

Pain Management 2009: Progress, Challenges, Future Directions

Canadian Pain Society
Annual Meeting
May 28, 2009



Objectives

- Summarize recent data on pain prevalence and impact from the Nanos Canadian Pain Survey
- Discuss the ongoing controversies around the use of long term opioid therapy
- Outline a systems approach to improve future pain management in Canada



Pain Prevalence in the USA

- Harris poll(1992) **20%**
- Pain in America(2003) **22%**



Epidemiology of chronic pain from three large, high quality surveys of **adult general populations**

- ✓ Blyth et al PAIN (2001): N = **17 543** Australia
pain most days for 3 months: **18.5%**
- ✓ Eriksen et al PAIN (2003): N = **20 000** Denmark
pain lasting more than 6 months: **19 %**
- ✓ Breivik et al EJP (2004): N = **30 701** in 12 European countries
pain >6 months > 5/ 0-10 pain scale = **18%**



Canadian National Pain Study, 2002 A Summary:

- 64% of patients felt their pain was not very effectively treated
- 68% of MDs thought moderate-severe chronic pain was not well treated



Canadian Chronic Pain Study II (2004)

- Arthritic conditions and back pain are the most common reason for chronic pain
- The prevalence of pain increases with age (17→33%)

Boulanger 2007



Three Major Concerns

- The cost of Pain Management : The STOPPAIN Study
- The emergence of Prescription Drug Abuse as a major societal focus
- Putting chronic pain on the front burner



Chronic Pain in Canada – Prevalence and Consequences

Some results from the Canadian Pain Society
Nanos Pain Survey 2007-2008

Taenzer, Schopflocher, Jovey



Nanos Canadian Pain Survey 2007 & 2008

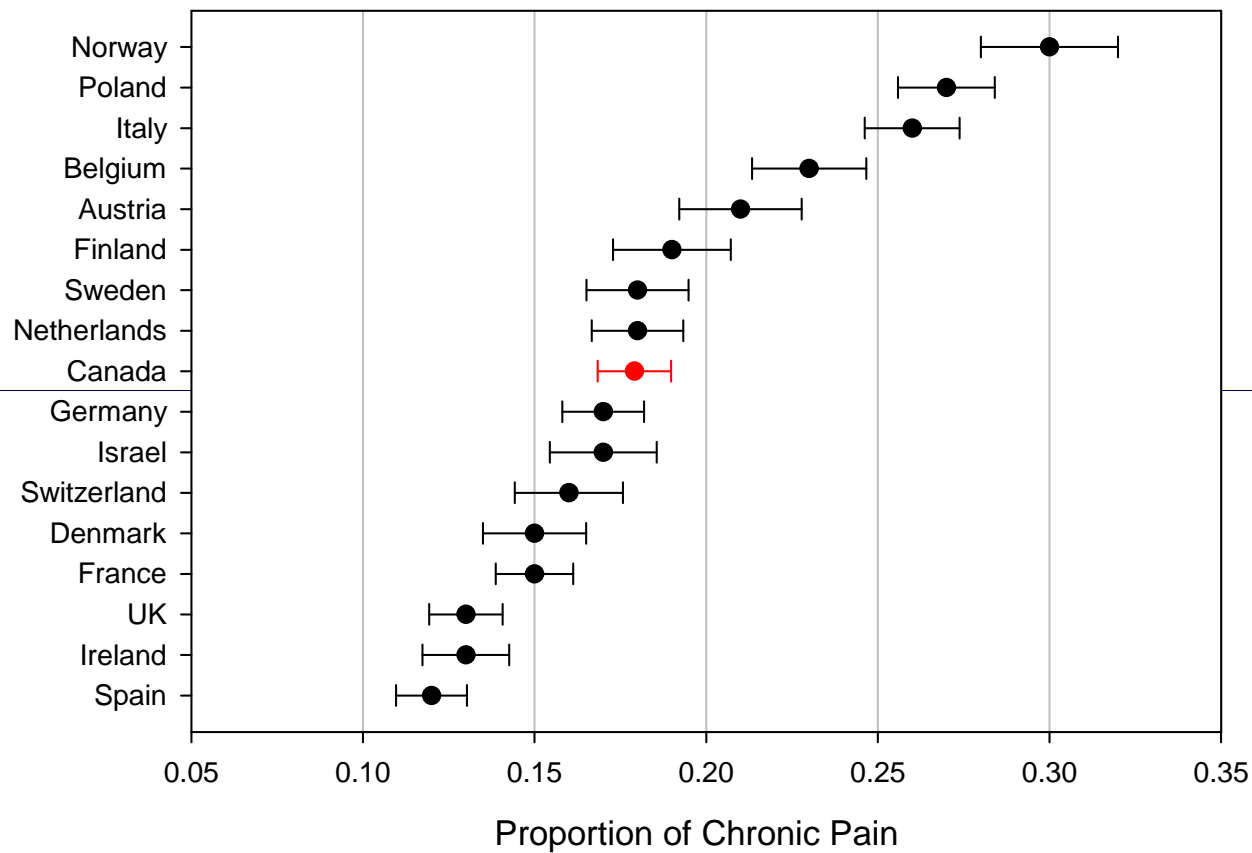
- 2000 people with chronic pain, daily or most days of the week, found by random phone survey each year (N=4000) completed a short survey
- Then 300 per year (N=600) with moderate to severe pain were asked to complete a detailed survey



Nanos Canadian Pain Survey 2007 & 2008

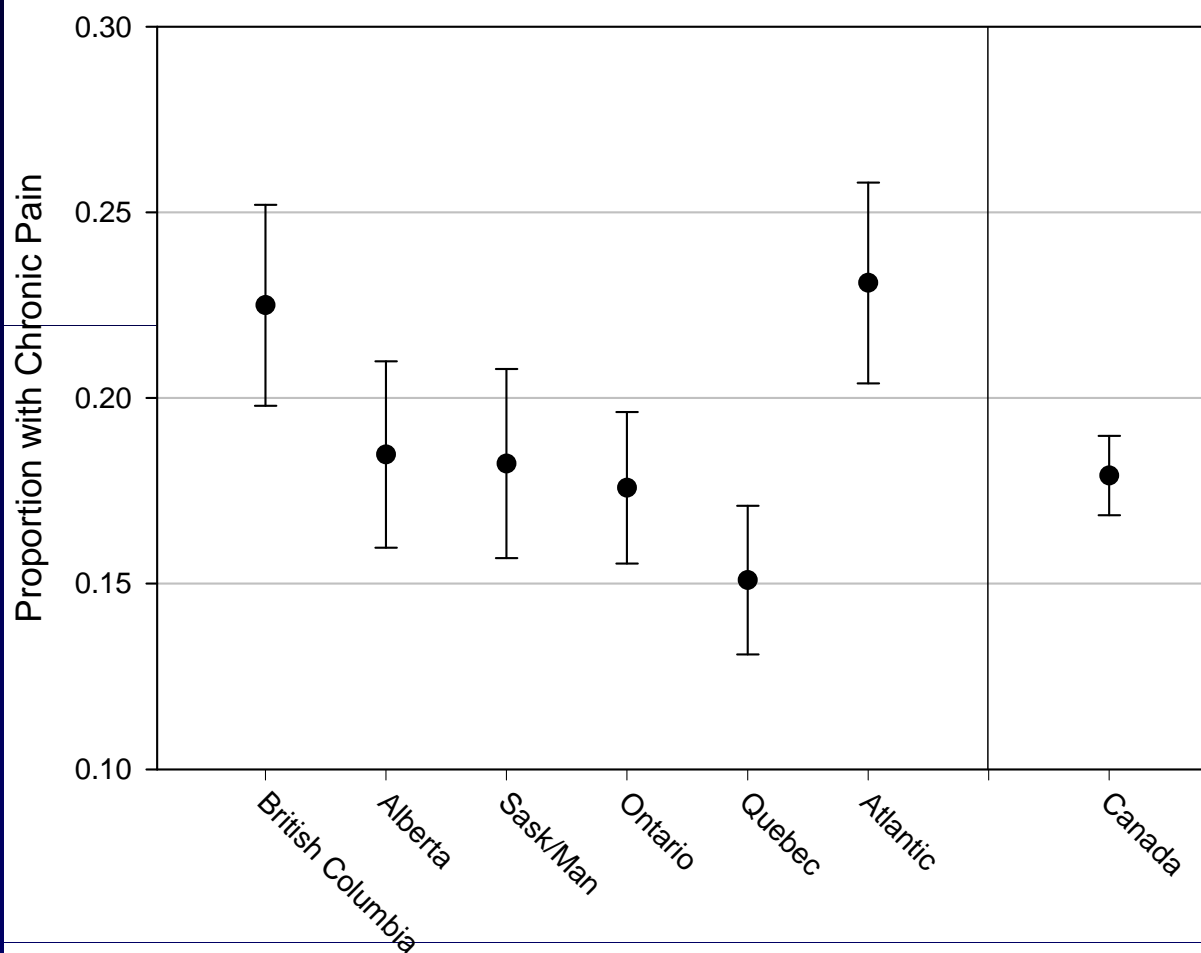
- 18% of Canadian adults suffer from moderate to severe chronic pain daily or most days of the week

Proportion reporting Chronic Pain

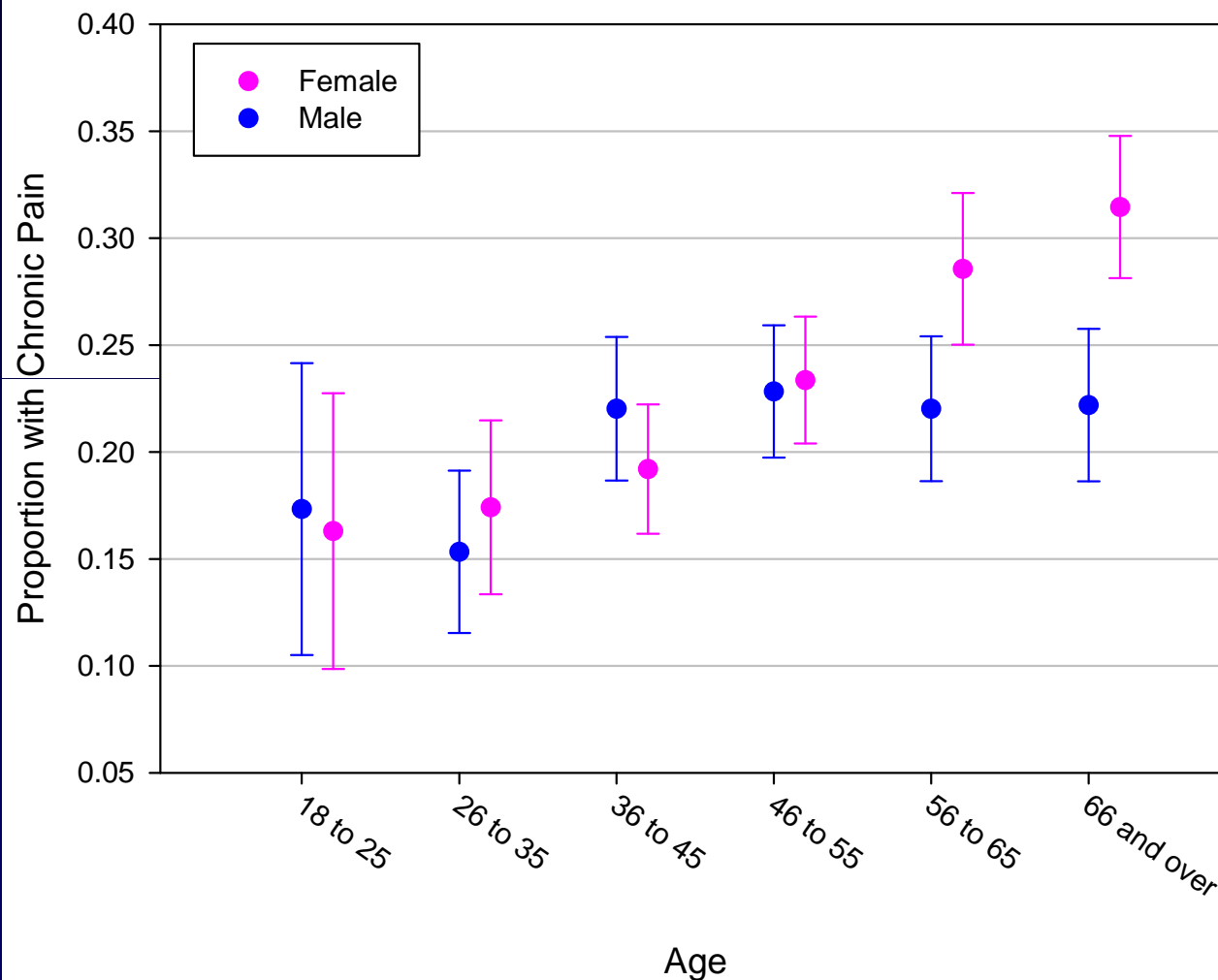


Source: Breivik, H Collett, B, Ventafridda, V, Cohen, R, Gallacher, D. (2006) Survey of chronic pain in Europe: Prevalence, daily life, and treatment. *European Journal of Pain*, 10, 287-333.

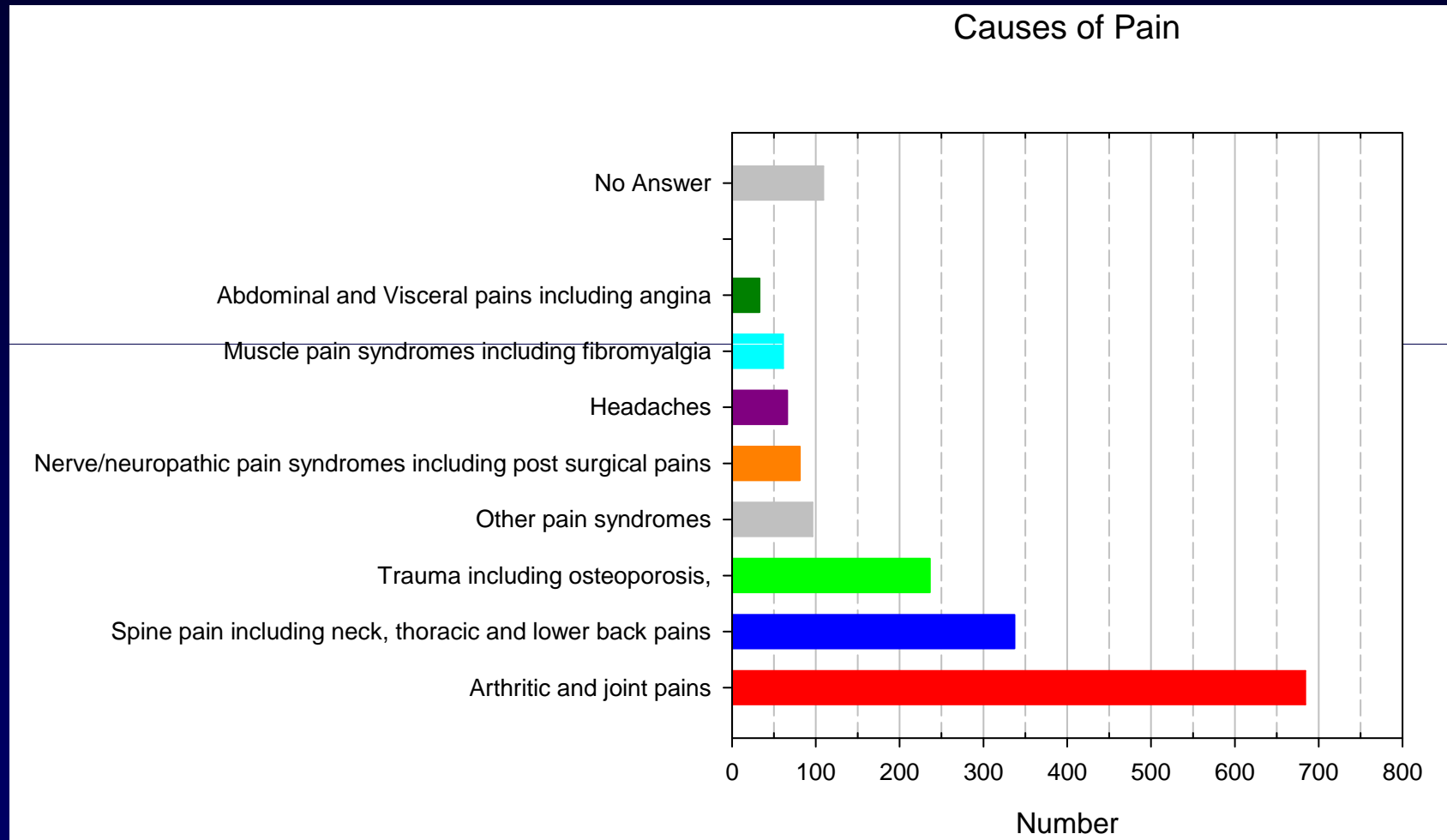
Prevalence of Chronic Pain Age 18+ by Region, Canada 2007-2008



Prevalence of Chronic Pain by Age and Sex,
Canada 2007-2008



Causes of Chronic Pain in Canada



CPS Nanos Survey 2007-2008

IMPACT OF CHRONIC PAIN

(N=600/1700 moderate to severe pain)



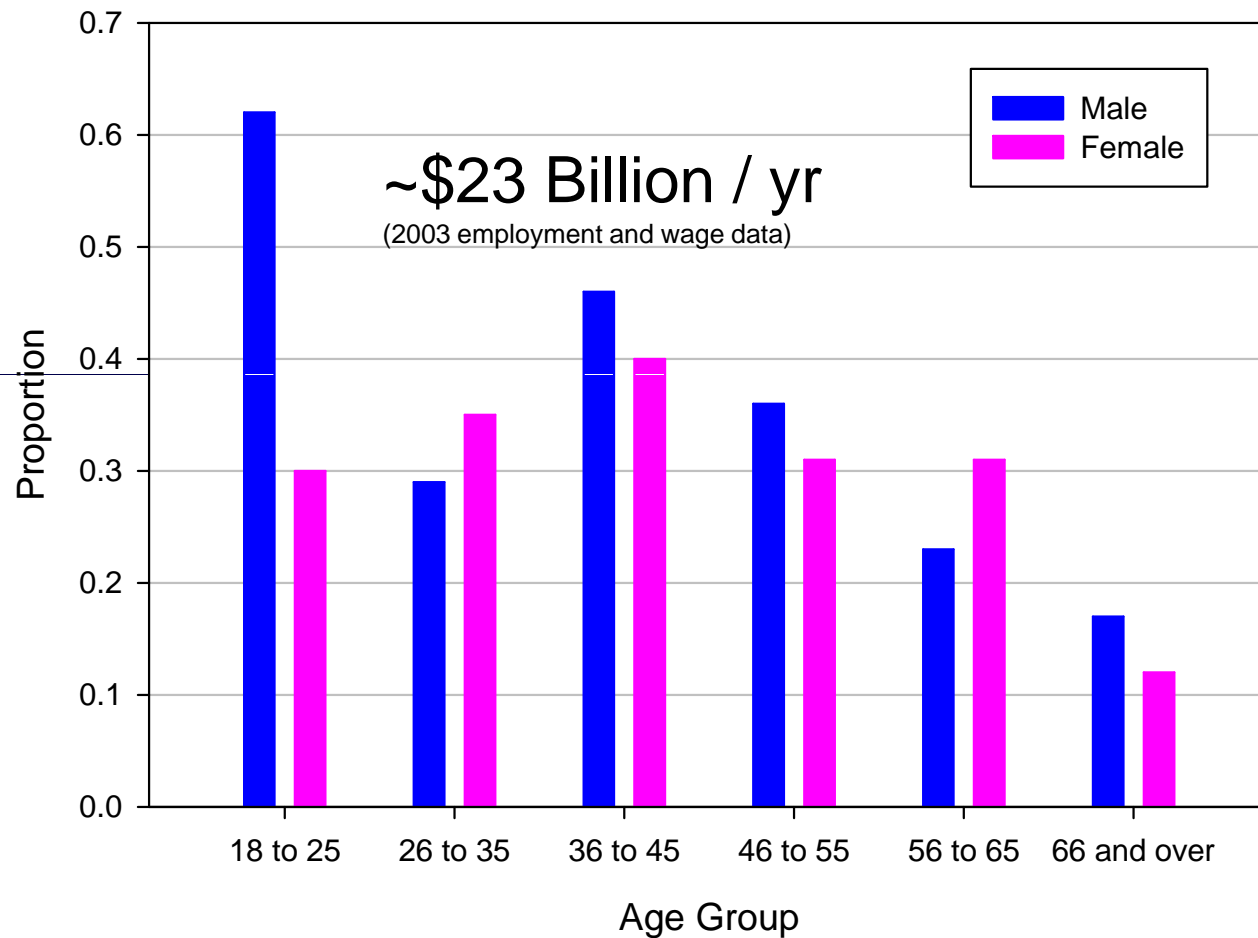
Chronic Pain: Workplace Costs

Among those Canadians with moderate or severe pain:

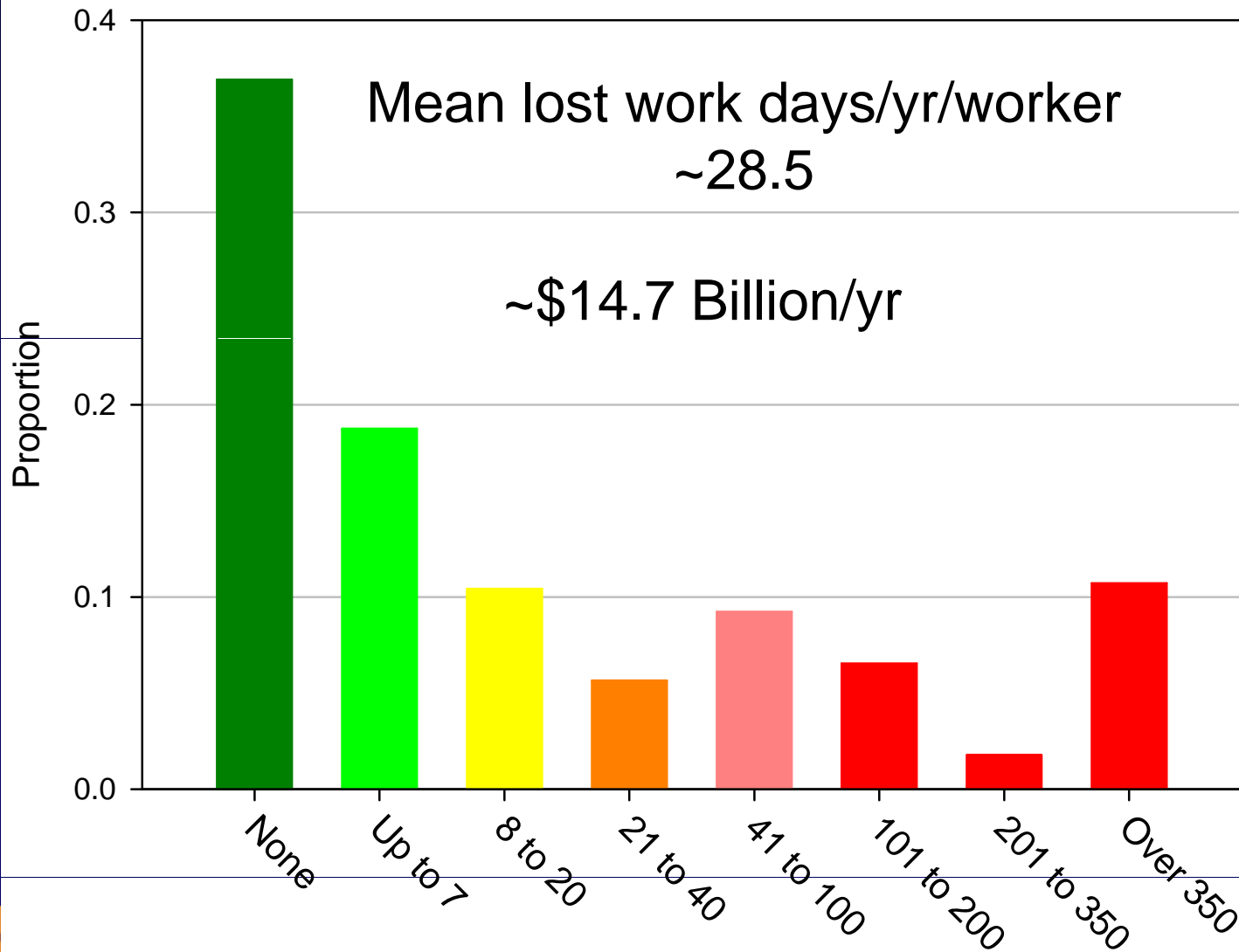
- 41% - no impact on work
- 33% - lost a job because of their pain
- 47% - reduced job responsibilities because of their pain
- 49% - on average they lose \$12,558 dollars in income over a one-year period because of their pain.



Lost Job as a Result of Pain



Lost Work Days
Job not lost, Aged ≤65

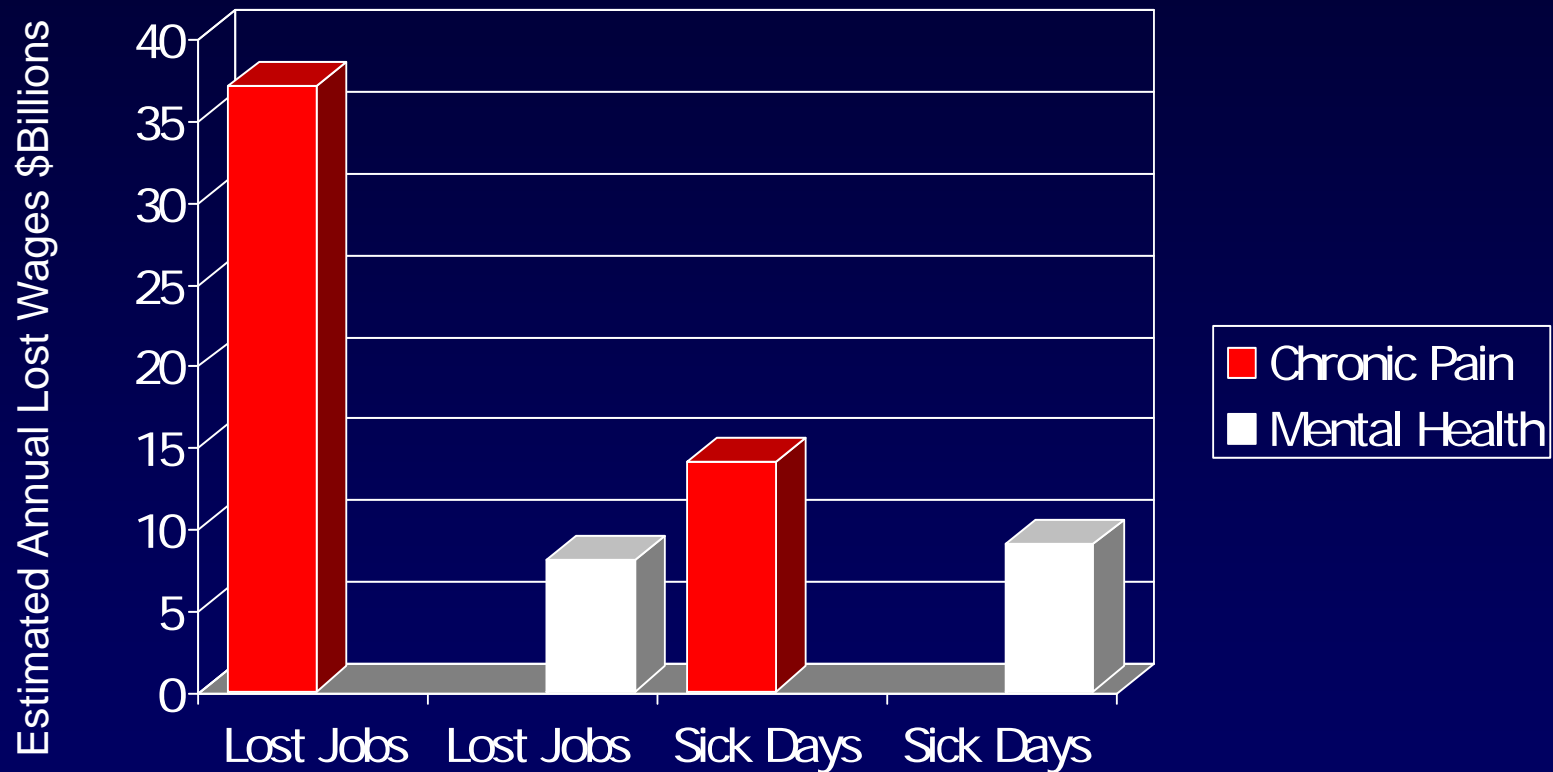


Chronic Pain: Workplace Costs

Lost jobs:	\$23 Billion / yr
Sick days:	<u>\$14 Billion / yr</u>
Total:	\$37 Billion / yr



Workplace Costs Chronic Pain vs Mental Health



Schopflocher, 2008

The Economic Impact of Pain in the U.S.

- 13% of workers lose a mean of 4.6 hrs/week of productive work time due to common pain conditions
- Costs to U.S. industry est. **\$61.2 B / year (U.S.)***
 - 76% due to reduced performance at work

Stewart et al. JAMA 2003; 290:2443-54.

- Cost of depression to industry: est. \$31 B/yr

Stewart et al. JAMA 2003; 289:3135-44.

* equal to the cost of CV disease or cancer



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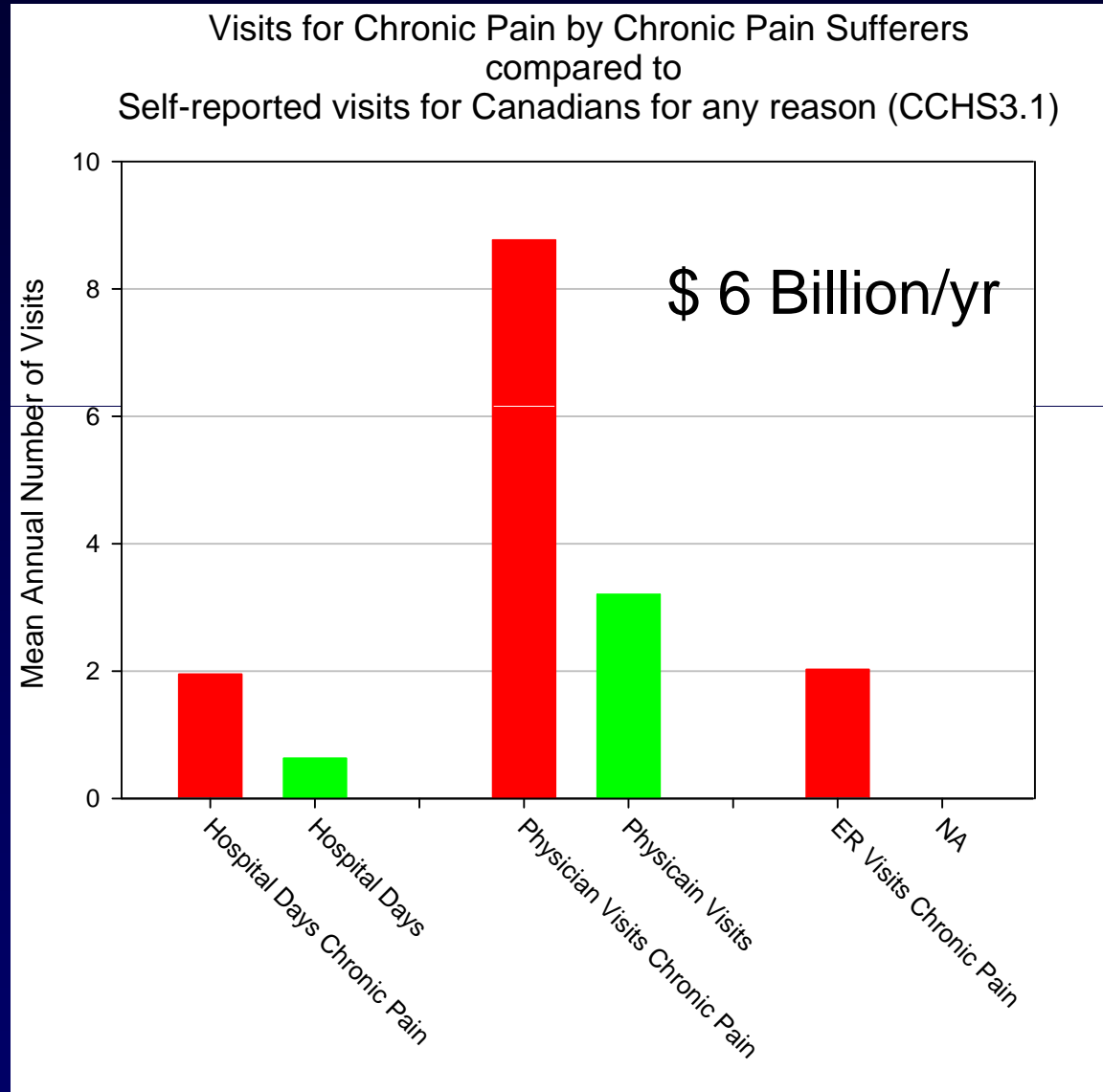
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Healthcare Utilization Rates for Chronic Pain



Chronic Pain: Mental Health Disorders

Prevalence of diagnosed concurrent mental health disorders:

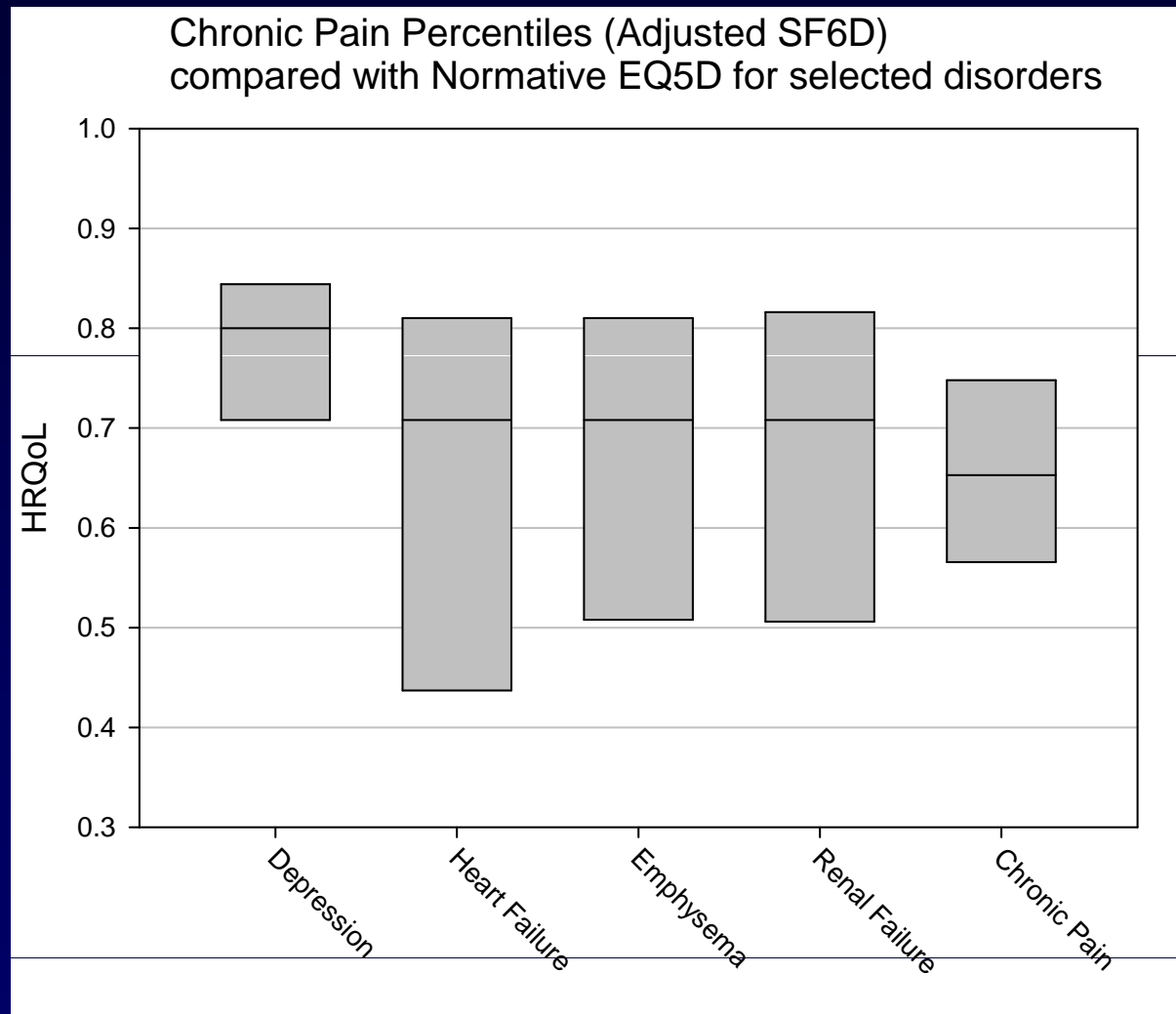
Depression: 27.9%

Anxiety: 25.0%

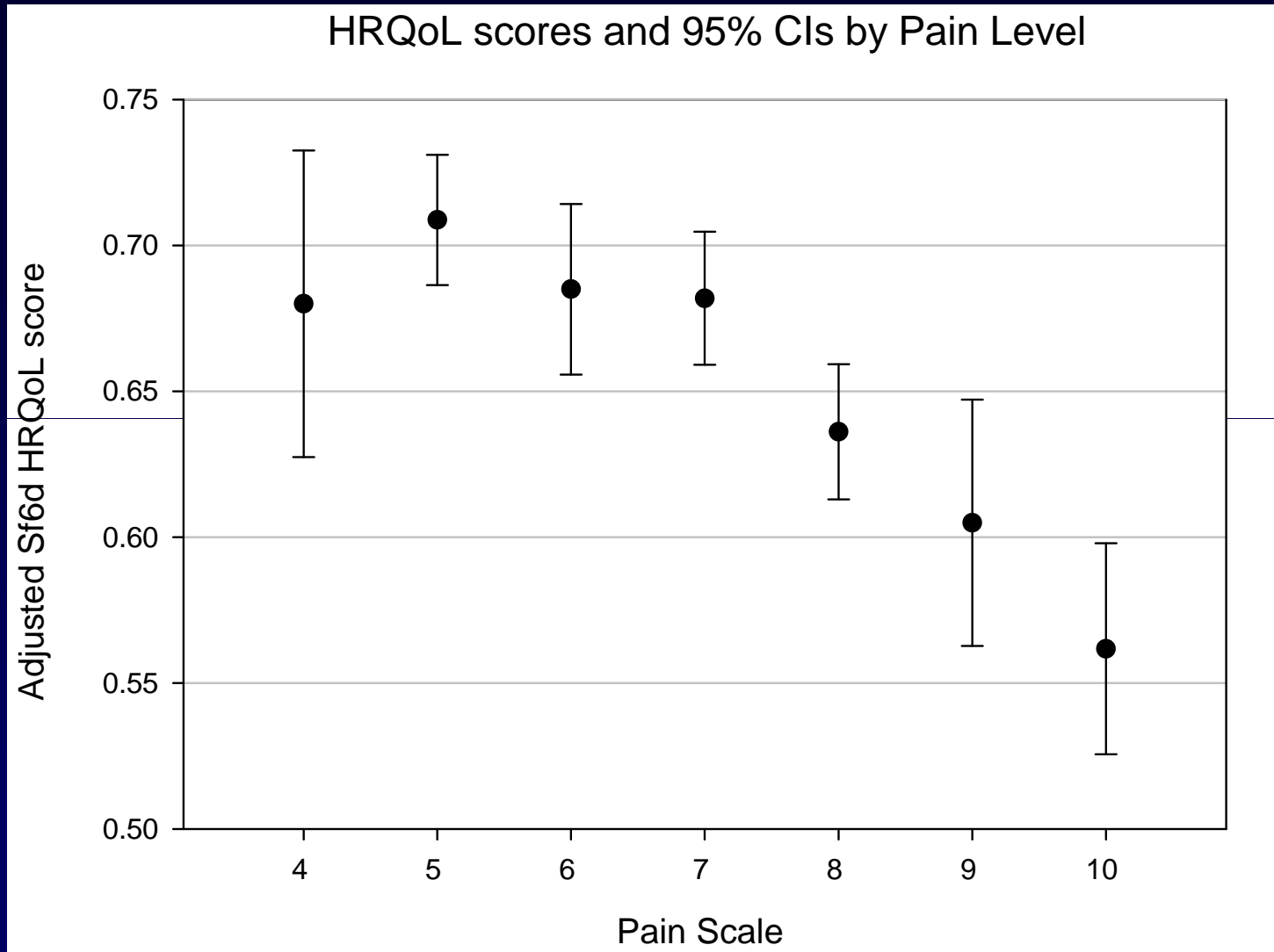
Both: 16.4%



The Impact of Pain on Quality of Life



HRQoL scores and 95% CIs by Pain Level

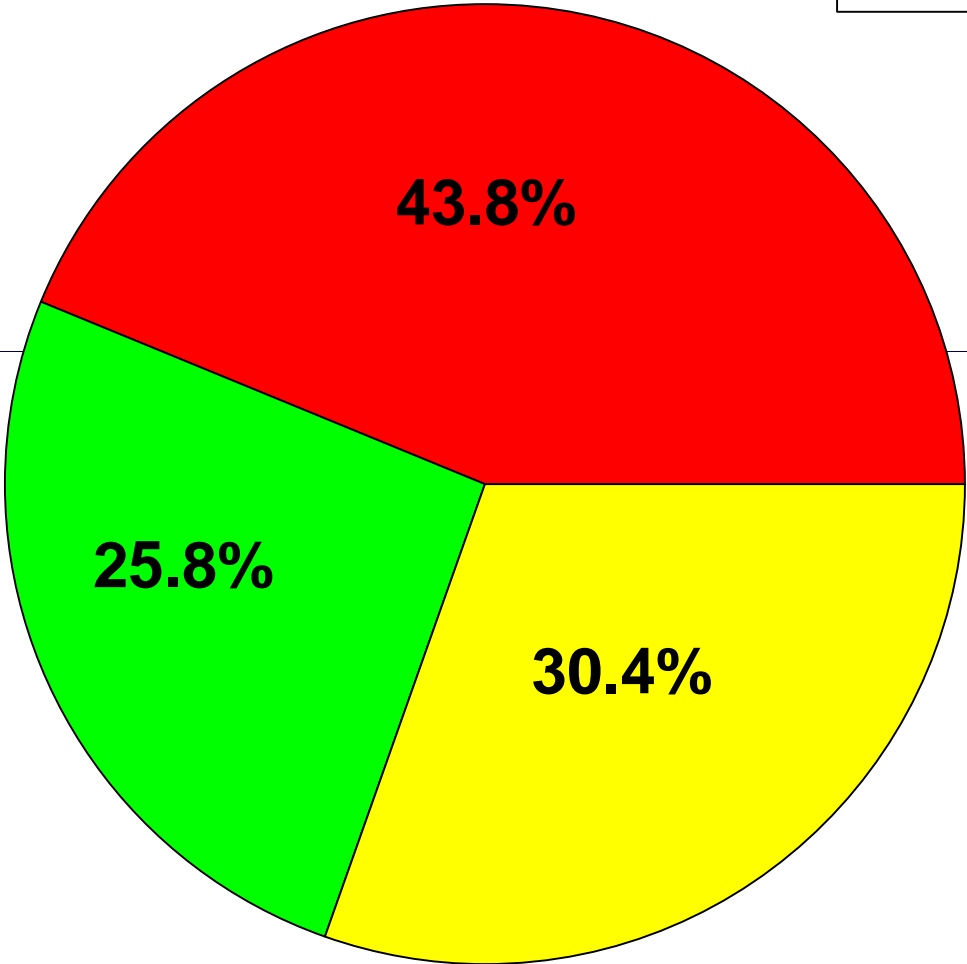


TREATMENT SATISFACTION



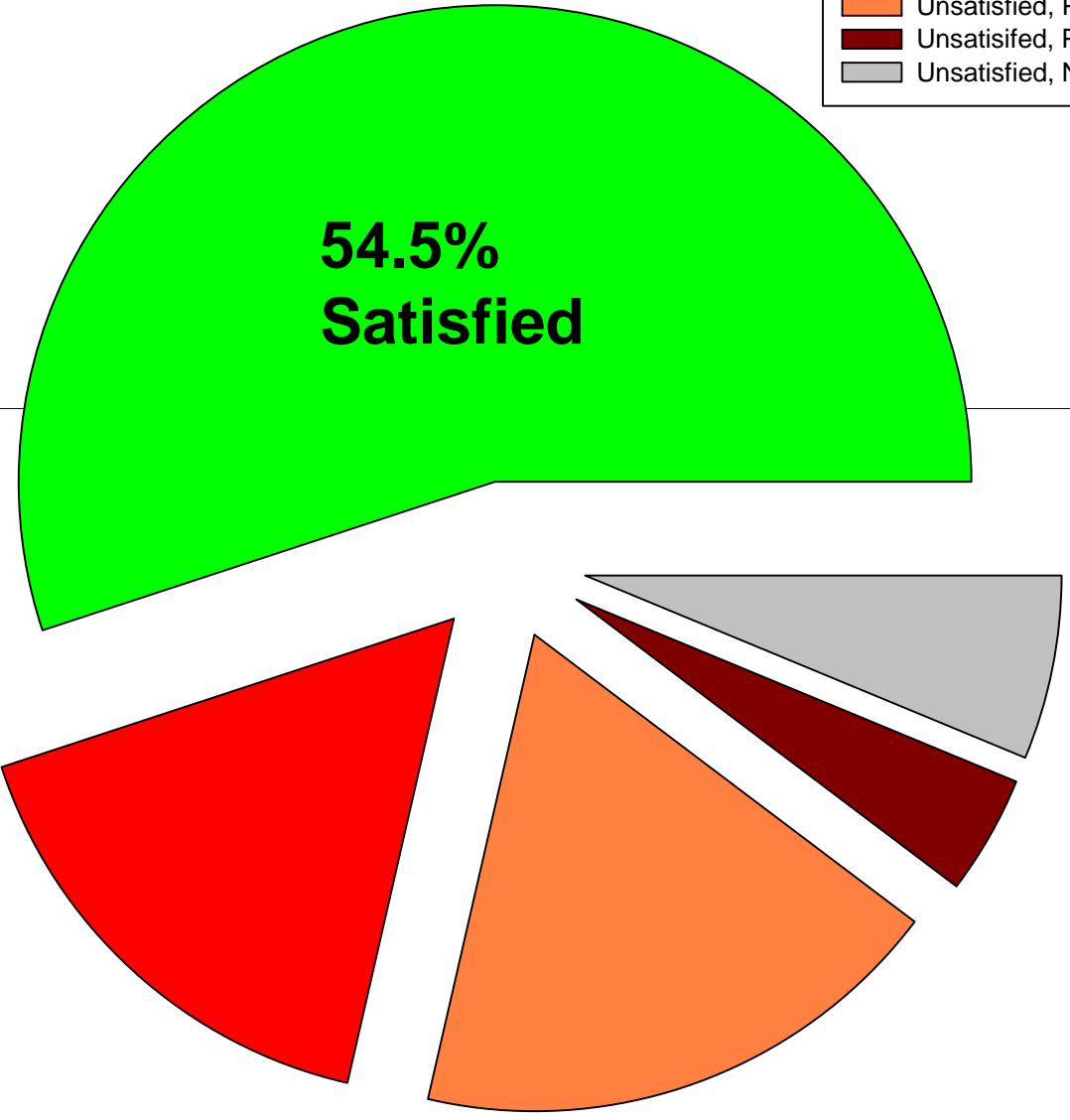
Current Prescription Medications

- No Prescription Medications
- Non-narcotic Analgesic
- Narcotic Analgesic

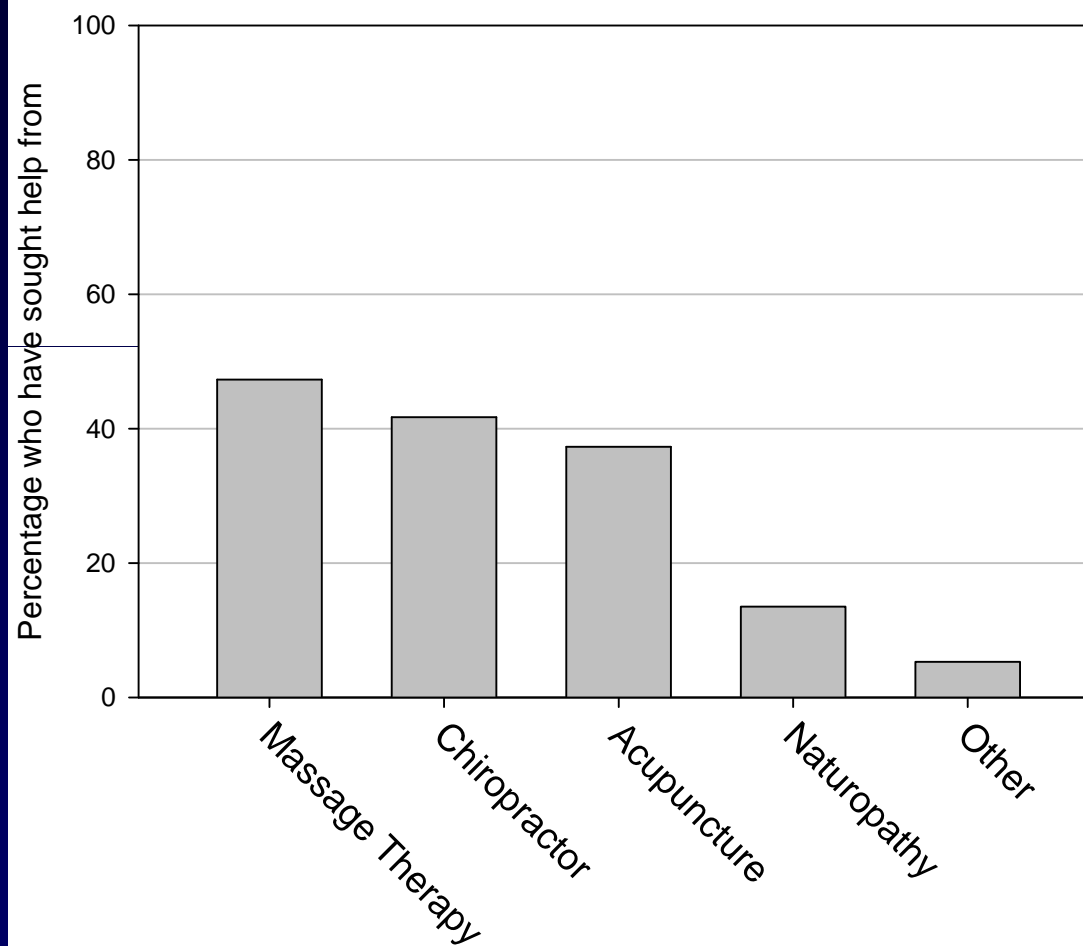


Satisfaction with Current Treatment

- Satisfied with Treatment
- Unsatisfied, No Relief
- Unsatisfied, Physician is inattentive
- Unsatisfied, Physician is incompetent
- Unsatisfied, No reason given



Alternative Therapies



Undertreated Pain Is a Major Public Health Problem

- Chronic pain ranks among the top reasons for health care visits and health-related work absences
- Chronic pain negatively affects all aspects of a person's biopsychosocial life
- Patients with pain – high cost to society
- Both patients and physicians are not satisfied with current care

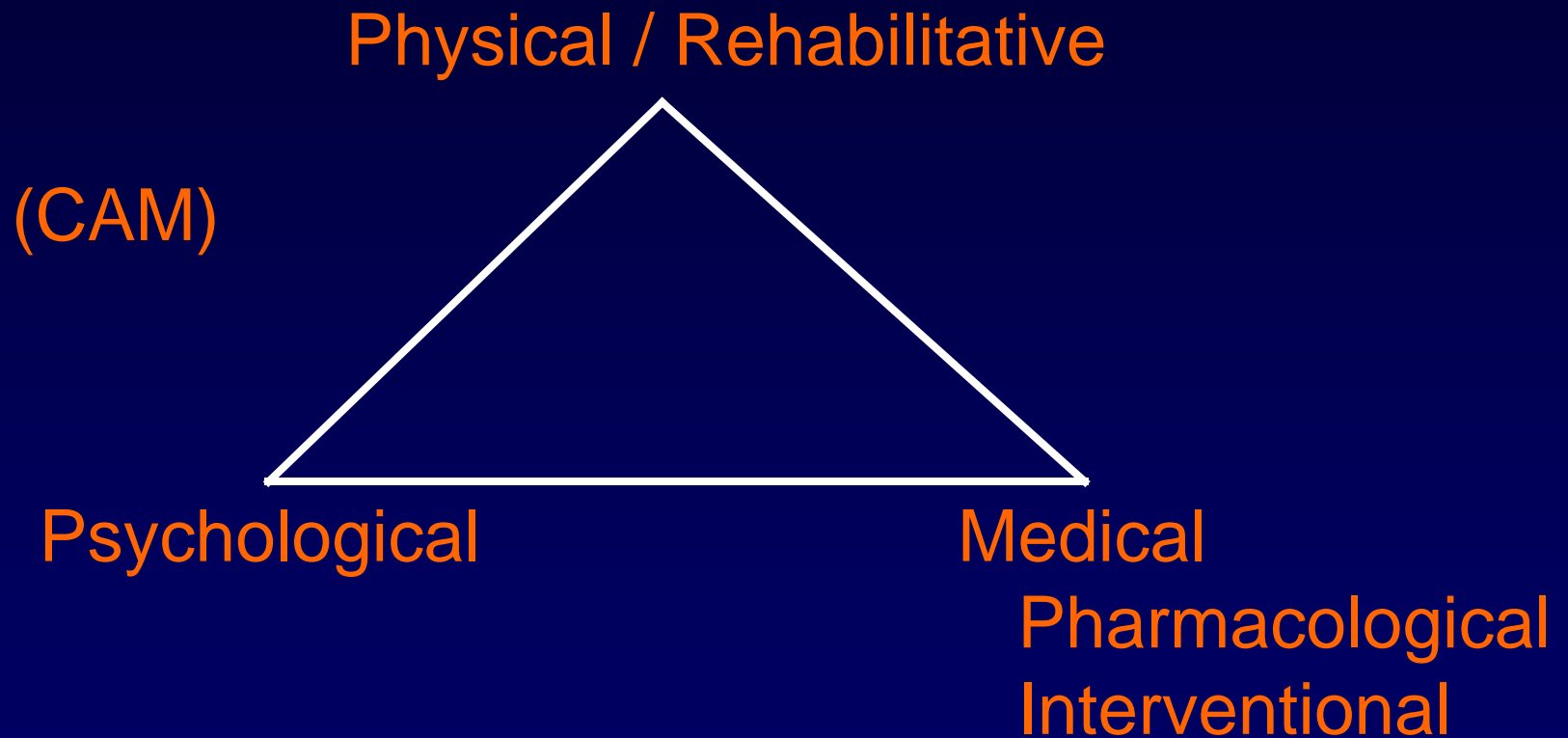
Barriers for HCPs

- Limited training in medical schools
- Lack of up to date knowledge
- Pain management not seen as a priority in the disease-centered model of care
- Lack of consultation and treatment resources
- Time consuming
- Biases and fears about use of opioid analgesics
- Too many patients, not enough time

A Survey of Pain Curricula in Health Science Faculties in Canada – CPS 2007

	Total Hours (mean)	Range
Dentistry	15	0 - 24
Medicine	16	0-38
Nursing	31	0-109
Occupational Therapy	28	0-48
Pharmacy	13	2-33
Physical Therapy	41	18-69
Veterinary Medicine	87	27-200

The Ideal Treatment of CNCP



Pharmacotherapy will be a part
of most chronic pain treatment
plans...



..but do I have to prescribe
opioids for chronic pain??



“The use of narcotics in terminal cancer is to be condemned if it can possibly be avoided...because of undesirable side effects. Dominant in the list of these unfortunate effects is addiction.”

Lee Jr LE. JAMA 1941;116:216-9



OTTAWA CITIZEN

SUNDAY, JULY 27, 2003

When the damage is done


THE KINGSTON WHIG-STANDARD
SATURDAY, JANUARY 25, 2003

Scam artists make doctors wary

CALGARY HERALD
TUESDAY, DECEMBER 17, 2002

Methadone clinic 'may be a lifesaver'

NATIONAL POST
WEDNESDAY, JANUARY 22, 2003

New Brunswick: Police seize prescription drugs and \$84,000 in cash

THE PROVINCE

SUNDAY, MAY 11, 2003

Illegal B.C. prescription drugs flood across border to reserve

The Gazette

MONDAY, MAY 12, 2003

Doctors arrested for prescribing OxyContin to addicts: Crackdown in Appalachia began after cancer painkiller showed up on black market

THE HAMILTON SPECTATOR

SATURDAY, DECEMBER 14, 2002

'Hillbilly heroin' hits Hamilton area

CAPE BRETON POST

Our Island's Tradition since 1901

FRIDAY, JUNE 13, 2003

Regional police say drugs causing increase in crime

GUELPH MERCURY
Serving Guelph & Wellington County, Ontario, Canada

TUESDAY, NOVEMBER 5, 2002

Thousands of painkillers taken from store

Evidence for Opioids in CNCP

- *“There is now strong consistent evidence that opioids relieve chronic neuropathic and nociceptive pains and improve function in placebo-controlled trials with patients who suffer chronic non-cancer pain”.*

Furlan A et al. CMAJ 2006



Evidence for the Pharmacotherapy of Neuropathic Pain

- Tricyclics NNT 1.5-2.0
- *Opioids NNT 2-3
- Gabapentin / Pregabalin NNT: 3-5
- Tramadol NNT: 3-6
- Venlafaxine / Duloxetine NNT: 4.5-5
- SSRI NNT: 6-7

(NNT = # of patients treated to get 1 with a 50% pain reduction)



*Average pain reduction across studies ~ 30% (Kalso Pain, 2004)

Opioids are not a panacea for all pains in all patients

There is always an individual
risk / benefit ratio



Unanswered Questions: Opioids

- In which patients will opioids work?
- For how long?
 - Tolerance vs. hyperalgesia
- Long-term side effects
 - Hormonal
 - Sleep apnea
 - ?immune effects
- The abuse / addiction issue



Reducing the Risks of Opioid Misuse – Universal Precautions

- Screen for addiction risk in all patients
- Set boundaries around medication use (Rx agreement)
- Use random urine drug screening
- Identify drug misuse behaviors early and intervene (refer for help)
- Introduce opioids as a “trial of therapy” with agreed upon goals
- Taper opioids when goals not achieved



Opioid Risk Tool Clinician Form

(includes point values to determine scoring total)

Mark each box that applies:

1. Family History of Substance Abuse:

Alcohol

1

3

Illegal Drugs

2

3

Prescription Drugs

4

4

2. Personal History of Substance Abuse:

Alcohol

3

3

Illegal Drugs

4

4

Prescription Drugs

5

5

3. Age (mark box if between 16-45)

1

1

4. History of Preadolescent Sexual Abuse

3

0

5. Psychological Disease

Attention Deficit Disorder,
Obsessive-Compulsive Disorder,
Bipolar, Schizophrenia

2

2

Depression

1

1

Scoring Totals

The patient can be placed into one of three opioid risk categories based on their total score.

Low Risk = 0 - 3 points
Medium Risk = 4 - 7 points
High Risk = 8 points and above

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Risk-Based Pain Management

- **Group III: Co-management with tertiary specialist**
 - Written agreement, random UDTs 1-2x per month, pill counts
 - Exhaust all other options before considering opioids
 - Dispense daily to weekly, less “abusable” meds
- **Group II: Primary Care with consultation**
 - More assessment and focus on functional goals
 - Written agreement, UDT 3-4x per year, collateral information
 - Follow-up monthly, dispensing q2 weeks, choose opioids carefully
- **Group I : Treatment by Primary Care**
 - Utilize all pharmacotherapy options, including opioids, focus on SE
 - Verbal or written agreement, UDT 1-2x per year
 - F/U q2-3 months, meds dispensed q4 weeks



**Morphine, Oxycodone,
Hydromorphone, Fentanyl,
Methadone**

Tramadol

**Acet/Codeine 30mg
Acet/Oxycodone 5mg**

NSAIDs / COXIBS

Acetaminophen

Mild Pain 0-3

Moderate Pain 4-7

Severe Pain 8-10



Goals in Pain Management

Pain Relief
Improved
Function

Minimize
Side Effects
Med. Misuse



Essential Follow-up Documentation

The "4 + 2 As"

1. **A**nalgesia (pain relief)
2. **A**ctivities (physical and psychosocial functioning)
3. **A**dverse Effects (and your advice)
4. **A**mbiguous Drug Taking Behaviours (and your response)
5. **A**ffect (depression, anxiety)
6. **A**ccurate medication record

Name of drug, strength, directions, # units to dispense



Adapted from Passik & Portenoy

**How can we “fix” the system
for pain management?**



We need to better educate health
care professionals about pain

Curriculum redesign
FRCP pain specialty



An Ideal Pain Management System

Prevention



Primary Care



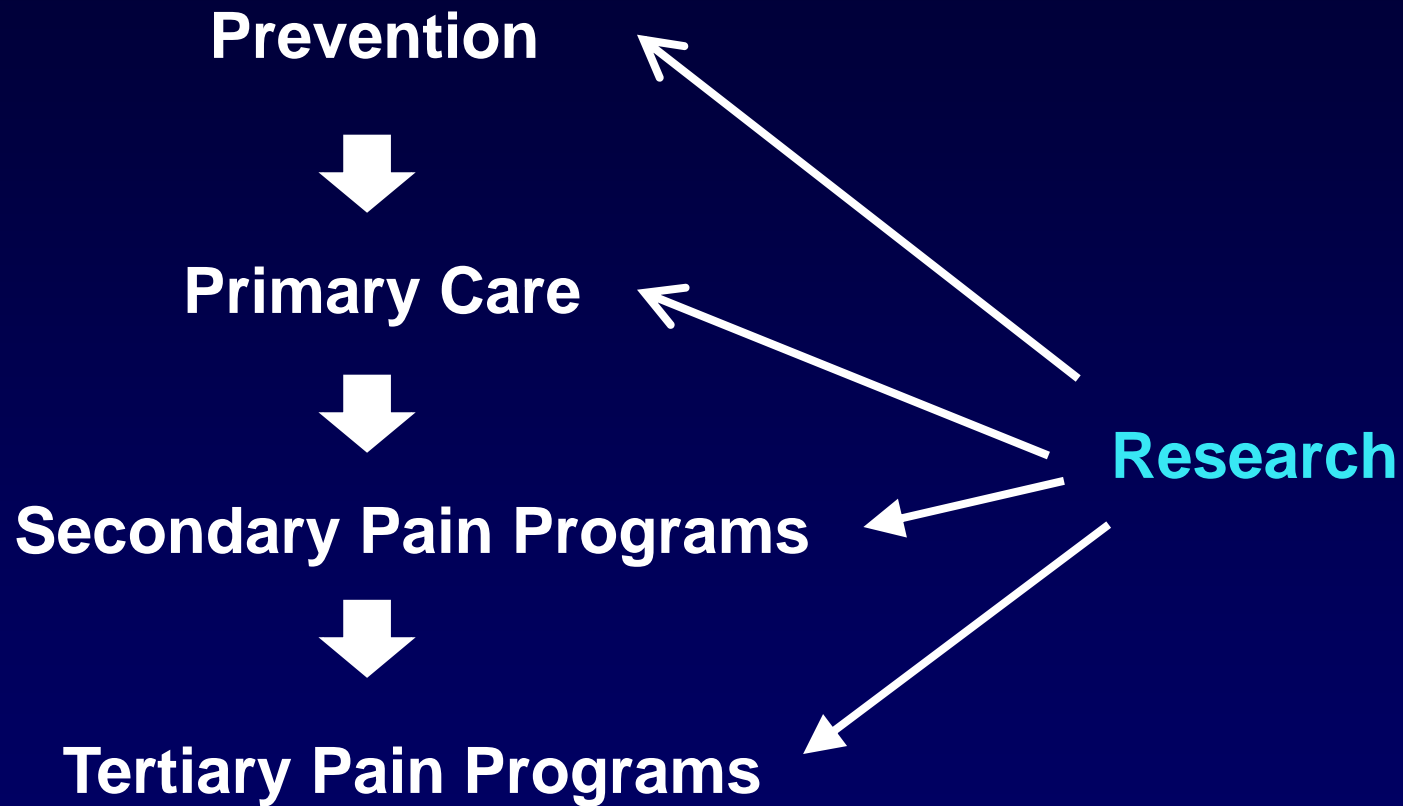
Secondary Pain Programs



Tertiary Pain Programs



An Ideal Pain Management System

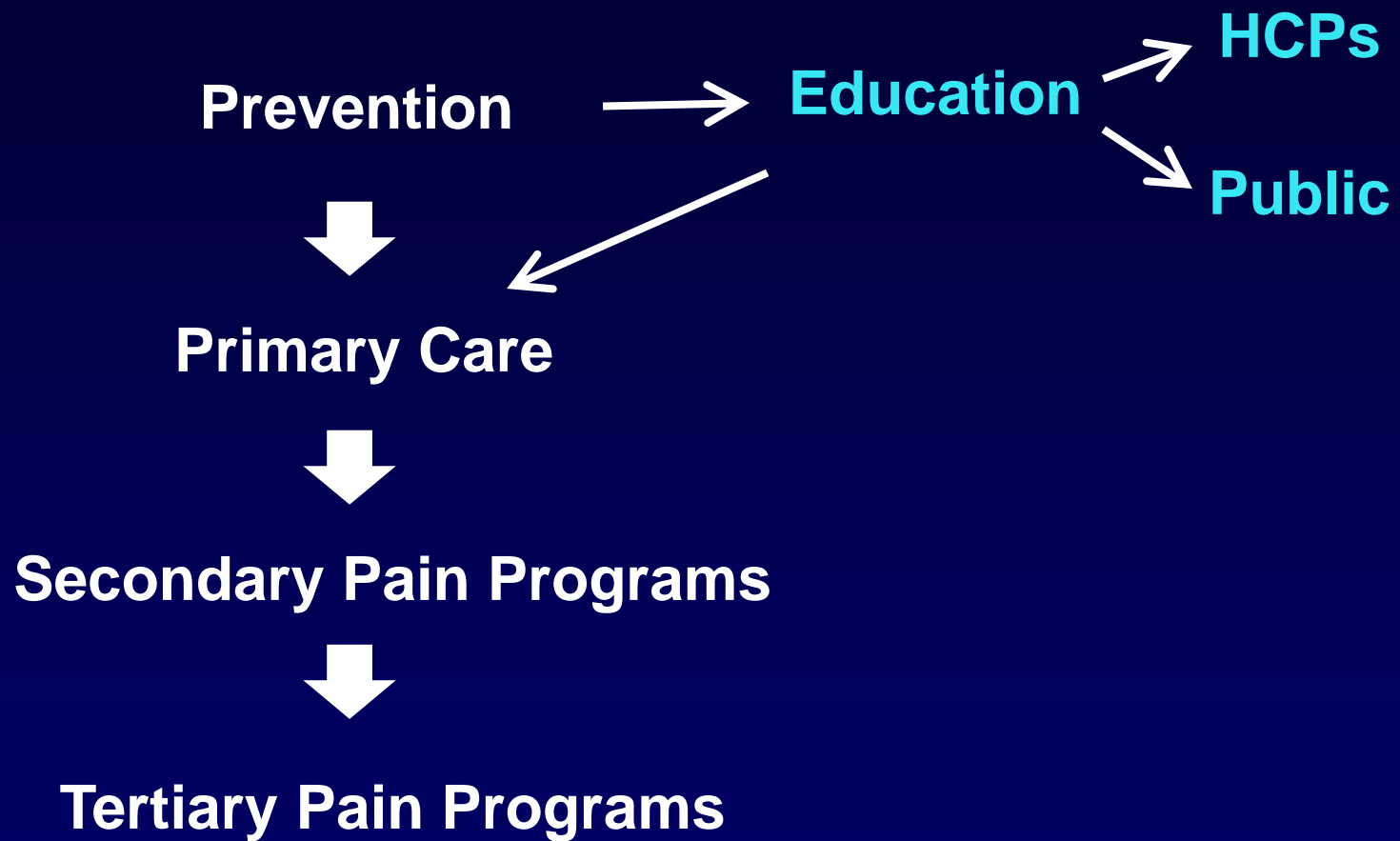


Funding for Pain Research

- CIHR Funding for pain research < 1%
 - Only 6 RCTs in pain since 1999
- StatsCan data 2007:
 - Total spent on R&D in health care: \$6.3 Billion
 - Total spent on pain R&D: 0.25%



An Ideal Pain Management System



**Can we actually
prevent chronic pain?**



Risk Factors for Post-Op Pain

Non-Modifiable

Sex

Age

Genes

Education ?

Pain Sensitivity ?

Modifiable

Pre-op pain

Severe post-op pain

Anxiety

Smoking

Expectations

Sleep

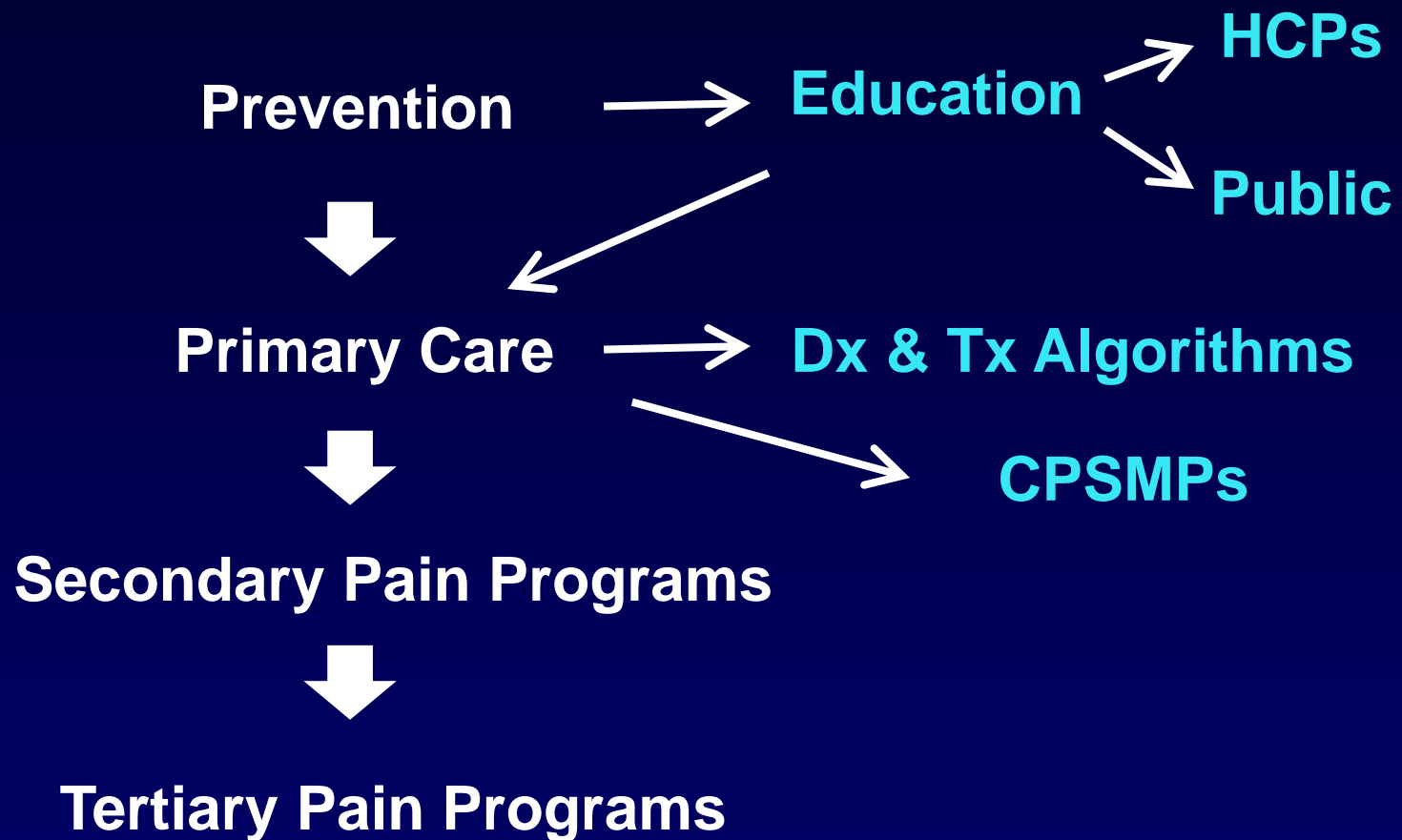


Multimodal Perioperative Analgesia

- Providing a “cocktail” of certain medications on the day of surgery and for 3-5 days afterwards along with local anesthetic blocks of the area being operated on
- Reduced pain → reduced opioid use post op → reduced opioid symptoms → faster recovery
- Less chronic pain 1 year later?



An Ideal Pain Management System

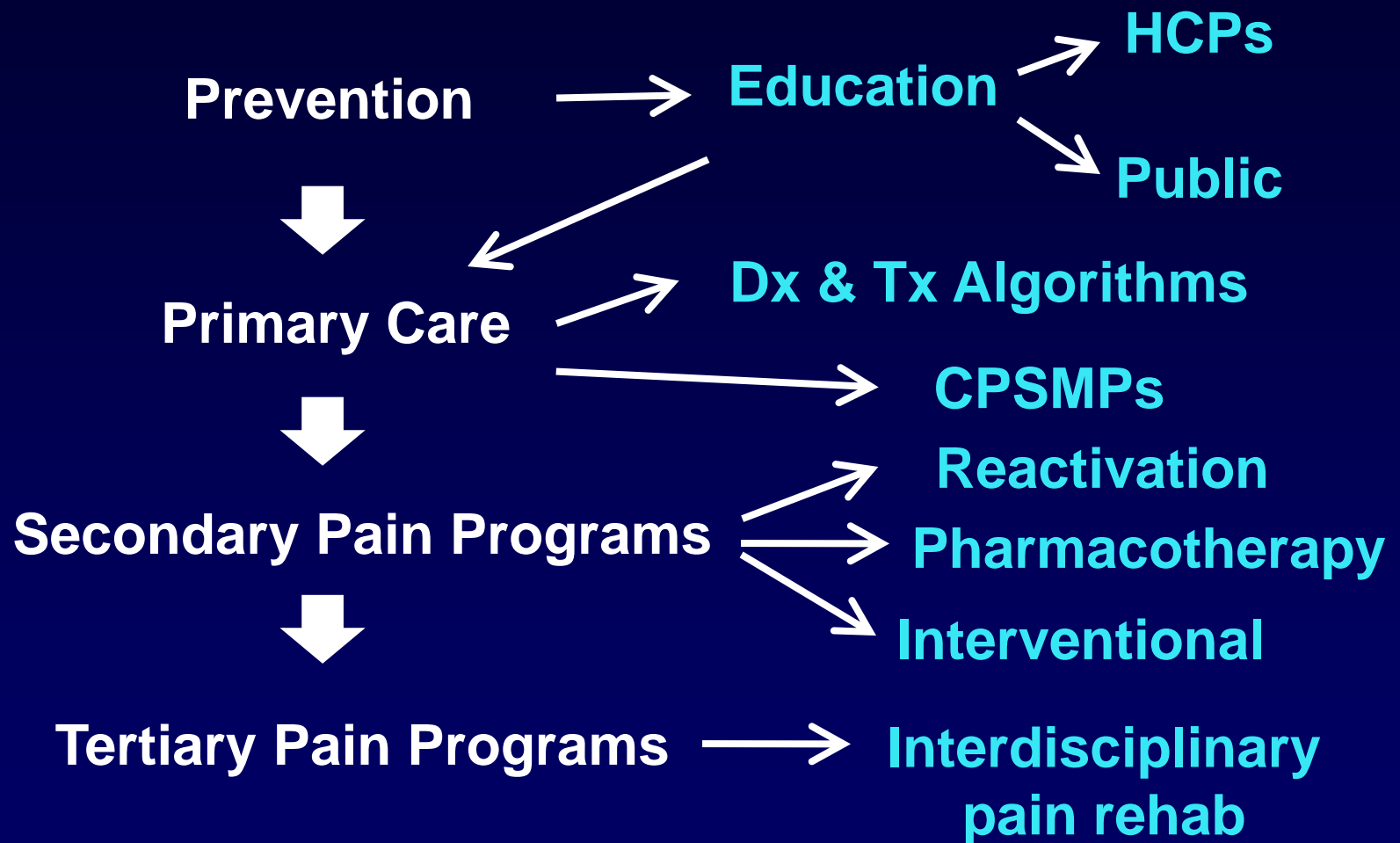


CPSMP: Program Content and Format

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	✓	✓	✓	✓	✓	✓



An Ideal Pain Management System



Pain Management Goals

- Decrease pain
- Improve function
 - **Physical**
 - **Psychological**
 - **Social**
- Minimize risk
 - **Patient**
 - **Physician**
 - **Society**



The Tipping Point

“That moment when an idea or trend crosses a threshold and spreads like wildfire.”

Malcolm Gladwell

National Pain Awareness Week

November 1 - 7, 2009


Canadian Pain
Coalition
Conquering Pain for Canadians
A Partnership of Pain Patient Groups, Health Professionals and Scientists

Partners with

painexplained.ca
GETTING ANSWERS FOR PAIN

**National Pain
Awareness
Week**



La Coalition canadienne
contre la douleur

Conquérir la douleur pour
les Canadiens
Un partenariat d'associations de personnes qui souffrent,
de professionnels de la santé et chercheurs

www.canadianpaincoalition.ca



painexplained.ca

GETTING ANSWERS FOR PAIN

*A new Canada-wide initiative
to raise the profile of pain as
an issue*

Questions?

Thank You !

The slides for this talk will be available on the
CPS conference website or from:
drjovey@sympatico.ca