



**Welcome to CHNET-Works! Fireside Chat # 373**  
*www.chnet-works.ca A project of PHIRN and CHHRN – University of Ottawa*  
**March 6, 2014 1:00 – 2:00 PM ET**

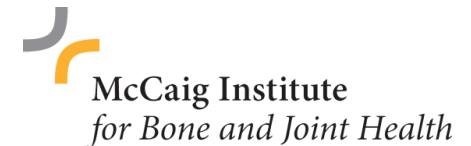
# **Transforming Musculoskeletal Care in Alberta:** ***Moving Upstream with Collaborative Teams in Primary Care***

**Linda Woodhouse PT, PhD**

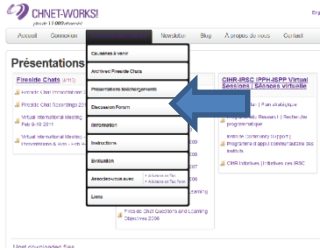
Associate Professor & David Magee Endowed Chair  
in MSK Research, University of Alberta;  
Scientific Director, AHS Bone and Joint Health Strategic Clinical Network;  
Research Affiliate, McCaig Institute for Bone and Joint Health

**Dianne Millette, PT, MHSc.**

Registrar and CEO  
Physiotherapy Alberta – College + Association



## *Housekeeping : how a fireside chat works...*



### **Step #1 : Backup PowerPoint Presentation**

▪ [www.chnet-works.ca](http://www.chnet-works.ca)

### **Step #2 : Teleconference**

#### **All Audio by telephone**

- If your line is 'bad' – hang up and call back in
- Participant lines muted
- Recording announcement



### **Step #3: The Internet Conference** *(via 'Bridgit' software)*

*From our computer to yours*

**No audio via internet**



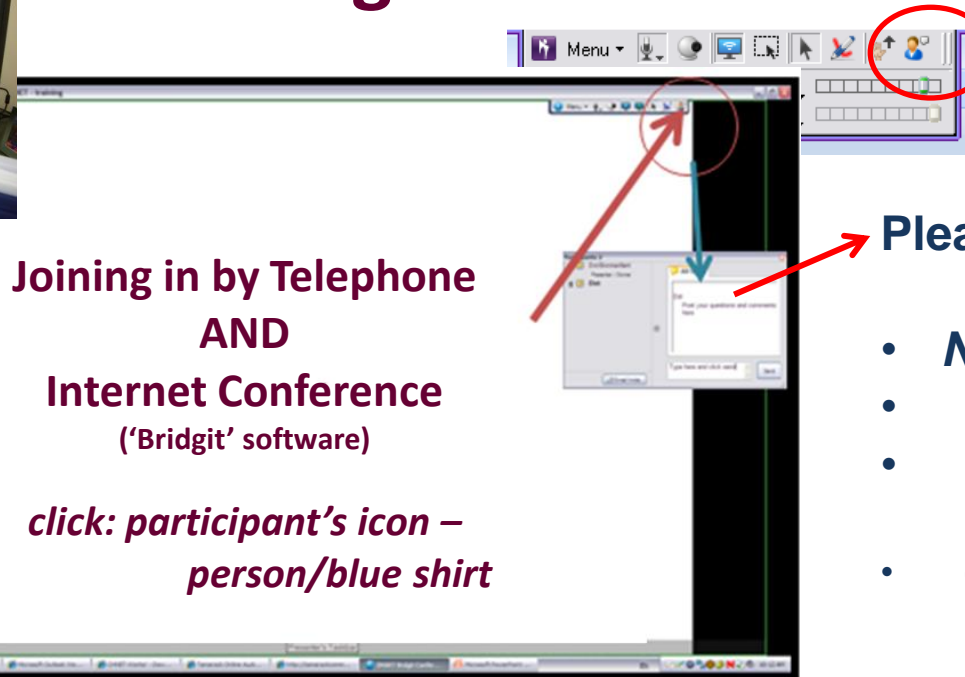
A transmission delay of 2-4 seconds is normal

**Difficulties? Firewalls - slow reception, disconnection :**

*Use the Backup PowerPoint Presentation (Instruction Step #1)*

***For assistance: [animateur@chnet-works.ca](mailto:animateur@chnet-works.ca)***

# How to post comments/questions during the Fireside Chat

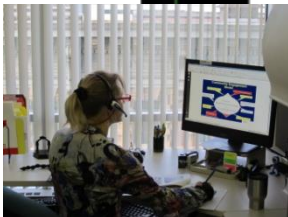


Joining in by Telephone  
AND  
Internet Conference  
(‘Bridgit’ software)

*click: participant’s icon –  
person/blue shirt*

**Please introduce yourself!**

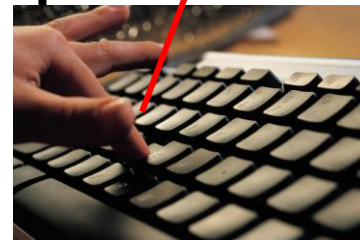
- ***Name***
- ***Organization***
- ***Location***
- ***Group in Attendance?***



**Joining by Telephone only?**



**By email:  
Respond to the ‘access instructions  
email  
[animateur@chnet-works.ca](mailto:animateur@chnet-works.ca)**



# Disclosure

---

- Consultant to Eli Lilly & Lilly (Global)
  - Monoclonal anti-myostatin antibody

# Overview

---



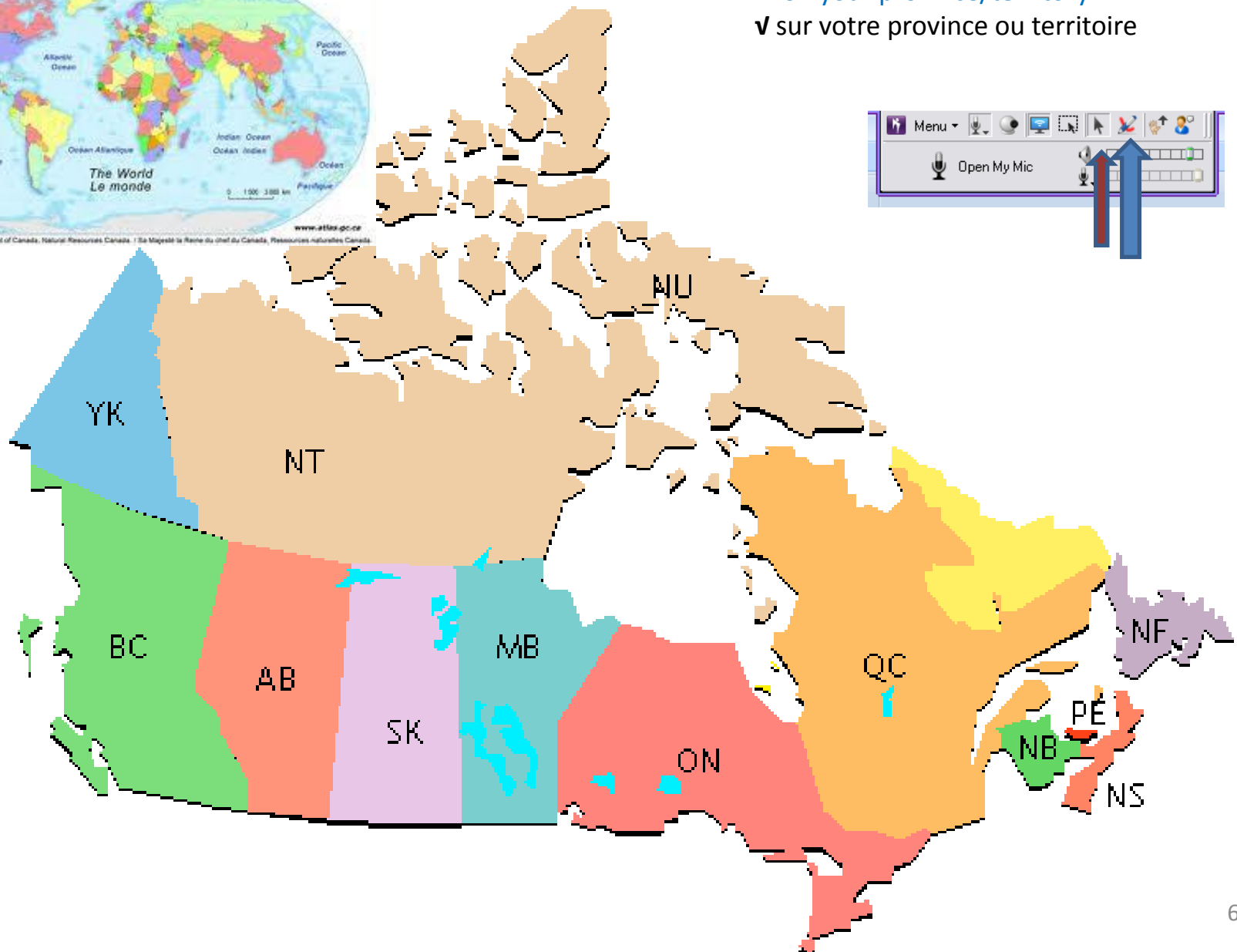
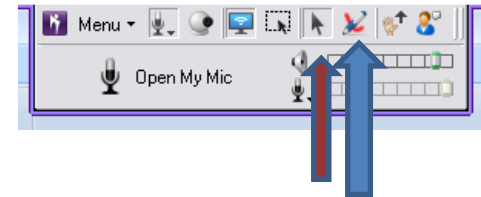
- Review of past success in streamlining in-hospital tertiary care to improve wait times (using total joint arthroplasty as a model)
- Future: moving upstream to focus on conservative management of chronic diseases (MSK model)
- New clinical roles (advanced practice).

# Where are you located? Où *habitez-vous*?



✓ on your province/territory

✓ sur votre province ou territoire



# What is Your Main Sector?

*Put a ✓ on your answer (or RSVP via email)*



**Public Health**

**Education/Research  
Faculty/Staff/Student**

**Provincial /Territorial  
Government/Ministry**

**Professional Health  
Organization**

**Health Practitioner**

**Other?**

# What is your role?

*Put a ✓ on your answer (or RSVP via email)*



**Policy maker**

**Research**

**Decision maker**

**Front Line**

**Community leader**

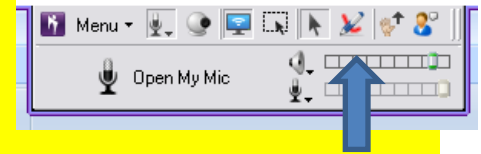
**Other**



*Do you agree with the following statement:*

Health Care Organizations encourage collaborative practice and typically enable practitioners to work to their maximum Scope of Practice?

*Put a ✓ on your answer (or RSVP via email)*



- Yes

- No

- Maybe/Not Sure?

# The Challenge — Impact of MSK Disorders

---

- MSK conditions are the leading cause of severe long term pain and physical disability worldwide<sup>1</sup>
- 2000-2010 “The Bone & Joint Decade”
- Moving from 1 in 8 to 1 in 4 Canadians with Arthritis<sup>2</sup>
- Every 60 seconds, someone in Alberta seeks health care for a musculoskeletal (MSK) condition.

<sup>1</sup> Woolf, A. D., & Pfleger, B. (2003). *Bull World Health Organ*, 81(9), 646-656

<sup>2</sup> Arthritis Alliance of Canada (2011) *The Impact of Arthritis in Canada: Today and Over the Next 30 Years*

# Cumulative Economic Burden of OA

---

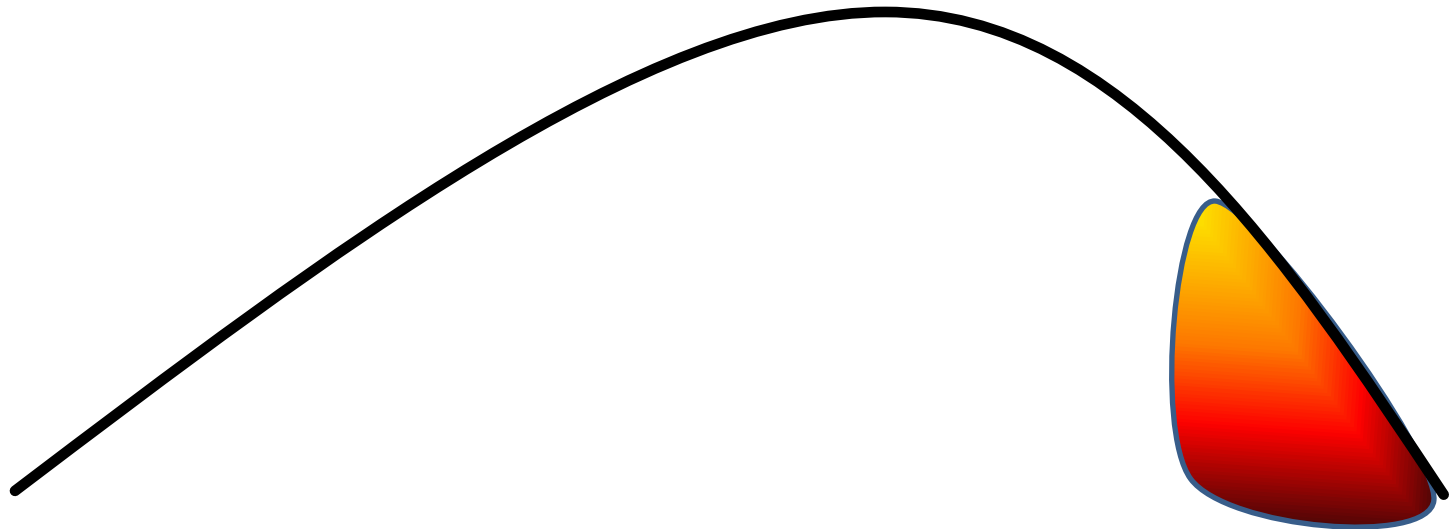
OA	2010	2015	2020	2030	2040
Total direct costs	\$ 10.2 B	\$ 75.3 B	\$ 157.5 B	\$ 339.3 B	\$ 546.4 B
Total indirect costs	\$ 17.3 B	\$ 119.9 B	\$ 247.6 B	\$ 555.1 B	\$ 909.1 B
Total economic burden	\$ 27.5 B	\$ 195.2 B	\$ 405.1 B	\$ 894.4 B	\$ 1,455.5 B

\* B = Billion

Arthritis Alliance of Canada Fall, 2011

# Current Focus: Tertiary Prevention

**Strategies to manage those with end-stage disease (e.g. OA)**



# Secondary Prevention

---

## Strategies to delay progression of chronic disease (e.g. OA)

Lifestyle Changes

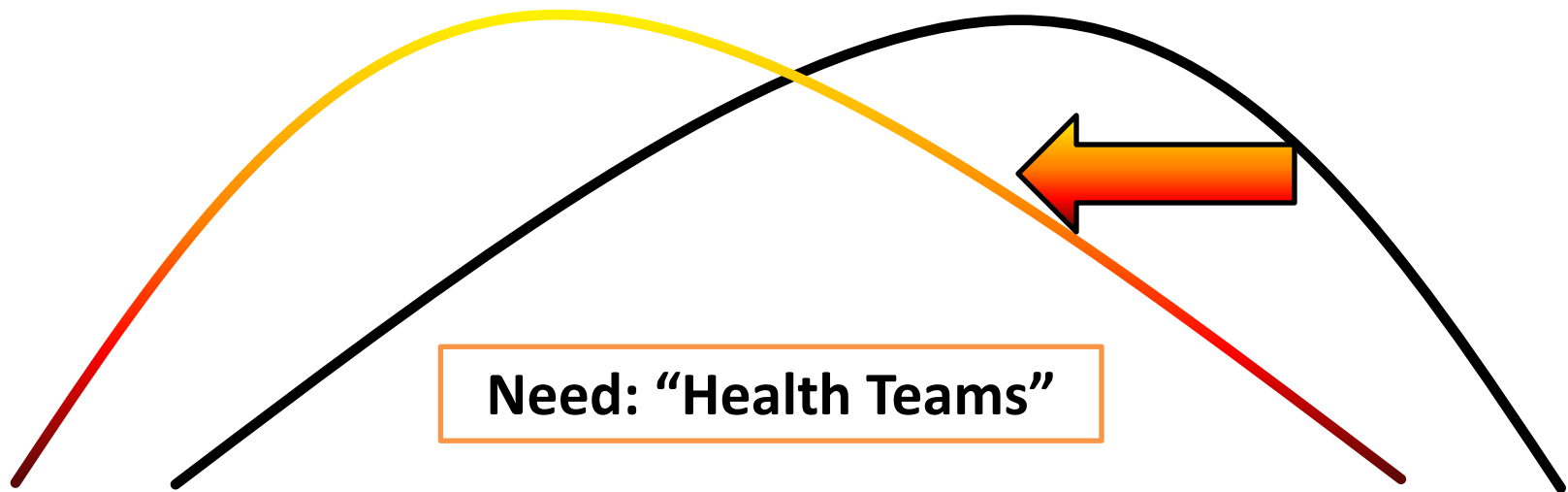


Need: "Health Care Teams"

# Primary Prevention

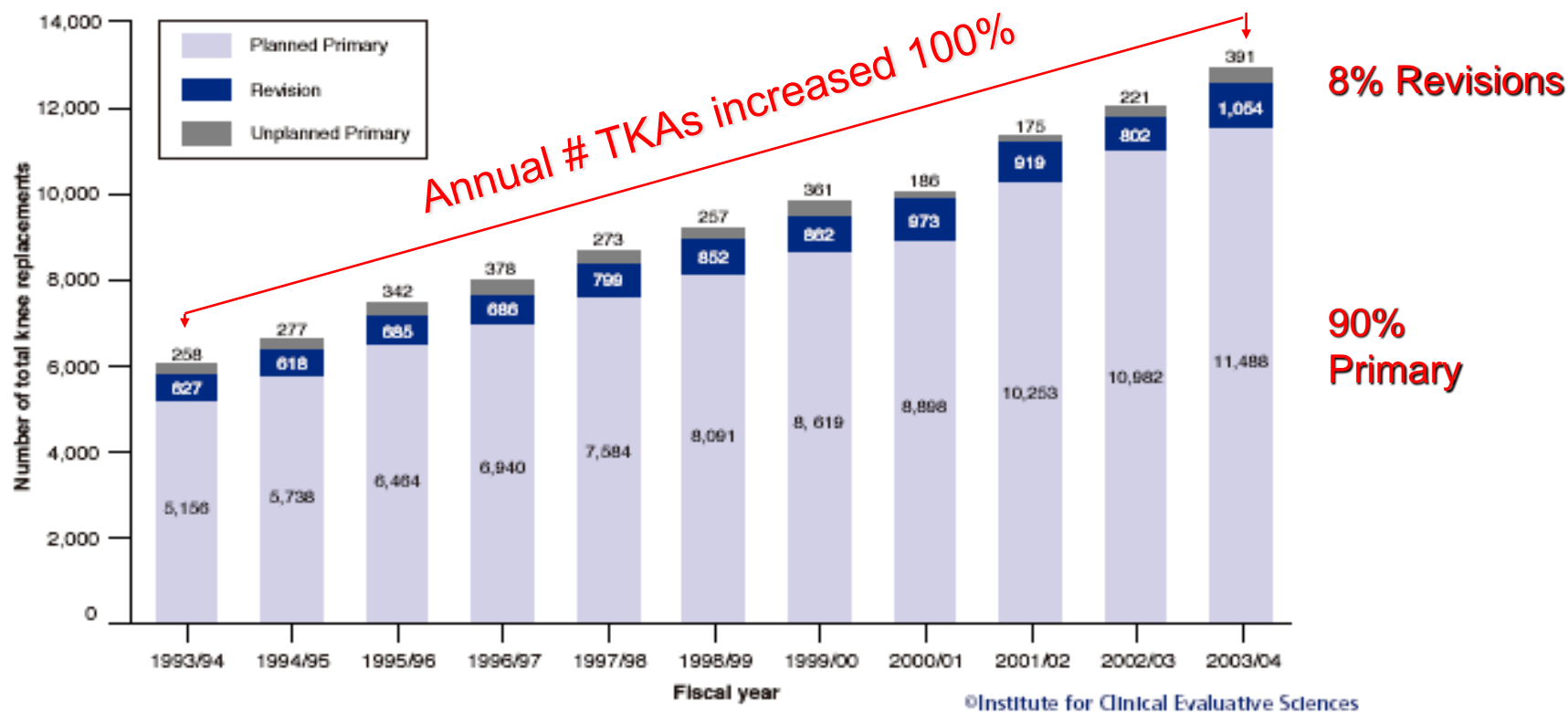
---

**Strategies to reduce injury and the risk of developing chronic diseases (e.g. OA)**



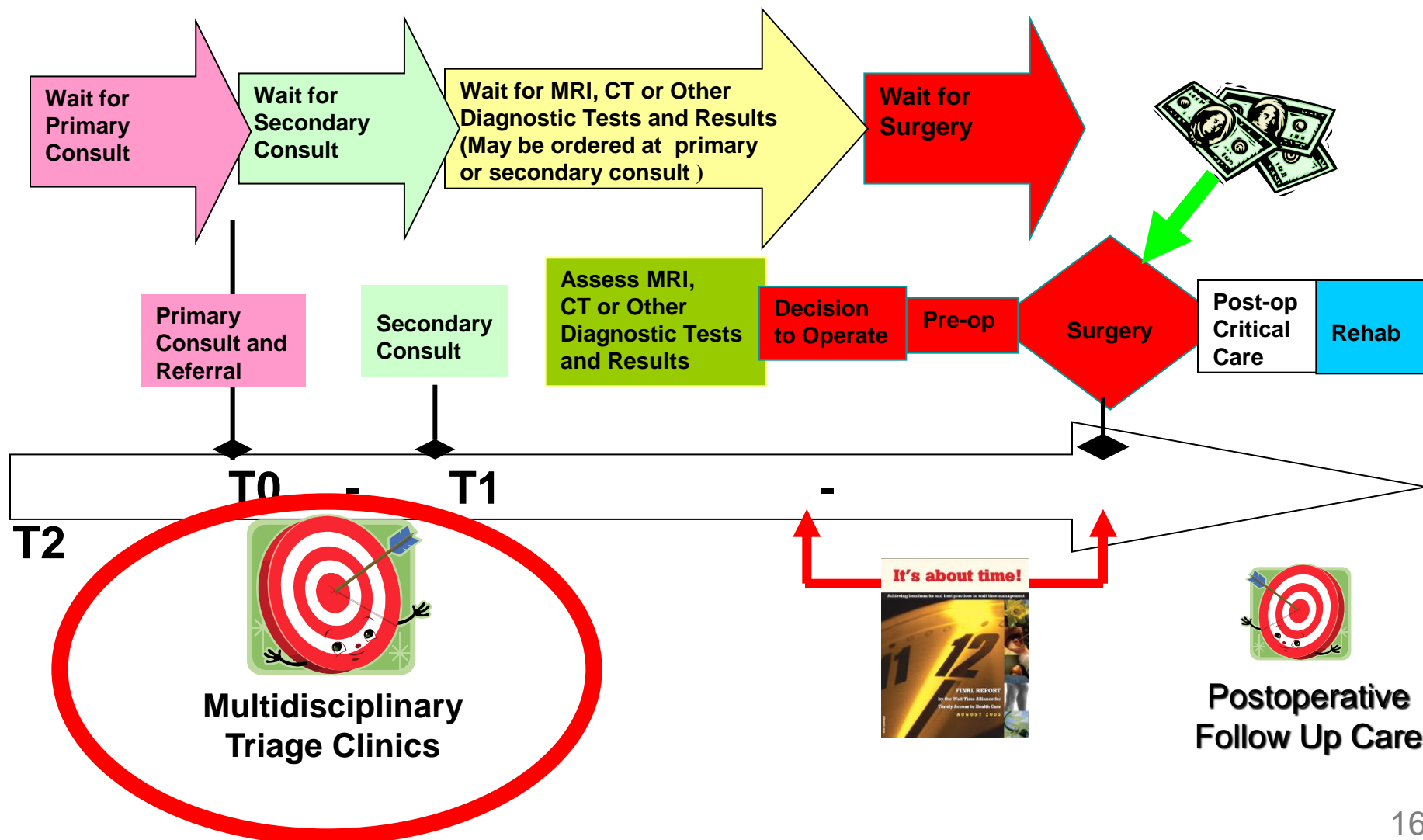
# Annual # of TKAs

5.1b Annual number of total knee replacements for the population aged 20 years and older, by type, in Ontario, 1993/94–2003/04



Data sources: Canadian Institute for Health Information–Discharge Abstract Database; Ministry of Health and Long-Term Care–Registered Persons Database

# Wait Times

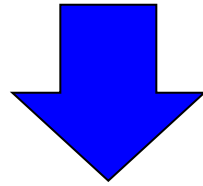




# Challenges for tertiary care

---

- \$\$\$\$\$\$ (unsustainable)
  - High volumes
- Shortage/aging of health care workers

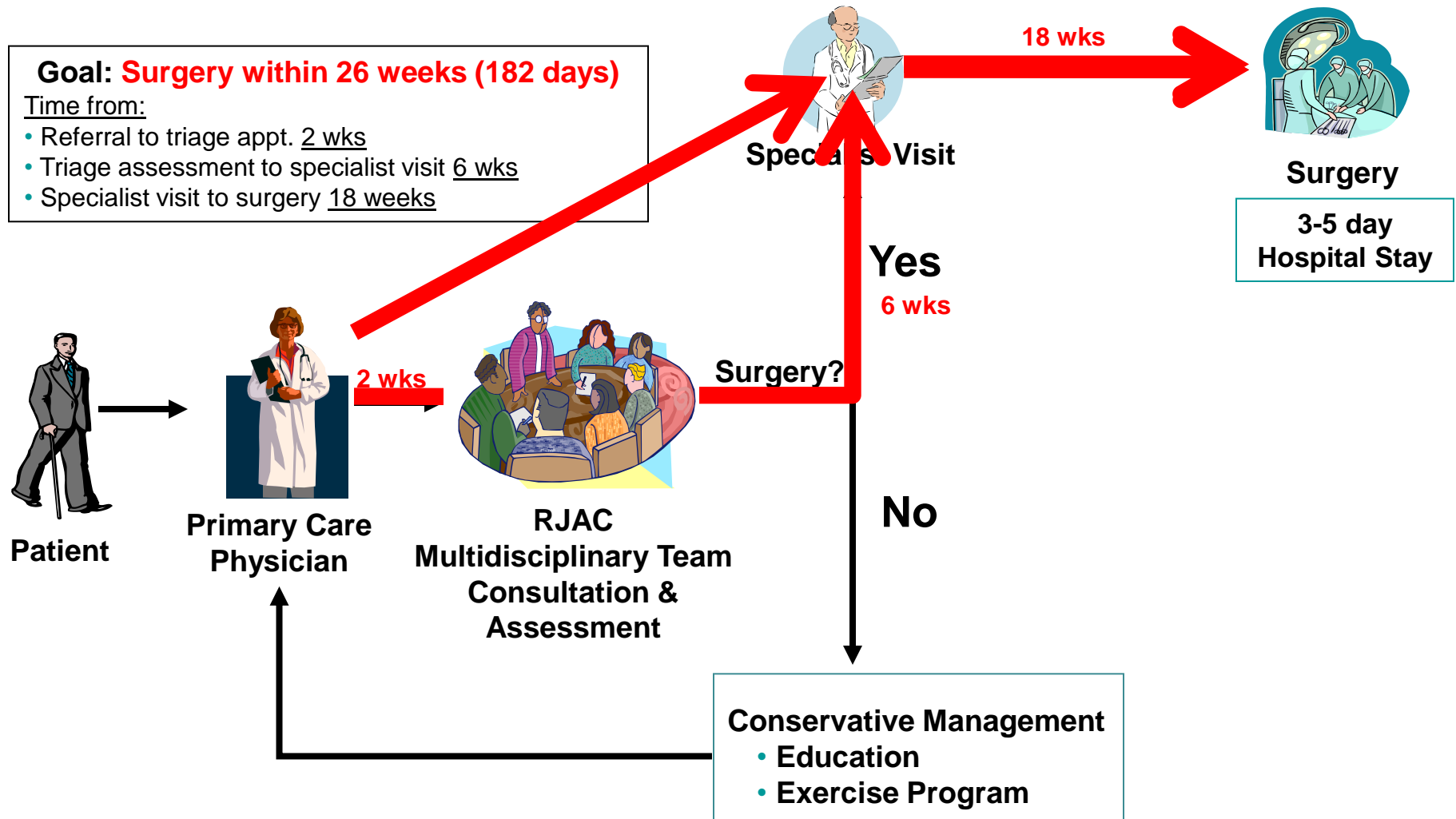


## **New Roles in Health Care**

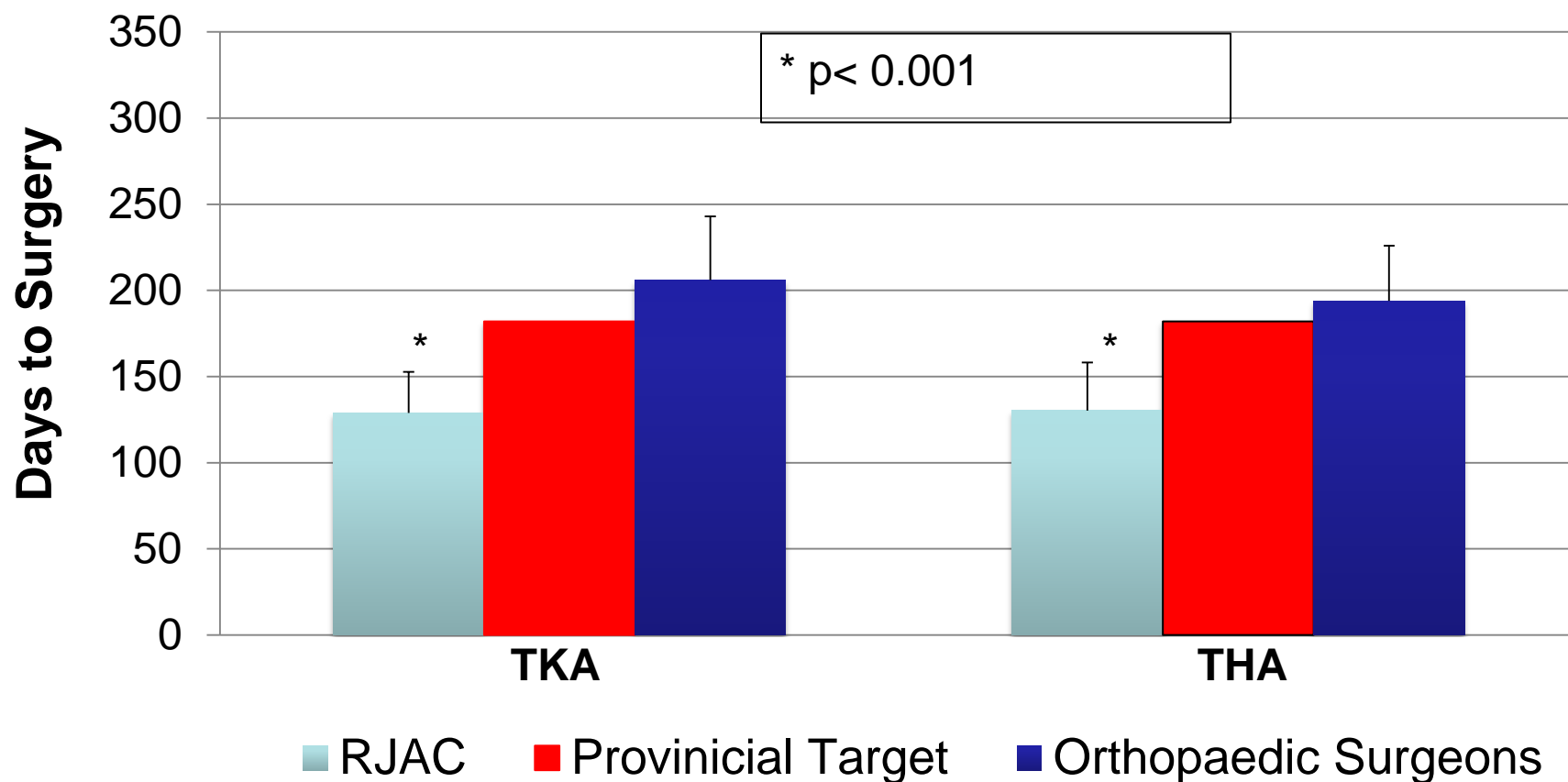
- Nurse practitioner
- Advanced Practice/Extended Scope Physiotherapist

# Regional Joint Assessment Centre

Hamilton Niagara Haldimand Brant Local Health Integration Network



# Time to Surgery



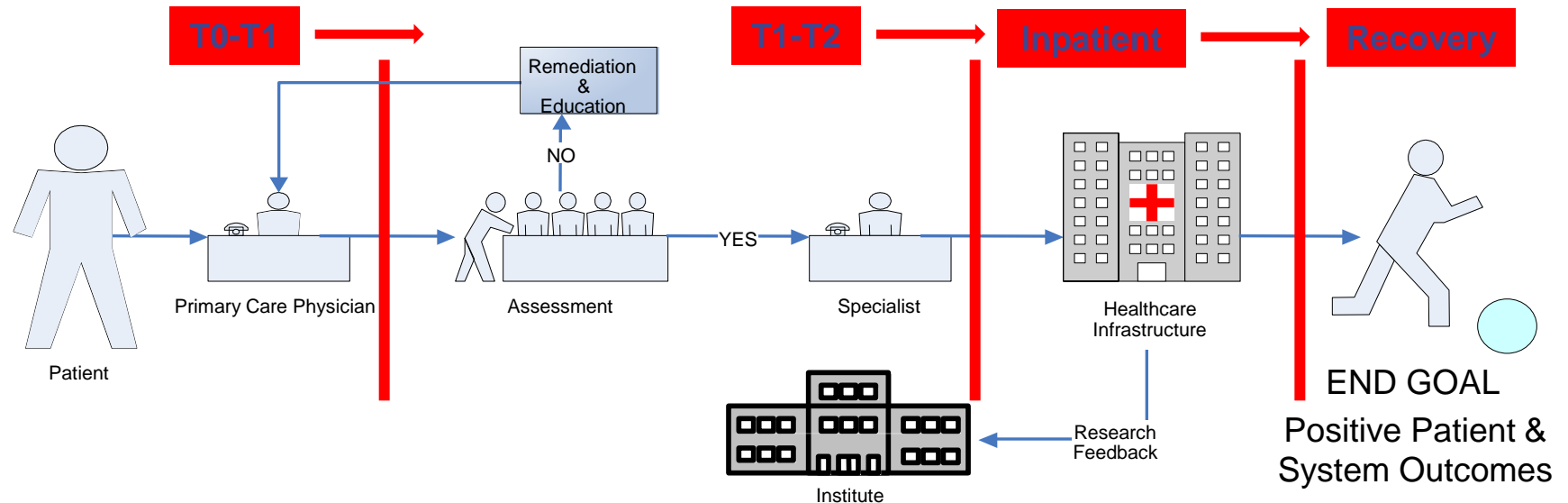
# Interprofessional Triage Teams

---

- **Pre Surgical Triage**

- Australia
- UK, Scotland, Wales (**-19 to 29 wks**)
  - UK (Aintree, Somerset Coast & Southampton NHS)
- Canada
  - Alberta
  - Ontario - Ottawa, Kingston, Thunderbay, Toronto (Holland, NYGH, UHN, St. Michael's), Hamilton/Niagara

# New Models of Care



## Seven Key Model Elements

1. **Provincial care path** – based on evidence
2. **Central intake clinics** – multidisciplinary teams
3. **Case managers** – manage each patient uniquely
4. **Accountable patients** – patient 'contracts'
5. **Data informed** – quality measured by Institute
6. **Resources aligned** – beds, ORs, staff
7. **Case rate funding** – clinic and surgical care

# Becoming the Best: Efficiency

## Doing More With the Same

- Productivity gains:

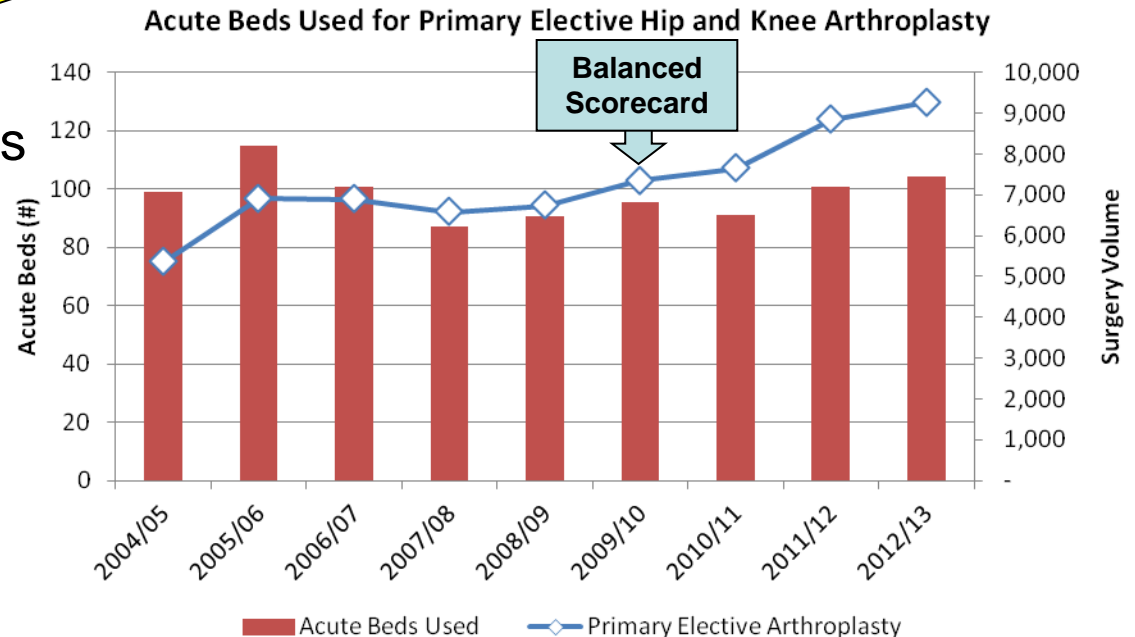
73% more surgery

5% beds

Volume have  
reduced wait times  
by 11%

**Reduced costs by \$33 million**

More hip and knee  
replacements  
performed but fewer  
beds needed



# Balanced Scorecard

## Scorecards and Individual Physician Reports being Used

QUALITY DIMENSIONS:	EFFICIENT	SAFE	APPROPRIATE	ACCESSIBLE	ACCEPTABLE	EFFECTIVE	
<b>SELECTED MEASURE:</b>	(Length of Stay - LOS) (Note 1)	OR "Time Out" (Note 2)	% of Patients Mobilized Day 0 (Note 3)	Time to Surgery (T0 - T2) (Note 4)	Patient Satisfaction (H-CAHPS' Pain Control Responses) (Note 5)	Date of Discharge/ Predicted date (Note 6)	
<b>TARGETED IDEAL (Level 10):</b>	Full compliance to established standards; non-negotiable			Ideal target based on what can realistically be achieved in two years; negotiable			
<b>PERFORMANCE LEVEL: ▼</b>							
<b>10</b> (Targeted Ideal)	4.2 days or less	100% compliance	100%	400 days or less	90% or higher for "Always" Score	0%	<b>10</b>
<b>9</b>	4.3	<b>95%</b>	90%	<b>450 Days</b>	88%	0.5%	<b>9</b>
<b>8</b>	<b>4.5</b>	90%	82%	500 Days	86%	1%	<b>8</b>
<b>7</b>	4.7	85%	<b>75%</b>	550 Days	85%	2%	<b>7</b>
<b>6</b>	4.9	80%	68%	600 Days	82%	4%	<b>6</b>
<b>5</b>	5.1	70%	61%	675 Days	79%	6%	<b>5</b>
<b>4</b>	5.3	65%	54%	775 Days	76%	8%	<b>4</b>
<b>3</b> ("AS IS" at Start)	5.5	Current Compliance 60%	47%	896 Days	<b>63.5%</b> for "Always" Score (See Note 5)	10%	<b>3</b>
<b>2</b>	5.7	55%	40%	1000 Days	60%	12%	<b>2</b>
<b>1</b>	5.9	50%	30%	1200 Days	55%	<b>15%</b>	<b>1</b>
<b>WEIGHTING (%)</b>	20	15	20	10	15	20	= 100 (%)
<b>OPTIMIZATION SCORE: (Level x Weight)</b>	140	150	140	70	45	20	<b>TOTAL SCORE = 565</b>

# Balanced Scorecard

Site: <b>RAH : Royal Alexandra Hospital</b>										
Time Period: 2013-04-01 to 2013-06-30										
LEGEND										
Up ▲										
Same ●										
Down ▼										
Quality Dimensions:	EFFICIENT <sup>1</sup>	EFFICIENT <sup>2</sup>	SAFE <sup>3</sup>	SAFE <sup>4</sup>	SAFE <sup>5</sup>	APPROPRIATE <sup>6</sup>	ACCESSIBLE <sup>7</sup>	ACCEPTABLE <sup>8</sup>	EFFECTIVE <sup>9</sup>	
Selected Measure:	Avg. length of stay*	% meeting LOS benchmark*	% compliance with SSCL briefing	% compliance with SSCL timeout	% compliance with SSCL debrief	% mobilized day of surgery	Avg. time to surgery	Patient satisfaction	Theatre change over time (minutes)	
Definition:	Mean time in days spent in hospital for elective primary H&K replacement, including transfers to sub-acute, rehab or another hospital.	Percent of primary elective H&K replacement patients, excluding PHR, who meet the LOS benchmark for their discharge location.	Percent of primary elective H&K replacements where surgeons, anaesthetists and nursing complete the briefing component of the Safe Surgical Checklist (SSCL).	Percent of primary elective H&K replacements where surgeons, anaesthetists and nursing complete the timeout component of the Safe Surgical Checklist (SSCL).	Percent of primary elective H&K replacements where surgeons, anaesthetists and nursing complete the debrief component of the Safe Surgical Checklist (SSCL).	Percent of primary elective H&K patients who change position from supine to WB at bedside w/ help and walking aid on day of surgery.	Days from referral to consult + days from decision to surgery, divided by # of elective H&K replacements, including revisions.	Means score on OVERALL SATISFACTION on patient feedback form.	Average number of minutes between cases to turn over theatre for primary elective H&K replacement patients.	
Change from Last Period:	▲	▲	●	▲	▲	▲	▼	▼	●	
Current Results:	5.34	82.7%	99.9%	100.0%	100.0%	79.1%	245.7	8.73	21.0	
Ideal:	10	4.0	97%	100%	100%	100%	154	9.80	20.0	10
	9	4.2	95%	93%	93%	97%	185	9.75	20.5	9
	8	4.4	93%	86%	86%	94%	220	9.70	21.0	8
	7	4.6	91%	79%	79%	91%	255	9.65	22.0	7
	6	4.8	89%	72%	72%	88%	290	9.60	23.0	6
	5	5.0	86%	65%	65%	85%	325	9.55	24.0	5
	4	5.3	83%	58%	58%	82%	360	9.50	25.0	4
Baseline:	3	5.6	80%	46%	46%	79%	394	9.45	26.0	3
	2	6.0	75%	40%	40%	76%	430	8.50	28.0	2
	1	6.4	70%	30%	30%	73%	440	8.00	30.0	1
Weighting (%):	10	10	5	5	5	20	10	20	15	100
Optimization Score (Level x Weight):	30	30	45	50	50	60	70	40	120	495

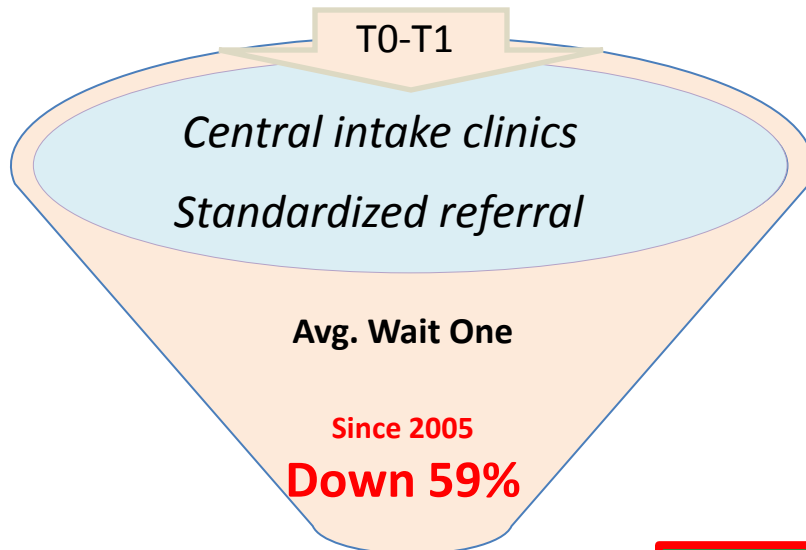
\* Reporting period for this measure is lagged by 1 quarter



# Reduced Wait Times

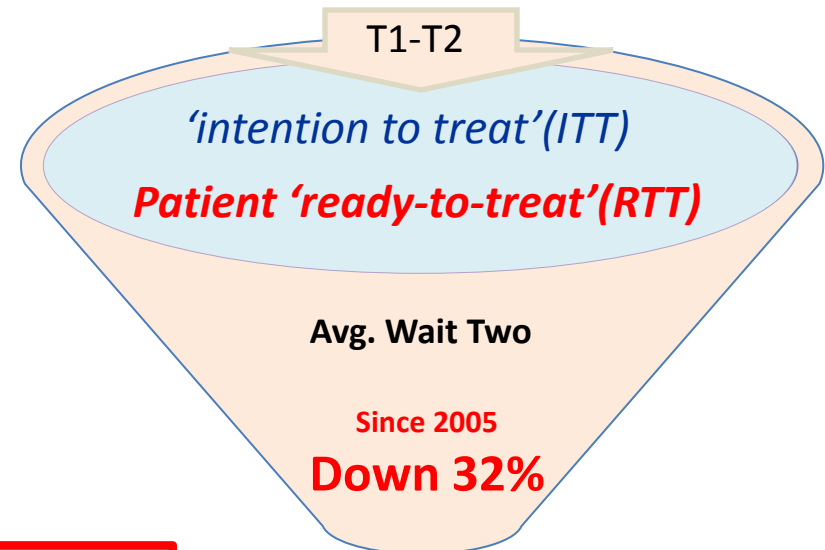
Two waiting periods + another reason for wait time = *patient choice*

1. Referral to consultation



2004-05: 29 weeks  
2012-13: 12 weeks

2. Consultation to surgery



2004-05: 58 weeks  
2012-13: 39 weeks  
**2012-13: 19 weeks**

Eliminate waits  
caused by  
Patient Delays  
*could cut*  
**~50%**  
**from Avg. wait**

# Evaluate 6 Domains of Quality



# Improvements (2005-2013)

~20,000 patients now assessed for 9,600 surgeries per year

---

## Acceptability

- **9 out of 10 patients highly satisfied**
- **98% of patients like the team approach**

## Appropriateness

- **85% now mobilized day of surgery (up from 40% in 2009/10)**

## Effectiveness

- **85% have improved function**
- **Why 15% fail to improve is the subject of current prevention research**

# Improvements (2005-2013)

~20,000 patients now assessed for 9,600 surgeries per year

---

## Accessibility

- Average wait for consult **59% faster** than 2005
- Average wait for surgery **67% faster** than 2005
- Faster access **avoids \$22.7M/yr out-of-pocket** for patients (wages etc.) + **~\$2.5M system costs**

## Efficiency

- **Surgical volume up 73%** since 2004/05
- Inpatient **bed use up only 5%** since 2004/05
- **32,000 bed days gained** since 2010 (a resource productivity gain of **~\$32.8M**)

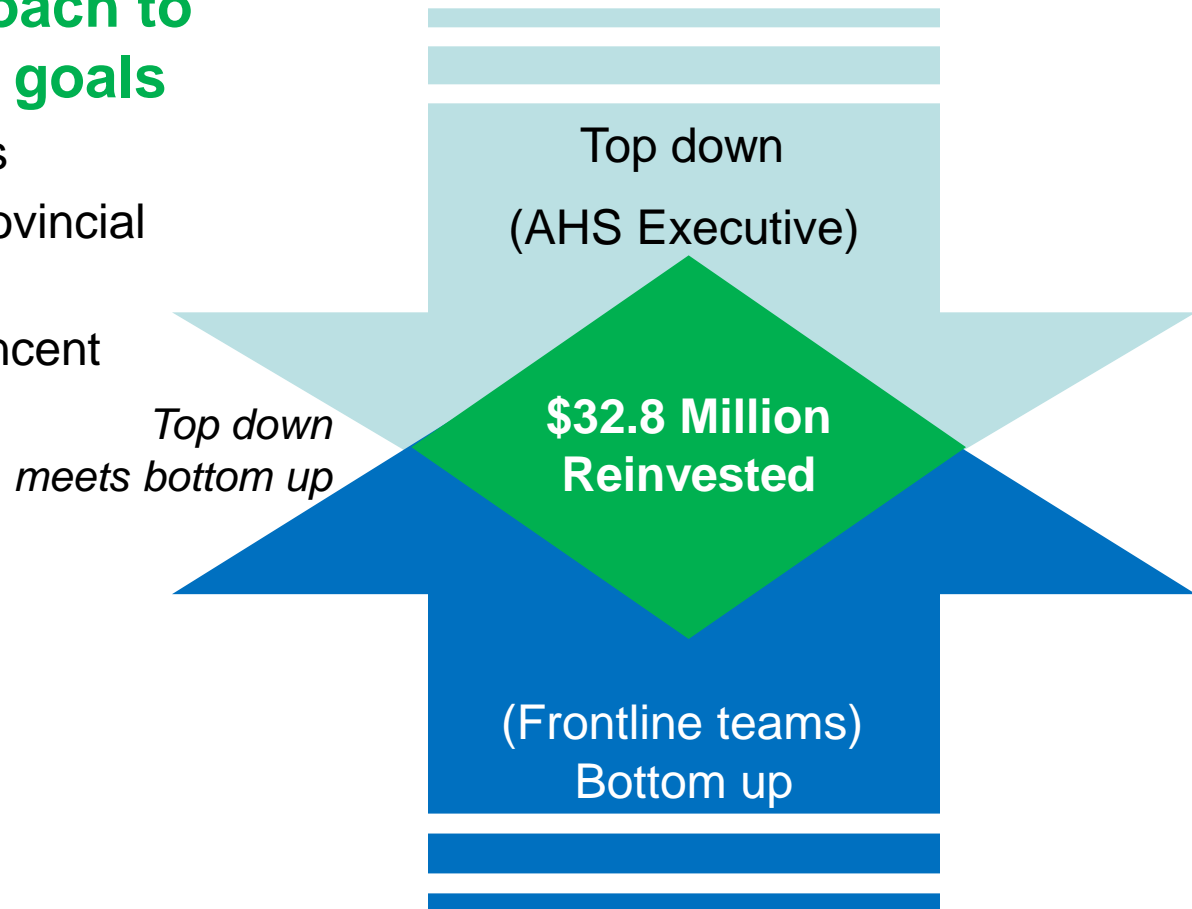
## Safety

- 30-day **readmission rates down to 4% from 5%**  
- so **now avoiding ~\$1M/year** of inpatient costs
- Now a focus by provincial clinical committee on **other safety improvements**

## Frontline Teams Meet Provincial Health Goals

- **A bottom-up approach to meeting top-down goals**

- Teams set local targets
- Targets tied to AHS provincial goals
- Balanced scorecards incent site-specific gains





# How to Transform Health Care?



# **Role of Strategic Clinical Networks**

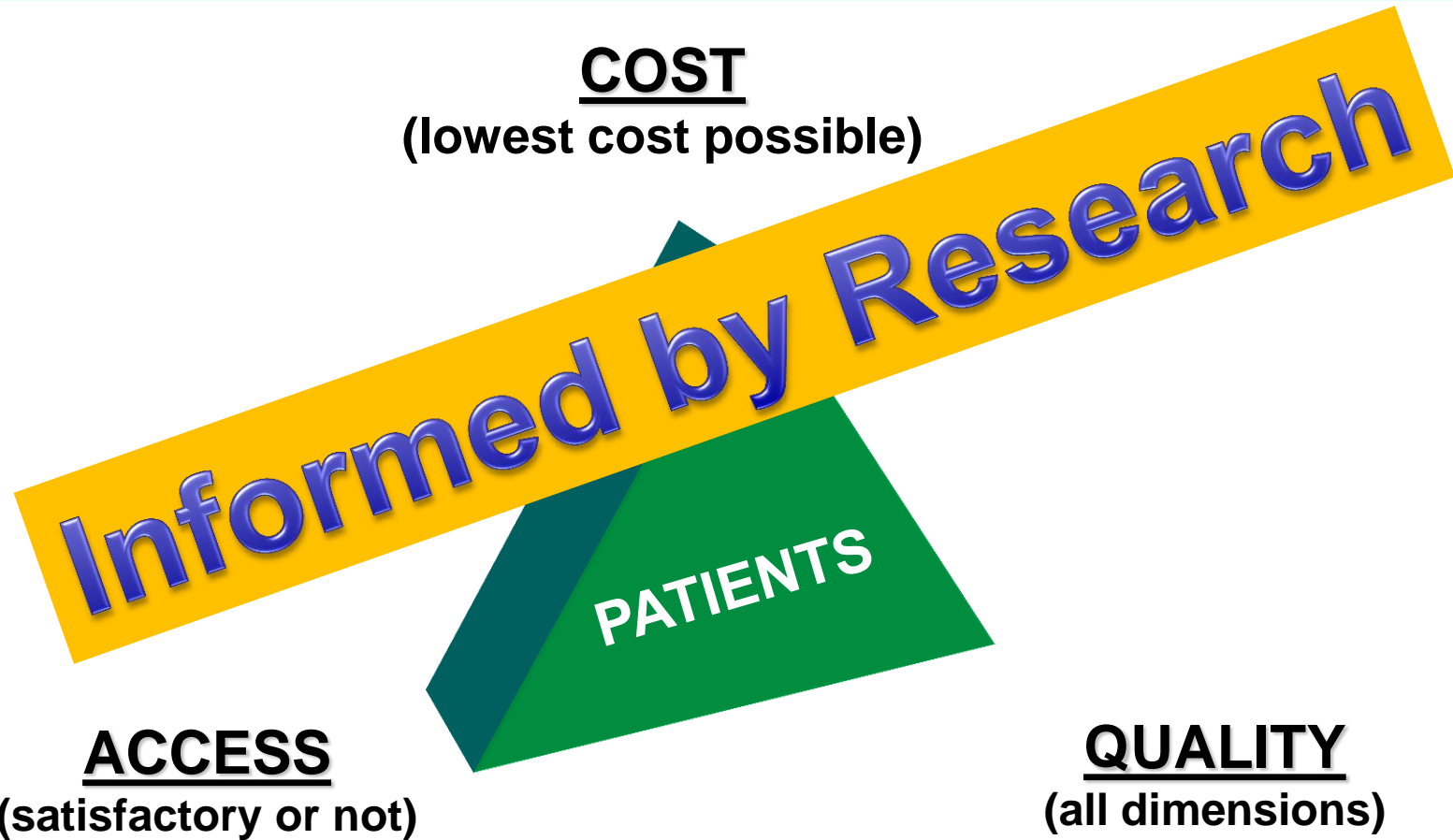
---

- Help build an evidence-based, sustainable health care system.
- Bridge provincial and local initiatives.
- Provide a framework & participate in evaluating care.
- Generate new knowledge & translate it into practice .
- Test methodologies for systems-wide change.

## Balancing the Needs of Health + Health Care

*Choices and tradeoffs are required: Around 'one table'*

---





# Knowledge Translation

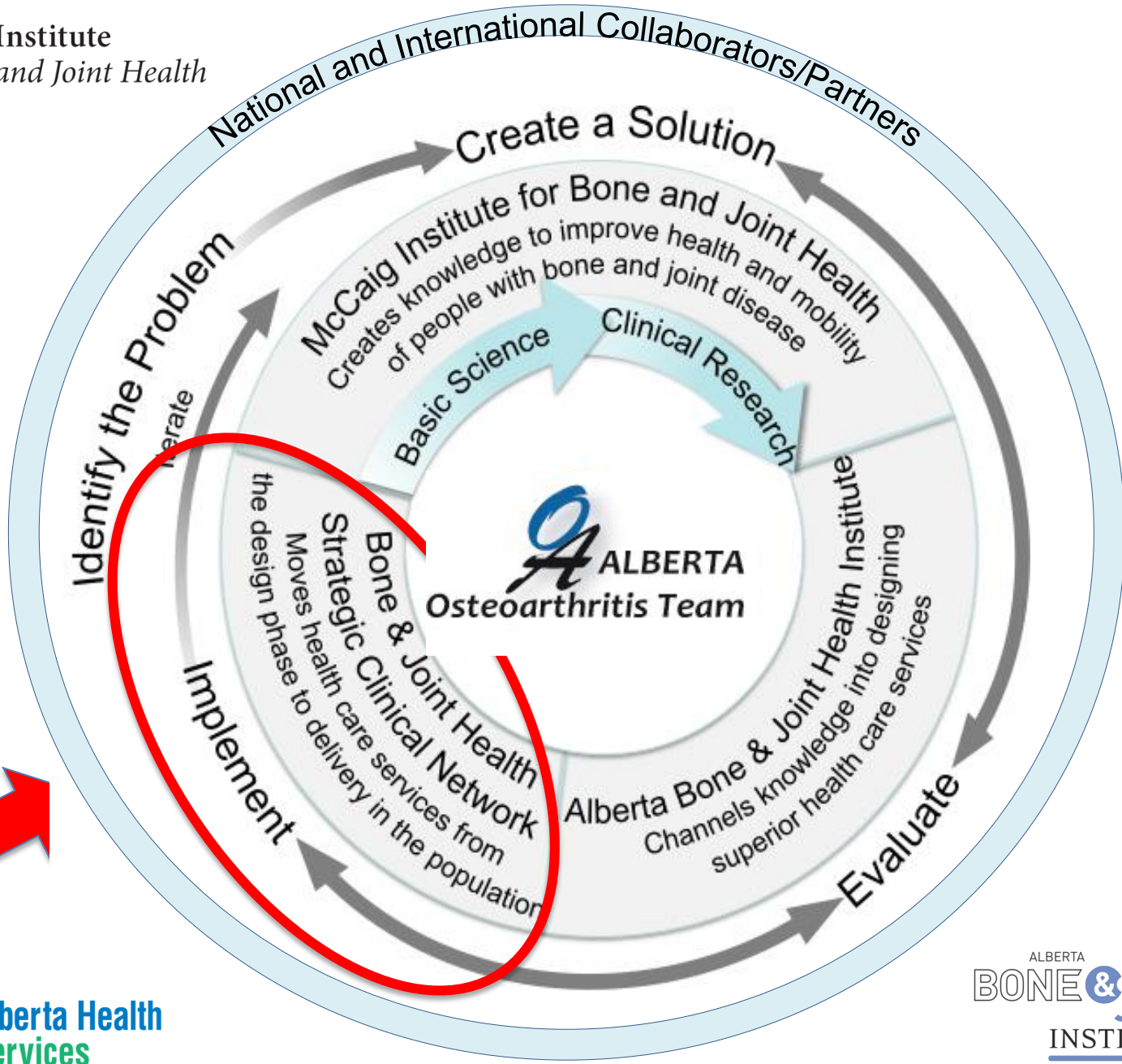
Engaged end users



The Researcher

Users of Knowledge

On the same team



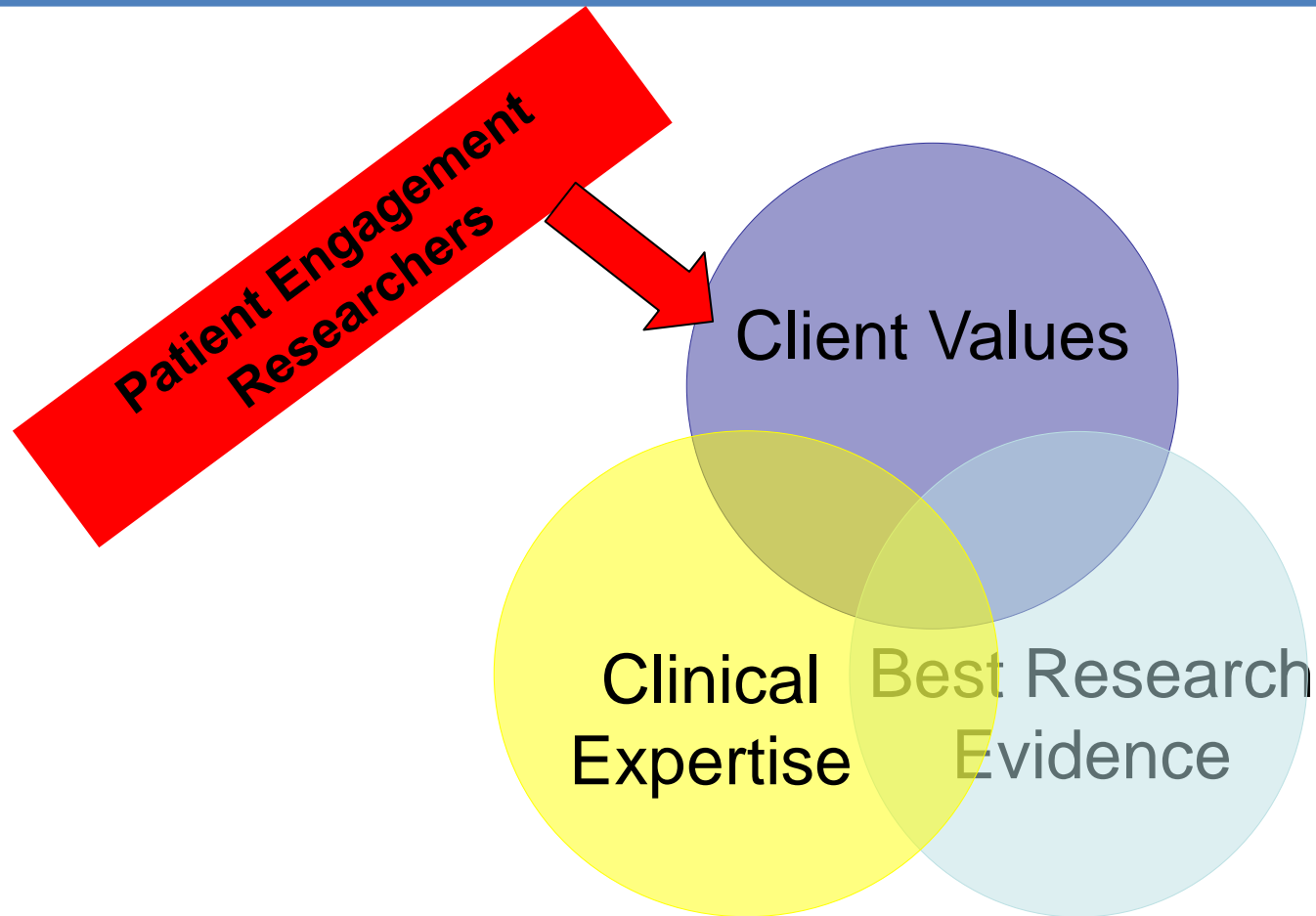
# Patients With Hip & Knee OA Triage'd by Advanced Practice Physiotherapists 2007-2010

n = 2423



# Evidence Based Practice

---



# Patient Engagement Research



## News & Events

### Health experts and patients partner to tackle osteoarthritis

UAlberta scientists team up with the best minds from across the province to advance research, improve care and educate Albertans about osteoarthritis.

By Bryan Alary on October 4, 2013



UAlberta researcher Linda Woodhouse (left) and osteoarthritis patient-turned-researcher Jean Miller are among the presenters who will discuss advances in hip and knee osteoarthritis research, care and patient education Oct. 24 at the Wood Forum at Corbett Hall.

## Patients Matter: Engaging Patients as Collaborators to Improve OA Care in Alberta

**Funded by:** Canadian Foundation for Healthcare Improvement in partnership with AHS, University of Calgary, Arthritis Society, Institute for Public Health; and Consumer Advisory Council of the Canadian Arthritis Network

### Outputs:

21 PERS completed training and internship program

5 research studies carried out involving 125 patients

**3 Research Reports pertaining to Arthritis Patients' Experiences**

- 1) *Experience of Living with Chronic Joint Pain*
- 2) *Experience of Waiting for Help with Osteoarthritis*
- 3) *Oh! Canada: Southeast Asian Immigrants' Experience of OA Surgery*

# Listen to the customer - patients



- **Demand** is one of the key factors of a successful implementation

Focus on Conservative Management





# **Goal – MSK Transformation**

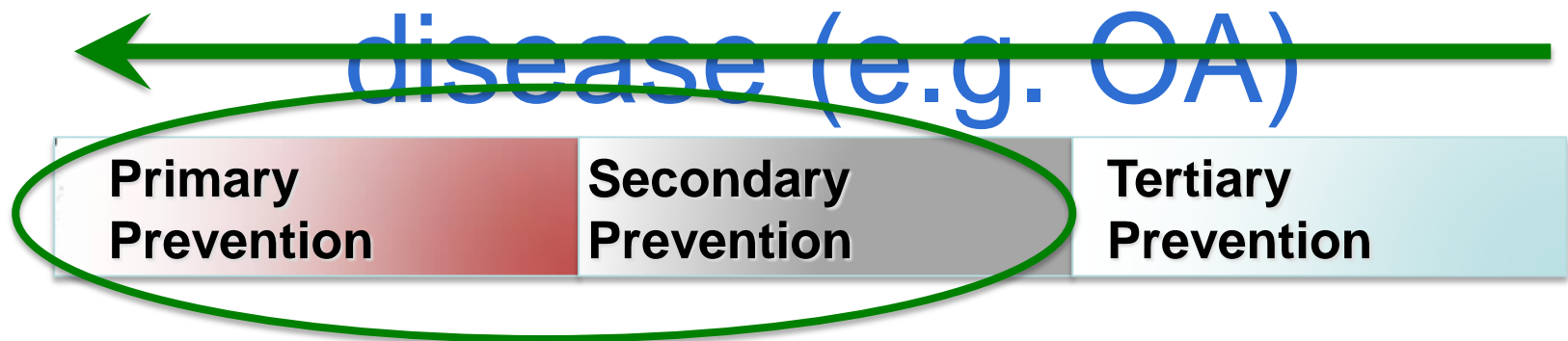
---

- To develop, implement and evaluate a new evidence-informed strategy to manage musculoskeletal care across Alberta



# Move Upstream

Shift focus to  
conservative/non-operative  
management of chronic  
disease (e.g. OA)





# Poll question - Hands up!!

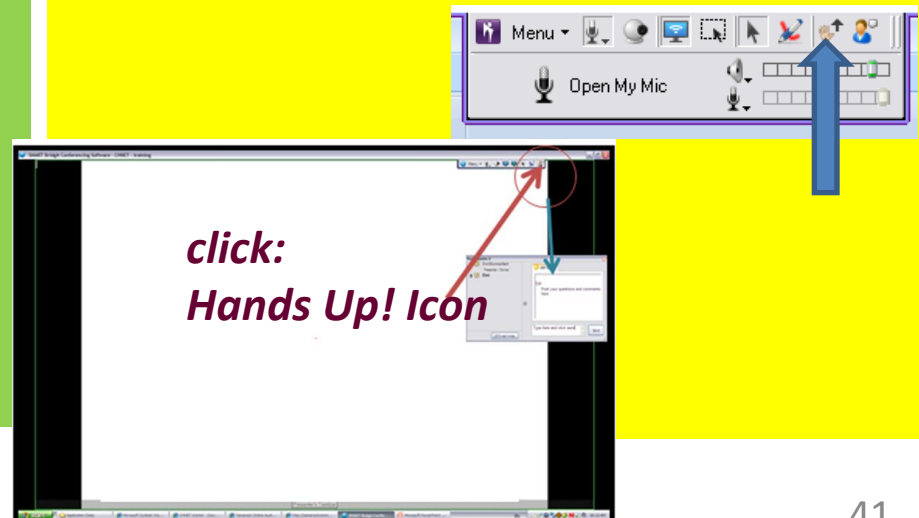
Hands up if you agree  
with this statement:  
Acute health care  
institutions should be  
contribute resources to  
help keep patients out  
of their institutions?

## RSVP

**Via Email:** Respond to the 'access  
instructions email  
[animateur@chnet-works.ca](mailto:animateur@chnet-works.ca)

## OR

**Via Bridgit Internet Conference:**



# Proposed System

---

- Interprofessional teams with centralized triage/e-referral, comprehensive MSK assessment and care, expedited access to DI and specialists

Role for Advanced Practice Clinicians

# Transform MSK Care

---

Early access to multidisciplinary team MSK care will improve the access, cost, morbidity, satisfaction, quality and comprehensiveness of care for Albertans with:

- 1) spine pain
- 2) rheumatological disorders, and
- 3) soft tissue knee injuries

compared to current approaches that focus on use of single specialist access and wait-lists.

# MSK Transformation for Alberta

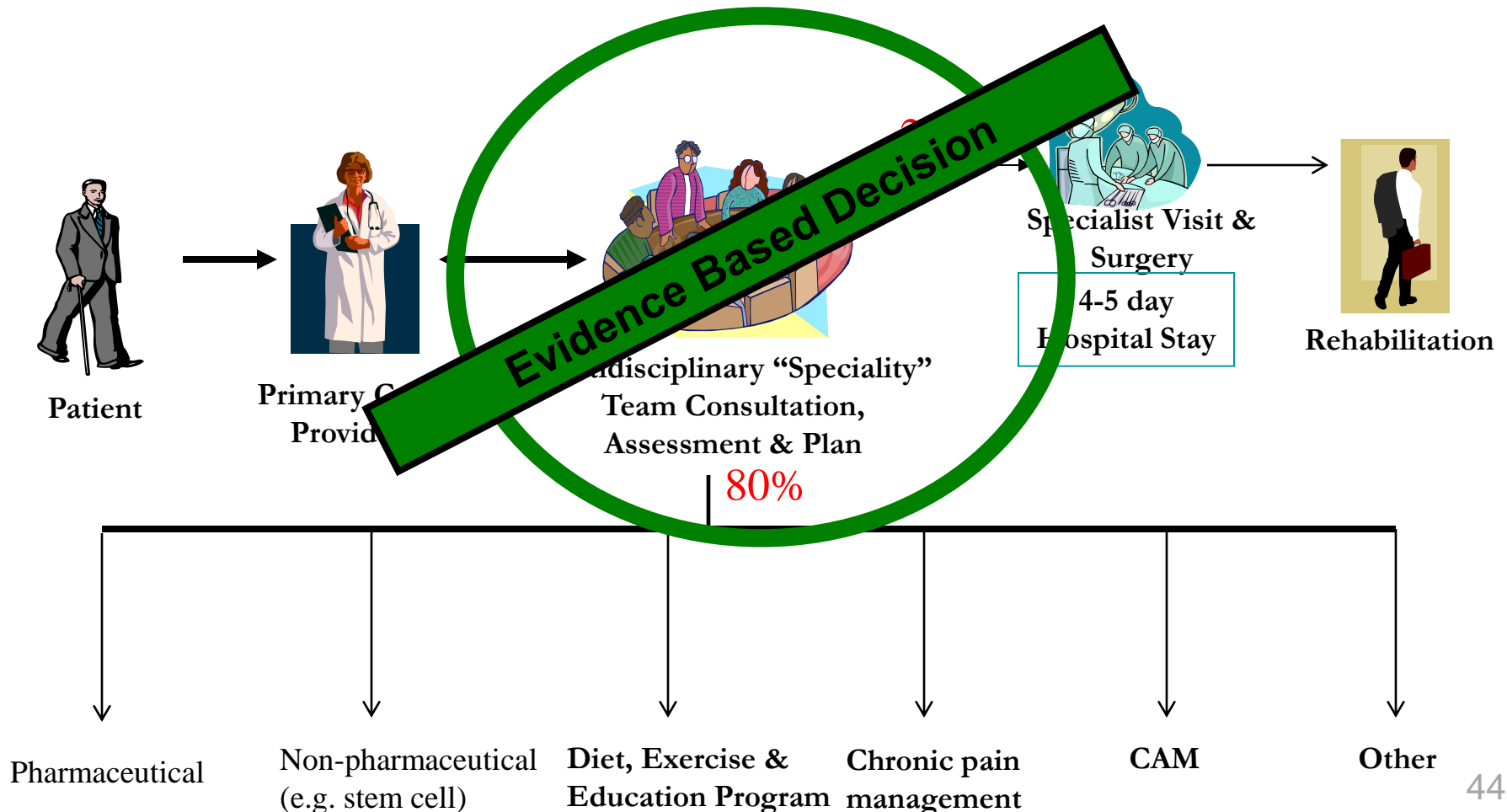
## Comprehensive Assessment and Plan

### Principles: (built on TRUST)

- Improved access to comprehensive care
- Outcomes evaluation

### Central intake: Real Time Data, Close to patient's Home

Patient preference represented  
Multidisciplinary MSK assessment & plan



# Key Elements

---

- Evidence informed
- Multidisciplinary teams
- Built on trust \*\*\*\*\*
- Standardized staffing based on function with established competencies, procedures and outcome measures across the clinics
- Set evaluation strategy at the outset
- No new bricks and mortar

# Challenges

---



- How we define primary care
- Funding model
  - Fund teams for collaborative care and quality outcomes vs. individuals for procedures performed
- Data collection
  - MSK occurs in both public & private sector – need integrated data collection system
  - Real time data to evaluate individual performance (patient & practitioner outcomes) - reward quality!!!
- Training practitioners to work in collaborative models

# A question for participants!

- What strategies are you using to address these challenges?

## RSVP

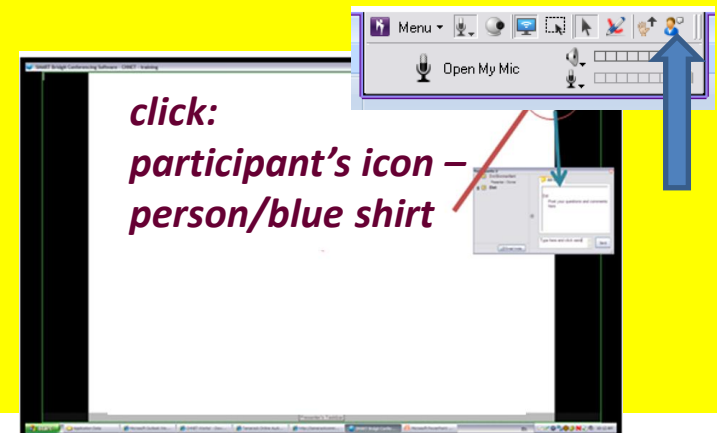
### Via Email:

Respond to the 'access instructions email

[animateur@chnet-works.ca](mailto:animateur@chnet-works.ca)

### OR Text Chat...

### Via Bridgit Internet Conference:



# Advancing Practice: The Regulatory Contribution

March 6, 2014

Dianne Millette, PT, MHSc.

Registrar and CEO

Physiotherapy Alberta – College + Association





# Regulatory Context in Alberta

- Self-regulating
- Provincial authority
- Licensure model
  - Restricted Activities
  - No exclusive scopes of practice
- Protected title
- Recognition of Clinical Specialists
- Direct access



# Health Care Policy Context

- Focus on primary care
- Providing patients with a “medical” home
- Wait list and wait time reductions
- Maximizing scopes of practice
- Improving physician working conditions
- Reducing overall health care costs
  - Burden of chronic disease



## More Background

- 2400 physiotherapists
- 58% public practice, 42% private practice
- No formal advanced practice or extended scope roles
- Primary Health Care Model-but many unattached patients
- Legislative framework provides an opportunity for innovation

- Ability to refer to specialists for minor and major consultations
- Ability to order diagnostic imaging: X-ray, MRI, Diagnostic Ultrasound
- Collaborative prescribing relationship with Pharmacists
- Focused on MSK: Core Competence in assessment and diagnostic skills

- Long road to implementation of new legislation
- Tried to anticipate “new normal” for physiotherapy practice based on what was evolving
- Need for new partnerships, persuasive arguments based on available evidence
- Need the profession to be confident in core competencies as well as more advanced areas of practice

- Physiotherapists
  - Need to believe they have the ability to develop new competencies and take on new roles
- Employers
  - Need to create roles
  - Need to deal with issues of classification, payment
- Government
  - Need legislative change re: electronic health records
- Evaluation
  - Ongoing



# Conclusions

---

- We must move upstream to focus on primary and secondary prevention strategies to manage the tsunami of patients with chronic diseases that will occur in the next decade.
- This requires system-wide changes in data collection and funding to enable “teams” in primary care to manage these conditions.
- Regulation may be more of a perceived than actual barrier to new advanced practice roles.

***What “surprised” you most about the information from the Fireside Chat?***

***✓ the options that apply to you.....***

1. There were no real surprises.
2. That funding for team based care is crucial to a sustainable health care system.
3. There are fewer barriers to implementing advanced practice roles than I originally thought.
4. Collaboration among health care providers is more difficult to implement than I realized.
5. That regulation is more of a perceived than actual barrier to advanced practice roles.
6. Other





# Physiotherapy Alberta

## College + Association

`dmillette@physiotherapyalberta.ca`

# Contact Information

---

**Linda Woodhouse PT, PhD**  
**Associate Prof. University of Alberta**  
**David Magee Endowed Chair in MSK Clinical Research**  
**Scientific Director, AHS BJHSCN**  
**Faculty of Rehabilitation Medicine**  
***3-10 Corbett Hall, Edmonton, Alberta, Canada T6G 2G4***  
***Tel. Office 780.492.9674***  
***Email: [linda.woodhouse@ualberta.ca](mailto:linda.woodhouse@ualberta.ca)***



**UNIVERSITY OF ALBERTA**  
**FACULTY OF REHABILITATION MEDICINE**



# Thank You



Physiotherapy Alberta  
College + Association