

One Problem, Variable Approaches by Three Provinces to Reducing Wait Times for Hip and Knee Replacement

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on behalf of the Models in Arthritis Care Team

This work is supported by a CHIR Emerging Team
Grant in Models of Arthritis Care – ETG9225

Background

- 16% of Canadian population over 16 have arthritis
- Osteoarthritis (OA) is most common
- Large and significant impacts: pain, disability, mental health, employment, productivity
- Currently no effective disease modifying drugs

Background

- Hip and knee replacement (TJR): effective in relieving OA pain and disability when medical management has failed
- Aging of the population, increasing obesity rates, increasing OA prevalence, broadened indications for TJR



increased demand for TJR



growing wait lists and wait time for TJR surgery

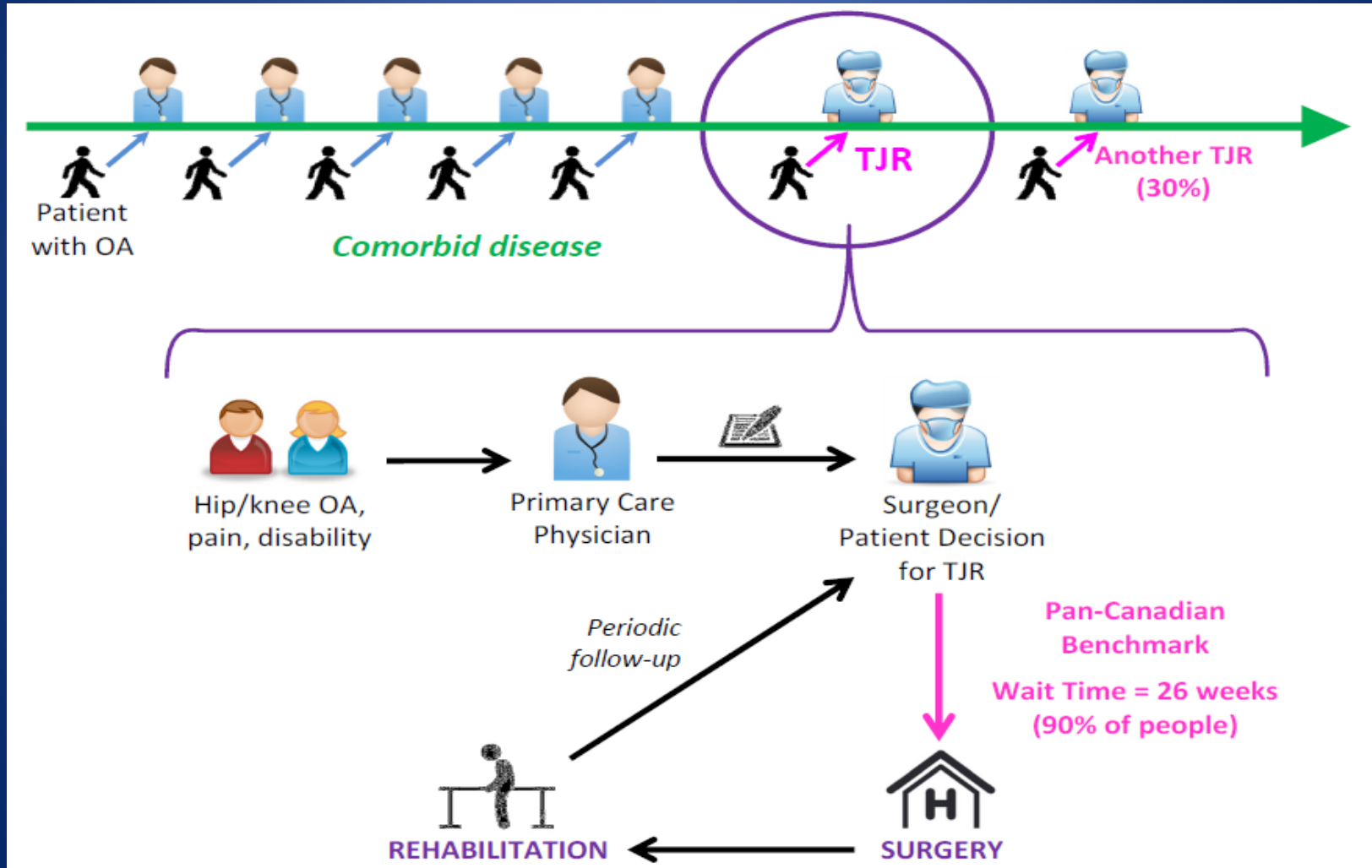
Purpose

Overall Objective: in the context of a larger project looking at innovative models of delivering care for people arthritis.....

Specific Objective:

This work describes the approach taken by three provinces to address TJR wait times, specifically to achieve a 26 week wait from patient/surgeon decision for surgery to surgery

The Challenge: Flow of Care



Methods

Setting: British Columbia, Alberta, Ontario

Methods: Embedded case methodology

Triangulation of:

- 1) source documents (peer literature, reports, working papers) of MOC, health human resources, wait times etc.
- 2) population/admin data re utilization/inflow-outflow of care regions
- 3) Semi-structured, one-on-one stakeholder interviews: health planners/decision-makers, program managers, care providers

Methods cont.

Interviews:

Phase I

- Purposive sample of individuals who represent various models of care and/or were known as opinion leaders in arthritis care delivery
- 'Snowball' technique to identify additional models and/or other individuals who could inform the study
- Thematic analysis of the content using a constant comparative approach to identify models/innovative processes of providing care (CAHSPR 2012)

Phase II

- Six case studies chosen for in-depth follow-up re drivers, facilitators and barriers: one rural and one urban in each of BC, AB and ON

Between 07/2010 and 01/2013:

- 79 key informants interviews (BC=24, AB=22, ON=33)
 - 28 in-depth interviews re: BC=9, AB=10, ON=9 phase II

Methods cont.

In triangulating data, considered.....
possible differences in **arthritis prevalence**,
HHR and **geography**
intersected
with **interview themes** related to approaches,
drivers, facilitators and barriers to TJR models
developed to address wait times

Results

Arthritis prevalence:

Number of individuals, crude rates of arthritis 15 yrs and older, 2007-2008 (PHAC 2011)

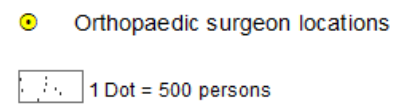
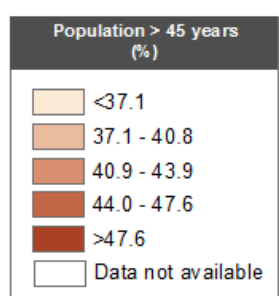
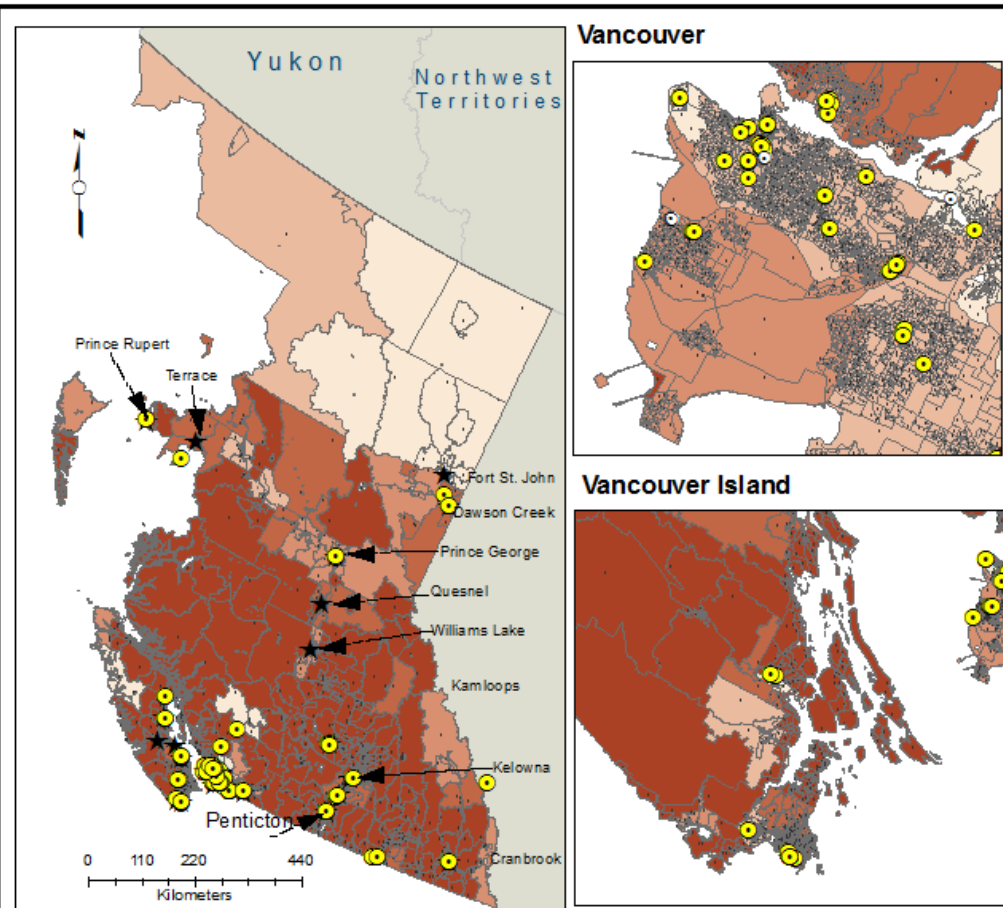
Province	Number	Crude rate (%)
British Columbia	560,025	15.7
Alberta	411,892	14.9
Ontario	1,825,011	17.5
Canada	4,259,694	16.0

HHR: Orthopaedic surgeons (2009) CMA survey

- BC, AB, ON: 4 per 100,000
- Canada: 3.2 per 100,000

Geography challenges:.....

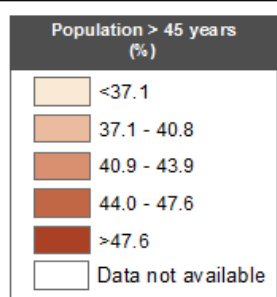
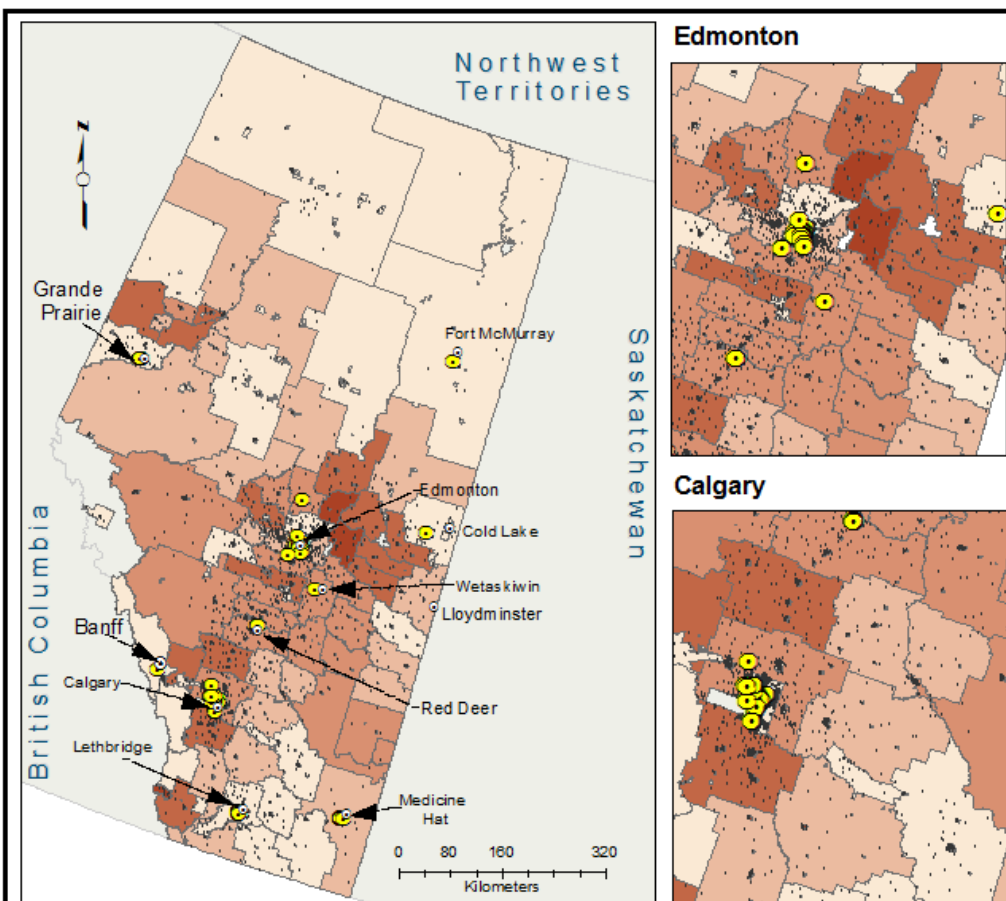
Proportion of the population 45 years and older by census subdivisions and practice locations of orthopaedic surgeons.
British Columbia



Data sources

British Columbia College of Physicians;
2006 Census: Statistics Canada;

Proportion of the population 45 years and older by census subdivisions and practice locations of orthopaedic surgeons, Alberta

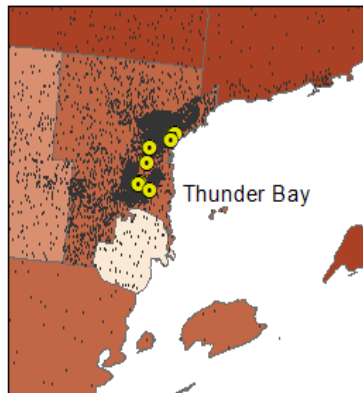
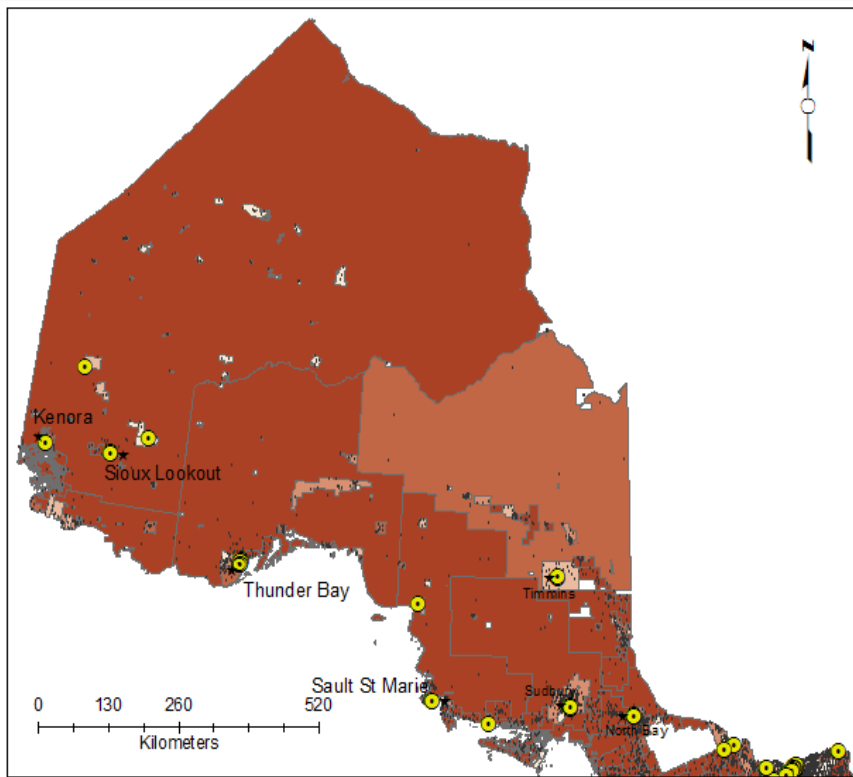


- Orthopaedic surgeon locations
- City centre
- 1 Dot = 200 persons

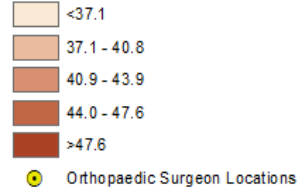
Data sources

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2006 Census: Statistics Canada;

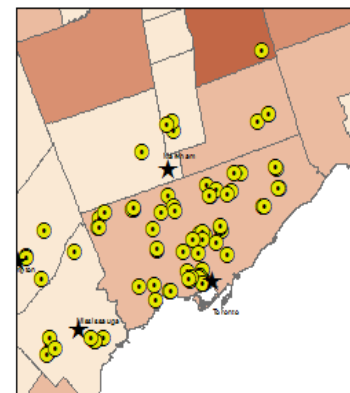
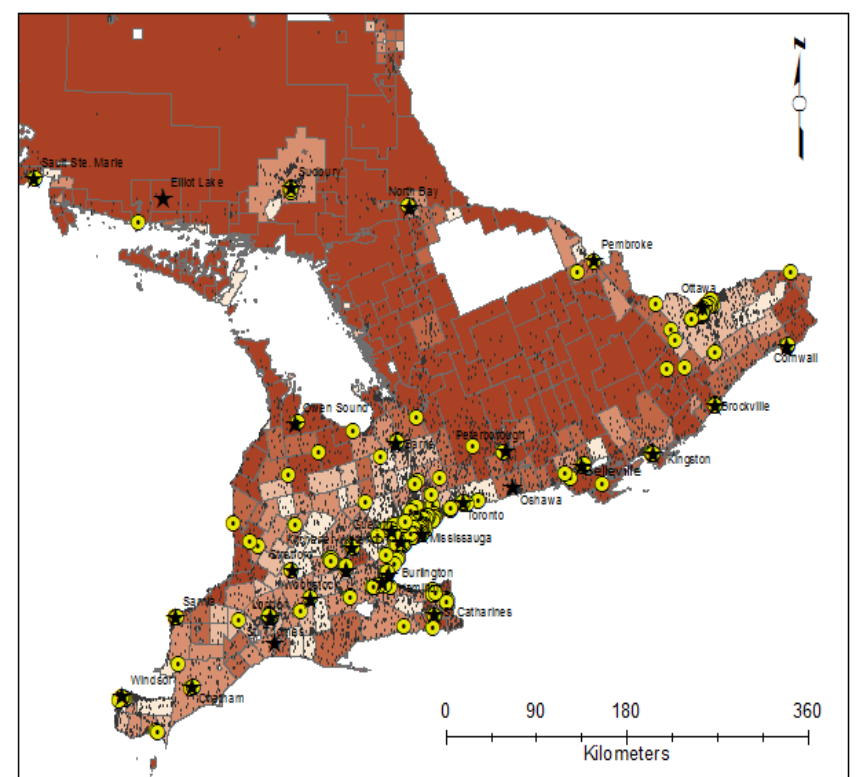
Proportion of the population 45 years and older by census subdivisions and practice locations of orthopaedic surgeons, Northern Ontario



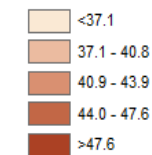
Population 45+



Proportion of the population 45 years and older by census subdivisions and practice locations of orthopaedic surgeons, Southern Ontario




Population 45+ (%)



- Orthopaedic Surgeon Locations
- Major cities
- 1 dot = 500 people

The Models of Care

Common to all provinces....

- \$\$\$ Federal  Provincial: increased TJR volumes (Health Accord)
- Mandated wait time reporting
- Process efficiencies:
 - improved OR turnover for more cases per day
 - standardized care pathways, patient education
 - decreased acute hospital LOS
 - standardized and decreased rehab

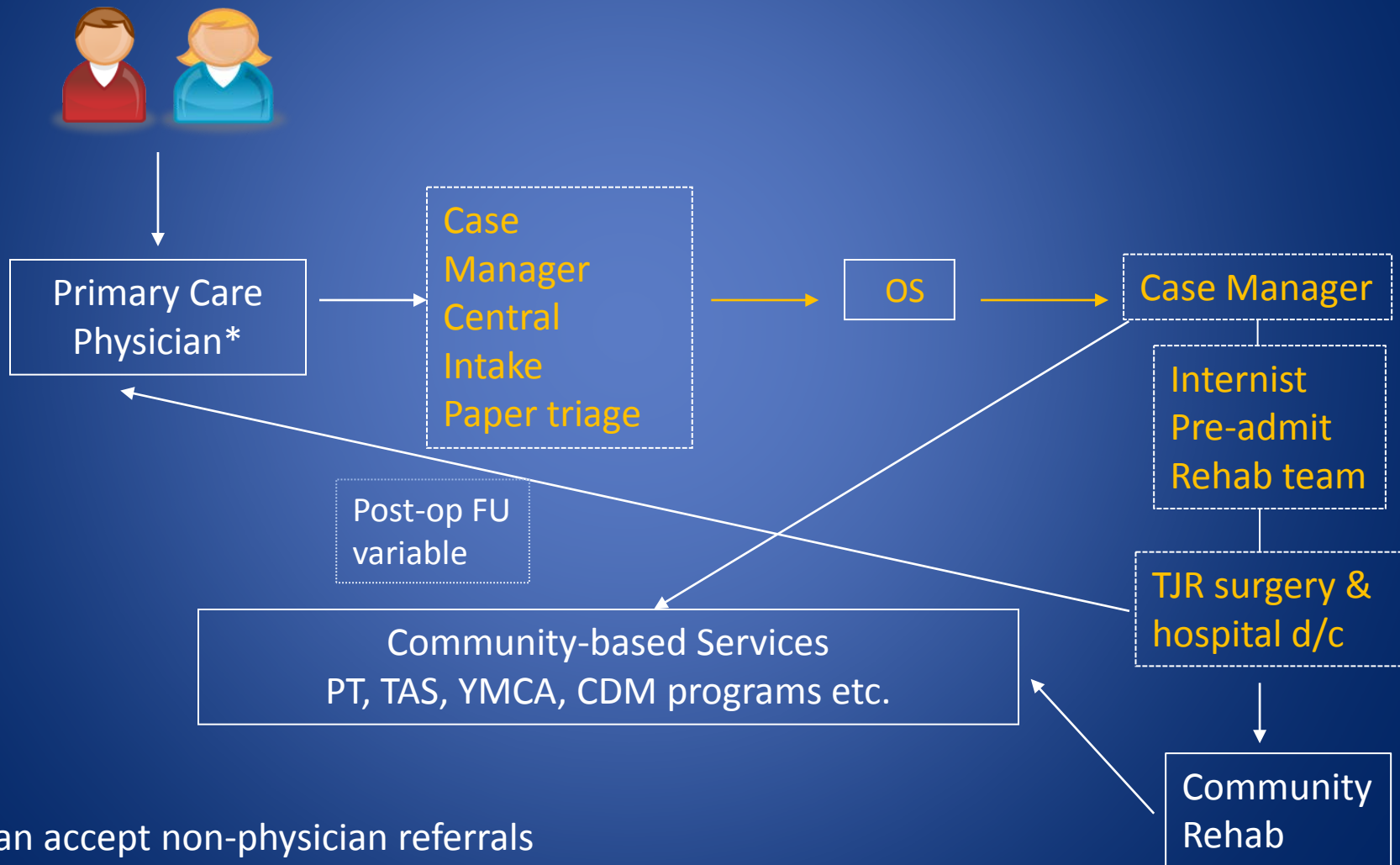
The Models of Care

Provincial variations

British Columbia: Various Strategies

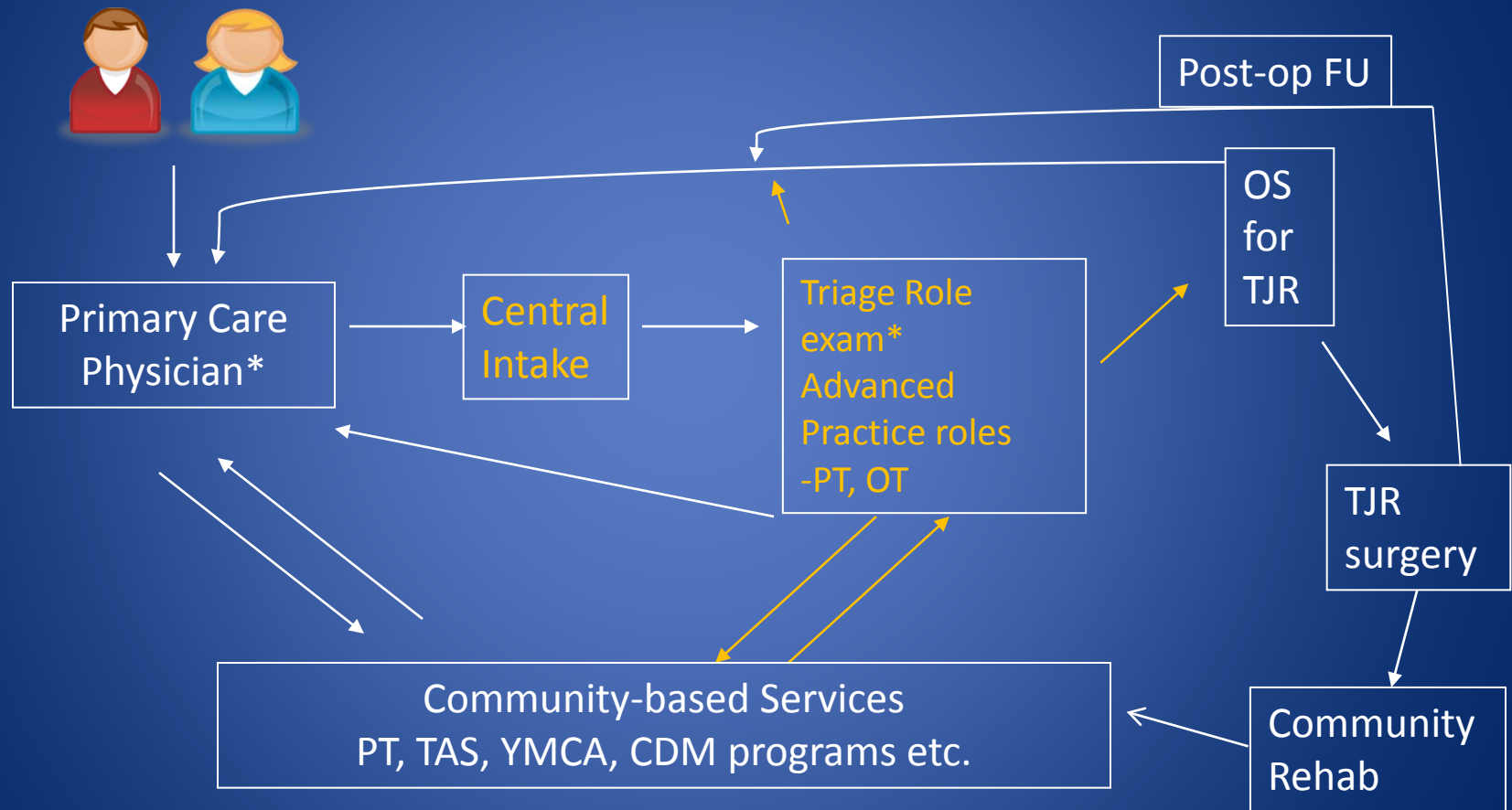
- Orthopaedic Collaborative: standardization of care but mainly local strategies.....
- Travelling surgeon and patient to utilize OR time in another health authority
- Local multi-disciplinary OA program
- Health authority funding of private physio clinic to provide post TJR rehab

Alberta: Provincial Model of Care



*OS can accept non-physician referrals

Ontario: Advanced Practitioner Triage Role



*triage, consult/education role for non-surgical; some post-op FU

TJR: Model Facilitators

- Champions across local, regional and provincial levels who interact and support across levels
- Evidence-based activity and application of evidence
- Openness to doing things differently and in a way that is flexible and fits local context
- Resources/dollars to support initiatives

TJR: Barriers

- Threats to sustainability: funding
- HHR and community resources; rural particularly limited available skill sets resources
- Urban/rural challenges

Wait-times: Surgeon to Surgery

- Beginning of the Accord: varied 52 to 100+ weeks
- Now: waits significantly reduced (and large volume increases)
....struggles to meet the bench mark of 26 weeks

		Number of joint replacements	Wait time (number of wks for 90%)	Hospitals meeting target	Trend 2010 to 2013
Knee	BC	1255	32.8	12/29	↓
	AB	1599	39.1	5/13	↑
	ON	8903 *	33.1	24/56	↑*
Hip	BC	1833	37.5	14/29	↓
	AB	971	38.9	6/13	↑
	ON	-	27.1	33/56	-

Q4 data 2012/2013

* Total knee and hip joint replacement

Summary and Conclusion

- This work describes the approach taken by three provinces to address wait times, specifically to achieve a 26 week wait from patient/surgeon decision for surgery to surgery
- While much improved, TJR wait time results have varied across the provinces and hospitals within provinces
- A variety of TJR models were developed to expedite access to surgeons: not all models specifically address wait time from surgeon consult to surgery

Summary and Conclusion

- If models expedite access to surgeon, this potentially has more effect on increasing volumes than reducing wait times
- Upward creep of the wait times
- This raises questions of: 1) whether benchmarks are attainable; and, 2) how such strategies will be sustained in times of fiscal constraint, the ending of the Accord and continued TJR volume increases

Acknowledgements

Team members/Stakeholders:

BC

Linda Li
Sherry Bar (MOH)
Jenny Leese
Erin Bambury
Amy Kirkham

Canadian Rheumatology Association

Michel Zummer

Public Health Agency of Canada

Siobahn O'Donnell

The Arthritis Society

Sydney Brooks

Canadian Arthritis Patient Alliance

Louise Bergeron

AB

Allyson Jones
Cy Frank (Alberta Innovates)
Dianne Mosher (Arthritis Alliance)

Ontario Rheumatology Assoc.

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Gillian Hawker
Susan Jaglal
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Mayilee Canizares
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Olga Manuk
Viji Venkatamaranan