Regional Orthopaedic Program
Musculoskeletal Centre of Excellence

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Conflict of Interest Declaration: Nothing to Disclose

Presenter: **Dr. David Puskas and**

Caroline Fanti

Title of Presentation: Regional Orthopaedic Program

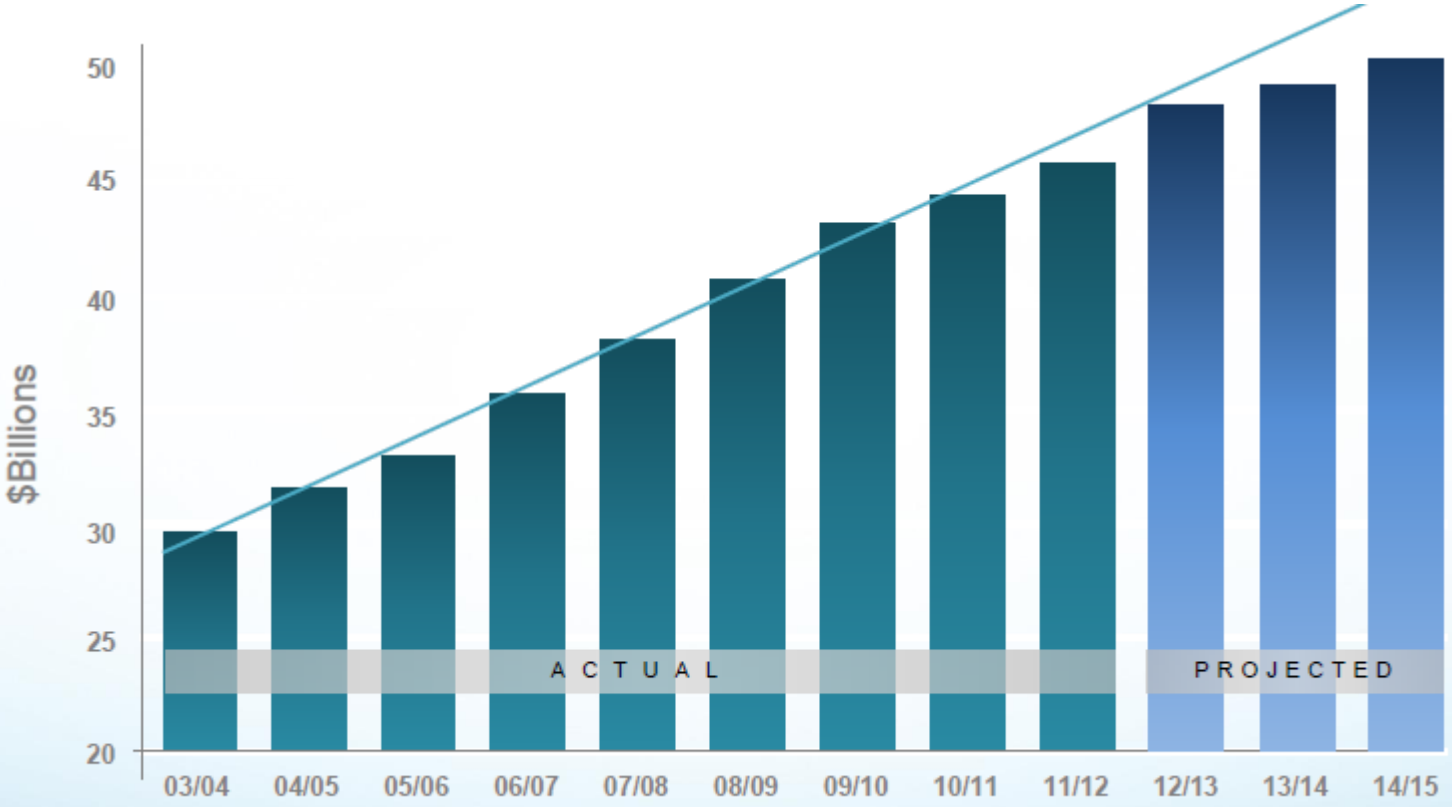
We have no financial or personal relationship related to this presentation to disclose.

Introduction to Regional Orthopaedic Services Program Planning

Background: Provincial Challenges

- **Population aging**
  - Ontario's seniors (65+) population is expected to double from approximately 15% to 30% over the next twenty years (Sinha, 2011)
- **Fiscal constraints**
  - Health spending currently accounts for approximately 40% of the provincial budget, if grown at current rate, $24 billion required by 2030
- **Maintenance of access to required services**
  - Canada wide, despite a 15% increase in total hip & knee replacements carried out between 2010 and 2012; the percentage of procedures completed within target decreased by 4% (CIHI, 2013)
- **Need to look for ways to become more efficient within our current means**
  - There is an opportunity to develop a fully integrated regional model for orthopaedic services

Ontario Health Care Spending Since 2003



Source: Ontario's Action Plan for Health Care

Health Costs by 2030

Source: Ontario's Action Plan for Health Care

The Case for Change

- **Ministry of Health and Long T***erm Care interest in advancing access and quality in orthopaedics* **– introduction of Quality Based Procedures and "bundled care".**
- **North West LHIN is currently not meeting wait time targets for hip and knee replacement surgery.**
- **Over the next twenty years the North West LHIN can expect demand side pressures driven by population aging, poor health status and osteoarthritis rates, and population aging.**
- **Canada wide, despite a 15% increase in total hip & knee replacements carried out between 2010 and 2012; the percentage of procedures completed within target decreased by 4% (CIHI, 2013).**
- **There is a unique opportunity to develop a fully integrated model for orthopaedic services.**

Integrated Orthopaedic Capacity Plan

- **The Integrated Orthopaedic Capacity Plan (IOCP) was mandated by the MOH as the first in a series of detailed capacity plans with four key objectives :**
  - Resource/capacity planning across the continuum of care
  - Achieving/maintaining access and quality targets, Orthopaedic Quality Scorecard and LHIN-level Wait Time Strategy targets
  - Planning to ensure that necessary services and access to care in other related service areas are not impacted by the introduction of the Quality Based Procedures (QBP)s
  - Planning for out-year (Year 2/3) Orthopaedic QBPs

Integrated Orthopaedic Capacity Plan

In the North West LHIN there is an opportunity to align the implementation of the IOCP and QBPs with the Health Services Blueprint

- The analysis of current state and volume management approach fits with the service delivery model framework identified in the Blueprint

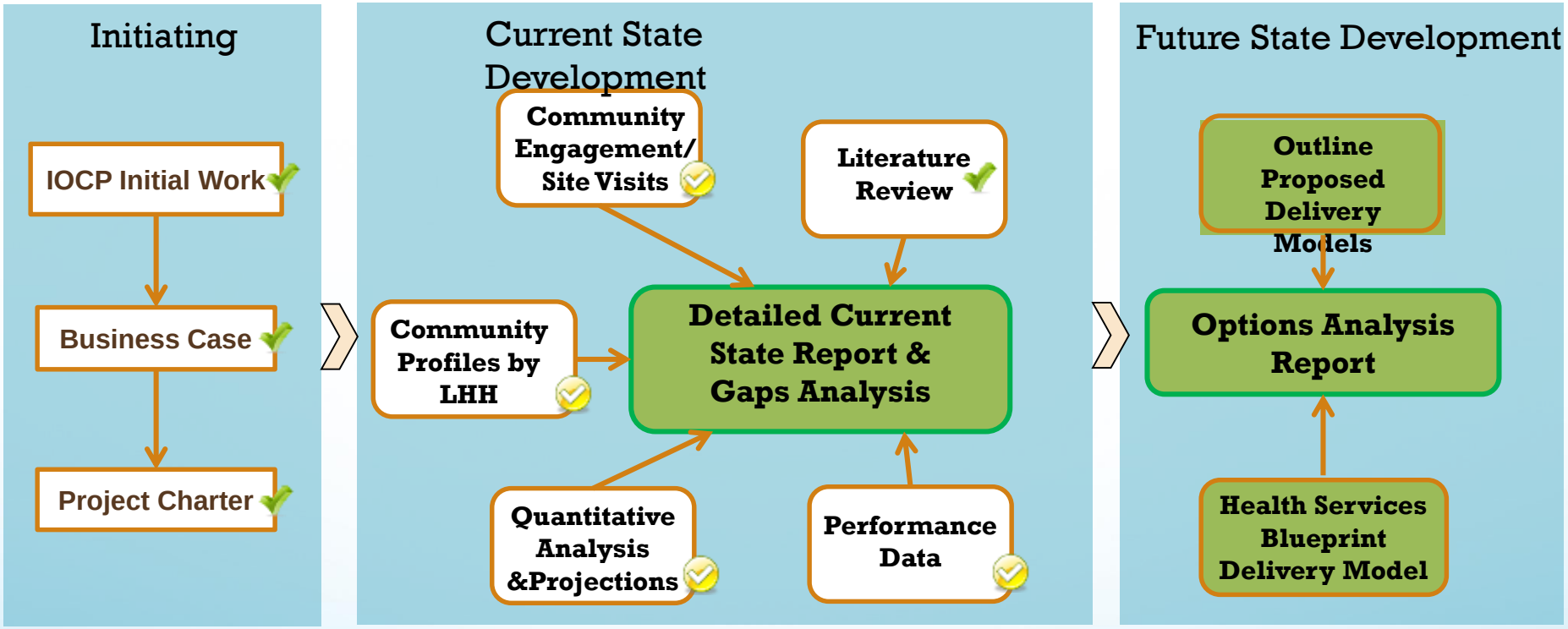
Overview of Quality Based Procedures

- Quality Based Procedures (QBPs) are a key component of Health System funding Reform
- Procedures which were previously funded through global budgets and Wait Time Strategy funding will now be funded at a fixed, efficient price
- Fixed pricing will apply to the patient's entire journey across the continuum of care, including pre and post-operative interventions
- In this fiscal year QBPs for unilateral hip and knee replacement are being implemented, both procedures include standardized care pathways and associated pricing
- In the upcoming years there are additional orthopedic funding models including bundled payment which are planned for implementation

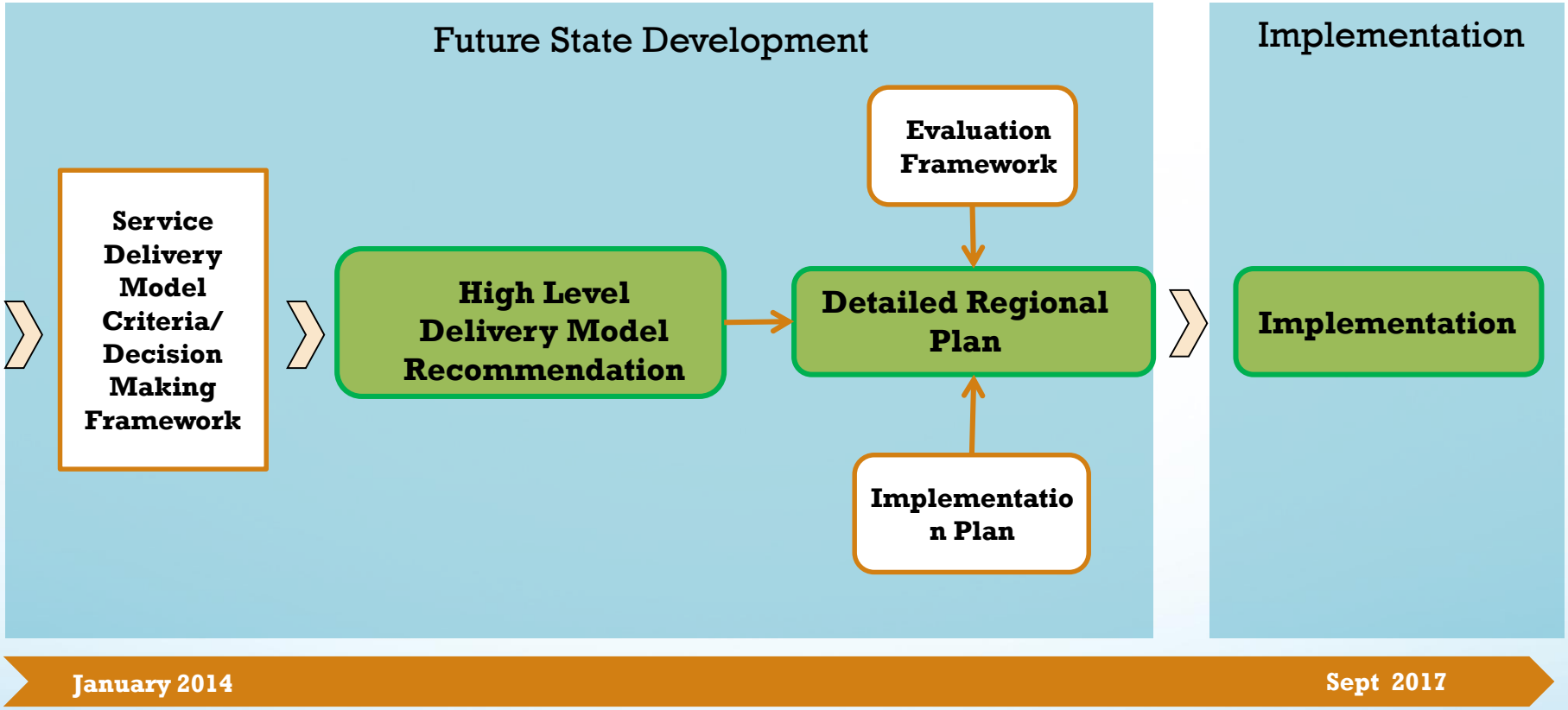
Why a Regional Approach

- Orthopaedic surgery is a high-cost, high-volume clinical group which represents approximately 25% of total surgical volume in the North West.
- Recommendation # 8 of the Health Services Blueprint specifies that selected high cost/high impact programs should be developed as regional programs – this includes surgical services.
- A regional approach implies - an integrated approach including collaboration, partnership and integration of services, a seamless patient journey across the continuum of care; and components of education, evidence based practice, culturally sensitive and competent care, and continuous quality improvement.
- A regional approach does not signify a predefined delivery model.

Project Planning Approach



Project Planning Approach

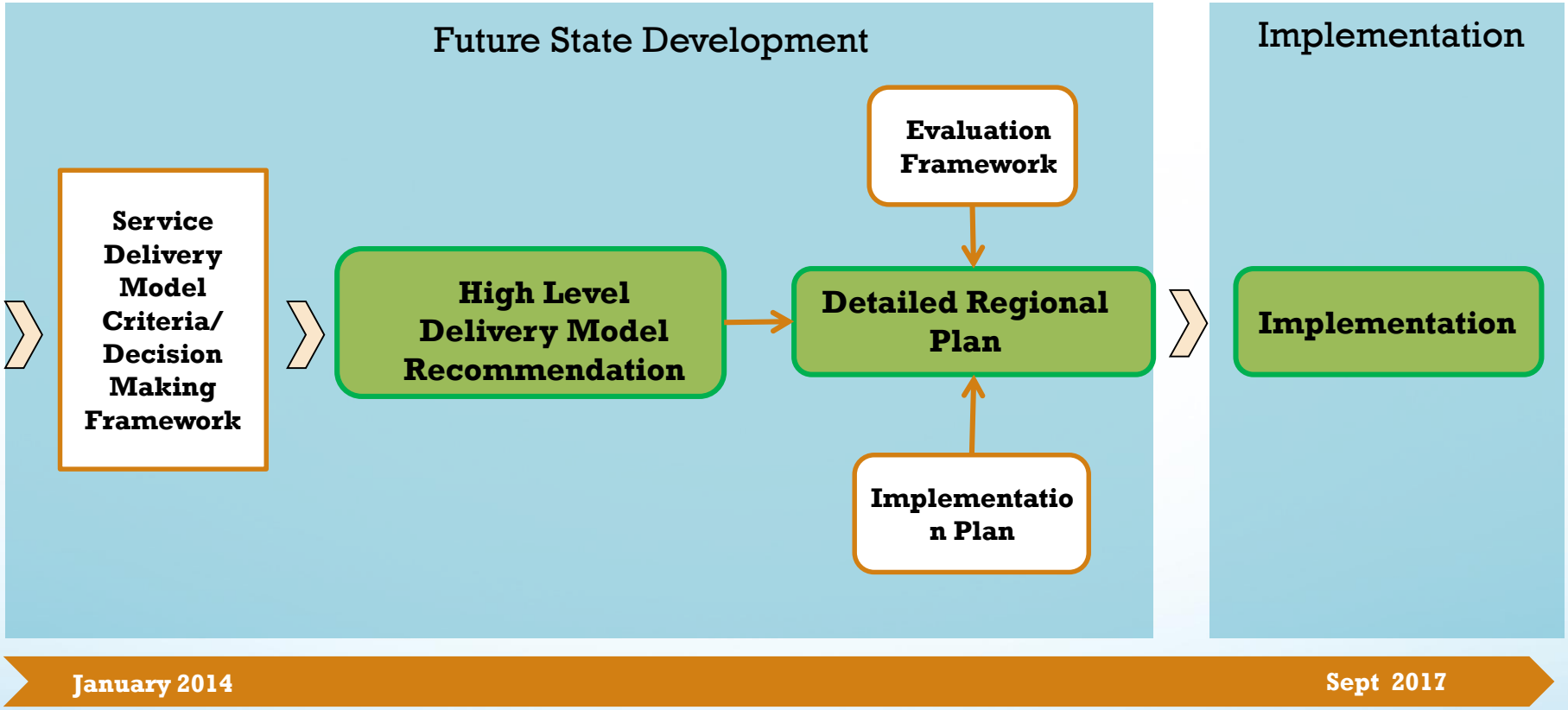


April 2013

Project Governance/Desired End Point

- **A skills-based steering committee with regional representation was formed.**
- **The desired end point of the Committee's work is:**
  - ***The recommendation of a clearly articulated Orthopaedic Services Delivery model for the North West LHIN***
- **The recommended model should provide a more effective, efficient, and patient centered continuum of care for the residents of the North West LHIN.**
- **The Committee will achieve this desired result by agreeing on common principles as previously discussed and using these to evaluate the distinct service delivery model options.**
- **It is expected that because of agreement to common principles and consensus decision making, at the project end point all Committee members become champions of the selected option within their organizations and regions.**

Project Planning Approach



April 2013

The Future
(is not recreating the past)

- Loudest voice wins
- Most senior provider gets most resources
- Prior good service permits resource misallocation
- Almost good enough is good enough
- I know that the literature says to do this, but I do it this way
- Any body is better than no body

The Future
(is not recreating the past)

- Inter professional expert panels – Provincial/national
- High volume elective cases being funded on quality and outcome
- Funding following the patient
- Care pathways dictating structure of care
- Minimizing variation of outcome

North West LHIN Regional Orthopedics Program Planning Day March 20 2014

- **Confirmation of Working Vision Statement**
- **Presentation from Subject Matter Expert, Rhona McGlassen Bone and Joint Canada**
- **Knowledge Café – Defining and Distinguishing Between Models**
- **Knowledge Café – Strengths and Weaknesses of Models**
- **Selection of Model**

Model Options

- **Embedded Orthopedic Surgeon in each regional community**
  - Perceived increased support for primary care especially around fracture management
  - Perceived benefit to emergency fracture patients – less travel
  - Very low volume caseload, high cost per unit
- **Traveling Surgical team**
  - Perceived increase experience of surgeon – subspecialty trained
  - Perceived lower cost per case
  - Truly 24/7 support through on call surgeons
  - More travel for emergency patients
  - More travel for surgical team

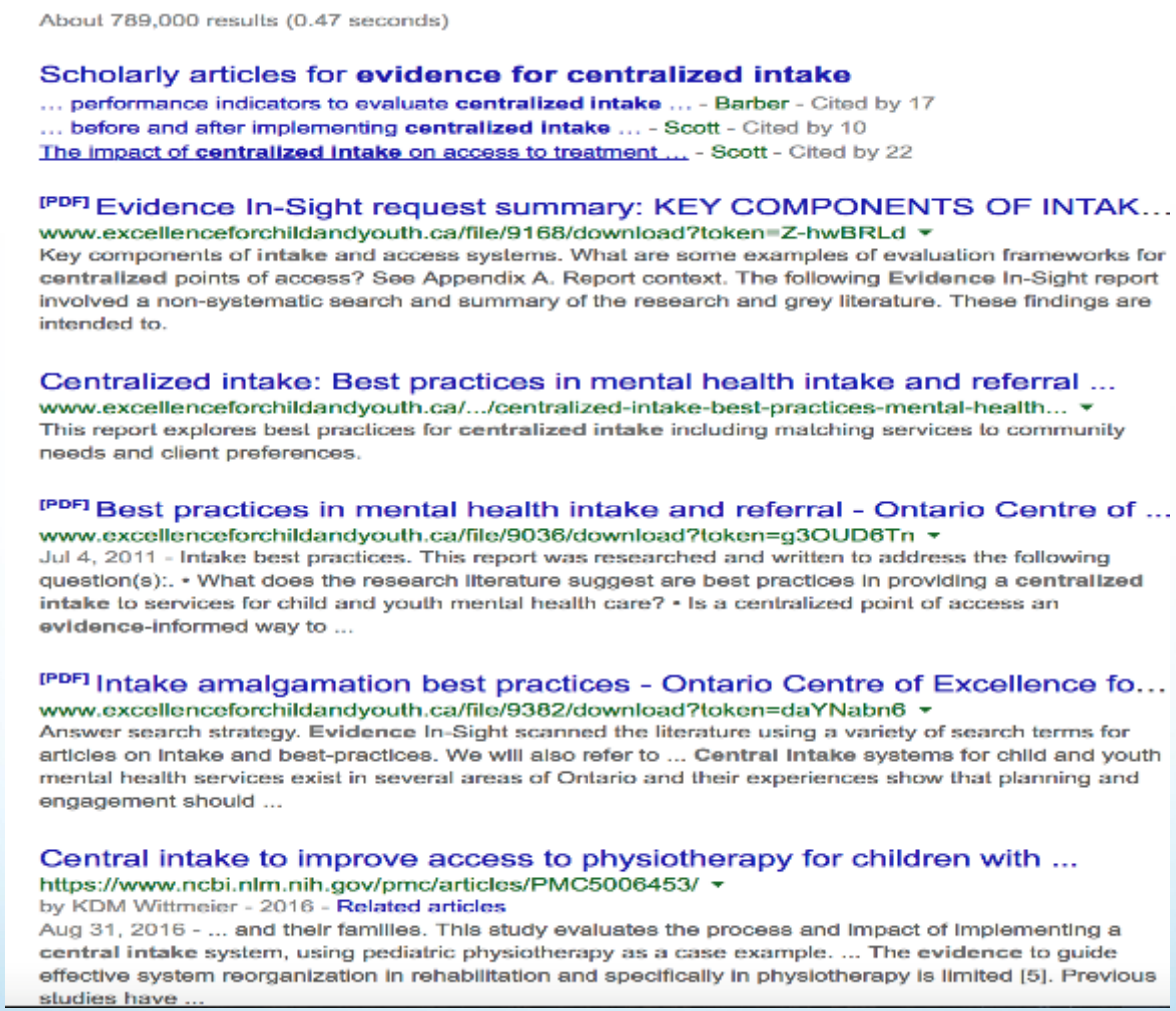
North West LHIN Regional Orthopedics Program Planning Day Sept 2014

- Confirmation of Working Vision Statement
- Presentation from Subject Matter Expert, Dr Hans Kreder, Chair of Orthopedics Sunnybrook Health Sciences Center
- Provision of academic evidence supporting model selection
- Confirmation of Model Selection

Model Selected

- **Centralized intake of all MSK pathology (in staged fashion)**
- **Traveling subspecialty surgical team to maintain the highest possible expertise for each case performed**
- **Increased choice for Patient – pooled consent lists, first available or specific surgeon**

Is There Evidence for Centralized Intake?



About 789,000 results (0.47 seconds)

Scholarly articles for evidence for centralized intake

… performance indicators to evaluate **centralized intake** … - Barber - Cited by 17
… before and after implementing **centralized intake** … - Scott - Cited by 10
The impact of **centralized intake** on access to treatment … - Scott - Cited by 22

[PDF] Evidence In-Sight request summary: KEY COMPONENTS OF INTAK…
www.excellenceforchildandyouth.ca/file/9168/download?token=Z-hwBRLd
Key components of intake and access systems. What are some examples of evaluation frameworks for centralized points of access? See Appendix A. Report context. The following Evidence In-Sight report involved a non-systematic search and summary of the research and grey literature. These findings are intended to.

Centralized intake: Best practices in mental health intake and referral …
www.excellenceforchildandyouth.ca/…/centralized-intake-best-practices-mental-health…
This report explores best practices for centralized intake including matching services to community needs and client preferences.

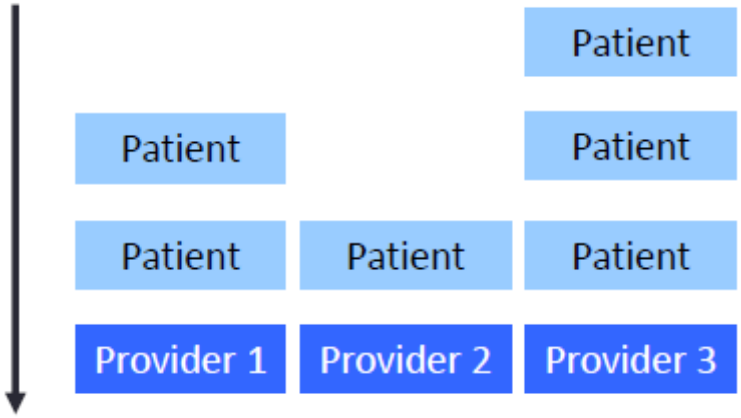
[PDF] Best practices in mental health intake and referral - Ontario Centre of …
www.excellenceforchildandyouth.ca/file/9036/download?token=g3OUD6Tn
Jul 4, 2011 - Intake best practices. This report was researched and written to address the following question(s):. • What does the research literature suggest are best practices in providing a centralized intake to services for child and youth mental health care? • Is a centralized point of access an evidence-informed way to …

[PDF] Intake amalgamation best practices - Ontario Centre of Excellence fo…
www.excellenceforchildandyouth.ca/file/9382/download?token=daYNabn6
Answer search strategy. Evidence In-Sight scanned the literature using a variety of search terms for articles on intake and best-practices. We will also refer to … Central Intake systems for child and youth mental health services exist in several areas of Ontario and their experiences show that planning and engagement should …

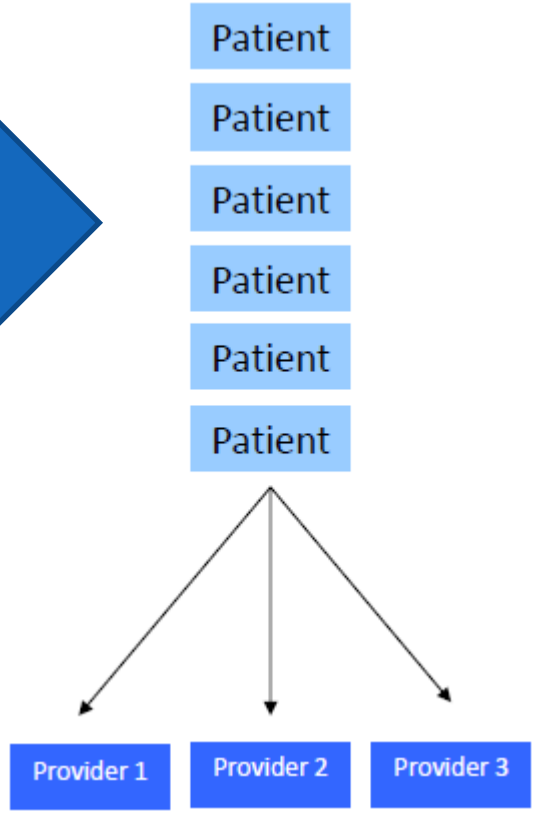
Central intake to improve access to physiotherapy for children with …
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5006453/
by KDM Wittmeier - 2016 - Related articles
Aug 31, 2016 - … and their families. This study evaluates the process and impact of implementing a central intake system, using pediatric physiotherapy as a case example. … The evidence to guide effective system reorganization in rehabilitation and specifically in physiotherapy is limited [5]. Previous studies have …

Moving to coordinated intake and assessment centre models for orthopaedic assessment

Current model in most of Ontario

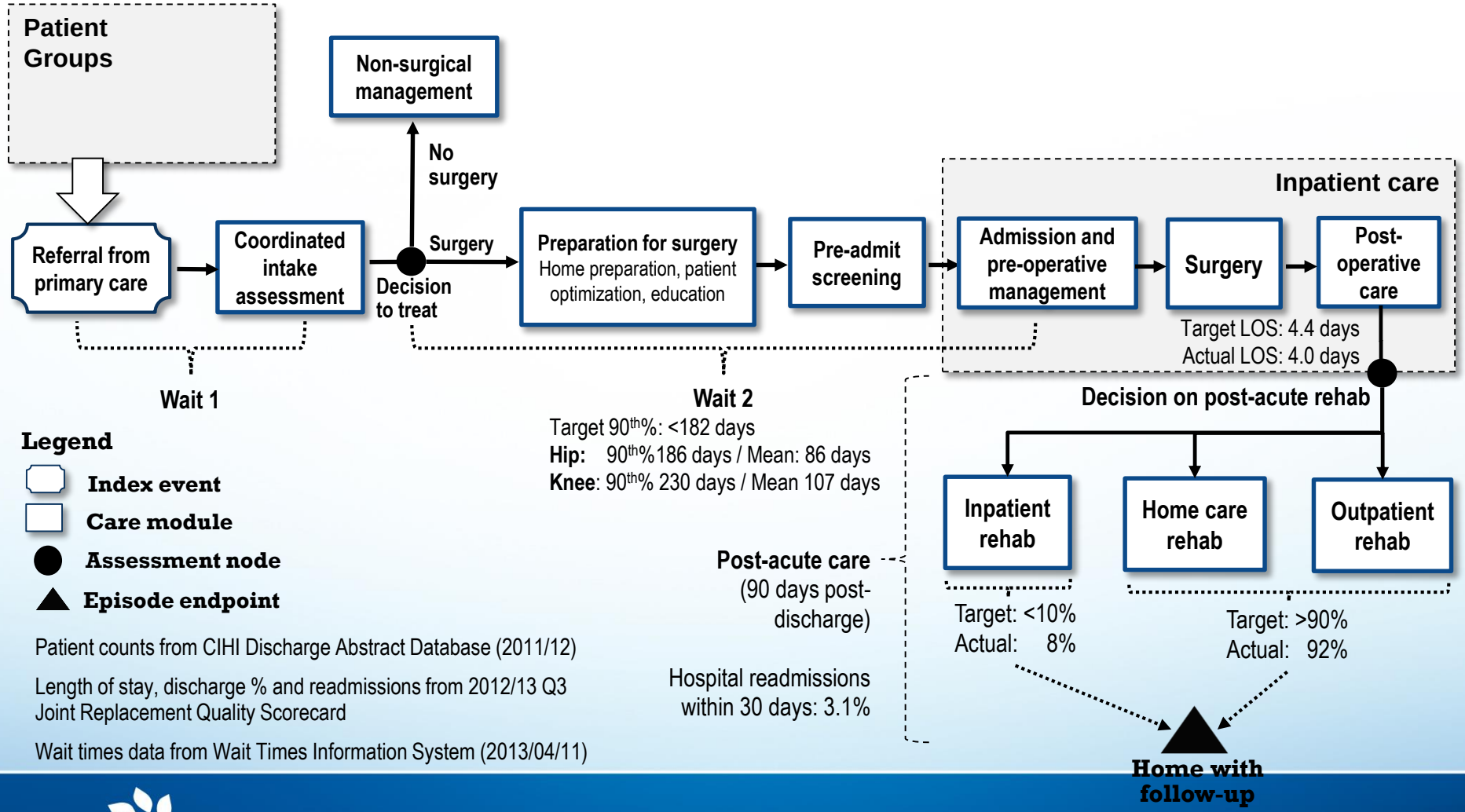


Recommended model



- Regional MSK patients referred to centre for assessment by allied health and triage to appropriate treatment (whether surgical or non-surgical)
- Reduces wait times and improves efficiency and appropriateness of care
- Existing Ministry-funded precedents in Ontario:
  7 regional hip/knee replacement coordinated intake centres and ISAEC model for low back pain

A visual model to hang it all together: An evidenced based pathway



Patient counts from CIHI Discharge Abstract Database (2011/12)

Length of stay, discharge % and readmissions from 2012/13 Q3 Joint Replacement Quality Scorecard

Wait times data from Wait Times Information System (2013/04/11)

Thunder Bay Regional Health Sciences Centre

healthy together

The Future
(is not recreating the past)

- To accomplish goals reorganization/retooling/real integration needed
- Absolutely need to understand each clinical group's perspective of their local need
- Change our perspective to inclusiveness/inter professionalism
- Train to fight the next war, not the last war

The Future: Going to be different from now

- **Increased the presence of Orthopedic surgery/medicine in region (surgeon and APC) - hiring more academic orthopedic surgeons, training more APC**
- **improved coverage (especially in each subspecialty area)but not 24/7/365**
- **professional and institutional growth (case load and variety)**
- **improved patient choice**
- **maximizing tertiary subspecialty exposure in region**

The Future: Going to be different from now

- **Embrace change (faces and locale and clinician type)**
- **Acknowledge that we can't stay the same or go backward in attitude: the silo is dead**
- **Acknowledge that we must institute processes that ensure that provincial and national academic standard of care goals are achieved**
- **Acknowledge that we should not create a service delivery model that creates a standard of care unique to the northwest LHIN unless it is exemplary**

VISION STATEMENT

“To improve the health of the orthopedic patient population in the North West LHIN by delivering high quality, accessible, financially sustainable care and service in an integrated and organized manner.”

THE PAST - PROBLEMS

Access to orthopaedic care was:

- Inequitable
- Uncoordinated
- Inefficient
- Not timely
- Not close to home
- Not sustainable

THE PAST - PROBLEMS

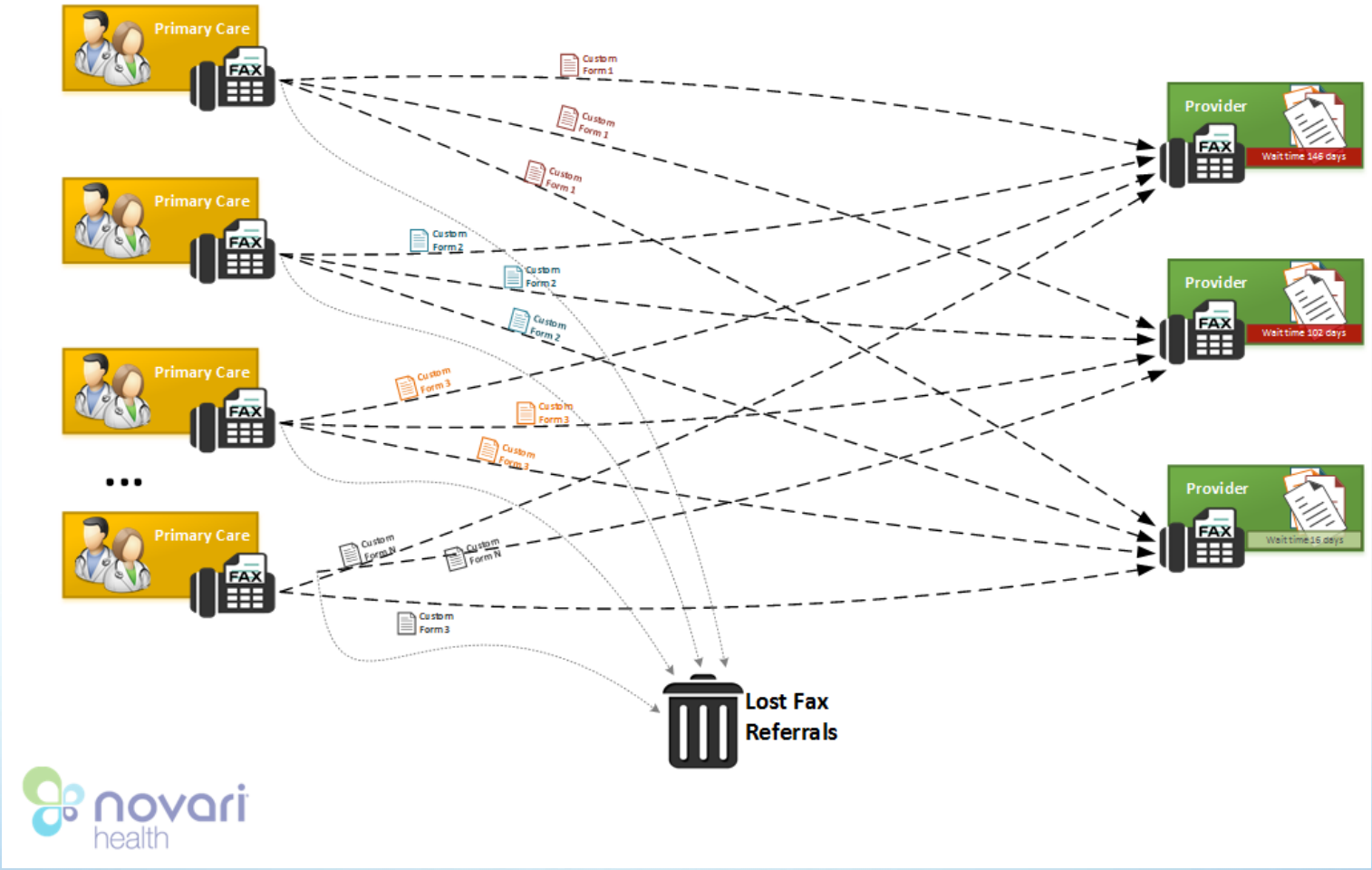
- Chaos referral patterns
- Standardized referral process only for hip/knee
- Inappropriate imaging
- Inequitable access to care across the region
- Efficiency disparity across OR sites
- Care not Close to Home

THE FUTURE - SOLUTIONS

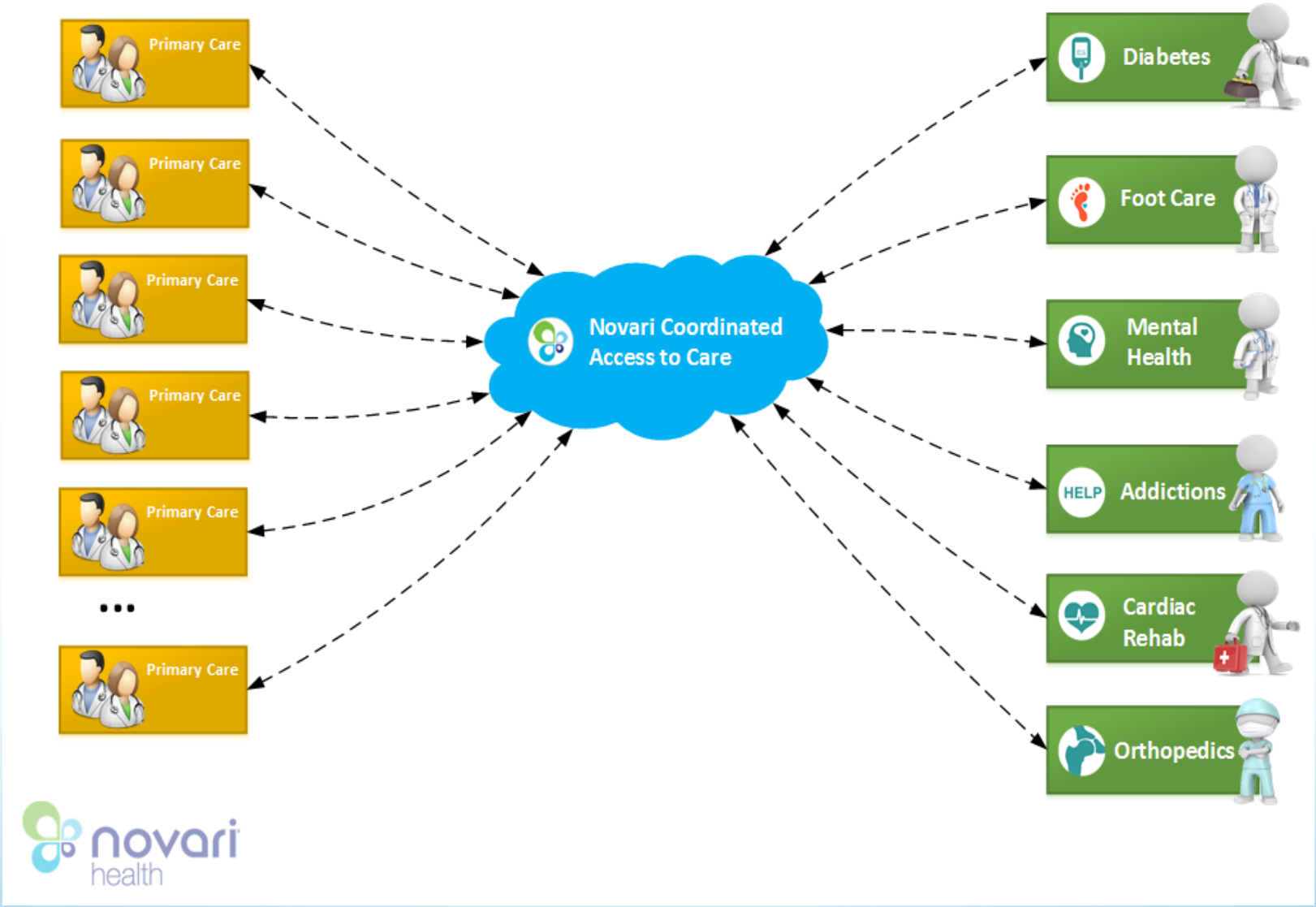
What we need: Alignment with HQO dimensions, benefit for patients, payers, providers and the health care system

- **Inter-disciplinary approach for all MSK**
- **Standardized processes for all MSK**
- **Standardization across continuum of care**

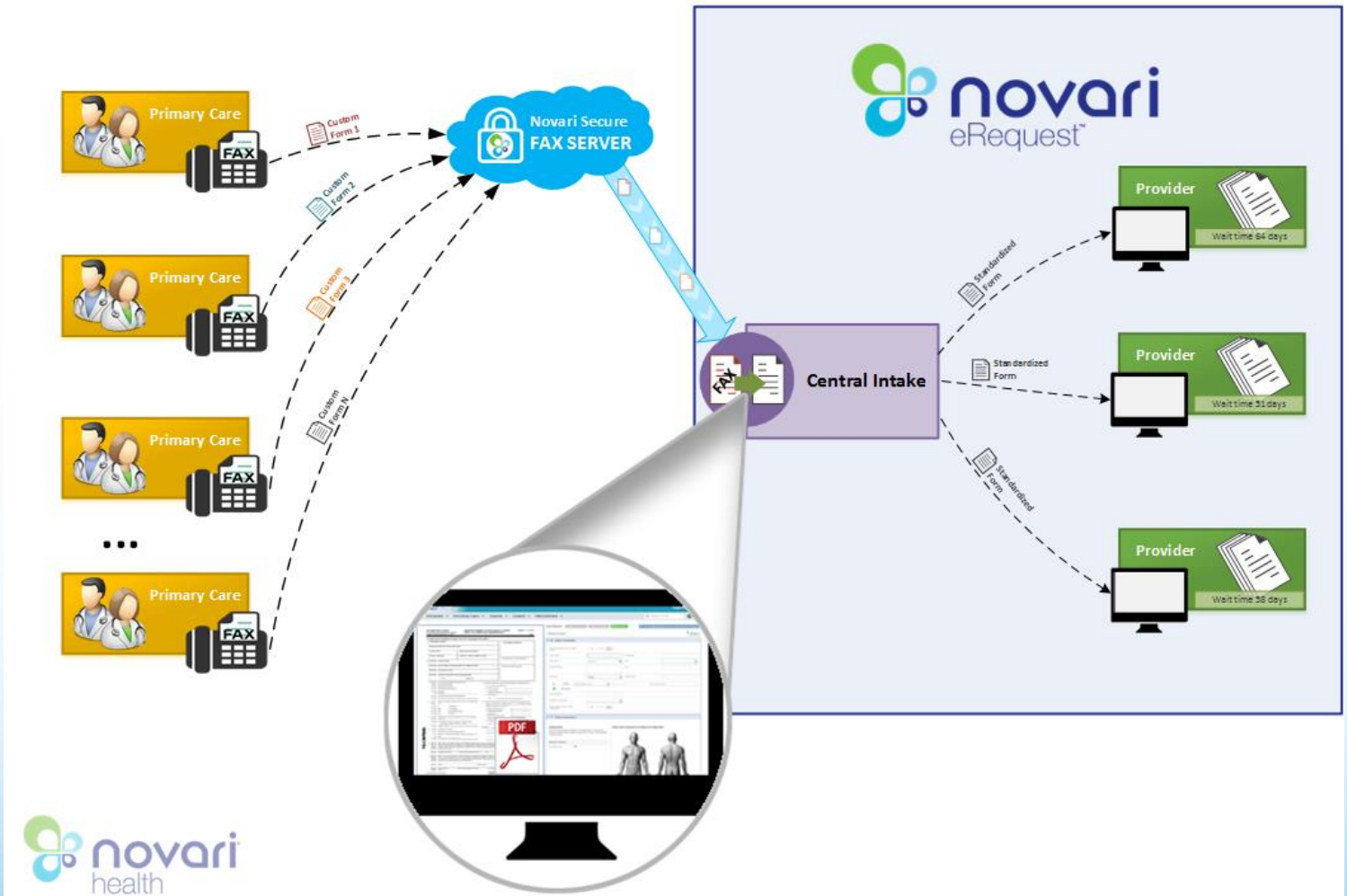
Current State: Point to Point Faxed Referrals



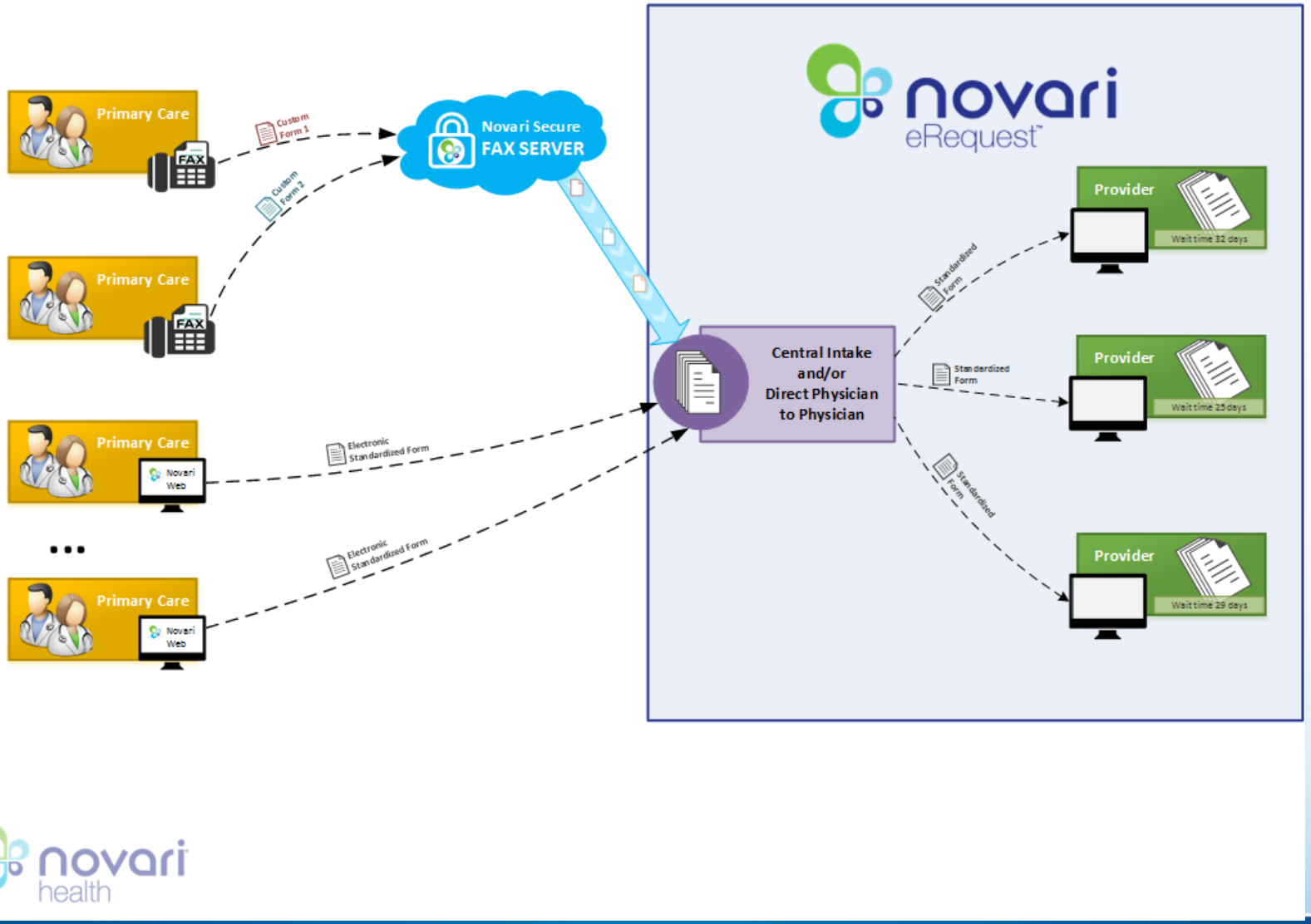
Primary Care to Specialist Care



Crawl: Fax to Central Intake



Walk: Fax & Web



novari health

BENEFITS

Complete & Appropriate Referrals

- Regional standardized electronic referral forms

Know Where to Send a Referral

- Novari eRequest provides an accurate list of appropriate referral destinations and their wait times

Know the Status of Every Referral in Real Time

- The Novari eRequest® module displays the status of each referral (i.e. sent, received, accepted, declined, scheduled, etc.) as it moves through the system.

BENEFITS

Load Balance Demand Across Resources

The Novari eRequest system is capable of both direct – point A to B – referrals, and/or the routing of referrals via a central intake. Central intake staff managing a referral type(s) can then load balance demand across available providers when routing referrals.

Eliminate Inappropriate Referrals

Using built-in decision support and best practice appropriateness guidelines, inappropriate referrals can be caught up front at the time of referring.

Better Resource Planning Data

Understand in real time the appropriateness criteria, wait times, processing times, bottlenecks in the system, outcomes and demand for local resources by speciality and services.

FUTURE STATE

- ***Leveraging a full model of Musculoskeletal Care through advanced technology and regional integration***
- **One program – hub and spoke design - with rotating sub-specialty service and inter-professional care to all sites to:**
  - Achieve sufficient volumes;
  - Critical mass at each surgical site;
  - Expertise required for the provision of specialized service with exemplary outcomes
- ***Establish the basis for regional standardization of quality standards and monitoring, clinical pathways, equipment and referral practices.***

What we will deliver: An MSK Centre of Excellence

Regional Orthopaedics Program

PATIENT NEEDS

Timely access to the full spectrum of orthopaedic services and care closer to home:

- ✓ Consultation
- ✓ Education and self management
- ✓ Comprehensive conservative treatment
- ✓ Surgical optimization
- ✓ Surgery and follow-up care
- ✓ Rehabilitation

HOSPITAL NEEDS

- ✓ To provide patient and family centred care
- ✓ Maintain surgical volumes and the associated funding
- ✓ A governance structure that allows over-sight of credentialing, regulation and competency maintenance
- ✓ Prevention of cancelled elective surgery due to over-capacity issues

MOHLTC and LHIN NEEDS

Development of an Integrated Orthopaedic Capacity Plan to:

- ✓ Deliver equitable access to care
- ✓ Provide uniform standardized quality of care that meets Provincial and National standards
- ✓ Increase system efficiencies = SUSTAINABILITY

The plan MUST align with:

- ✓ Orthopaedic Expert Panel Recommendations
- ✓ NW LHIN Health Services Blueprint
- ✓ Health System Funding Reform
- ✓ Patients First Act

PRIMARY CARE PROVIDER NEEDS

- ✓ **Simplified, streamlined intake process to ensure patients receive appropriate services sooner which leads to greater patient satisfaction**
- ✓ **Quick and measurable referral response times**
- ✓ **Timely, reliable lines of communication with specialists/the program**
- ✓ **Additional resources for patient support and education**

SURGEON NEEDS

- ✓ **Optimal OR time to address surgical demand and meet Wait 2 time-lines**
- ✓ **Surgical volumes to maintain the surgeons and support staff competency with elective and non-elective cases**
- ✓ **OR staffing competency and operational efficiency**
- ✓ **Assurance of infection control measures**
- ✓ **Assurance of adequate equipment**
- ✓ **Support of primary care providers for care transfer**

Regional Orthopaedic Program – Hub and Spoke Model of Care

MSK Centre of Excellence

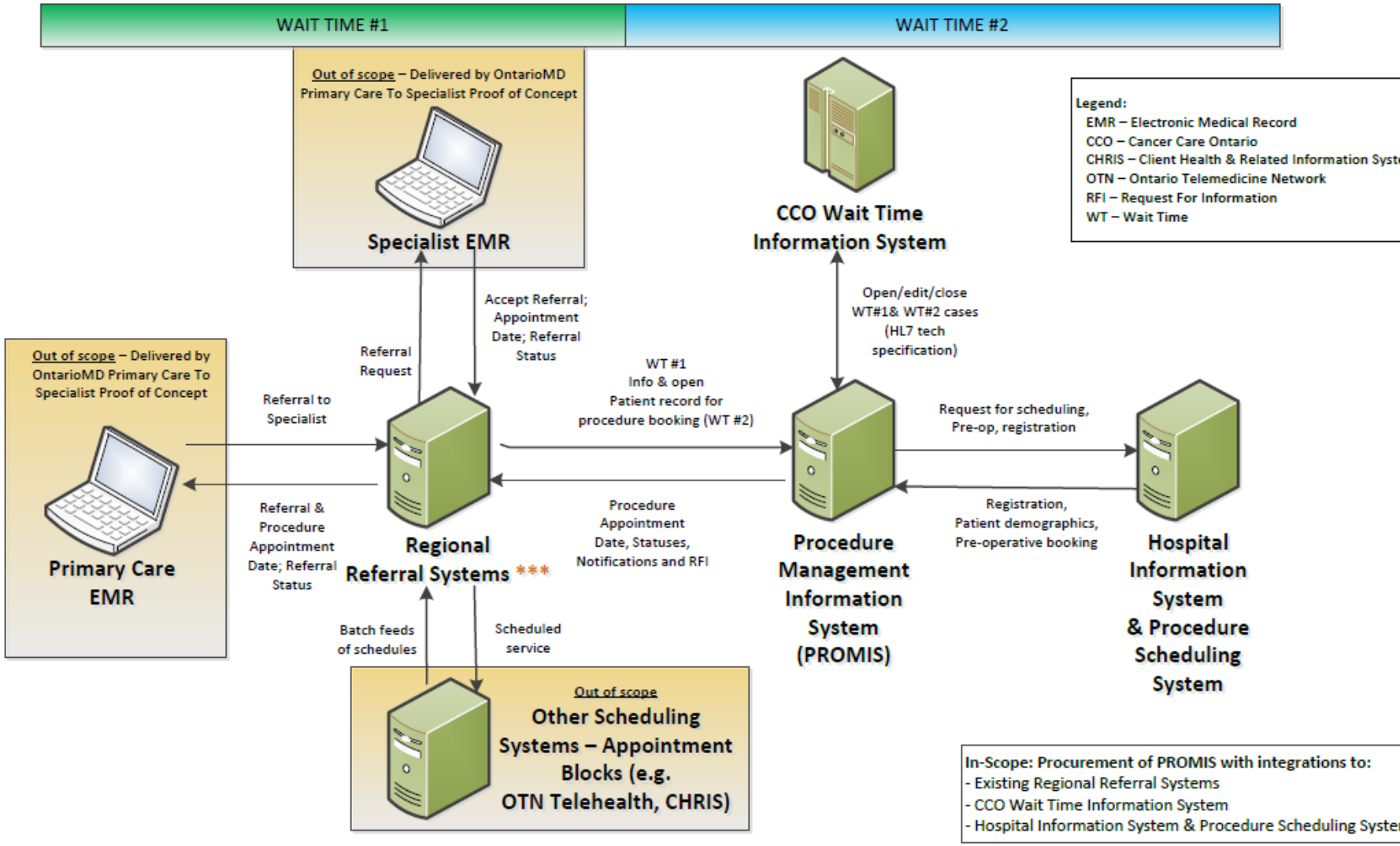
Key Features:

- **Centralized Intake (can expand to all medical specialists)**
- **Real time referral status to communicate to Primary Care**
- **Surgeon Wait List dashboards**
- **Transparent wait lists across all 4 surgical sites – in real time**
- **Inter-professional team for all MSK services**
- **Think Research Order Sets/Standardized Care Paths/Best Practices**
- **Complex reporting to CCO-WTIS**

Alignment with HQOs 6 dimensions of quality:

Safe, Effective, Patient-Centred, Efficient, Timely & Equitable

Primary Care to Specialist Referral For Operating Room Procedure
High-Level System Integration Diagram



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North West LHIN

Central East LHIN

Ontario eHealth Ontario

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Regional Orthopaedics Program

Benefits Realization:

- **Maximum Efficiency – increased surgical throughput in regional facilities from 2-3 TJA/day to 4-6 (50% reduction in cost per case)**
- **Travel grants: savings of 90 travel grants/visit to the region. 30 visits per year. 2700 travel grants – minimum cost $300/grant = $810,000 cost avoidance**
- **Optimizing Telemedicine consults: 120 consults/follow ups per week = 1440/year = $432,000 cost avoidance**
- **Total cost avoidance per year: :$1,242,000 *(minimum)***

HQO Alignment: Efficient and Effective – Using resources wisely

Regional Orthopaedic Program

Alignment with Local and Provincial Strategic Directions:

- **Provincial Priorities: Patients First: Action Plan for Healthcare**
  - Ensure faster access to specialists
  - Provide care that is coordinated, and integrated with primary care, so a patient can get the right care from the right providers
  - Increase the use of virtual care tools to give patients more access to specialists regardless of where they live
  - Successfully implement pertinent quality based procedures across the continuum of care and ensure quality outcomes

- **North West LHIN 2016-19 Integrated Health Services Plan & Health Services Blueprint**
  - Improving the Patient Care Experience
  - Improving Access to Care and Reducing Inequities
  - Building an Integrated e-Health Framework
  - Ensuring Health System Accountability and Sustainability
  - Implement Blueprint vision of fully integrated specialty program with defined basket services at sub-region and local health hub level

SUCCESS INDICATORS

- ✓ ACCESS TO CARE/CARE CLOSE TO HOME
- ✓ WAIT TIMES
- ✓ PATIENT AND PROVIDER SATISFACTION
- ✓ RESOURCE DISTRIBUTION
- ✓ QBP TARGETS
- ✓ QUALITY AND SAFETY
- ✓ EFFICIENCY AND SUSTAINABILITY
- ✓ INTEGRATION ACROSS THE CONTINUUM

Regional Orthopaedic Program

HQO Alignment

A just, patient-centred health system committed to relentless improvement. Let's make it happen!

Thunder Bay Regional Health Sciences Centre

DRHC Dryden Regional Health Centre

North West LHIN

Riverside Health Care

Lake of the Woods District Hospital

Thank you!