

# Chronic Pain in Primary Care

## Can new EMR tools make it easier to provide evidence-based care?

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McMaster Family Practice



**Hamilton** Family Health Team  
*Better care, together.*



Centre for Effective Practice

# Objectives

1. Discuss the common elements to chronic pain care in an EMR environment
2. Highlight ways in which each project has tailored the functionality
3. Discuss success factors that will contribute to our collective understanding of improving the quality of care provided to Chronic Pain patients and the necessary enablers to support clinicians.

# Agenda

- Introductions
- Chronic Pain & Primary Care EMRs
- Hamilton FHT Experience (PSS/Bell)
  - Project 1: One practice within HFHT
  - Project 2: Scaling Up across practices within HFHT
- McMaster FHT Experience (OSCAR)
- Opportunities for collaboration

# Centre for Effective Practice

The Centre for Effective Practice (CEP) is a federally-incorporated, not-for-profit organization enabling appropriate care in primary care through the development and implementation of relevant, evidence-based programs and tools:

- Academic detailing
- Clinical performance aids (tools, EMR modification, etc.)
- Patient education
- Provider outreach (strategic communications, CME, etc.)
- Review, endorse and summarize clinical practice guidelines

# Disclosures

- Project funding received from eHealth Ontario
- Collaborating with Doug Kavanagh, founder of CognisantMD

# Care Gap

One of the most consistent findings in health care is the gap between evidence and practice... resulting in patients not receiving care according to scientific evidence and patients receiving care that is not needed or is harmful (underuse, overuse, misuse)

# Opportunity for EMRs

- Leverage shift from EMR adoption to meaningful use
- Integrate evidence at point-of-care
- Improve user experience and add value
- Systematically collect data for disease monitoring & quality improvement

# Chronic Non Cancer Pain

- Canada's recorded prescription-opioid consumption increased by about 50% between 2000 and 2004 (International Narcotics Control Board 2006);
- Canada is currently the world's third-largest opioid analgesic consumer per capita (International Narcotics Control Board 2009)
- Ontario, oxycodone prescriptions rose by 850% from 1991 to 2007, from 23 prescriptions/1000 individuals per year to 197/1000 per year (Dhalla, 2009)
- Other health system concerns; diverting, addiction, suicide, increased system costs
- New Guideline and Opioid Manager

# Existing Evidence

- National Opioid Guideline
  - <http://nationalpaincentre.mcmaster.ca/opioid/>
- Opioid Manager
  - <http://www.effectivepractice.org/index.cfm?PAGEPATH=&ID=23515>

# OPIOID MANAGER

The Opioid Manager is designed to be used as a point of care tool for providers prescribing opioids for chronic non-cancer pain. It condenses key elements from the Canadian Opioid Guideline and can be used as a chart insert.

## A Before You Write the First Script

Patient Name: \_\_\_\_\_

Pain Diagnosis: \_\_\_\_\_

Date of Onset: \_\_\_\_\_

### Overdose Risk

#### Patient Factors

- Elderly
- On benzodiazepines
- Renal impairment
- Hepatic impairment
- COPD
- Sleep apnea
- Sleep disorders
- Cognitive impairment

#### Provider Factors

- Incomplete assessments
- Rapid titration
- Combining opioids and sedating drugs
- Failure to monitor dosing
- Insufficient information given to patient and/or relatives

#### Opioid Factors

- Codeine & Tramadol - lower risk
- CR formulations - higher doses than IR

#### Prevention

- Assess for Risk Factors
- Educate patients / families about risks & prevention

- Start low, titrate gradually, monitor frequently
- Careful with benzodiazepines
- Higher risk of overdose - reduce initial dose by 50%; titrate gradually
- Avoid parenteral routes
- Adolescents, elderly - may need consultation
- Watch for Abuse

### Goals decided with patient:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

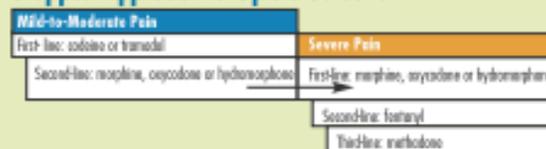
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### Initiation Checklist

	Y	N	Date
Are opioids indicated for this pain condition			
Explained potential benefits			
Explained adverse effects			
Explained risks			
Patient given information sheet			
Signed treatment agreement (as needed)			
Urine drug screening (as needed)			

### Stepped Approach to Opioid Selection



### Opioid Risk Tool

By Lynn R. Webster MD

Item (circle all that apply)	Item score if female	Item score if male
<b>1. Family History of Substance Abuse:</b>		
Alcohol	1	3
Illegal drugs	2	3
Prescription drugs	4	4
<b>2. Personal History of Substance Abuse:</b>		
Alcohol	3	3
Illegal drugs	4	4
Prescription drugs	5	5
<b>3. Age (mark box if 16-45)</b>	1	1
<b>4. History of Preadolescent Sexual Abuse</b>	3	0
<b>5. Psychological Disease</b>		
Attention Deficit Disorder, Obsessive-Compulsive Disorder, or Bipolar, Schizophrenia	2	2
Depression	1	1
<b>Total</b>		
<b>Total Score Risk Category:</b>		
Low Risk: 0 to 3, Moderate Risk: 4 to 7, High Risk: 8 and above		

## B Initiation Trial A closely monitored trial of opioid therapy is recommended before deciding whether a patient is prescribed opioids for long term use.

**Suggested Initial Dose and Titration** (Modified from Weaver III, 2007 and the e-CPS, 2008) Notes: The table is based on oral dosing for OXC2. Brand names are shown if there are some distinct features about specific formulations. Reference to brand names as examples does not imply endorsement of any of these products. CR = controlled release, IR = immediate release, NA = not applicable, ASA: Acetylsalicylic Acid

Opioid	Initial dose	Minimum time interval for increase	Suggested dose increase	Minimum daily dose before converting IR to CR
Codeine (alone or in combination with acetaminophen or ASA)	15-30 mg q 4 h, as required	7 days	15-30 mg/day up to maximum of 600 mg/day (acetaminophen dose should not exceed 3.2 grams/day)	100 mg
CR Codeine	50 mg q 12 h	2 days	50 mg/day up to maximum of 300 mg q 12 h	NA
Tramadol (37.5 mg) + acetaminophen (325 mg)	1 tablet q 4-6 h, as needed up to 4/day	7 days	1-2 tab q 4-6 h, as needed up to maximum 8 tablets/day	3 tablets
CR Tramadol	a) Zydram XL <sup>®</sup> : 150 mg q 24 h b) Tramad <sup>®</sup> : 100 mg q 24 h c) Ralvion <sup>®</sup> : 100 mg q 24 h	a) 7 days b) 2 days c) 5 days	Maximum doses: a) 400 mg/day b) 300 mg/day c) 300 mg/day	NA
IR Morphine	5-10 mg q 4 h, as needed maximum 40 mg/day	7 days	5-10 mg/day	20-30 mg
CR Morphine	10-30 mg q 12 h, Kadian <sup>®</sup> q 24 h. Kadian <sup>®</sup> should not be started in opioid-naïve patients	Minimum 2 days, recommended: 14 days	5-10 mg/day	NA
IR Oxycodone	5-10 mg q 6 h, as needed maximum 30 mg/day	7 days	5 mg/day	20 mg
CR Oxycodone	10-20 mg q 12 h, maximum 30 mg/day	Minimum 2 days, recommended: 14 days	10 mg/day	NA
IR Hydromorphone	1-2 mg q 4-6 h, as needed maximum 8 mg/day	7 days	1-2 mg/day	6 mg
CR Hydromorphone	3 mg q 12 h, maximum 9 mg/day	Minimum 2 days, recommended: 14 days	2-4 mg/day	NA

### Initiation Trial Chart

Date	D/M/Y	D/M/Y	D/M/Y	D/M/Y
Opioid prescribed				
Daily dose				
Daily morphine equivalent				
More than 200				
Less than 200				
Goals achieved → Yes, No, Partially				
Pain intensity				
Functional status → Improved, No Change, Worsened				
Adverse effects				
Nausea				
Constipation				
Drowsiness				
Dizziness/Vertigo				
Dry skin/Pruritis				
Vomiting				
Other?				
Complications? (Reviewed: Y/N)				
Aberrant Behaviour (Reviewed: Y/N)				
Urine Drug Screening (Y/N)				
Other Medications				

To access the Canadian Guideline for Safe and Effective Use of Opioids for Chronic Non-cancer Pain and to download the Opioid Manager visit <http://nationalpaincentre.mcmaster.ca/opioid/>

## Maintenance & Monitoring

### Morphine Equivalence Table

Opioid	Equivalent Doses (mg)	Conversion to MEQ
Morphine	30	1
Codaine	200	0.15
Oxycodone	20	1.5
Hydromorphone	6	5
Buprenorphine	300	0.1
Meperidine & Tramadol	Dose Equivalents unreliable	
Transdermal fentanyl	60 – 134 mg morphine = 25 mcg/h 135 – 179 mg = 37 mcg/h 180 – 224 mg = 50 mcg/h 225 – 269 mg = 62 mcg/h 270 – 314 mg = 75 mcg/h 315 – 359 mg = 87 mcg/h 360 – 404 mg = 100 mcg/h	

#### Switching Opioids:

If previous opioid dose was:	Then, SUGGESTED new opioid dose is:
High	50% or less of previous opioid (converted to morphine equivalent)
Moderate or low	60-75% of the previous opioid (converted to morphine equivalent)

### Maintenance & Monitoring Chart

Date	D/M/Y	D/M/Y	D/M/Y	D/M/Y	D/M/Y	D/M/Y
Opioid prescribed						
Daily dose						
Daily morphine equivalent						
More than 200	Withdrawal Scale > than 200					
Less than 200						
Goals achieved → Yes, No, Partially						
Pain intensity						
Functional status → Improved, No Change, Worsened						
Adverse effects	Nausea					
	Constipation					
	Drowsiness					
	Dizziness/Vertigo					
	Dry skin/Pruritis					
	Vomiting					
	Other?					
Complications? (Reviewed: Y/N)						
Aberrant Behaviour (Reviewed: Y/N)						
Urine Drug Screening (Y/N)						
Other Medications						

0 = None  
1 = Limits ADLs  
2 = Prevents ADLs

## When is it time to Decrease the dose or Stop the Opioid completely?

When to stop opioids	Examples and Considerations
<b>Pain Condition Resolved</b>	Patient receives definitive treatment for condition. A trial of tapering is warranted to determine if the original pain condition has resolved.
<b>Risks Outweighs Benefits</b>	Overdose risk has increased. Clear evidence of diversion. Aberrant drug related behaviours have become apparent.
<b>Adverse Effects Outweighs Benefits</b>	Adverse effects impairs functioning below baseline level. Patient does not tolerate adverse effects.
<b>Medical Complications</b>	Medical complications have arisen (e.g. hypogonadism, sleep apnea, opioid induced hyperalgesia)
<b>Opioid Not Effective</b>	<b>Opioid effectiveness = improved function or at least 30% reduction in pain intensity</b> Pain and function remains unresponsive. Opioid being used to regulate mood rather than pain control. Periodic dose tapering or cessation of therapy should be considered to confirm opioid therapy effectiveness.

### How to Stop – the essentials

**How do I stop?** The opioid should be tapered rather than abruptly discontinued.

**How long will it take to stop the opioid?** Tapers can usually be completed between 2 weeks to 4 months.

**When do I need to be more cautious when tapering? Pregnancy:** Severe, acute opioid withdrawal has been associated with premature labour and spontaneous abortions.

**How do I decrease the dose?** Decrease the dose by no more than 10% of the total daily dose every 1-2 weeks. Once one-third of the original dose is reached, decrease by 5% every 2-4 weeks. Avoid sedative-hypnotic drugs, especially benzodiazepines, during the taper.

## Aberrant Drug Related Behaviour (Modified by Pozsik, Kish et al 2002).

Indicator	Examples
*Altering the route of delivery	• Injecting, biting or crushing oral formulations
*Accessing opioids from other sources	• Taking the drug from friends or relatives • Purchasing the drug from the "street" • Double-doctoring
Unauthorized use	• Multiple unauthorized dose escalations • Binge rather than scheduled use
Drug seeking	• Recurrent prescription losses • Aggressive complaining about the need for higher doses • Harassing staff for faxed scripts or in-person appointments • Nothing else "works"
Repeated withdrawal symptoms	• Marked dysphoria, myalgias, GI symptoms, craving
Accompanying conditions	• Currently addicted to alcohol, cocaine, cannabis or other drugs • Underlying mood or anxiety disorders not responsive to treatment
Social features	• Deteriorating or poor social function • Concern expressed by family members
Views on the opioid medication	• Sometimes acknowledges being addicted • Strong resistance to tapering or switching opioids • May admit to mood-elevating effect • May acknowledge distressing withdrawal symptoms

\* = behaviours more indicative of addiction than the others.

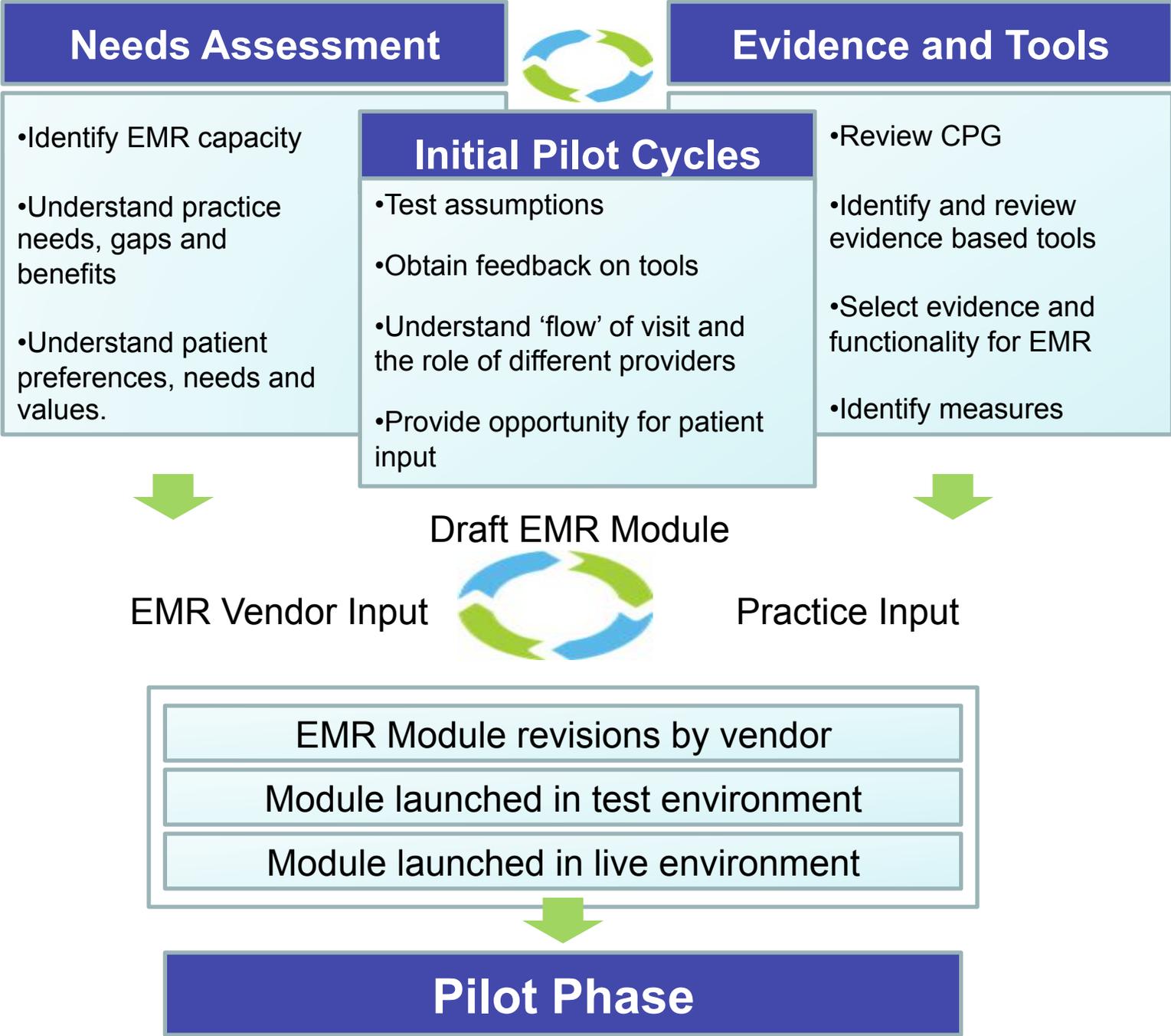
# Hamilton FHT

## Project #1: Pilot Objectives

- To test the integration of CPG recommendations within an EMR (Bell/xwave)
- How effectively clinical best practices can be integrated and automated within an EMR?
  - Patient Level
  - Practice Level
- Gain insight/understanding on future EMR specifications re: promoting quality and EBM

# Overall Goals of Pilot

- ↑ Improved consistency of best practice for management of chronic non cancer pain
- ↑ Improve patient safety and adherence
- ↑ Improve practice level dashboard/reporting functionality
- ↓ Decrease risk of addiction and/or diversion



# Capacity prior to project

- What capacity existed in EMR? What were the gaps?
  - Who are our chronic pain patients?
    - e.g. 6 year old child on codeine
  - 726 patients on opioids for chronic pain (estimated from 6000 rostered patients)
  - Point of interest: 307 patients are diabetics
- What would success look like?

# Bell EMR Features

## 1) Chronic Pain Registry

Pain Visit

Goals/Self-Mgmt

Flowsheet

Guidelines

Narc. Calculator

Opioid Risk Tool

Probs

Meds

Allergies

Directives

Flowsheet

Orders

Patient not in Chronic Pain Registry

Add

Underlying Medical Conditions that may Require Narcotic Analgesics

[Empty text box with scroll arrows]

View Last

Pain Measures ?

BPI (this visit): [input]

Previous BPI: [input]

PHQ-9 (this visit): [input]

Previous PHQ-9: [input]

Opioid risk:

Previous risk:

Narcotic Contract

Signed [input]

Urine Test

positive  negative

Drug: [input]

PHQ9

Opioid Risk Tool

Print Narcotic Contract

Comments

[Empty text box with scroll arrows]

View Last

Pain Management Goal ?

[Empty text box with scroll arrows]

New Goal

Medication Side Effects

- none
- constipation
- nausea
- sedation
- other

[input with scroll arrows]

Additional Treatments

- none
- accupuncture
- physical therapy
- exercise
- other

[input with scroll arrows]

[input with scroll arrows]

Treatment Plan (current prescribed daily dosing) ?

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View Last

Community Resources

Print Insurance Letter

Patient Info Sheet

Prev Form (Ctrl+PgUp)

Next Form (Ctrl+PgDn)

Close

# Bell EMR Features

## 2) Pain Management Goals

## Pain Management Goal

### Goal

Reduce pain by 30%

### Patient Self-Management Action Plan

not provided     provided     reviewed     revised

[View Last](#)

- Confidence Interval  $\geq 7$  achieved
- Barriers to self-management goal reviewed

# Bell EMR Features

## 3) Narcotics Calculator

# Opioid Analgesic Conversion Tool

Morphine Equivalence Table

From Opioid:

Qty:  mg

Reduction for incomplete cross tolerance:  %

To Opioid:

Reduction for incomplete cross tolerance: %

Chronic oral morphine equivalent dose:

## Centricity Practice Solution 2006



### MORPHINE EQUIVALENCE TABLE

Opioid	Equivalent Doses (mg)	Conversion to MEQ
Morphine	30	1
Codeine	200	0.15
Oxycodone	20	1.5
Hydromorphone	6	5
Meperidine	300	0.1
Methadone & Tramadol	Dose Equivalents unreliable	
Transdermal fentanyl	60 - 134 mg morphine = 25 mcg/h	
	135 - 179 mg = 37 mcg/h	
	180 - 224 mg = 50 mcg/h	
	225 - 269 mg = 62 mcg/h	
	270 - 314 mg = 75 mcg/h	
	315 - 359 mg = 87 mcg/h	
	360 - 404 mg = 100 mcg/h	

OK

## Centricity Practice Solution 2006



WARNING:  
200 mg of Morphine Equivalent daily is the watchful dose.

OK

none

# Capacity after project

- How many patients in your practice:
  - Have/experience chronic non cancer pain?
  - Are prescribed an opioid?
  - Have a narcotic contract?
  - Have set a self-management goal?
  - Have a pain goal?
  - Have had a Drug Urine Test?
- Assess patient via Opioid risk tool
- Capture Brief Pain Inventory scores at patient level over time
- Consistent conversion of morphine equivalent Rx

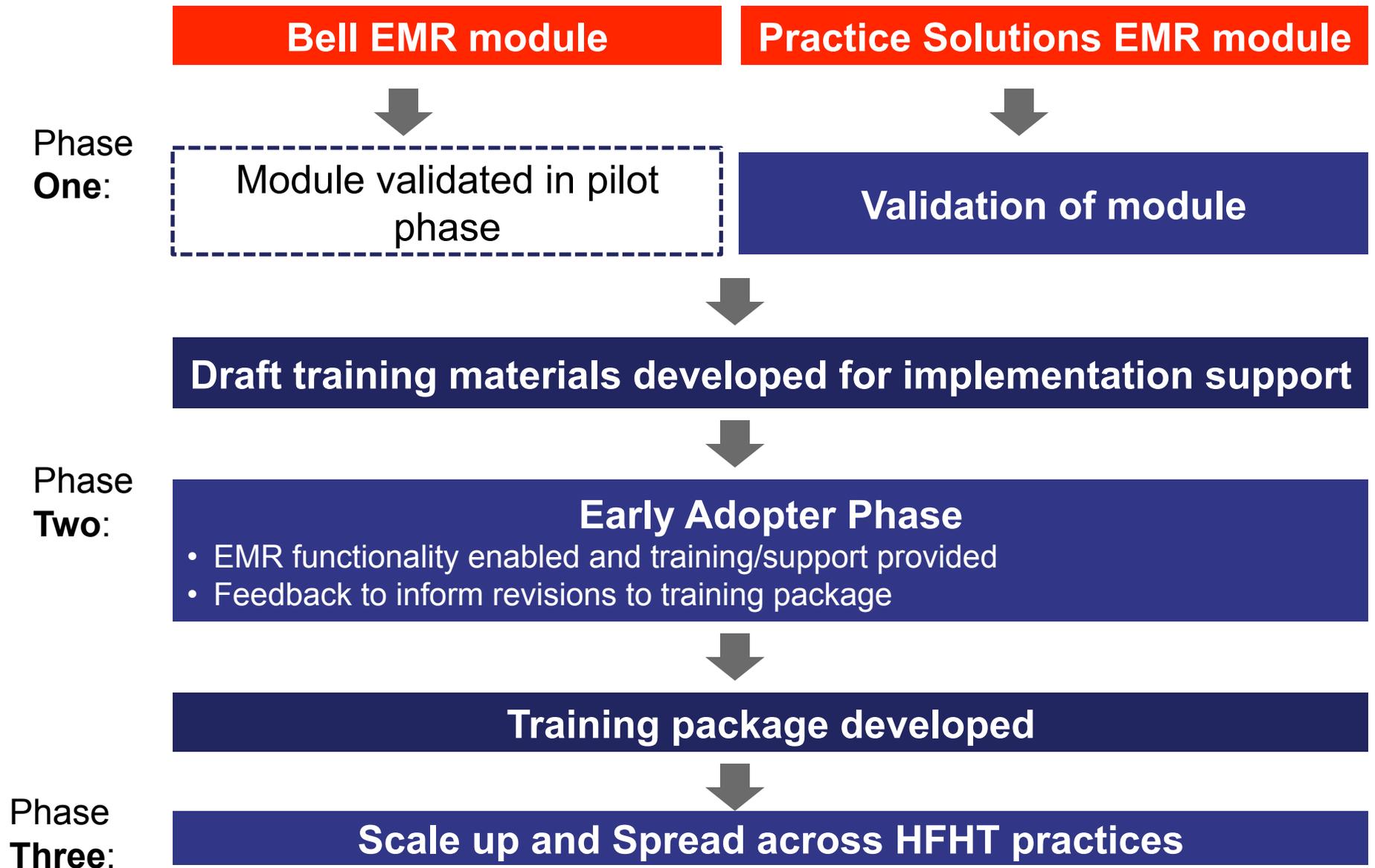
# Capacity after project

- **Patient Level**
  - Pain scores over time
  - Goals captured over time
  - Symptoms and Treatment over time (Rx education)
- **Practice Level**
  - Practice profile for chronic pain patients enabled
  - Patient Self-management functionality
- **Process Level**
  - Insurance forms
  - Narcotic contracts

# Key Lessons

- Primary Care Setting and Providers
  - EMR facilitating behaviour change...but slowly
  - Enabling better practice versus “telling providers what to do”
- Patient Centeredness and Self-Management
  - EMR can play a key role in patient engagement
  - Emerging opportunities for patients to populate data (BPI)
- EMR
  - Allowing guidance/evidence to evolve and EMR to accommodate
  - EMR serves providers and patients needs
  - Balance between standardization and adaptability
- Integrating Guidelines and Supporting Uptake
  - Support still needed once functionality has been enhanced
  - Potential to capture indicators for ongoing reporting

## Project #2: Scaling Up across practices within HFHT



# PSS EMR Features

## 1) Initiation Checklist

Jan 8, 2012

Opioid --Initial Assessment--

DGK

Notes

**A Opioid Manager Before You Write the First Script**

Pain diagnosis: Low back pain → CPP

Date of onset: Jan 8, 2012

Goals decided with patient:

→ Initiation Checklist

Jan 8, 2012

Opioid Initiation Checklist

DGK

**Initiation Checklist**

Date

(X)

Are opioids indicated for this condition?	<input checked="" type="checkbox"/>	Jan 8, 2012
Explained potential benefits	<input checked="" type="checkbox"/>	Jan 8, 2012
Explained adverse effects	<input checked="" type="checkbox"/>	Jan 8, 2012
Explained risks	<input checked="" type="checkbox"/>	Jan 8, 2012
Patient given information sheet	<input checked="" type="checkbox"/>	Jan 8, 2012
Signed treatment agreement (as needed)	<input checked="" type="checkbox"/>	Jan 8, 2012
Urine drug screening (as needed)	<input checked="" type="checkbox"/>	Jan 8, 2012

→ Opioid Risk Tool

→ Overdose Risks  Cautioned re: driving

→ Information Sheet

→ Treatment Agreement

→ Initiation Trial

Jan 8, 2012

Opioid Initiation Trial

DGK

**B Initiation Trial** A closely monitored trial of opioid therapy is recommended before deciding whether a patient is prescribed opioids for long-term use.

→ Initiation Advice...

→ Insert Monitoring Chart

# PSS EMR Features

## 2) Treatment Agreement

File

## Opioid Medication Treatment Agreement

I understand that I am receiving opioid medication from Dr. 01 to treat my pain condition.  
I agree to the following:

1. I will not seek opioid medications from another physician. Only Dr. 01 will prescribe opioids for me.
2. I will not take opioid medications in larger amounts or more frequently than is prescribed by Dr. 01.
3. I will not give or sell my medication to anyone else, including family members; nor will I accept any opioid medication from anyone else.
4. I will not use over-the-counter opioid medications such as 222's and Tylenol No. 1.
5. I understand that if my prescription runs out early for any reason (for example, if I lose the medications, or take more than prescribed), Dr. 01 will not prescribe extra medications for me; I will have to wait until the next prescription is due.
6. I will fill my prescriptions at one pharmacy of my choice; pharmacy name:
7. I will store my medication in a secured location.

**I understand that if I break these conditions, Dr. 01 may choose to cease writing opioid prescriptions for me.**

Sincerely,

Dandall Abadia

Discard

Add to Notes

# PSS EMR Features

## 3) Maintenance & Monitoring Chart



**Bell EMR module**

**Practice Solutions EMR module**

Phase  
**One:**

Module validated in pilot  
phase

**Validation of module**

**Draft training materials developed for implementation support**

Phase  
**Two:**

**Early Adopter Phase**

- EMR functionality enabled and training/support provided
- Feedback to inform revisions to training package

**Training package developed**

Phase  
**Three:**

**Scale up and Spread across HFHT practices**

# Comments/Questions?

- *Comments on maximizing the effectiveness of a similar tool in the FHT environment?*
- *Opportunities to implement tools beyond pilot projects?*

# Contact Information

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*Chronic pain in primary care:  
The McMaster Pain Program  
CDSS*

October 16, 2012

# The Challenge

*I think I would say one of the most challenging things is dealing with the suffering part of the chronic pain. And there's some kind of relationship with the patient where they feel like I have pain you have the medications that can control my pain, so you're the, if I can't get medications from you, you are a barrier to me relieving my suffering. And you get into a real negative relationship with the patient if you sort of allow that to sort of center and occur in the encounter. [FG2: P3; 83-92]*



# Our proposed solution

- CDSS that can provide evidence-based guidance regarding management of chronic pain
  - Current focus is low back pain and NeP
- Inclusion of personal health record ‘app’ where patients can record information related to pain management

# Hypothesis

A process of systematic consultation, feedback and process analysis with all types of proposed CDSS users (physicians, allied health and patients) will result in a tool aimed at improving evidence-based quality of care, with high usability and satisfaction among users.

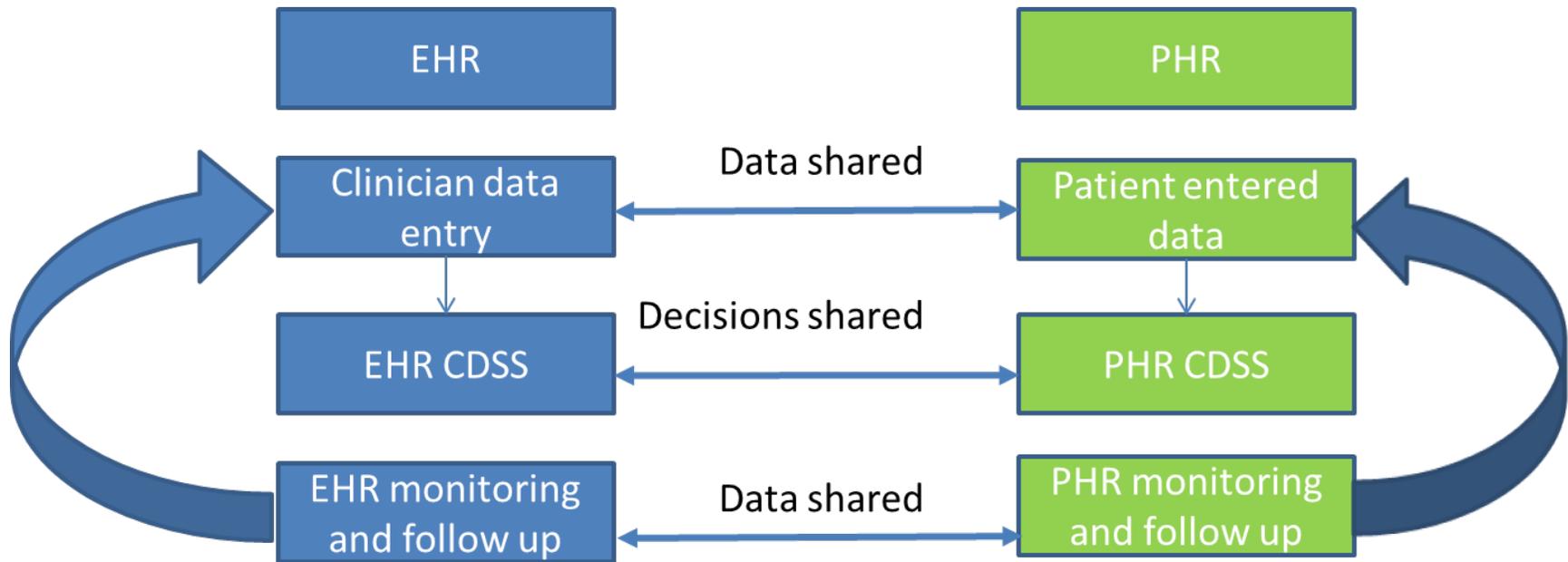
# *Research Questions*

- What are the needs of both interprofessional primary care clinicians, and patients with chronic and neuropathic pain, for function and format of a CDSS?
- What are the barriers and facilitators for the effective implementation of a CDSS for pain management?
- How acceptable and usable is a CDSS for an interprofessional primary care team and for patients after systematic development involving multiple stakeholders?
- What are the perceived barriers and facilitators for using the developed CDSS in routine clinical care?

# Study Co-Investigators

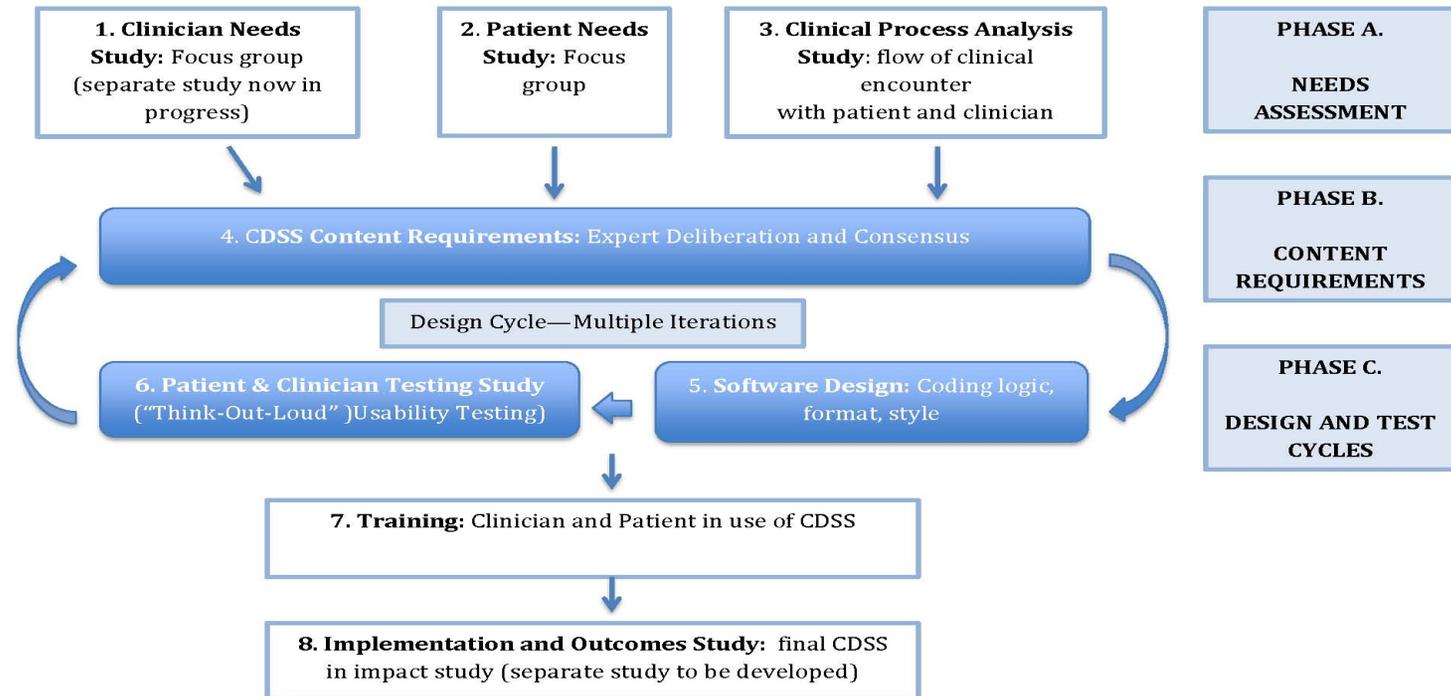
- Martha Bauer OT (clinician in pain care, McMaster Family Health Team),
- Norm Buckley MD, FRCP (Director, Michael G Degroote National Pain Centre):
- Lisa Dolovich PharmD, MSc (Associate Professor and research director Department of Family Medicine): Interest in e-health technology, community-based health promotion, quality assurance, interprofessional models of care
- Ron Goeree PhD (Clinical Epidemiology and Biostatistics, McMaster):
- Dale Guenter MD, MPH, FCFP (PI, Associate Professor and Co-Director of McMaster Family Practice): Clinical interest in HIV and chronic pain care; experience in community-based research, mixed methods and quality assurance
- Dwight Moulin MD, FRCP (Director NepDat Project):
- Inge Schabort (Family Physician, McMaster Family Health Team):
- Paul Taenzer PhD (Psychologist; part of low back pain guideline group; knowledge transfer)
- Khaled Hassanein PhD (E-health; DeGroote School of Business)
- Joseph Tan PhD (E-health; DeGroote School of Business)

# Linked EMR and PHR Systems



# CDSS Development Process

## Development Process for Computerized Clinical Decision Support System (CDSS)



# CDSS Development Process

## Multi-stage process:

- Clinician focus groups
- Patient focus groups
- Clinician observation (Business Process Analysis)
- Early engagement with programmer
- Usability testing

# Our Setting: McMaster Family Health Team

- 2 clinics (McMaster Family Practice and Stonechurch Family Health Centre)
- Approximately 30,000 rostered patients, 30 family physicians, 10 nurse practitioners, 2 occupational therapists, 3 pharmacists, 2 dietitians, 6 mental health therapists, as well as consulting psychiatrists and other specialists.
- Recent hiring of System Navigator.
- About 35 new family physicians graduate from the FHT yearly, and 70 are based in the clinics at any given time.

# Clinician Focus Groups (FGs)

- 4 FGs held in the Hamilton area (n=21)
- Between all groups have representation from FPs, NPs, allied health care providers, and residents

# List of Nodes

- CDSS content
- **CDSS features**
- Personal health record
- Experience with electronic forms/tools
- Patient Involvement
- Challenges with current EMR
- Challenges of working with patients who have pain
- NeP Pain
- Chronic low back pain
- General statements regarding pain
- Clinical practice guidelines
- Other: Uptake of CDSS; WSIB

# CDSS Features

- Layout
- Data sharing
- Tools
- Perceived benefits
- Expected challenges
- General CDSS comments

# CDSS: Perceived Benefits

- Will help maintain/improve continuity of care for patients with pain as CDSS will hopefully provide quick synopsis of the patient
- May help provide a 'backbone' when you feel like caving – especially with use of medication contract
- CDSS may help patients know what to expect at a visit as they may hear repetition of questions at each visit; will get to understand how chronic pain is treated
- CDSS will be able to provide patient education resources for patients
- Improved confidence for health care providers as will have an evidence-based guide for chronic pain treatment
- Helpful for learners as will have access to patient history related to chronic pain

# CDSS: Perceived Benefits

*But I think indirectly I think you can improve the confidence of the providers by having this. And I don't mean oh because you're giving them, you're reminding them what to ask. I think it's because it reassures them they haven't missed something. That's how you always feel with; like I have I missed something here? Like why is it not working? You know why are things not working?  
[FG4: P2; 507-510]*

# CDSS Features: Expected Challenges

- Will be difficult to keep updated and current
- CDSS may not be used as much if it only examines a few times of pain and excludes other types such as osteoarthritis, soft tissue injuries, etc..
- How will a provider know that there is a tool on the go for a patient
- Need to know where to find CDSS tool in the EMR
- How useful will CDSS tool be for clinicians (i.e. nurse practitioners) who won't be prescribing most relevant medications for chronic pain patients
- Would be nice if you can only fill in parts of the CDSS (e.g. WSIB forms) and not need to complete the whole CDSS
- If it's a really huge tool, no one will complete it – has to be workable and usable in a time-limited interaction with a patient
- Will become cumbersome if information that you enter is not populated in other relevant areas

# Your Experiences

- What challenges do you experience when working with patients with chronic pain?
- What features help make a CDSS appealing to you?
- What tools related to pain have you used that you think should be included in the CDSS?
  - Function-related