

**Leveraging Information Technology to Improve Care:
CCO's Approach to Population-Based Standardized
Symptom Screening**

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Outline

- Symptom Management in Ontario
 - Ontario Cancer Plan IV
 - Evolution of Symptom Assessment
- ISAAC Use in Ontario
 - Current State
- Improving ISAAC to Meet User Needs
- Structures to Support Implementation and Operations

Ontario Cancer Plan IV (2015-2019)

By 2019...

- Patients will report that cancer care was delivered in a manner that recognized their needs and preferences.
- Patients will have opportunities to report on their symptoms for specific disease sites in real time and will have their symptoms addressed.
- Patients and their families will have access to the resources, tools, knowledge and support they need to help them manage their care.
- Patient care information will be made available to patients and providers to support joint decision making (e.g., Diagnostic Assessment Program – Electronic Pathway Solution and Interactive Symptom Assessment and Collection).

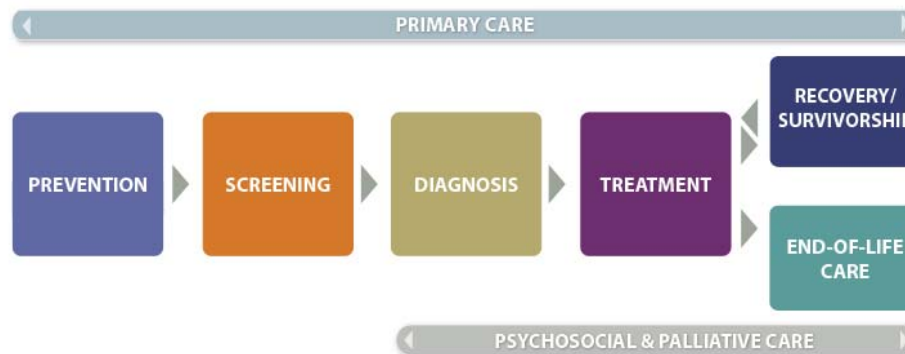


Vision for Symptom Management in Ontario

Improve the patient's experience by enhancing the quality and consistency of physical and emotional symptom management across the cancer journey

The cancer journey

Better cancer services every step of the way



Electronic Symptom Assessment

The Evolution of Symptom Management on ISAAC



ESAS

Edmonton Symptom Assessment System

PRFS

Patient-Reported Functional Status

New PROs

Addition of Patient-Reported Outcome Measures

Cancer Care Ontario
Action Cancer Ontario

Edmonton Symptom Assessment System (ESAS) (4)

Please circle the number that best describes how you feel NOW.

No Pain	0	1	2	3	4	5	6	7	8	9	10	Worst Possible Pain
No Tiredness (Drowsiness + lack of energy)	0	1	2	3	4	5	6	7	8	9	10	Worst Possible Tiredness
No Drowsiness (Drowsiness + feeling sleepy)	0	1	2	3	4	5	6	7	8	9	10	Worst Possible Drowsiness
No Nausea	0	1	2	3	4	5	6	7	8	9	10	Worst Possible Nausea
No Lack of Appetite	0	1	2	3	4	5	6	7	8	9	10	Worst Possible Lack of Appetite
No Shortness of Breath	0	1	2	3	4	5	6	7	8	9	10	Worst Possible Shortness of Breath
No Depression (Feeling sad)	0	1	2	3	4	5	6	7	8	9	10	Worst Possible Depression
No Anxiety (Feeling nervous)	0	1	2	3	4	5	6	7	8	9	10	Worst Possible Anxiety
Not Walking (Walking + how you feel about)	0	1	2	3	4	5	6	7	8	9	10	Worst Possible Walking
Other Problem (for example constipation)	0	1	2	3	4	5	6	7	8	9	10	Worst Possible

ESAS
Action Cancer Ontario

Completed by (check one)
 Patient
 Family caregiver
 Health care professional caregiver
 Computer-assisted

DO NOT DRAW ON REVERSE SIDE

Cancer Care Ontario
Action Cancer Ontario

ISAAC Interactive Symptom Assessment and Collection

PRFS

Activities & Function:

Over the past month I would generally rate my activity as:

- 0 - Normal with no limitations
- 1 - Not my normal self, but able to be up and about with fairly normal activities
- 2 - Not getting up to most things, but in bed or chair less than half the day
- 3 - Able to do little activity & spend most of the day in bed or chair
- 4 - Pretty much bedridden, rarely out of bed

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ISAAC Interactive Symptom Assessment and Collection

Lack of energy

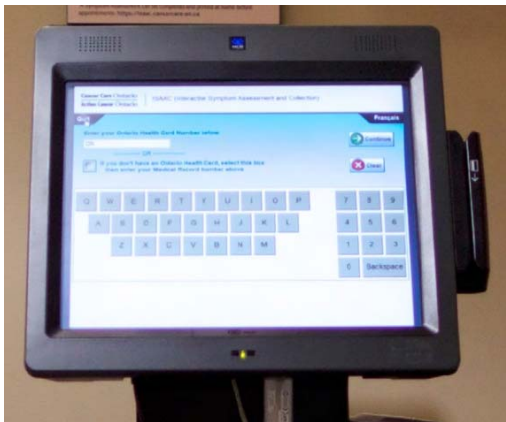
How big a problem, if any, has lack of energy been for you in the LAST FOUR WEEKS?

- 0 - No problem
- 1 - Very small problem
- 2 - Small problem
- 3 - Moderate problem
- 4 - Big problem



Interactive Symptom Assessment and Collection (ISAAC)

- ISAAC is an easy-to-use, standardized and secure web-based tool accessible to both patients and clinicians
- Developed and hosted by Cancer Care Ontario
- CCO supports the application for participating hospitals



- Primary patient access point:
 - Kiosks/tablets at hospitals
 - Personal computer at home (with internet connection)

Lessons Learned – Regional Implementation

Administrative Level	<ul style="list-style-type: none">i. Leadership and supportii. Integration of this work with other work in the organization <hr/>
Clinician Level	<ul style="list-style-type: none">i. Physician and clinician and team engagement and buy inii. Team-based approach but individual accountabilityiii. Tools required to help the team respond <hr/>
Patient Level	<ul style="list-style-type: none">i. Need to be engaged in the process (all stages from selection of measure to response)ii. Coaching/support on how to complete surveyiii. Education on self management of symptoms <hr/>

ISAAC Use in Ontario

Over **4.0 million** assessments in the ISAAC database to-date

167,569 unique patients were screened with ISAAC in 2014



Over **30,000** patients are screened every month

Established in **34** Partner Hospitals

Established in **14** Regional Cancer Centres

325 ISAAC kiosks have been implemented across Ontario to-date



Clinicians say:

"This is helpful in picking up new and arising symptoms immediately."

Current State of ISAAC

**ISAAC mainly used in
Regional Cancer Centres and
partner hospitals**

**New functionalities have been
created to support iPad
tablets as mobile kiosks**

**New Patient Reported
Outcome Measures have been
added to ISAAC**

**Growing emphasis on
usability and reliability as
strategic opportunities for
investment**

Improving ISAAC to Meet User Needs

Performance Requirement	Activity to Support Performance Requirement
Reliable	<ul style="list-style-type: none">• Development to ensure higher availability of ISAAC to users
Usable	<ul style="list-style-type: none">• Addressing barriers identified by end users
Mobile	<ul style="list-style-type: none">• Development of Mobile ISAAC for FNIM (First Nations, Inuit, Metis) populations is complete• Development of Responsive Web platform is under way
Integration with Electronic Health Records	<ul style="list-style-type: none">• 27/48 sites have ISAAC HL7 messages integrated to eMR
Integration with Hospital Registration Systems	<ul style="list-style-type: none">• ADT integration to ISAAC

Structures to Support Implementation & Operations

- Provincial ISAAC Application User Group
- CCO ISAAC dedicated mailbox for issues/tech support/enhancement requests
- Application Enhancement Request Process
- CCO Product Management and Implementation teams

Questions



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