



eReferral Solution

The use of an electronic referral solution that incorporates decision-support standards to send MSK referrals saves time processing referrals at central intake, reduces wait time for assessments and supports efforts to reduce the ordering of unnecessary diagnostic imaging.

Background

In Canada, 36% of the population suffers from a Musculoskeletal (MSK) disorder.¹ Currently, patients experience a long wait time to receive a consult from an orthopedic specialist.² Evidence has shown that approximately 40% of MSK patients can be managed conservatively with no surgery.³ Moreover, studies have shown that Magnetic Resonance Imaging (MRI) scans are overused for various MSK ailments such as hip, knee, and back pain.^{4,5} However, diagnostic imaging guidelines indicate that the value of MRI scans for MSK patients suffering from osteoarthritis is limited, and an X ray is more suitable to direct the treatment plan.^{6,7} Unnecessary referrals for MRI and surgical consults are contributors to the long wait times. In Ontario, patients could wait several months to see an orthopedic specialist.⁸

To support appropriate and timely access to MSK specialty care, the System Coordinated Access (SCA) Program has deployed electronic referral (Ocean eReferrals) in 3 of the 5 Ontario Health regions across the province (West, East, and North), in 2018. In this model, referrals are sent from primary care offices to central intake, where referrals are reviewed for missing information and adequately triaged according to the patients' needs.^{9,10} At rapid access clinics, patients are assessed by advanced practice physiotherapists to determine if a surgical consult is required and to provide enhanced options for conservative treatment, when needed.¹¹ Only patients in need of a surgical consult are referred to surgeons.¹¹

The Ocean eReferral network uses eforms, many of which incorporate evidence-based clinical guidelines. These forms ensure referral information is complete prior to sending and promote appropriate diagnostic imaging ordering for patients. Also, the referral in-application messaging and status tracking features make communication, gathering of information, and tracking referrals easier and faster across sites. The eReferral solution and the implementation of the MSK model are designed to reduce the long wait time for MSK patients to receive appropriate care.

Analysis of quantitative MSK hip and knee Ocean referral data (electronic and paper-based referrals processed and triaged at central intake through the system) from September 2018 to the end of October 2019 across four subregions (WW, ESC, NE, and SE) was conducted. A comparison of indicators for efficiency by the method of referral was done for:

- Processing time at central intake— The date the referral was created till the date it was forwarded to rapid access clinics
- Wait 1a time—The date of receipt of referral at central intake until the assessment date at rapid access clinics
- Proportion of images ordered for knee pain osteoarthritis patients ≥55 years
- Appropriateness of ordered MRI scans

“With eReferral, I love that I don't have to call to confirm the referral was received and that I don't have to call for status updates.”

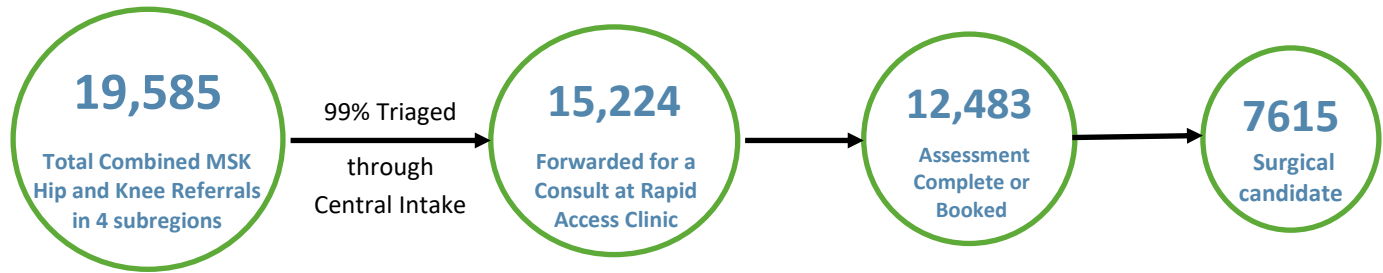
*Office administrative staff,
FHT office—North East LHIN*

“Hope we can use Ocean eReferral for all referrals to specialist services.”

*Clinical Director,
FHT office— South East LHIN*

Benefits

MSK Hip and Knee Referrals Processed through Ocean eReferral System September 2018 – October 2019 across 4 subregions



Time savings with the introduction of the Ocean eReferral solution

Data analysis of the electronic and paper-based referrals processed and triaged at central intake through the system illustrates a significant time savings as shown in the table below.

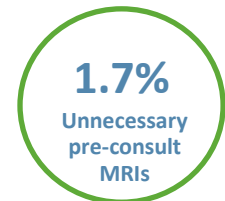
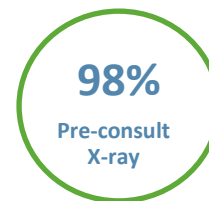
	Paper-based N=17325	eReferral N= 2260	Days saved using eReferral	P value
Average Processing Time at Central Intake	28 days	5 days	23 days	P<0.012
Average Wait 1 a	79 days	56 days	23 days	P<0.000

A highlight of the potential benefits of following a comprehensive model of care within the referral practice

Of all the processed MSK referrals, 7,125 were for knee pain osteoarthritis patients ≥55 years

Based on the University Health Network (UHN) guidelines¹² and MSK model consult outcome, the data illustrates a high proportion of X ray orders and low proportion of unnecessary MRIs as recommended by diagnostic imaging guidelines.¹²

- 6998 referrals had an X ray ordered at the point of referral
- Only 118 MRI scans were ordered unnecessarily pre-consult



Images ordered for knee osteoarthritis patients ≥55Y

About the SCA Program

The System Coordinated Access (SCA) Program was originally initiated to support the development and adoption of electronic referral in the Waterloo Wellington region. As a result of an investment by the Ontario Government, the program, in collaboration with the Think Research Consortium (Think Research, CognisantMD and Centre for Effective Practice), has now expanded to support the implementation of Ocean eReferrals to 3 of the 5 Ontario Health regions across the province (West, East and North).

eReferral replaces paper-based faxes with electronic referrals. Through a secure integration with electronic medical records (EMRs), referrals are sent, tracked and updated right from the patient’s electronic chart. The local SCA deployment teams provide training, solution set-up and support.

Works Cited

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Contact

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