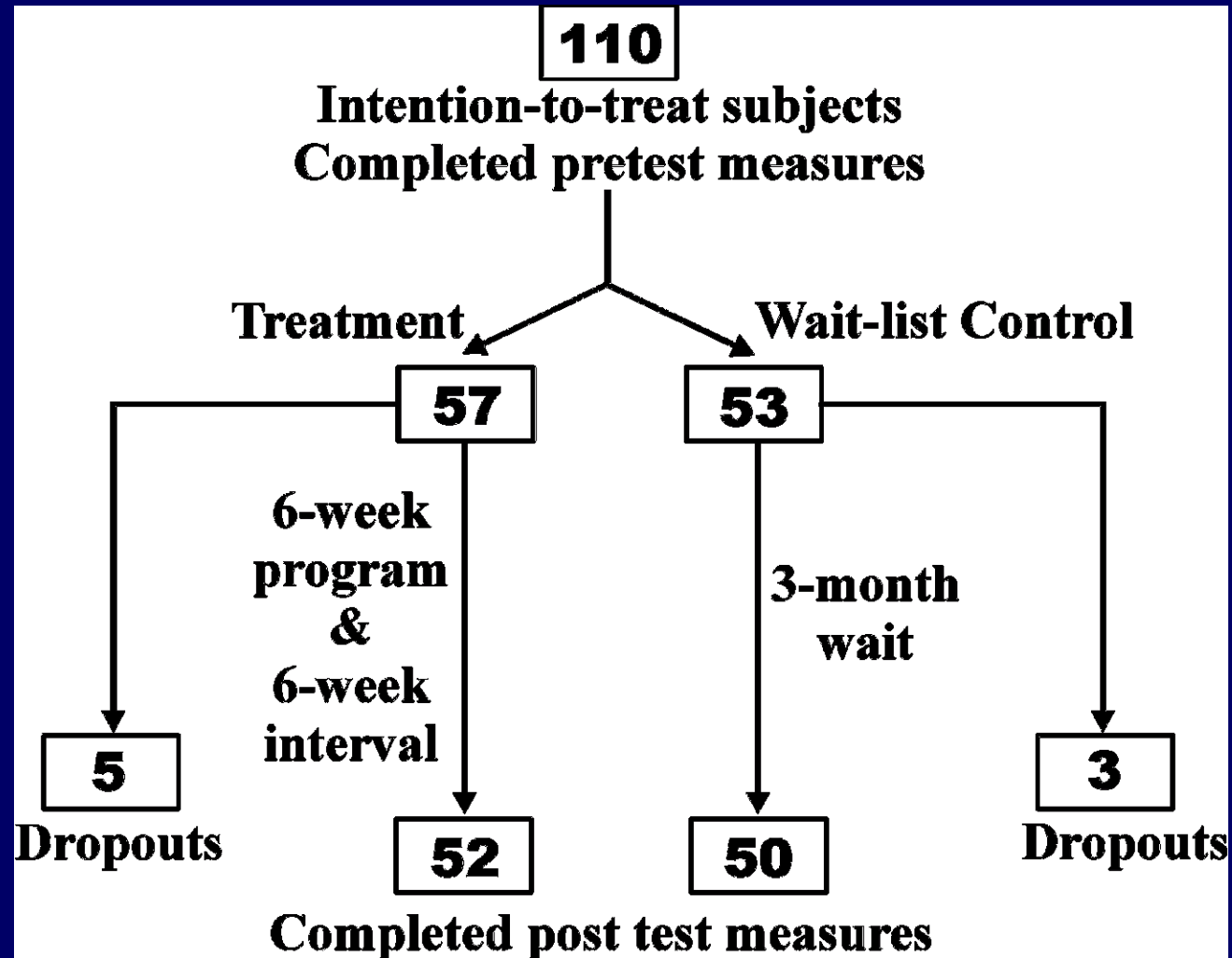
“Don’t mess with the process”: confidence-building strategies

- Making action plans
- Feedback - action planning, exercise diary and action plan forms
- Modeling - Program participants serve as models for each other
- Reinterpreting symptoms and changing beliefs - cognitive reframing
- Persuasion - by seeing others succeed in the group, by encouragement to do a 'bit' more by leader

CPSMP RCT #1: Efficacy Trial

- Study funded by NHRDP
- LeFort S, Gray-Donald K, Rowat K., Jeans, ME (1998). A randomized controlled trial of a community-based psychoeducation program for the self-management of chronic pain. *Pain*. 74; 297-306.

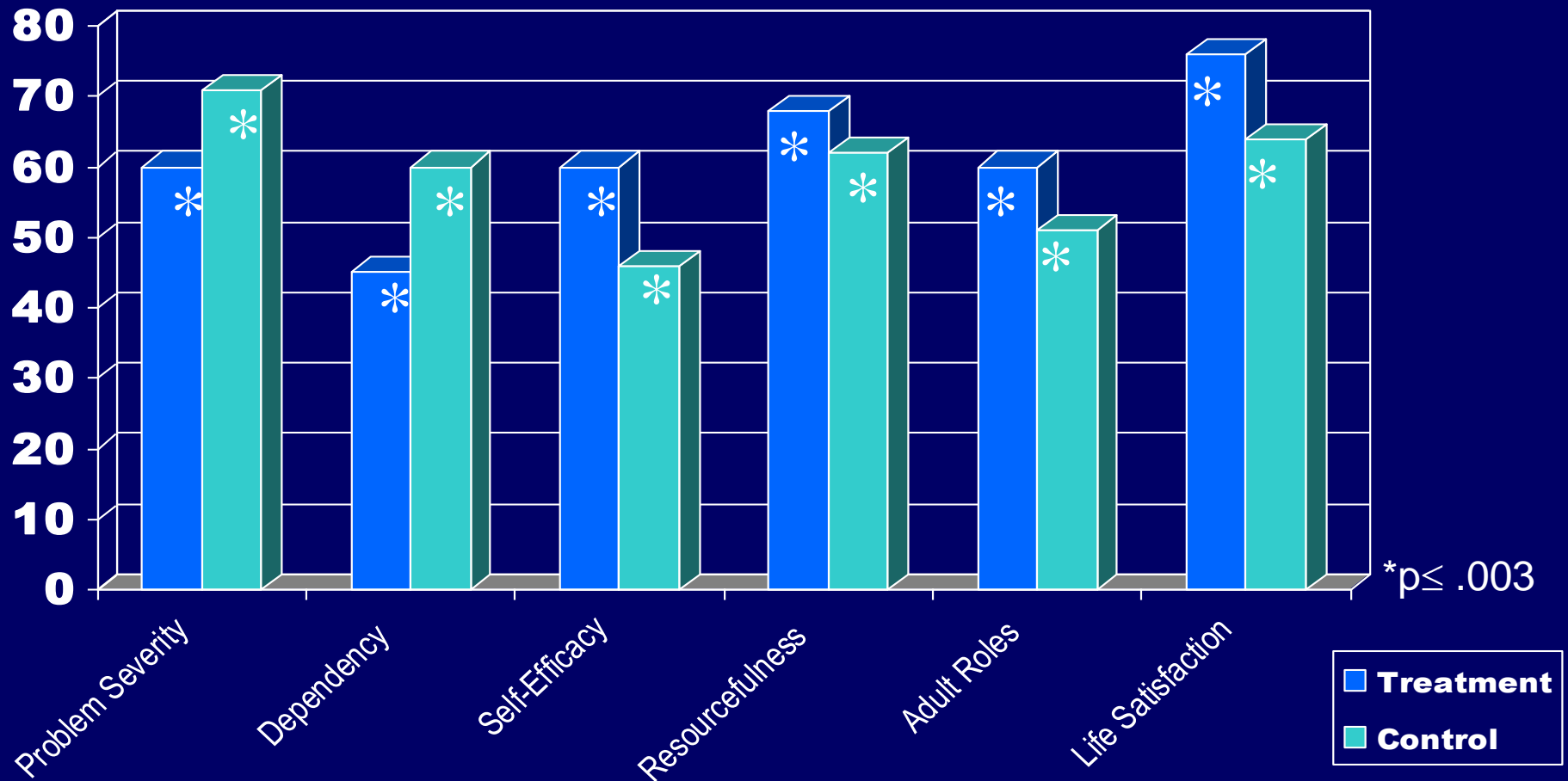
CPSMP RCT #1 – Efficacy Trial



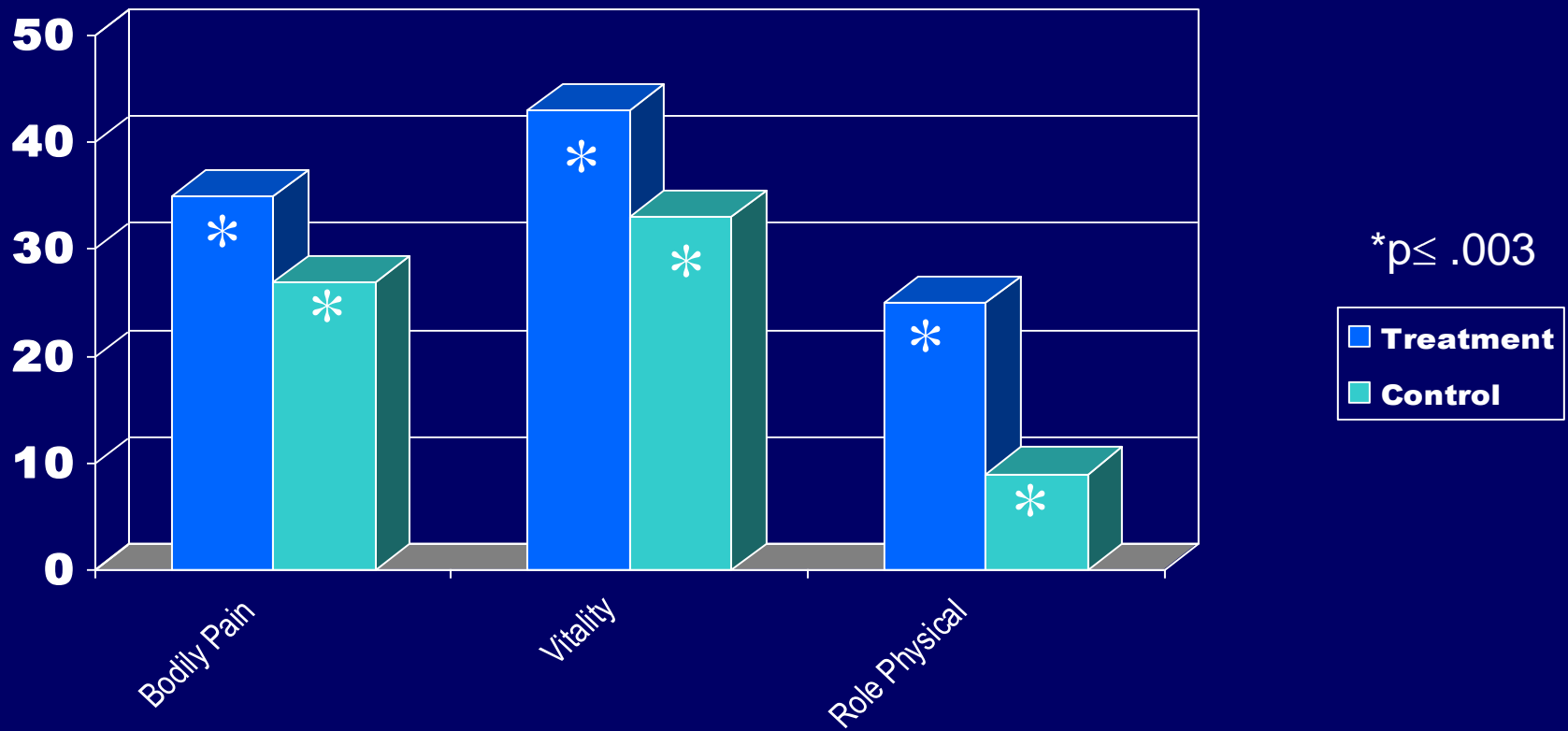
Results: Subject Characteristics

■ Mean age (range)	39.5 yrs (24-60)
■ Gender (% female)	73%
■ Education	
➤ (% high school graduate)	89%
■ Employment (% working)	38%
■ Mean pain duration	6.5 yrs (1-28)
■ # pain locations	6 sites (1-20)
■ Back/neck pain (%)	68%
■ Medications for pain	81%
■ Physician/specialist visit	62% in past 30 days

Comparison of Post-test Scores (Ancova)



Comparison of Post-test MOS-SF 36 Scores



Qualitative outcomes

- Having their voice heard
- Knowing they are not alone
- Sharing with others who understand
- Being a 'safe' environment
- Taking ownership of their pain



Results



- statistically reliable improvement in health status measures
- improvement in treatment group ranged from 9% to 47% with most in the modest range
- comparable results compared to studies of ASMP, and other chronic pain programs reported in the literature
- results supported self-efficacy theory (i.e., confidence building and increased problem solving lead to better outcomes)

CIHR-funded CPSMP RCT #2: Effectiveness Trial

- Co-investigators: J. Watt-Watson, P. Coyte, K. Webber
- Larger study in varied rural and urban sites:
 - 3 in Newfoundland (St. John's, Gander, Corner Brook)
 - 2 in Toronto and 1 in Halton
 - 1 in Regina
- Facilitators were community-based nurses and allied health care providers
- Baseline, 3 and 12 month data collection and monthly Pain Care Diaries to track economic costs

Participant characteristics

- Mean age: 48 yrs
- % Female: 80%
- Working: 31%
- Mean pain duration: 9 yrs
- % back or neck pain: 75%
- Recent visit to health provider: 90%

Results (n=207)

- Statistically significant change:
 - **Mental Health Composite Score** of the SF-36 (includes vitality, social & emotional functioning, and mental health) ($p = .001$) and
 - **Resourcefulness & Self efficacy** ($p = .006$)
- Positive trends to improvement: **disability, psychosocial adjustment to illness & life satisfaction.**
- Results maintained at 12 months

Conclusions from 'real-world'

- generic health care providers can reliably deliver the CPSMP.
- show positive outcomes at 3 months that are maintained for up to a year
- appears to reduce the indirect costs of chronic pain for men.
- results continue to support self-management education approaches.

Roll out of the CPSMP

Developed collaboration with Lisa (Cardas) Sulyok to jointly provide training and program development

- 5 Master training sessions in Vancouver, Edmonton, Toronto, Stratford, and Pennsylvania since 2008
- trained over 100 master trainers from various parts of Canada who can train leaders

Next week, another MT program in Toronto with 13 participants, 3 from Danish Department of Health. Being rolled out nationally in Denmark

Roll out

- BC – Led by UVIC Centre on Aging, part of provincial pain strategy; Fraser Health; Interior Health
- Alberta – Capital Health and Chronic Disease Strategy
- Ontario – 7 Family Health Teams in SW Ontario; Central East LHINS (Scarborough to Peterborough > 10 agencies); pain clinics; Y-PEP program in Kingston
- NS – South Shore
- NL – to start with the NL Long Term Pain Support Group in St. John's

Future Opportunities & Challenges

- Just at the beginning of understanding the kind of educational models & approaches we need.
- The consumer movement is here to stay: “nothing about us without us”.
- What about the family? “If one of us has it, we all have it”.
- Need to be innovative in use of new technologies to improve access and tailoring of interventions
- More R&D...? ***A Canadian Centre for Primary Care Level Interventions for Chronic Pain?***

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