



An Example of a Clinical Research Program on Pain Knowledge Translation and Exchange

Manon Choinière PHD and the ACCORD Team



DISCLOSURE

I have received research grants for various projects, consultant fees and/or honoraria from:

- ✓ AstraZeneca
- ✓ Janssen-Ortho
- ✓ Merck Frosst Canada
- ✓ Pfizer Canada



OUTLINE OF THE PRESENTATION

- ✓ Brief definition of KT and of the CIHR Team Grant Program «*Community Alliances for Health Research and Knowledge Exchange on Pain*»
- ✓ Historical background of the Programme ACCORD
- ✓ Objectives and description of the projects included in the Programme
- ✓ Challenges/obstacles encountered
- ✓ Facilitating elements and strengths
- ✓ Expected impact of the Programme

CIHR DEFINITION OF KT

KT is defined as a dynamic and iterative process that includes synthesis, dissemination, exchange and ethically-sound application of research findings within a complex set of interactions among researchers and knowledge users – to accelerate the capture of the benefits of research for Canadians through improved health, more effective health services and products, and a strengthened health care system.



Tell me and I will forget

Show me and I will remember

Involve me and I will understand

Confucius ?

A two-way street for the researchers and knowledge users



THE MANAGEMENT OF CHRONIC PAIN

Where are we and where are we going in Quebec?



HISTORICAL BACKGROUND

- ✓ 2002: Letter of the President of the *Pain Quebec Society* to the Quebec Ministry of Health denouncing the small number of multidisciplinary pain treatment clinics and their very long waiting lists.
- ✓ 2004 – 2005: The Quebec Ministry of Health created an *Advisory Committee* to propose a reorganisation of the health care services for chronic pain in Quebec

HISTORICAL BACKGROUND

- ✓ 2004: Creation of the *Quebec Association of Patients with Chronic Pain* (AQDC)
- ✓ 2006: Creation of the *Quebec Pain Research Network* (QPRN: 50 regular members + 26 associated members) funded by the FRSQ in partnership with Pfizer Canada, AstraZeneca, and the Quebec Ministry of Health



HISTORICAL BACKGROUND

✓ 2006: Report of the *Agency of Evaluation of Technologies and Modes of Intervention* which recommended to the Ministry of Health, among other things, that:

- Chronic Pain (CP) be considered as a major health problem and a high clinical priority
- Strategies to be developed and supported to **educate physicians** and allied **health care professionals** (evidence-based practices) as well as CP patients

HISTORICAL BACKGROUND

- ✓ 2006 - 2009: Adoption by the Ministry of Health of the report of the Advisory Committee « *Programme national d'évaluation, de traitement et de gestion de la douleur* »
 - Implementation of a hierarchical continuum of services offered in the primary, secondary and tertiary sectors of care to ensure a better accessibility, continuity, quality of services to CP patients
 - Designation of 4 Pain Centers of Expertise in Quebec (care, teaching, research) + continuum of services to be implemented in all sectors of care

HISTORICAL BACKGROUND



2006: Launching of the CIHR Team Grant Program: *Community Alliances* for Health Research and Knowledge Exchange on *Pain*

*UNIQUE MOMENTUM IN QUEBEC
UNPRECEDENTED OPPORTUNITY*



ACCORD
Working together for the management
of chronic pain



OBJECTIVES OF THE INITIATIVE

- ✓ Create **active partnerships** between **research teams** and **community organizations** which will foster high quality research and **knowledge transfer/exchange** in the field of **pain**
- ✓ Partners = **co-participants in all aspects of the research projects from the onset**: priorities, formulation of the research program, elaboration, dissemination, and application of the results

THE ACCORD PARTNERS

Care users

- ✓ President of the Quebec Association of Patients with Chronic Pain (AQDC) + 6 patients including elderly ones suffering from different types of CP syndromes
- ✓ President of the Quebec Federation of Elderly People



Clinicians

- ✓ Directors of the 4 Pain Centers of Expertise of the Montreal, McGill, Sherbrooke and Laval Universities (RUIS)
- ✓ 7 clinicians from various disciplines (family medicine, pharmacy, physiotherapy, nursing) working in the primary, secondary and tertiary sectors of health care



Academic Partners

- ✓ Directors of the CME Programs of the 4 Faculties of Medicine in Quebec, (Montréal, McGill, Sherbrooke, Laval)



Health Authorities

- ✓ Representative of the Quebec Association of the Rehabilitation Centers
- ✓ Directors of 3 provincial government health agencies in the areas of Montreal, Eastern Townships, and Quebec City
- ✓ Representative of the Quebec Ministry of Health (Direction of the Health Care Services and University Medicine)



Associations of health professionals

- ✓ Quebec Pain Society
- ✓ College of Physicians of Quebec
- ✓ Quebec Federation of Primary Care Physicians
- ✓ Quebec Association of Geriatrists
- ✓ Quebec Association of Nurses
- ✓ Quebec Association of Pharmacists
- ✓ Quebec Association of Physiotherapists

Representatives of the industry

- ✓ AstraZeneca Canada Inc
- ✓ Pfizer Canada Inc

Communication and public relations agency

- ✓ Cohn & Wolfe – Health Subdivision



Researchers

- ✓ Team of 15 senior and junior investigators from the Universities of Montreal, McGill and Sherbrooke who have diverse and complementary expertises in:
 - Health geography/geomatic
 - Family medicine
 - Geriatrics
 - Health/disease management
 - Medical teaching
 - Nursing
 -
 - Pharmacy
 - Pharmaco-economy
 - Pharmaco-epidemiology
 - Psychology
 - Rehabilitation
- ✓ Research trainees (Master, PhD, Post-doc)





*Application Concertée des COnnaissances et
Ressources en Douleur*



SOURCES OF FUNDING 2008 - 2012

- ✓ 2.5M – CIHR (*Institute of Musculoskeletal Health and Arthritis and Institute of Neurosciences, Mental Health and Addiction*) in partnership with AstraZeneca Canada Inc.
- ✓ 120K – FRSQ Quebec Pain Research Network + Groupe PRIMUS
- ✓ 120K – FRSQ Quebec Rehabilitation Research Network



PURPOSES OF THE PROGRAMME ACCORD

1. To improve both the condition and quality of life of the Quebecers who suffer from CP by offering them health care services that are more accessible and adapted to their specific needs

2. To provide better assessment and management of CP in Quebec by developing novel and efficient KTE strategies regarding the prevention, diagnosis, and treatment of CP adult and elderly individuals

PURPOSES OF THE PROGRAMME ACCORD

3. To create a new generation of researchers who will have the capacity to not only perform high quality research but also to do studies in real partnership with non researchers (clinicians, patients, policy/decision makers)



SPECIFIC OBJECTIVES

1. To document the health care gaps in the field of pain management in Quebec

2. To fill these gaps by using effective KTE strategies and to assess the impact of these strategies from a clinical, social and economic point a view using rigorous scientific methods and pragmatic types of studies



SPECIFIC OBJECTIVES

3. To develop and implement programs to better train and equip 1st line clinicians who treat CP patients

4. To develop and implement education and intervention programs for CP patients which encourage patient empowerment, self-management strategies and active partnership in pain treatment



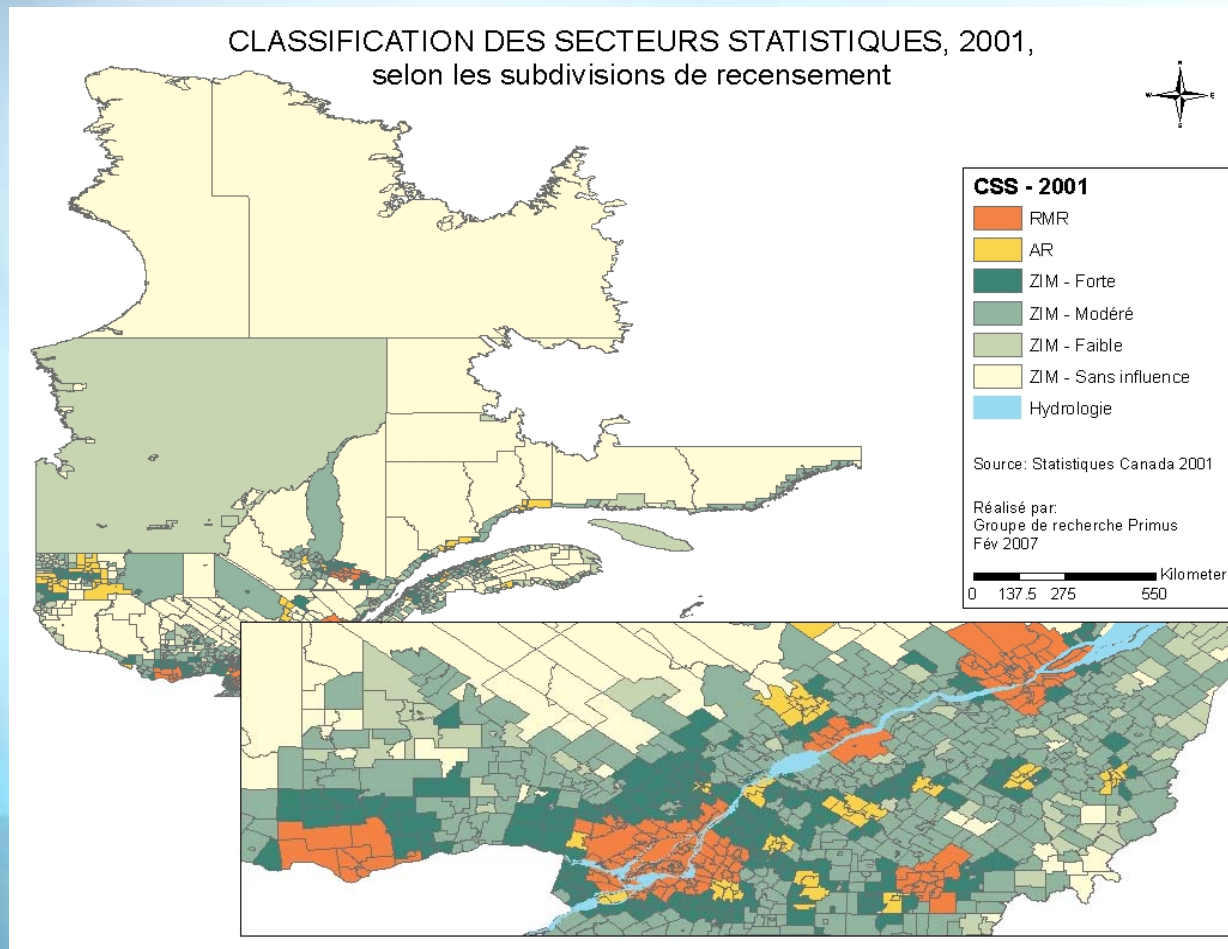


Project #1: Atlas on Chronic Pain and
Treatment Resources in Quebec

Project Leader: Dr Alain Vanasse
Dept of Family Medicine
University of Sherbrooke
Director of the Groupe PRIMUS

A picture is worth 1000 words

A map is worth 1000 pictures



Objectives

- ✓ To establish an *exhaustive mapping* of various types of *CP syndromes* (migraine, fibromyalgia, joint pain, back pain) in the province of *Quebec* using administrative data banks.
- ✓ To document the *available health care resources* specialized in the management of CP

Objectives

- ✓ To identify the *geographic* and *socio-economic gaps* with regard to:
 - Incidence/prevalence of CP
 - Morbidity/mortality
 - Pharmacological and medical treatments
 - Health care resources
- ✓ To *target areas* where more health care *ressources* need *to be allocated* and where *KTE programs* would be *most helpful*

Methods

- ✓ Geographic mapping of the health care resources specialized for CP treatment (survey and questionnaires)
- ✓ Development and validation of the algorithms to identify and retrieve CP patients from the Quebec administrative databases (RAMQ)
- ✓ Data analysis
- ✓ Preparation and production of the maps
- ✓ Publication of the Atlas (paper and web-based)

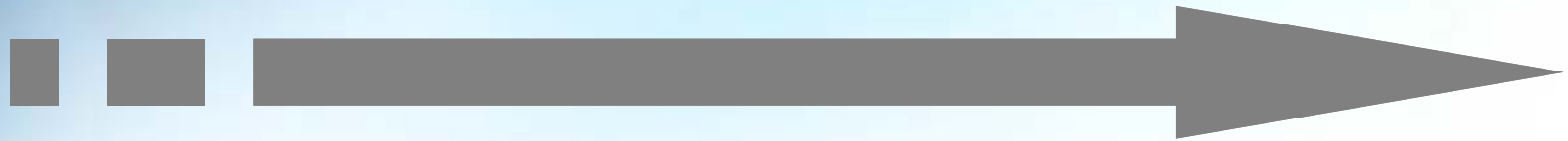


Project #2: Optimisation of Chronic Pain Management in Primary Care

Project Leader: Dr Lyne Lalonde

- Faculty of Pharmacy, U of Montreal
- Sanofi Avantis Research Chair on Ambulatory Pharmaceutical Services

Project - Phases



Phase I:

- Descriptive study to portray the situation of CP management in primary care



Phase II:

- Development of an education/intervention program involving teams of GPs+nurses+pharmacists +CP patients
- Pragmatic randomized trial (PRT) with 20 teams



Phase III:

- Revision and implementation of the program in other urban and rural areas of Quebec + PRT

Objectives of the Descriptive Study

1. To *characterize the clientele of CP patients* (N=600) who are seen in primary care (60 community pharmacies – different regions)
2. To describe their *use of health care resources* and *pain medication* (Quebec administrative databanks + pharmacy charts) over a 1-year period.
3. To document the direct and indirect *costs of their pain*

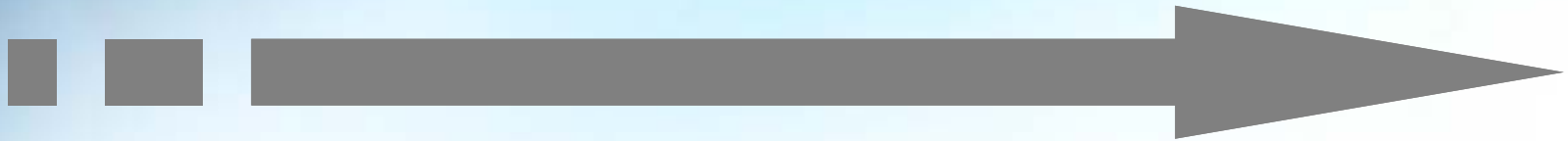


Objectives of the Descriptive Study

4. To document the *therapeutics gaps* re: pain medication and management of side effects (practice guidelines vs actual care).
5. To assess *barriers and attitudes* primary care *patients* have about pain and its treatment.
6. To assess the *pain educational needs* in primary care clinicians (500 GP and 150 pharmacists).



Project - Phases



Phase I:

- Descriptive study to portray the situation of CP management in primary care



Phase II:

- Development of an education/intervention program involving GPs+nurses+pharmacists +CP patients
- Pragmatic randomized trial (PRT) with 20 teams



Phase III:

- Revision and implementation of the program in other urban and rural areas of Quebec + PRT



Project #3: Optimisation of Pain Management in Ambulatory Elderly Individuals and Nursing Home Residents

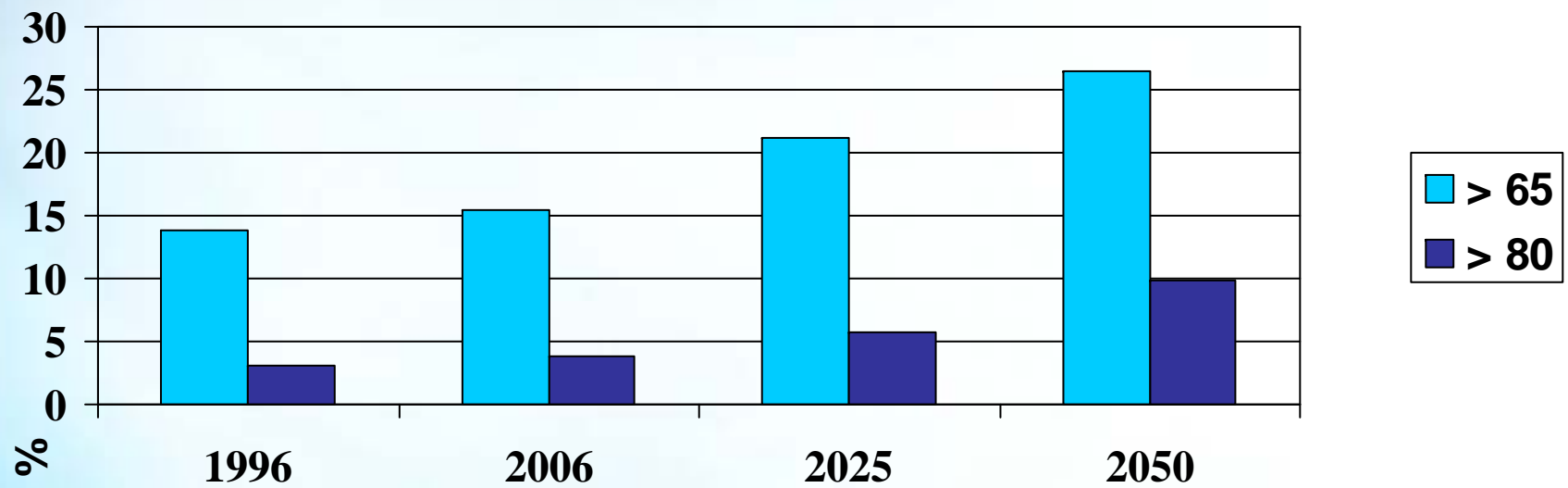
Project Leaders: Dr Michel Tousignant

- School of Rehabilitation, Universitaire of Sherbrooke
- Institut universitaire de gériatrie de Sherbrooke

Dr David Lussier

- Dept of Geriatry, McGill University
- Institut universitaire de gériatrie de Montreal

Population Ageing



Source: U.S. Census Bureau, International Programs Center, International Data Base

Prevalence and Treatment of Pain in Elderly People

✓ Community-based studies

- Between 30% and 75% of elderly people suffer from CP, and often for many years

✓ Nursing home residents

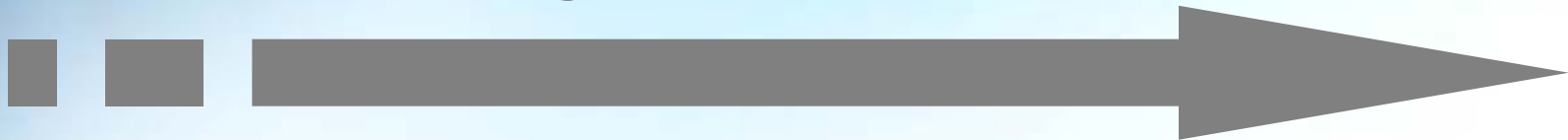
- Between 40% et 80% of the residents have CP
- Cognitive deficits, difficulty to communicate

✓ Treatment of pain

- Numerous barriers and preconceived ideas
- Acute pain (e.g., fractures) and CP are commonly undertreated or mistreated, and especially in the very old and in those with dementia

Project #3A

Optimisation of Pain Management in Nursing Home Residents



Phase I:

- Analysis of the staff educational needs re: pain assessment and treatment (3 NH)
- Development of a multidisciplinary education/intervention program



Phase II:

- Implementation of the program in the 3 NH
- Pilot study (efficacy, impact, facilitating factors, obstacles)
- Revision of the program



Phase III:

- Implementation of the program in 20 sites located in different regions of Quebec
- Pragmatic randomized trial

Project #3B

Multi-Facet Self-Management Program of CP in Elderly People Living in the Community





Project #4: Implementation and Efficacy Evaluation of Pain Schools for Patients Suffering from Fibromyalgia and Back Pain

Project Leaders: Dr Patricia Bourgault

- Faculty of Nursing, University of Sherbrooke

Dr Serge Marchand

- Dept of Surgery, University of Sherbrooke

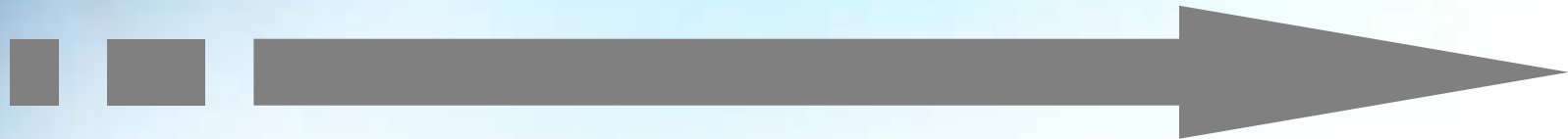
- Pain Research Chair of the UQAT - U of Sherbrooke

Pain Schools

- ✓ Multidisciplinary and multifacet intervention re: physical and psychological aspects of CP
- ✓ Patients = active partners in treatment (patient empowerment) + self-management strategies to control pain and other symptoms
- ✓ - Fibromyaglia Pain School (FPS): developed at the University of Sherbrooke
 - Back Pain School (BPS): developed at the Université du Québec en Abitibi-Témiscamingue

Project #4

Implementation and efficacy evaluation of FPS and BPS



Phase I:

- RCT to test the efficacy and impact of FPS in 2 regions of Quebec
- RCT to test the efficacy and impact of BPS in 2 regions of Quebec



Phase II:

- Identification of the facilitating factors and obstacles re: implementation
- Revision of the FPS and BPS



Phase III:

- Implementation of the FPS and BPS in 20 sites located in various urban and rural areas of Quebec + PRT



Project #5: *“La douleur chronique – Je m’en occupe”* :
A Vast Pain Awareness and Education Program

Project Leaders: Dr Manon Choinière

- Dept of Anesthesiology, U of Montreal

Dr Dominique Dion

- Dept of Family Medicine, U of Montreal

Mr Jacques Laliberté

- President of the Quebec Association of Patients with CP

OBJECTIVES

- ✓ To spread across Quebec a 5-year pain awareness and education program which will target the public, the CP patients and their family in order:
 - To *correct* certain *beliefs, attitudes* and preconceived ideas about pain and its treatment
 - To favour *patient empowerment* and encourage the use of efficient *self-managing strategies* for pain and other symptoms
 - To promote the concept of «*prevention*» of *pain chronicity*



OBJECTIVES

- ✓ To make *chronic pain more “visible”* (e.g., breast cancer) not only to the public and policy/decision makers but also for patients with CP and their family and those who suffer in silence and are often isolated.
- ✓ To make the public, the PC patients and policy/decision makers that *chronic pain* is not merely a symptom but a specific health care problem, a *disease in its own right*
- ✓ To convince policy/decision makers that *more resources* need to be *allocated* for the management of chronic pain

OBJECTIVES

- ✓ To *measure* and monitor the *impact* of the different components of the *Pain Awareness and Education Program* using various indicators



PROCEDURE

- ✓ Elaboration of a comprehensive communication plan over 5 years with C&W
- ✓ Launching of the Programme ACCORD – Webinaire, Nov 2008 + media releases (newspapers, radio and TV interviews)
- ✓ Development and production of the logo (ACCORD branding)

COMMUNICATION PLAN

- ✓ CIHR Café scientifique – Programme ACCORD – *Pain in Elderly People: How to live with chronic pain on a daily basis?* May 2009, Sept 2009, October 2009
- ✓ Video available on the Web site of AQDC
- ✓ Other Cafés scientifiques and similar types of interactive activity to come

COMMUNICATION PLAN

- ✓ Production of education brochures in both languages for patients (e.g., sleep hygiene measures, self-management techniques of CP, etc) and clinicians
- ✓ Distribution in Quebec medical clinics, pharmacies, and other relevant sites + web site



COMMUNICATION PLAN

- ✓ Development of a unique web portal which will be the reference site in Quebec for chronic pain (www.douleurchronique.org – www.chronicpain.org), and which will host the following groups:
 - Quebec Association of Patients with CP (AQDC)
 - Quebec Pain Society
 - Quebec Pain Research Network
 - Alan Edwards Centre Research on Pain (McGill)
 - Pain Clinics of the U of Montreal (to be extended)
 - Pain Centres of Expertise of the U of Montreal, McGill, Sherbrooke, and Laval
 - Programme ACCORD (intranet and internet)

COMMUNICATION PLAN

- ✓ Targeted activities during the National Pain Awareness Week (1st week of Nov)
- ✓ Media releases (newspaper, magazines, radio, TV, etc)
- ✓ Collaboration with the CPC and CPS
- ✓ Lobby activities – different Ministries of Quebec Government and provincial Health Agencies

CHALLENGES / OBSTACLES

- ✓ Ambitious program
- ✓ Multiple partners from different “cultures” who were not used to work together
- ✓ Difficulty to change the respective culture and pre-conceived ideas of researchers, clinicians and patients – switching of paradigm

CHALLENGES / OBSTACLES

- ✓ Multidisciplinarity – interdisciplinarity: theory vs reality for the clinicians and researchers? Habit of work in “silo”
- ✓ Very busy clinicians with heavy work load who legitimately get tired of being involved in such types of project on a voluntary basis
- ✓ Difficulty to get the different projects really on track and started

CHALLENGES / OBSTACLES

✓ Σ of costs of each project > 2.8M



FACILITATING ELEMENTS AND STRENGTHS

- ✓ Very dynamic patients and community members
- ✓ Highly dedicated pain clinicians



FACILITATING ELEMENTS AND STRENGTHS

- ✓ Strong team of researchers with complementary expertises coming not only from the pain field but also from other fields (e.g., chronic disease management, pharmaco-economy, health geography, etc)



FACILITATING ELEMENTS AND STRENGTHS

- ✓ ACCORD team divided in sub-teams, each one having its own project leader(s) and sub-group of clinicians, decision-makers, CP patients and research trainees
- ✓ “Grass root” approach and respect of the institutionnal cultures

FACILITATING ELEMENTS AND STRENGTHS

- ✓ Involvement of the health authorities at the beginning of the projects
- ✓ Advice and support from private communication/public relations specialists (worth the money re: lobby with the government and recruitment of financial partners) (e.g. Café scientifique, AQDC)

FACILITATING ELEMENTS AND STRENGTHS

- ✓ CIHR grant = spin off to get funding from other sources (peer-review grant agencies, government, industry, etc)



FACILITATING ELEMENTS AND STRENGTHS

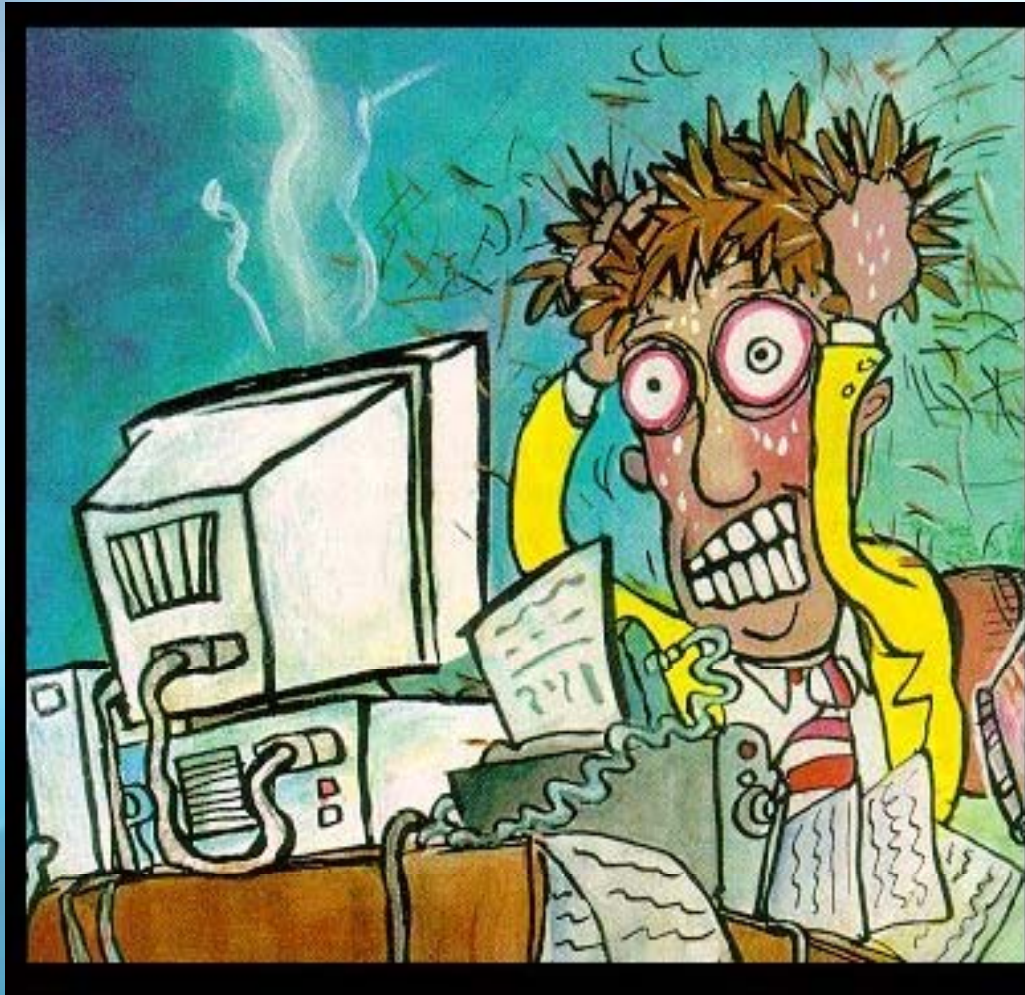
- ✓ Assessment and evaluation of the KTE strategies using rigorous scientific methodologies and various types of indicators



OVERALL IMPACT OF THE ACCORD PROGRAMME

- ✓ «Concerted» initiative of transfer, exchange and application of scientific knowledge re: management of chronic pain
- ✓ Care and services more accessible and adapted to the patients' specific needs
- ✓ Improvement of the patients' condition and quality of life
- ✓ Training of new researchers in KTE

OVERALL IMPACT OF THE ACCORD PROGRAMME



How I feel.....

ACKNOWLEDGMENTS

- ✓ Mrs Isabelle Jeannotte – Administrative Coordinator
- ✓ All the Research Nurses, Research Assistants, Research Trainees, Clinicians, Policy/Decision Makers, and CP Patients who are involved in the different projects of the Programme ACCORD
- ✓ CIHR & AstraZeneca, FRSQ

ACKNOWLEDGMENTS

✓ Co-PIs: Serge Marchand, Dominique Dion

✓ Co-Investigators (by alphabetical order)

- Patricia Bourgault (U of Sherbrooke)
- Celeste Johnston (McGill U)
- Lyne Lalonde (U of Montreal)
- Diane Lamarre (U of Montreal)
- Paule Lebel (U of Montreal)
- David Lussier (McGill U)
- Sylvie Perreault (U of Montreal)
- Rick Riopel (McGill U)
- Mick Sullivan (McGill U)
- Maureen Simmonds (McGill U)
- Michel Tousignant (U of Sherbrooke)
- Alain Vanasse (U of Sherbrooke)

Merci !



ACCORD
Working together for the management
of chronic pain