

Waterloo Wellington LHIN

BRIEFING NOTE

January 31, 2018

For Decision

Board of Directors Item 13.2 - Musculoskeletal System Transformation

PURPOSE

To provide the WWLHIN Board of Directors with a recommendation to endorse the proposed musculoskeletal (MSK) system transformation plan and approval for the CEO to proceed with implementation and decisions on base funding in line within the Ministry of Health and Long Term Care (MOHLTC) funding envelope and project timeline from November 2017 through to March 2019.

CORE CONTEXT

- The WWLHIN has developed a strategic plan for system transformation of MSK care including the implementation of a Central Intake and Assessment Centre (CIAC) and Interdisciplinary Spine Assessment and Education Centre (ISAEC). Objectives of this plan include improving patient experience, improving accountability wait time metrics for hip and knee replacement and spine surgery, and establishing an integrated model of care for management of MSK related acute and chronic pain as an alternative to opioid therapy.
- The MOHLTC will provide the WWLHIN up to \$650,295 in prorated base operational funding for the 2017-18 funding year, which will annualize up to \$1,300,591 for the 2018-19 funding year, and ongoing, to support building capacity and operationalizing the regional MSK central intake, assessment and management program.
- The CIAC and ISAEC models are evidence-based best practice standards of care being spread across Ontario as mandatory processes for hip and knee replacement and spine surgeries.
- Patients with low back pain (LBP) are not receiving timely access to care with thousands of patients in the WWLHIN on waiting lists to be seen. Primary care practitioners have limited resources for treatment and management often leading to decisions to treat with opioids.
- The rehabilitation system has identified a gap in care for those with chronic pain and an opportunity to provide evidence based best practice to avoid opioid use for acute and chronic MSK pain.

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RECOMMENDATION

THAT the WWLHIN Board of Directors approves the CEO to proceed with implementation and decisions on base funding in line with the plan for MSK System Transformation within the Ministry funding envelope.

BACKGROUND INFORMATION

During the 2017-18 fiscal year, WWLHIN Hospitals collectively received \$12.9 million in additional funding with \$736,000 being allocated for high priority (more urgent) hip and knee replacement surgery. A mandatory requirement of this high priority funding is the implementation of a CIAC, which will organize referrals for hip and knee replacement surgery into a system of care to enable LHIN-wide access to the surgeon with the shortest wait time.

Adoption of SCA/ eReferral is being deployed to the MSK strategy to enable electronic referrals from primary care provider's electronic medical records (EMR) directly to the specialist's EMR. The SCA eReferral strategy also includes educational guides for referring practitioners to include the required standing X-Ray imaging and avoid unnecessary MRI imaging, which is most often not required for diagnosis and the evaluation for total joint replacement.

The CIAC model will include Advanced Practice Clinicians (APCs) who will see patients within 2-6 weeks from primary care referral to assess patient's optimal treatment plan between conservative management including physiotherapy and structure exercise or surgery. CIAC's in Ontario have demonstrated that 40% of those referred benefit from conservative management rather than surgery.

Since November 2012, the evidence based ISAEC model has demonstrated positive results for delivering accessible, patient-centred Low Back Pain (LBP) services. Like the CIAC model, ISAEC involves APCs who screen patients for their appropriateness for surgery within 2-6 weeks from referral. The ISAEC pilot studies in Ontario have shown over 90% of those referred to spine surgeons for low back pain do not require surgery. The ISAEC model minimizes the time these patients wait to initiate a treatment program when surgery is not recommended.

Ministry LHIN Accountability Agreement (M-LAA) and Hospital Service Accountability Agreement (H-SAA) include wait time targets for hip and knee total joint replacement. The WWLHIN has not achieved the target for this quality standard for several years. This investment is expected to improve system performance by redistributing referrals throughout the WWLHIN to those surgeons with shorter wait times and optimizing surgeon's time seeing only those who are most likely to benefit from surgery. An additional impact of this MSK strategy is anticipated to improve MRI wait times through the use of SCA/ eReferral resulting in fewer MRI's for hip and knee joint replacement considerations.

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This investment is expected to help achieve the wait time target for hip and knee total joint replacement within the 2018-19 fiscal year. Current and previous performance as shown from the WWLHIN system dashboard is included below demonstrating a long period of under-performance and negative impact to patients and their caregivers.

Residents will receive timely access to non-emergency hip-replacements	Cambridge, North Dumfries	Cambridge Memorial Hospital	90.00	100.00%	98.67%	69.49%	83.33%	81.43%	71.19%	88.71%	100.00%	11
	Guelph Area	Guelph General Hospital	90.00	60.78%	50.77%	41.67%	39.22%	41.51%	37.33%	53.57%	94.12%	11
	Kitchener, Waterloo, Woolwich, Welsley, Willmot	Grand River Hospital	90.00	66.27%	39.29%	20.00%	29.41%	23.60%	25.78%	23.47%	27.78%	11
	Aggregate WW System Performance		90.00	74.05%	62.33%	41.88%	48.65%	47.37%	39.00%	50.00%	67.46%	11
Residents will receive timely access to non-emergency knee replacements	Cambridge, North Dumfries	Cambridge Memorial Hospital	90.00	96.91%	95.16%	74.60%	78.65%	66.28%	80.23%	77.88%	94.85%	11
	Guelph Area	Guelph General Hospital	90.00	84.51%	60.26%	53.75%	27.27%	34.52%	41.32%	51.52%	88.04%	11
	Kitchener, Waterloo, Woolwich, Welsley, Willmot	Grand River Hospital	90.00	50.00%	38.24%	25.27%	23.81%	19.40%	19.53%	14.06%	11.81%	11
	Aggregate WW System Performance		90.00	72.94%	57.09%	47.16%	42.91%	37.46%	38.93%	39.90%	59.49%	11

The WWLHIN has held stakeholder engagement with patients, all orthopaedic surgical hospitals, orthopaedic surgeons, spine surgeons, advanced practice clinicians, primary care practitioners, the eHealth Centre of Excellence, and the Ministry of Health and Long Term Care over the last year.

The WWLHIN has recently completed a capacity review and plan for Rehabilitation services, highlighting opportunities for improved processes for hip fracture management and MSK related acute and chronic pain. This will include future spread and expansion of the primary care low back pain model in each of the sub-regions to provide primary care with alternatives to medication-only management (i.e. opioids). The prevalence of pain management in primary care practices is close to 30% of all visits, with over two thirds of pain being MSK in nature.¹ Establishing regionally centralized clinical services for acute and chronic pain in conjunction with the ISAEC will support those requiring more advanced services.

Implementation in the WWLHIN will focus on three assessment centres located in the three sub-regions with orthopaedic surgery hospital programs with close alignment with the surgeons and the hospitals. The location of the ISAEC centre is currently being determined, but there will be close alignment with the spine program at Grand River Hospital. Advanced Practice Clinicians (APC e.g. Physiotherapists) will be hired by the WWLHIN Home and Community Care team to advance this community-based model. Accountability with the hospitals will require that all funded cases of hip and knee surgery performed be processed through this model including referral to central intake and screening by an APC, ensuring adherence to best practice. Patients will clearly understand their wait time for surgery, with 90% of patients receiving their surgery within standard wait times. The project implementation will run for 18 months from November 2017 through to March 2019.

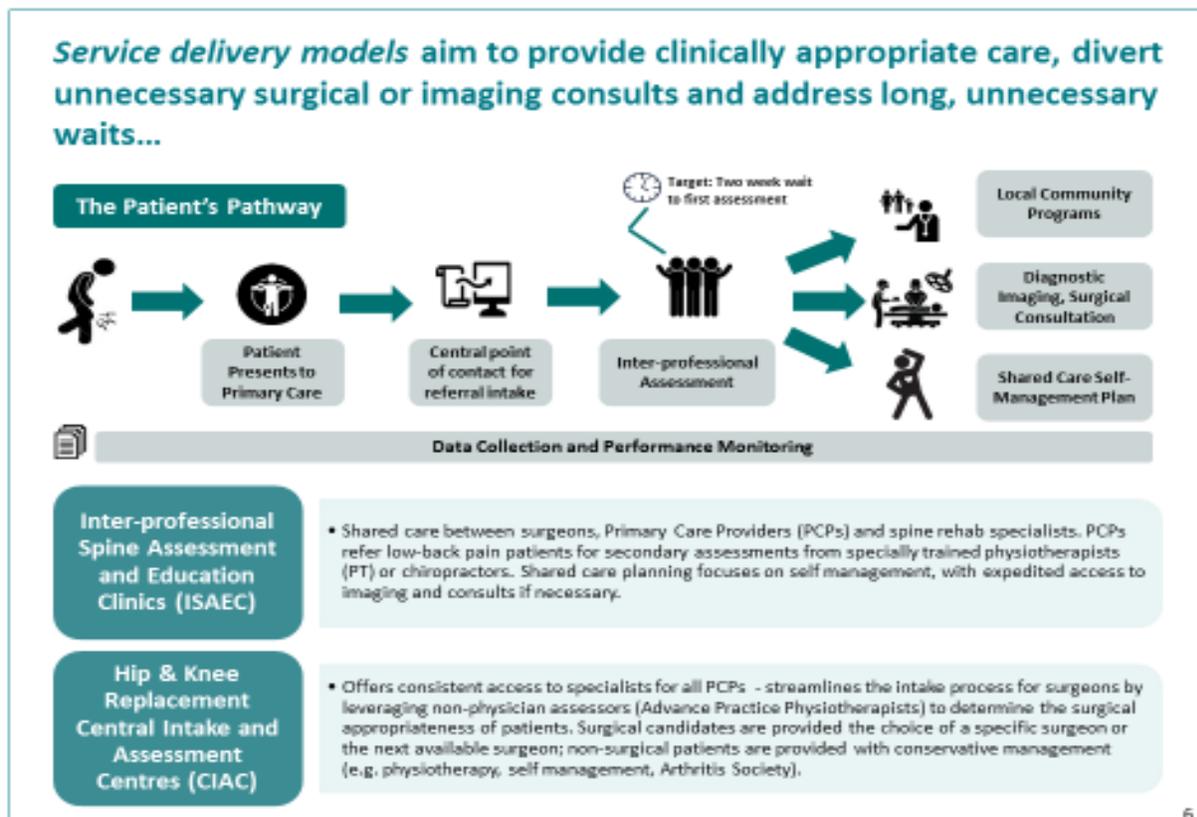
¹ Hasselstrom J, Liu-Promgren J, Rasjo-Wraak G, Prevalence of Pain in General Practice, Eur J Pain 2002, 6(5): 375-385

APPENDIX A – MSK Evidence-Based Model of Care

CIACs have been shown to:

- Streamline the intake process so that patients receive more timely assessments and consults.
- Improve surgeon wait list management and referral practices.
- Provide patients with the choice of hospital, surgeon or the shortest wait time.
- Decrease system wait time for joint replacement by 27%.
- Provide non-surgical patients with conservative management strategies.
- Improve communication to referral sources (e.g. general practitioners and specialists) regarding imaging requirements to avoid unnecessary testing.

Figure 1: Service Delivery Model of Care for ISAEC and CIAC



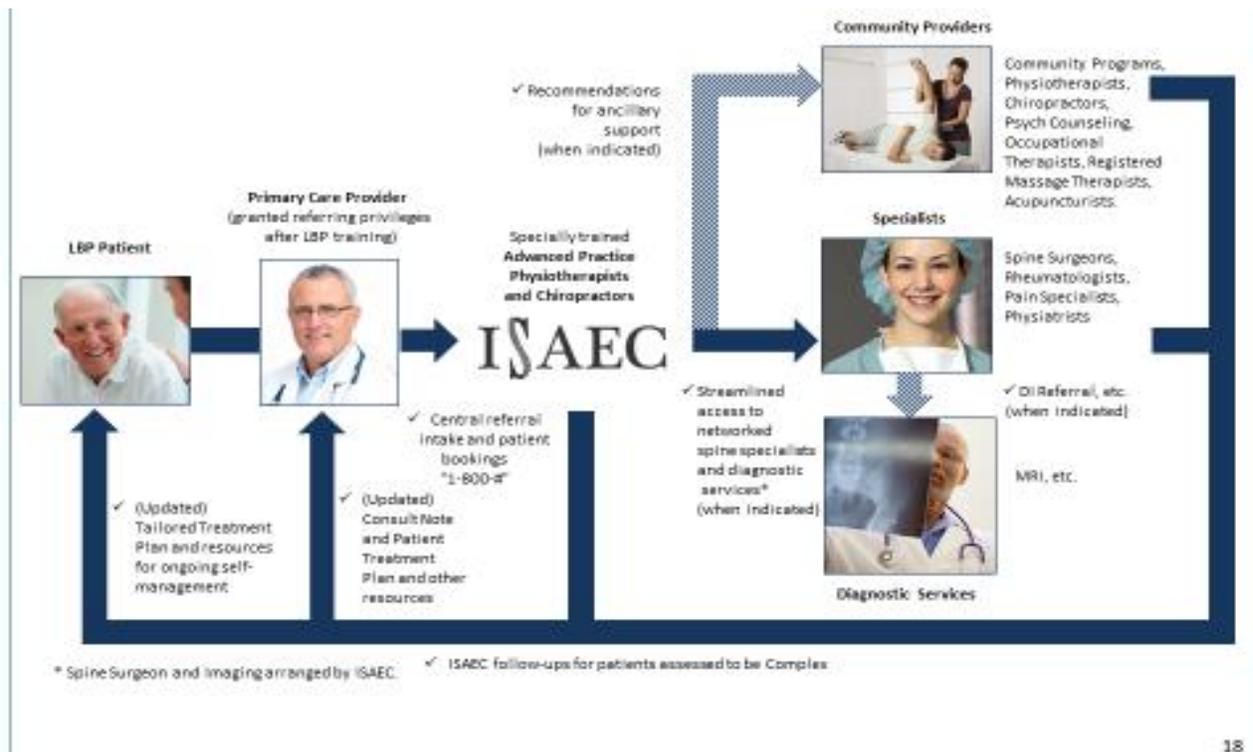
Key achievements of the ISAEC model include:

- Provided services to over 6,000 patients, including referral to Advanced Practice Clinicians in less than two weeks. High rates of patient and provider acceptance as evidenced through high satisfaction rates (patient at 99% and provider at 96%).

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- Improved patient outcomes with reduction in chronic symptoms six months following treatment. Significant built-in knowledge transfer to participating Primary Care Providers, who reported a two-fold increase in their confidence in treating/ managing LBP.
- ISAEAC pilots across Ontario have successfully demonstrated a 30% decrease in MRI utilization. Increased economic productivity of patients, of which 50% are not working at the start of treatment, return to work within six months.

Figure 2: ISAEAC Pilot Care Pathway



In Waterloo Region the number of ED visits for opioid toxicity increased from an average of 97 per year (2003-09) to 131 per year (2010-2015), a 35% increase. When patients have effective, timely and comprehensive pain management strategies, opioid abuse drops with resulting positive impacts in quality of life and savings to the health care system. Close to 20% of the Canadian population live with chronic pain demonstrating significant prevalence.² Acute pain

² Schopflocher D, Taenzer P, Jovey R, The Prevalence of Chronic Pain in Canada, [Pain Res Manag.](#) 2011 Nov-Dec; 16(6): 445-450

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accounts for 60-80% of ED visits and the management of pain in the ED is often inadequate and poorly tailored to the individual, despite consensus guidelines.³

³ Cordell W.H., Keene K.K., Giles B.K., et al. The high prevalence of pain in emergency medical care. *Am. J. Emerg. Med.* 2002;20:165-9.