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

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*
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
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

i. Leadership and support
ii. Integration of this work with other work in the organization

Clinician Level

i. Physician and clinician and team engagement and buy in
ii. Team-based approach but individual accountability
iii. Tools required to help the team respond

Patient Level

i. Need to be engaged in the process (all stages from selection of measure to response)
ii. Coaching/support on how to complete survey
iii. Education on self management of symptoms
**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
- **Established in 14 Regional Cancer Centres**
- **Established in 34 Partner Hospitals**
- **Over 30,000 patients** are screened every month
- **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

<table>
<thead>
<tr>
<th>Performance Requirement</th>
<th>Activity to Support Performance Requirement</th>
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<tbody>
<tr>
<td>Reliable</td>
<td>• Development to ensure higher availability of ISAAC to users</td>
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<tr>
<td>Usable</td>
<td>• Addressing barriers identified by end users</td>
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<tr>
<td>Mobile</td>
<td>• Development of Mobile ISAAC for FNIM (First Nations, Inuit, Metis) populations is complete</td>
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<td>• Development of Responsive Web platform is under way</td>
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<td>Integration with Electronic Health Records</td>
<td>• 27/48 sites have ISAAC HL7 messages integrated to eMR</td>
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<td>Integration with Hospital Registration Systems</td>
<td>• ADT integration to ISAAC</td>
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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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