



Symptom screening improves patient and healthcare system outcomes: implementing the evidence with e-IMPAQc

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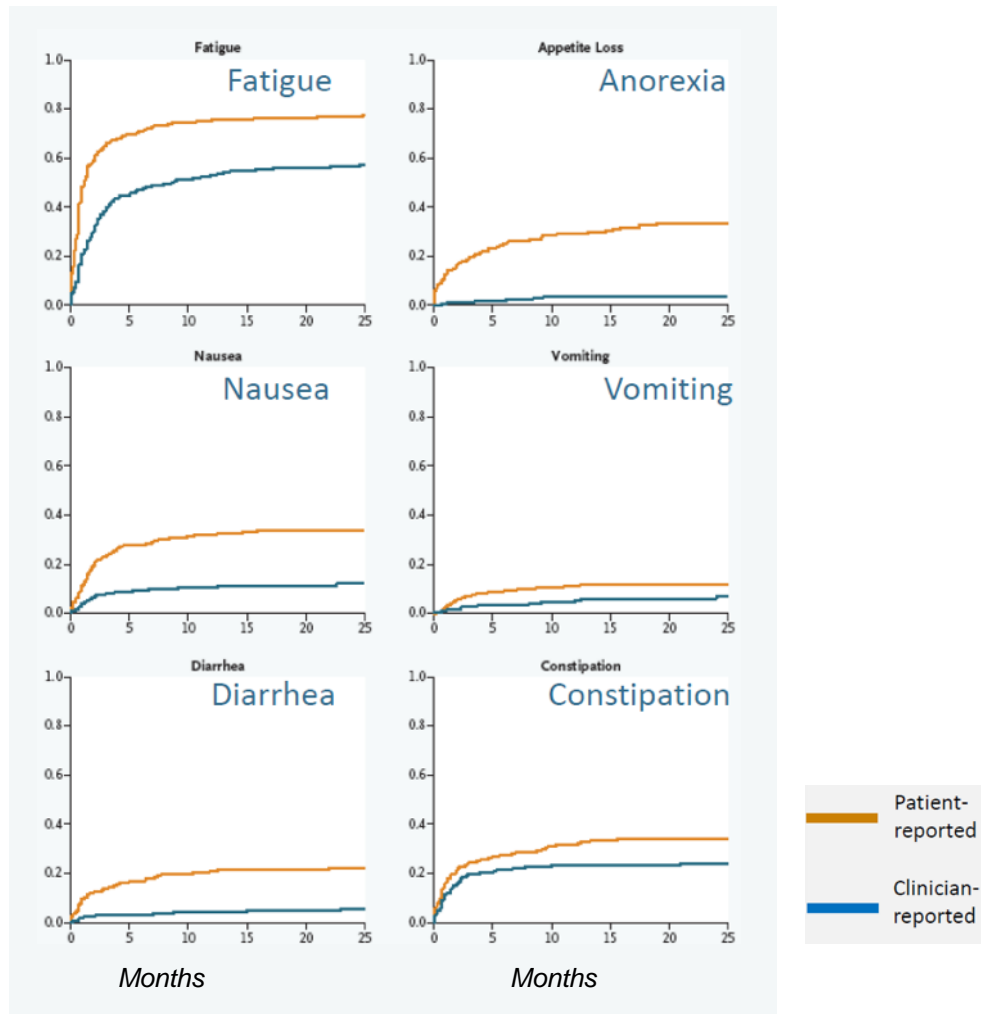
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AGENDA

1. Significance and evidence for symptom screening
2. e-IMPAQc screening program
3. Summary of results to date

The challenge: Patients' symptom burden underestimated in clinical practice



Basch, E. NEJM 2010; 362:865-869



Underestimation of patients' subjective experiences of symptom severity might lead to preventable morbidity, which is costly to both the patient and the health care system

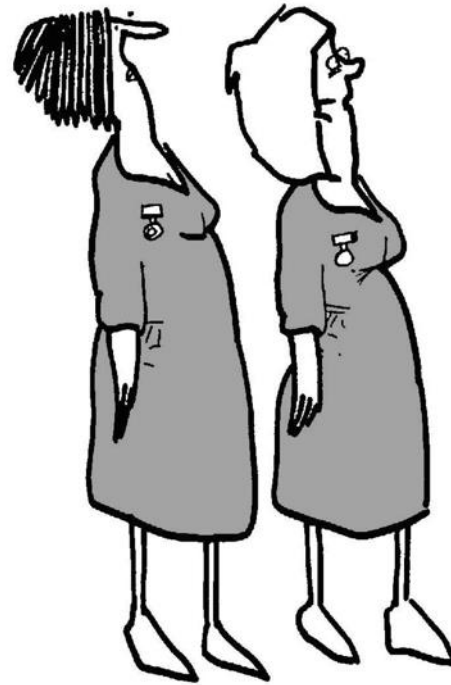


The solution: We need to get the information directly from patients

- Patient-reported outcomes (PROs) data often include QOL, physical symptoms (e.g., pain, fatigue), and psychological symptoms (e.g., distress, anxiety)
- PROs are typically collected using validated questionnaires

Edmonton Symptom Assessment System: (revised version) (ESAS-R)												
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 (Tiredness = 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 (Depression = feeling sad)	0	1	2	3	4	5	6	7	8	9	10	Worst Possible Depression
No Anxiety (Anxiety = feeling nervous)	0	1	2	3	4	5	6	7	8	9	10	Worst Possible Anxiety
Best Wellbeing (Wellbeing = how you feel overall)	0	1	2	3	4	5	6	7	8	9	10	Worst Possible Wellbeing
No _____ Other Problem (for example constipation)	0	1	2	3	4	5	6	7	8	9	10	Worst Possible _____
Patient's Name _____											Completed by (check one):	
Date _____ Time _____											<input type="checkbox"/> Patient	
											<input type="checkbox"/> Family caregiver	
											<input type="checkbox"/> Health care professional caregiver	
											<input type="checkbox"/> Caregiver-assisted	

What is the evidence for the impact of PRO screening programs?



Do you remember when all we had to do was look after people?



The evidence: Many systematic reviews and meta-analyses.....

Strong, consistent evidence	improved patient-provider communication and patient satisfaction
Moderate evidence	PRO data in clinical care generally associated with improved symptom management, including early detection and monitoring of symptoms and symptom-related actions by clinicians, and reduced symptom prevalence and severity (effect sizes variable)
Weaker evidence	impact on patient outcomes such as quality of life (effect sizes mostly small)
Minimal evidence (neglected area)	impact on health service utilisation, eg ED presentations, chemotherapy completion and survival
No integration	with EMR (in oncology); no integrated systems adopted as part of routine care in Quebec

Components of effective PRO screening programs



**Regular
systematic
screening**



**PRO data fed
back to clinicians**

- Actionable information
- Cross-sectional and longitudinal trends



Real-time alerts



**Follow-up
care**

- Not necessarily referrals!



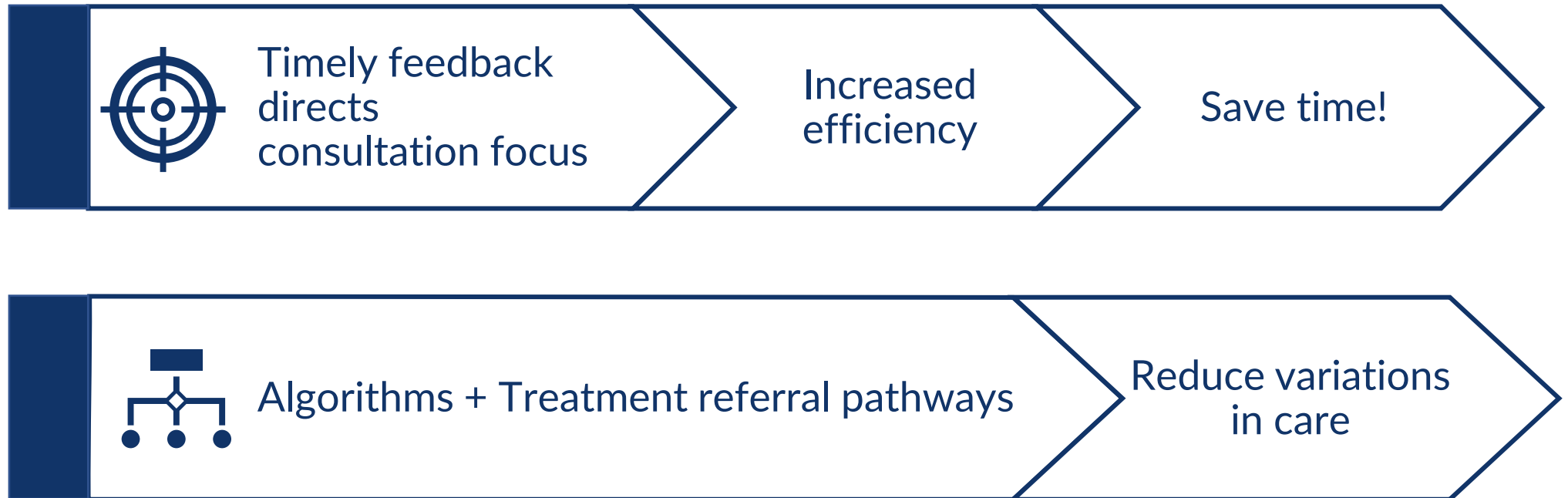
The use of electronic platforms

To facilitate patient screening, the use of electronic platforms is considered the preferred method because of:

- ✓ Its general acceptance by patients
- ✓ Versatile use (clinical and non-clinical settings)
- ✓ Its efficiency in translating data into usable formats for clinicians and patients
- ✓ Its ability to create clinical alerts
- ✓ Its ability to integrate data into electronic records.

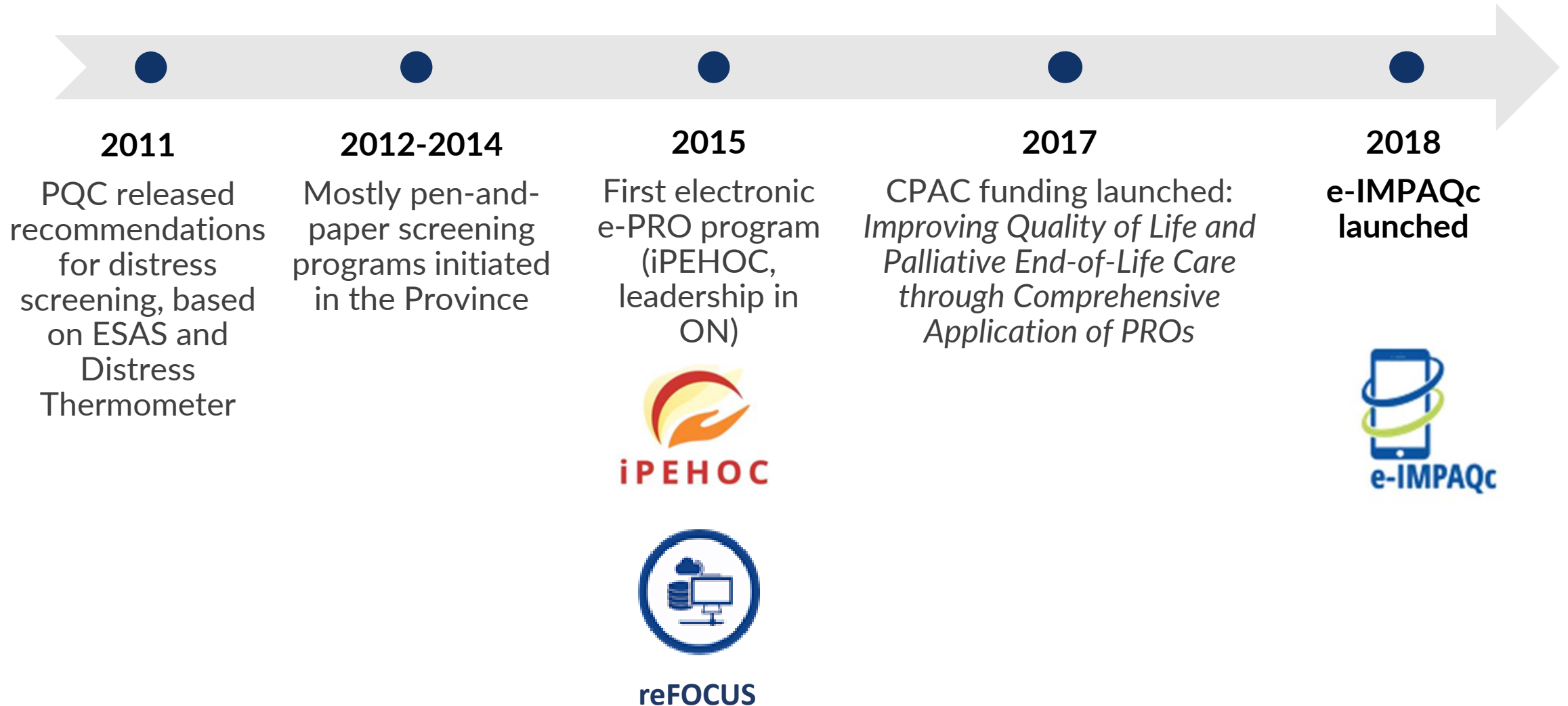


Use PROs to work “differently”, not more





What are we doing in Quebec in oncology?





Objective of e-IMPAQc

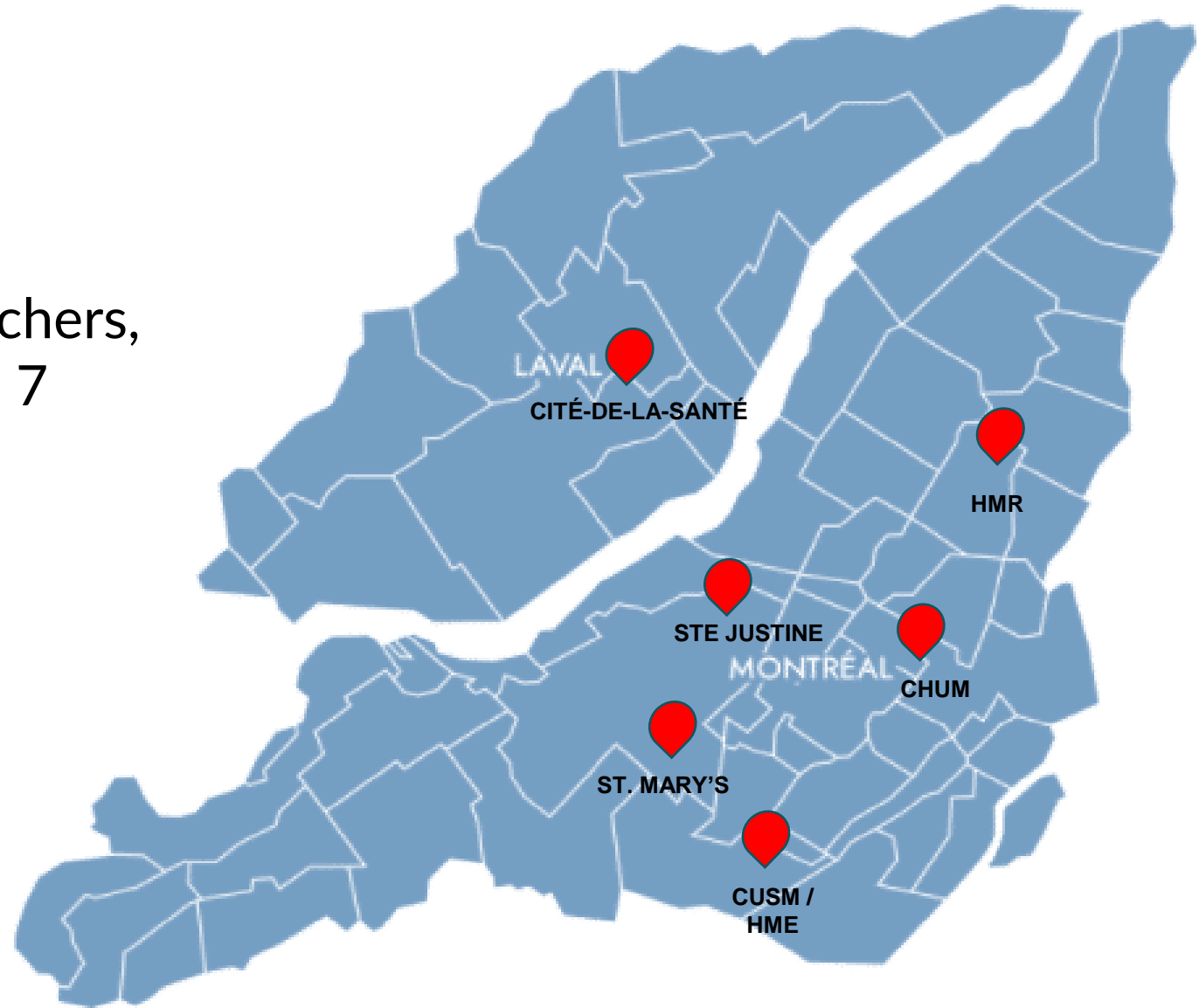
Large-scale deployment of a symptom screening and management program for cancer patients and their caregivers using electronic platforms



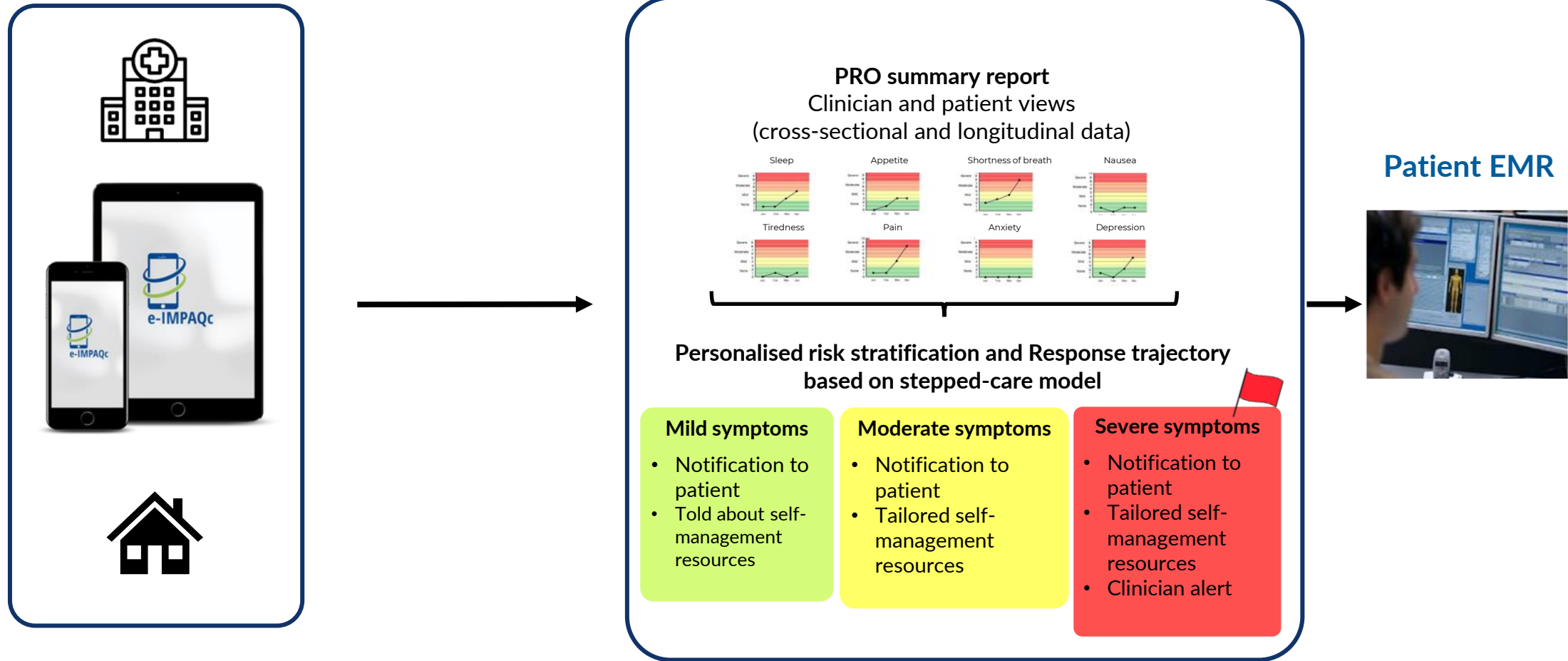


Co-development of e-IMPAQc

49 clinicians, managers, researchers,
patients, and caregivers across 7
centres



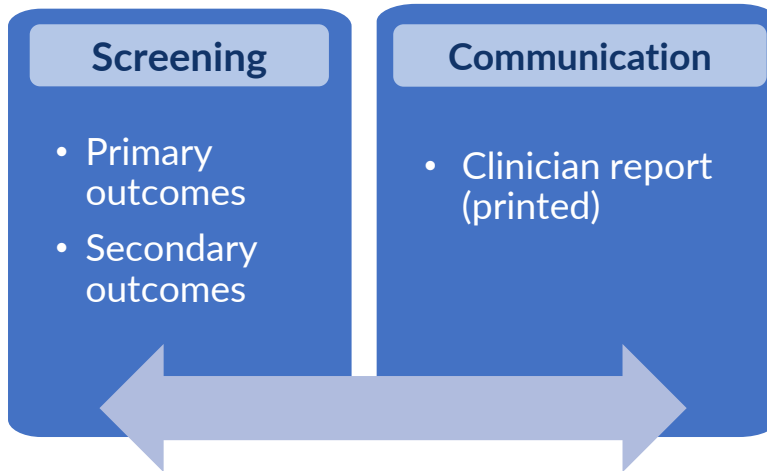
Overview of the components of e-IMPAQc



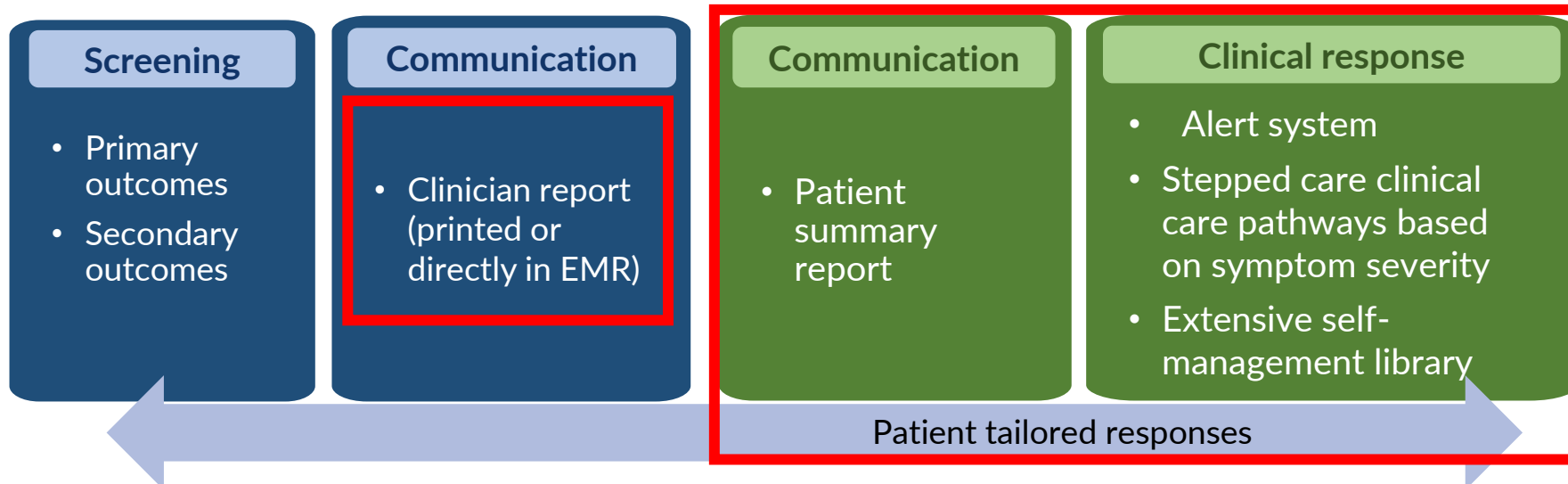


Added value of e-IMPAQc

Many screening programs



e-IMPAQc

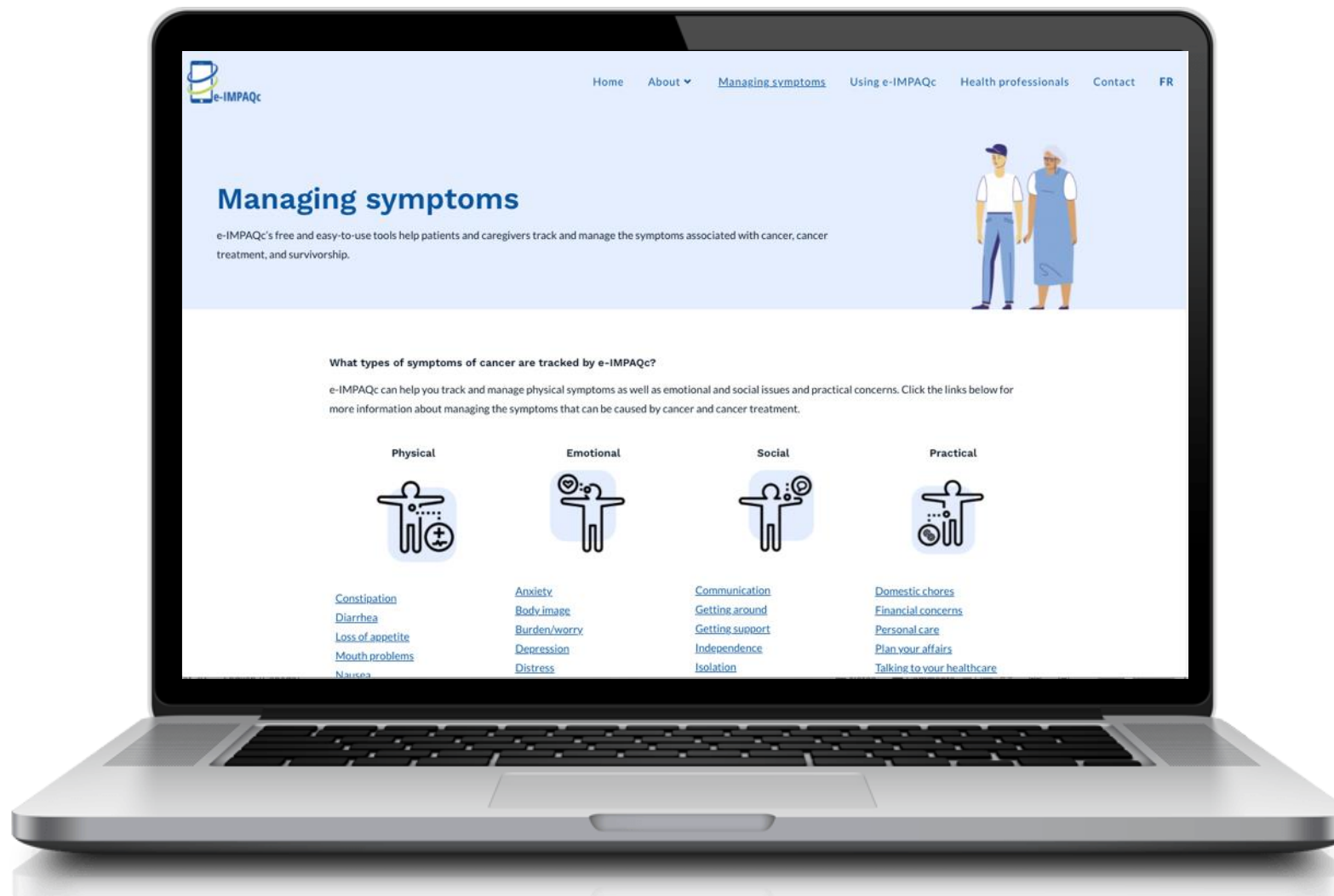


Increased symptom management through **greater patient engagement**



Our resources are available!

Visit e-impaqc.com/managing-symptoms



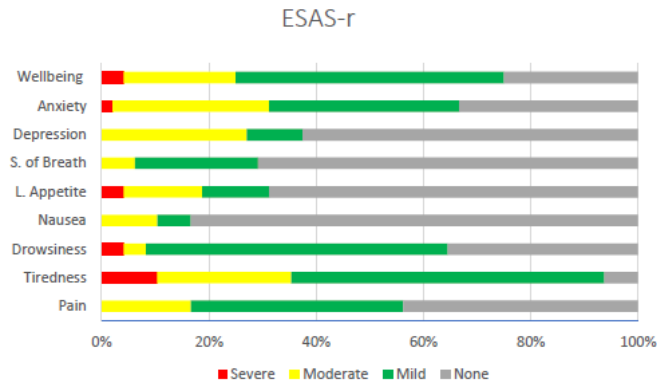


e-IMPAQc MUHC Screening Dashboard

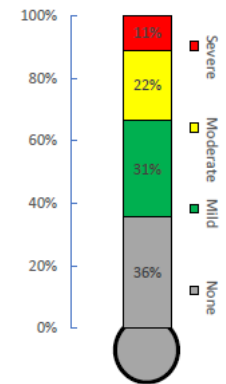
November 2020 – July 2021

- 21 unique patients screened
- 6 new patients screened since last period
- 48 total screenings

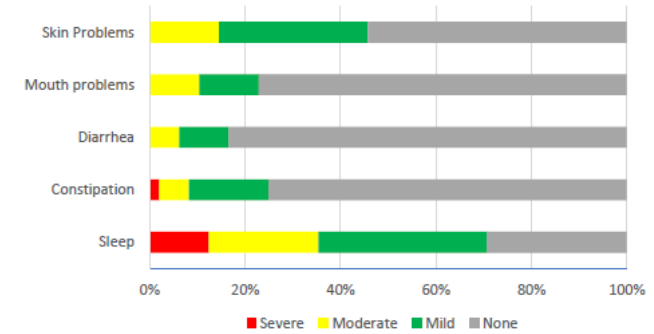
Severity of Symptom Burden



Distress Thermometer

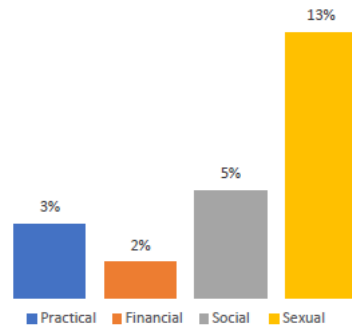


Additional ESAS Questions

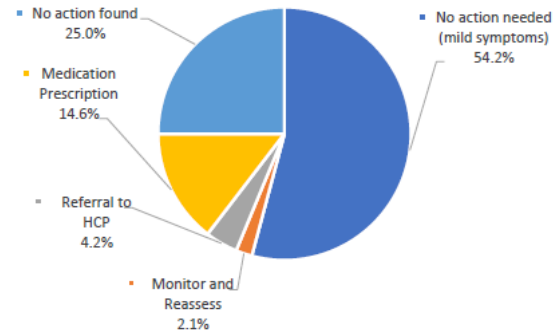


Prevalence of Symptoms

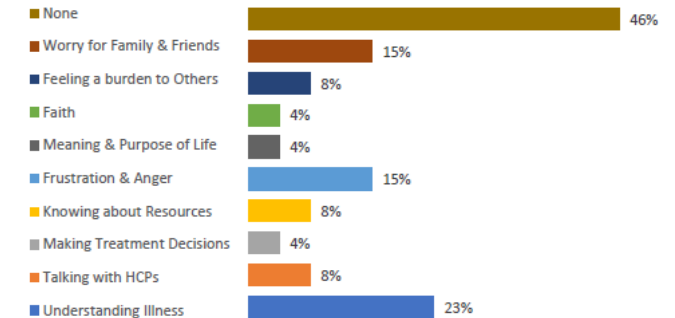
Prevalence of SDI Indicators



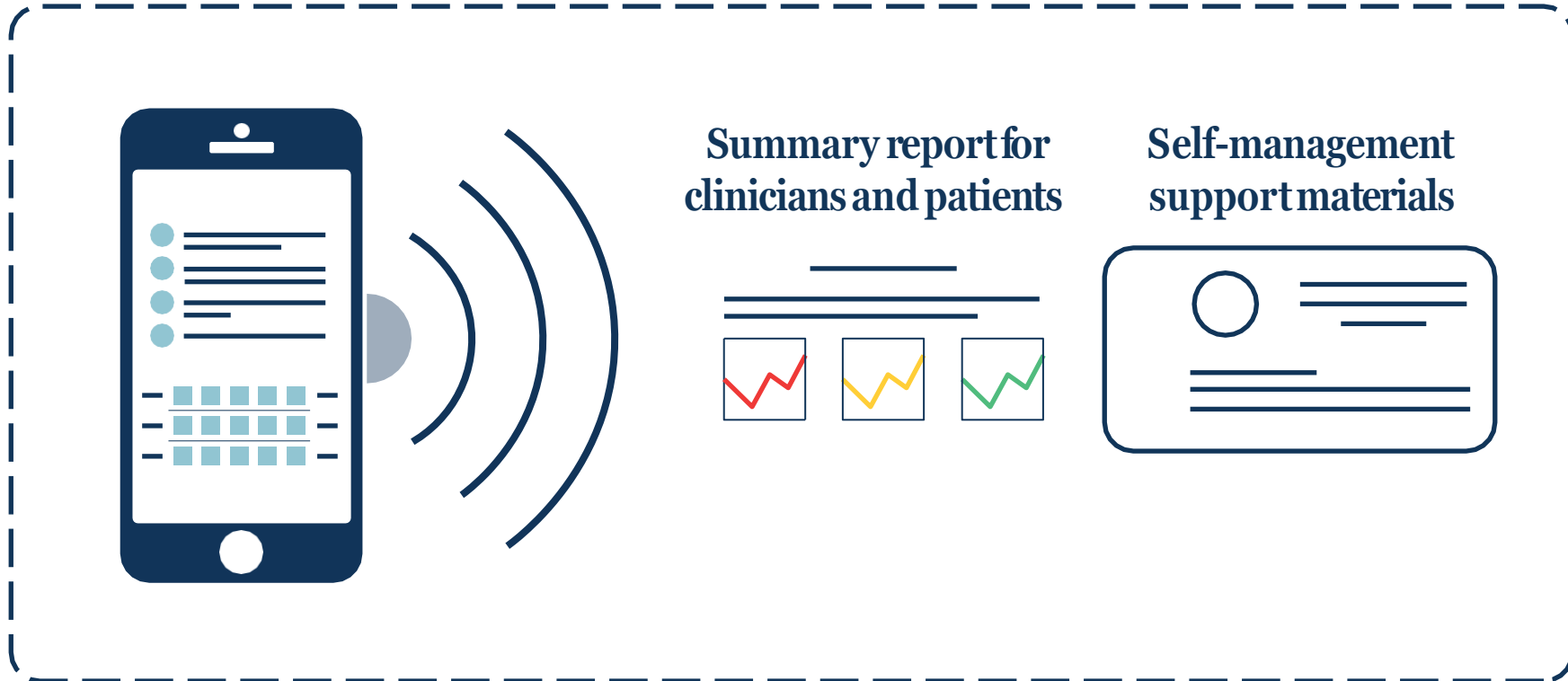
Follow-up Post Screening



Prevalence of Selected CPC Symptoms



Digital platform selected by participating hospitals





e-IMPAQc Pilot Patient Feedback

Patients reported having had an easier time navigating their cancer care through **symptom tracking and educational materials.**

e-IMPAQc supports a more **transparent and smoother treatment delivery.**

e-IMPAQc Pilot Patient Feedback

Benefits to patients

reducing
feelings
of anxiety

offering
reassurance

“[e-IMPAQc] is so much less stressful. Like I have everything ‘in the palm of my hand’”

“I think it was magnificent that I had this. I wouldn’t be able to go without it”



e-IMPAQc Pilot Patient Feedback

Self-management Materials

responding to
the right
questions

providing
a plan of
action



*“It gave me a possibility of what to do,
like an action plan”*

*“It was just more like a reassurance that I
was OK, you know, that it was normal”*

e-IMPAQc Pilot Patient Feedback

Healthcare Professional use of patient screening results

facilitating
conversations

optimizing
appointment
time

“[the doctor] was fully versed on what I had reported in the questionnaire and I thought wow, this works really well”

“And [he] explained why, it said that there was a concern with one of the answers to my questions, which I thought you know how great that is.”



e-IMPAQc Pilot Patient Feedback

Patient Summary Reports

giving a sense
of ownership
over their care

normalizing
symptoms



*“Summary reports helped me to know
what is normal, which is abnormal”*

*“I liked seeing the visual, I liked having it in
my hand... I didn’t have to beg for paperwork
or my history or anything”*

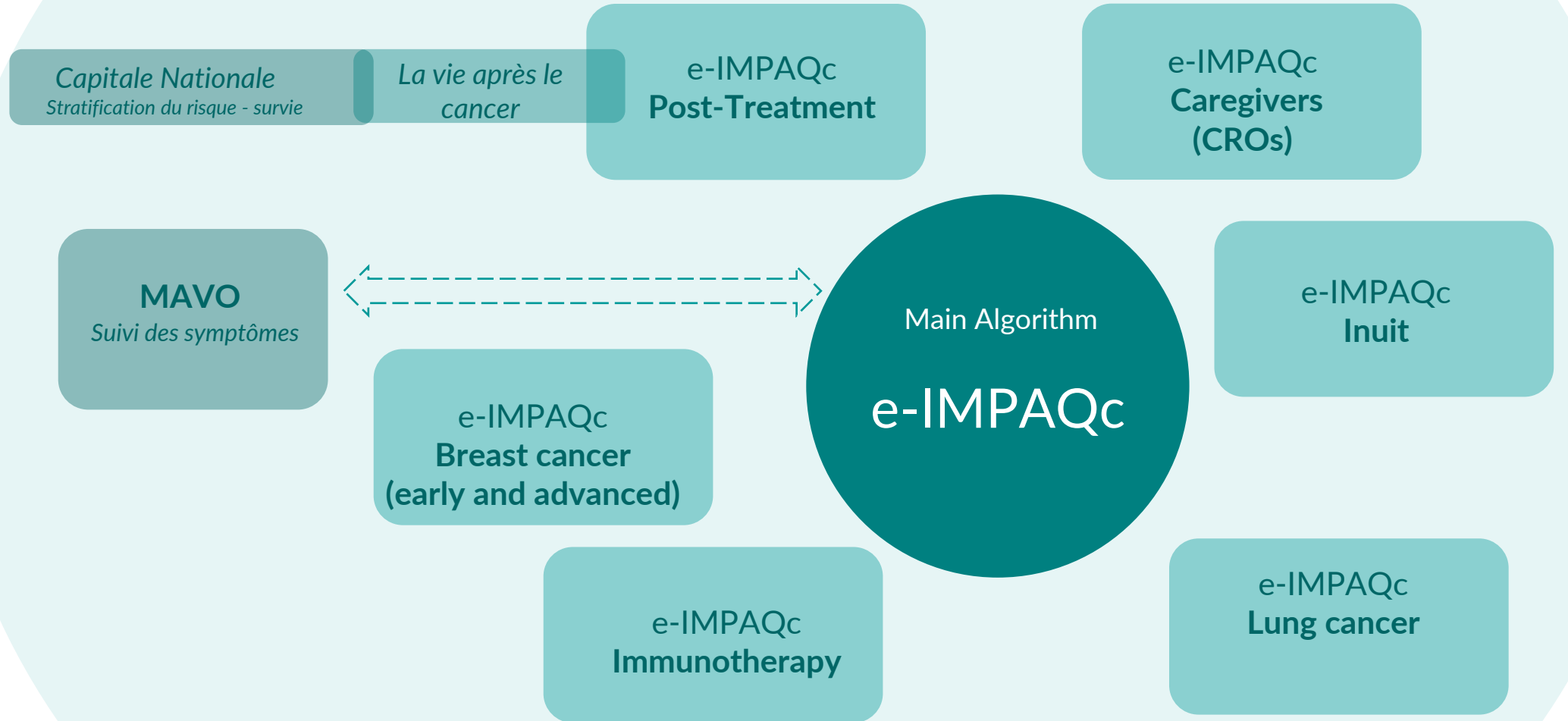
e-IMPAQc Pilot Patient Feedback

Suggested improvements were made by patients to:

- **simplify the process of registration**
- **additional resources that could be included in the materials offered**
- **app features that would improve the functionality of the application.**



e-IMPAQc algorithms and collaborations



Platforms

DART

OPAL

Telehealth

Other mobile
platforms

Other web-based
platforms



Relevance & future outlook

Systematic collection of PROs places **patient-centered care** at the forefront of cancer care

The fluctuation of symptoms across the trajectory of care can be more easily identified with PROs

PRO screening reports potentially improve co-ordination of care

The use of PROs in cancer care can not only **improve symptom severity** and the process of care but also treatment adherence and health-related outcomes such as **quality of life**

CONTACT



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Symptom tracking & management to improve cancer care

e-IMPAQc helps patients and caregivers at cancer centres across Quebec track and manage their physical and emotional symptoms and practical challenges and communicate these to their healthcare team using mobile technology.

