

## CONFERENCE ABSTRACT

# Ontario Inter-professional Spine Assessment and Education Clinics (ISAEC): Patient, Provider and System Impact of an Integrated Model of Care for the Management of Low Back Pain (LBP)

1st North American Conference on Integrated Care, Toronto, 4 - 7 October 2021

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### *Introduction*

Low back pain (LBP) is a highly prevalent and poorly managed condition. The Inter-professional Spine Assessment and Education Clinics (ISAEC) uses an interprofessional, multidisciplinary, integrated-care model to provide upstream secondary and tertiary standardized clinical evaluation, individualized education and self-management recommendations for LBP patients in remote to metropolitan geographies. As a pilot, started in Jan 2013, the ISAEC program has seen over 6500 patients and grown from 220 to 540 PCPs (20% of whom are Nurse Practitioners). Additionally, 14 trained Advanced Practice Clinicians (Chiropractors and Physiotherapists) and 3 Clinical Practice Leads are supported by 8 specialist champions.

### *Aims Objectives Theory or Methods*

The objectives of this study were to determine the impact of the ISAEC evidence, patient and provider informed integrated-care pilot on 1) Patient reported satisfaction and outcome; 2) Primary care provider (PCP) satisfaction and knowledge transfer; 3) Surgical referral appropriateness; and 4) Utilization of spinal imaging from the perspective of the healthcare. Methods included 1) Mixed methods study for patient and provider evaluation (patient reported outcomes measures and satisfaction surveys). 2) Institute for Clinical Evaluative Sciences (ICES) administrative data analysis comparing spine imaging test ordering by ISAEC and non-ISAEC physicians and determine the direct cost impact.

### *Highlights or Results or Key Findings*

The mean wait time for ISAEC initial assessment was 12 days. Overall patient satisfaction (n=2482) was 99% and 95% felt they understood their condition better. For 811 patients enrolled in a prospective study, a mean reduction in Oswestry Disability score of 10 was observed at 6 months. Enrolled PCPs (n=134 /220) on average showed a two-fold increase in their confidence managing LBP and 97% reported overall satisfaction with the program. Within the ISAEC network of providers, surgical referral appropriateness was 96% (compared to 20-30% prior to ISAEC).

Compared to non-ISAEC PCPs, the overall annual utilization for all LBP-related diagnostic imaging ordered by ISAEC-PCPs fell 28% in year 1 and an additional 5% in year 2 compared to their non-ISAEC peers. This translated to an annual estimated per physician cost avoidance of \$3150 and \$4175 in year 1 and 2 respectively based only on imaging.

### ***Conclusions***

In single-payer public healthcare delivery system, a shared-care, stratified education and self-management model of care for LBP provides significant positive multidimensional impact on patients, providers and the health care system. Overall, the ISAEC integrated care model was able to improve on the quality and appropriateness of care, while reducing cost.

### ***Implications for applicability/transferability sustainability and limitations***

The pilot ISAEC integrated care model has been re-named Rapid Access Clinics-Low Back Pain and successfully adopted and implemented as a provincial program in 2019. Current patient and provider experience and satisfaction mirror the aforementioned pilot results. Furthermore, program pilots are now running in two other Canadian provinces.