Expanded Prostate Cancer Index Composite for Clinical Practice (EPIC - CP) –

Pilot results

![Ontario logo - Cancer Care Ontario]

Outline

1. EPIC-CP Background

2. EPIC-CP Pilots - Phase I and II

3. EPIC Pilot Phase II Results

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EPIC-CP Background and Context

- Currently, ESAS-r is being used in cancer centres as the standard for symptom screening to inform clinical care

  - While ESAS-r is a useful tool for **generic** symptom screening, it does not capture disease-specific concerns or the effects of specific treatments

- EPIC was selected to address the **unique needs** of men with prostate cancer

- EPIC-CP is a 16-item instrument specifically designed for men with prostate cancer that measures symptoms such as:

  - Urinary incontinence
  - Urinary irritation
  - Bowel incontinence
  - Sexual health dysfunction
  - Hormonal
  - Health-Related Quality of Life (HRQOL)

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EPIC Phase I Pilot

- Conducted in 2012 to test the long-form EPIC measure (26 items) for feasibility and acceptability in one Ontario cancer centre (Kingston)

- Results indicated that:
  - EPIC was endorsed and accepted by both patients and clinicians in radiation review clinics,
  - and that the prostate-specific domains of EPIC were seen as a strength

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EPIC-CP Phase II Pilot

- In 2014, funding was provided by Cancer Care Ontario to fund an expanded Phase II Pilot **evaluation of EPIC-CP**

- EPIC-CP was implemented in four cancer centres across Ontario:
    - Princess Margaret Cancer Centre (PMCC)
    - Cancer Centre of South Eastern Ontario (CCSEO)
    - Carlo Fidani Peel Regional Cancer Centre, Trillium Health Partners (THP)
    - Grand River Regional Cancer Centre (GRRCC)

- EPIC-CP was implemented in consult and follow-up clinics in radiation oncology and surgical oncology, as well as treatment review

Data collection & analysis:

- Semi-structured, qualitative interviews were conducted with a convenience sample of practitioners

- Each patient recruited to use the EPIC-CP tool was also asked to evaluate their experience using the Patient Exit Survey (PES)

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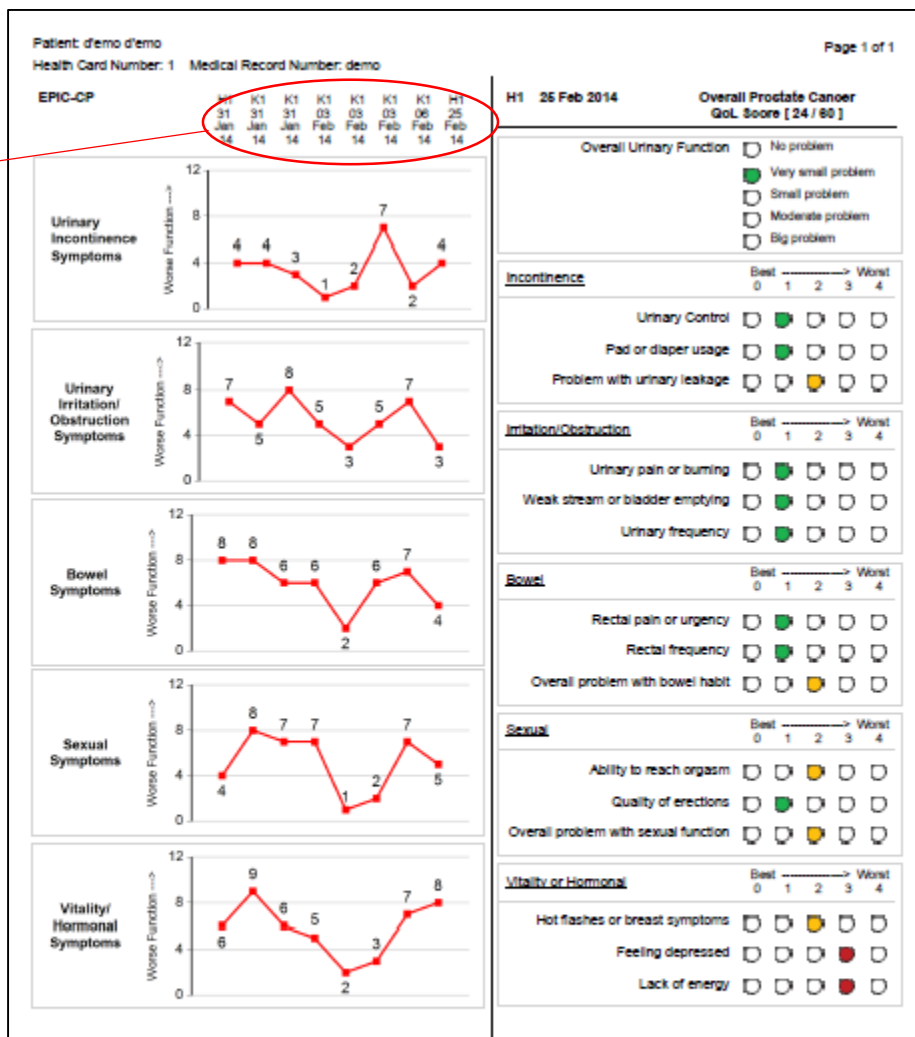
EPIC-CP Phase II Pilot – Data Output

K: Kiosk
H: Home
P: Paper

EPIC-CP histograms

Scores for the 5 domains of EPIC-CP:
- Urinary incontinence
- Urinary irritation/obstruction
- Bowel function
- Sexual function
- Vitality/hormonal

Domain scores are calculated by adding scores of all questions in the domain (seen on right)

EPIC-CP scores for each domain by question

Colours indicate the following:
- **Green** = positive scores
- **Yellow** = neutral score (probe further)
- **Red** = negative scores, immediate action necessary

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EPIC-CP Phase II Pilot Results

Demographics:

- Total of 287 complete Patient Exit Surveys were collected from the four cancer sites

- Majority of the sample of respondents were between the ages of 60 and 79 (77%) and had completed college, university or trade school (46%).

- most respondents were not undergoing any hormone therapy (74%)

- Most respondents (40%) were surveyed while in the radiation follow-up phase of their treatment

Table 1 - Overall demographic information for patients who completed the PES (n=287)

	Total n (%) (N=287)
Ages	
30-49	1.4% (4)
50-59	17.4% (50)
60-69	38.7% (111)
70-79	38.3% (110)
80 and above	4.2% (12)
Marital status	
Married/Life partner	78.0% (224)
Single, never married	4.5% (13)
Divorced/ Separated and Widowed	15.7% (45)
Other	1.7% (5)
Highest Education level	
Missing	0.3% (1)
No formal education	0.7% (2)
Completed public or grade school/Less than high school (some high school)	10.4% (30)
Completed high school	13.2% (38)
Some college (attended but not complete)	13.6% (39)
Completed college or university/Completed technical school (apprenticeships)	46% (132)
Post-graduate degree (i.e. PhD)	15.7% (45)
Hormone therapy	
Missing	1.4% (4)
No	74.2% (213)
Yes	24.4% (70)

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EPIC-CP Phase II Pilot Results

Demographics:

- Overall percentage completion of all survey items were high, ranging from 90.5% to 99.5%

- Sexual health completion rates were among the lowest scores, ranging from 90.5% to 92.0% , but far exceeded expectations

Table 2 – Percentage completion of the EPIC-CP survey items (all sites, N=937)

Questions on EPIC-CP	Total n (%) (N=287)
Ability to reach orgasm	90.5% (848)
Feeling depressed	98.9% (927)
Hot flashes or breast symptoms	96.9% (908)
Lack of energy	98.6% (924)
Number of pads or diapers used	98.9% (927)
Overall problem with bowel habit	99.5% (932)
Overall problem with sexual function	92.0% (862)
Overall urinary function	99.1% (929)
Problem with urinary leakage	99.1% (929)
Quality of erections	90.1% (852)
Rectal frequency	99.1% (929)
Rectal pain or urgency	99.3% (930)
Urinary control	99.1% (929)
Urinary frequency	99.0% (928)
Urinary pain or burning	98.5% (923)
Weak stream or bladder emptying	98.9% (927)

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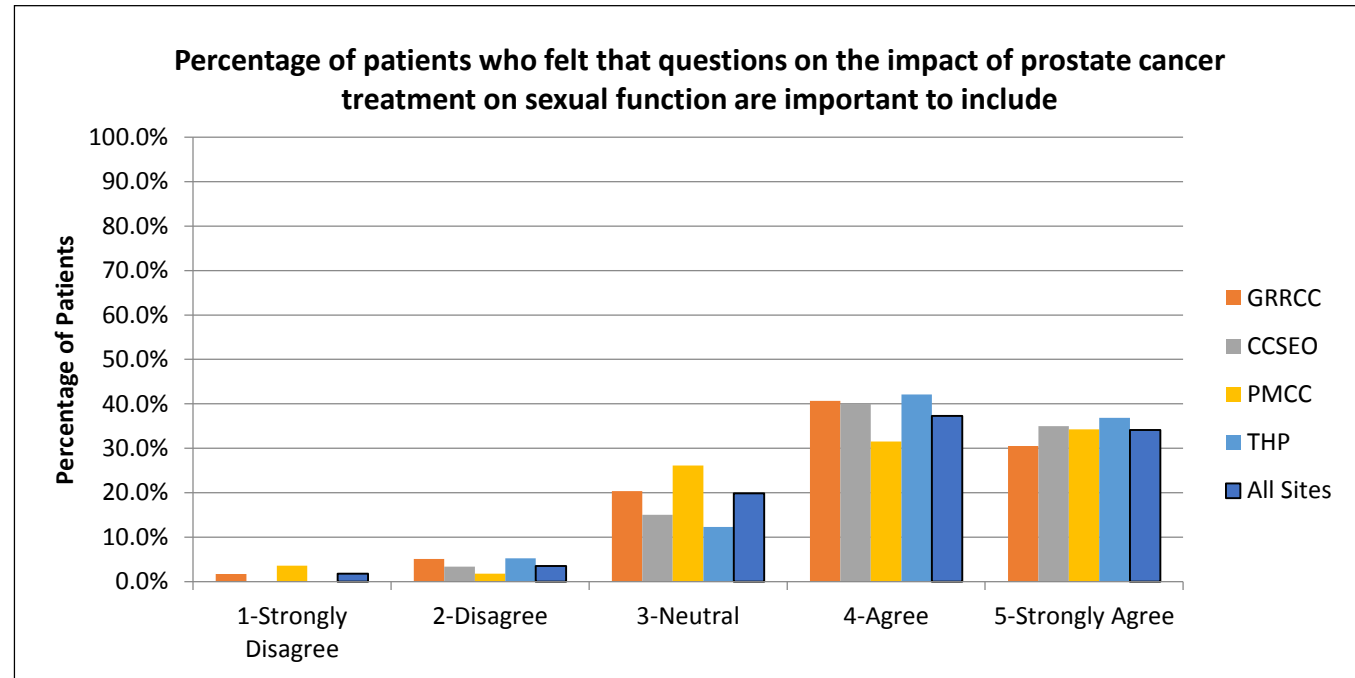
EPIC-CP Phase II Pilot Results

Common themes include the following:

- EPIC-CP fostered person-centred communication and discussion of sensitive topics

- EPIC-CP assisted in standardizing the assessment and facilitated customization of the treatment plan by targeting problems identified in the measure

- EPIC-CP helped to inform the understanding of patient experience of prostate cancer treatment effects for routine care

- The comparison of EPIC-CP and ESAS-r in prostate cancer patient clinical practice

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EPIC-CP Phase II Pilot Results

EPIC-CP fostered person-centred communication and discussion of sensitive topics

- Clinicians and patients both reported that the EPIC-CP tool facilitated discussions regarding sensitive treatment effects such as urinary and sexual dysfunction

- 71.4% of patients agreed or strongly agreed that questions regarding the impact of prostate treatment on sexual health were important to include in order to facilitate discussion with clinicians

- 65.5% of patients agreed or strongly agreed that completing the EPIC-CP questionnaire helped them participate more in discussions regarding their care

Percentage of patients who felt that questions on the impact of prostate cancer treatment on sexual function are important to include

Legend: GRRCC, CCSEO, PMCC, THP, All Sites

X-axis: 1-Strongly Disagree, 2-Disagree, 3-Neutral, 4-Agree, 5-Strongly Agree

Y-axis: Percentage of Patients (0.0% to 100.0%)

"Oh, all the time. Absolutely. Every time it was a really good tool to sit down and actually focus the discussion on the things that were pertinent to their particular situation. And you could bring up stuff…because they had reported it I could say to them more easily, "I see you're having issues with…can you tell me about it" and then pull the information I needed to know how to treat them".

- Clinician

EPIC-CP Phase II Pilot Results

EPIC-CP assisted in standardizing the assessment and facilitated customization of the treatment plan by targeting problems identified in the measure

- Clinicians mentioned EPIC-CP questionnaire was a bit subjective, but was seen as a strength

- Tool empowered patients to tell their story and experience

- EPIC-CP helps to tailor visit according to patient score

- When questionnaire is completed prior to appointment, it improved overall clinic efficiency

"I guess prior to EPIC, the questions I tended to ask patients are quite random…Now that there is EPIC we actually have something to go by and know that there are issues that we need to cover with them…it is helpful to remind us that we do have to see these patients that do have concerns or problems based on their scores…we have got the printout to see they do need something addressed". – Clinician
- Clinician

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EPIC-CP Phase II Pilot Results

EPIC-CP helped to inform the understanding of patient experience of prostate cancer treatment effects for routine care

- PES reported that 34.5%, 34.8% and 20.6% of patients thought their experience completing the EPIC-CP questionnaire was good, very good and excellent, respectively

- 62% of patients reported feeling more satisfied after their appointment with the addition of the EPIC-CP, while only 2.4% of patients voiced that they were annoyed that they had to complete the EPIC-CP questionnaire

Overall patient experience completing the EPIC-CP questionnaire
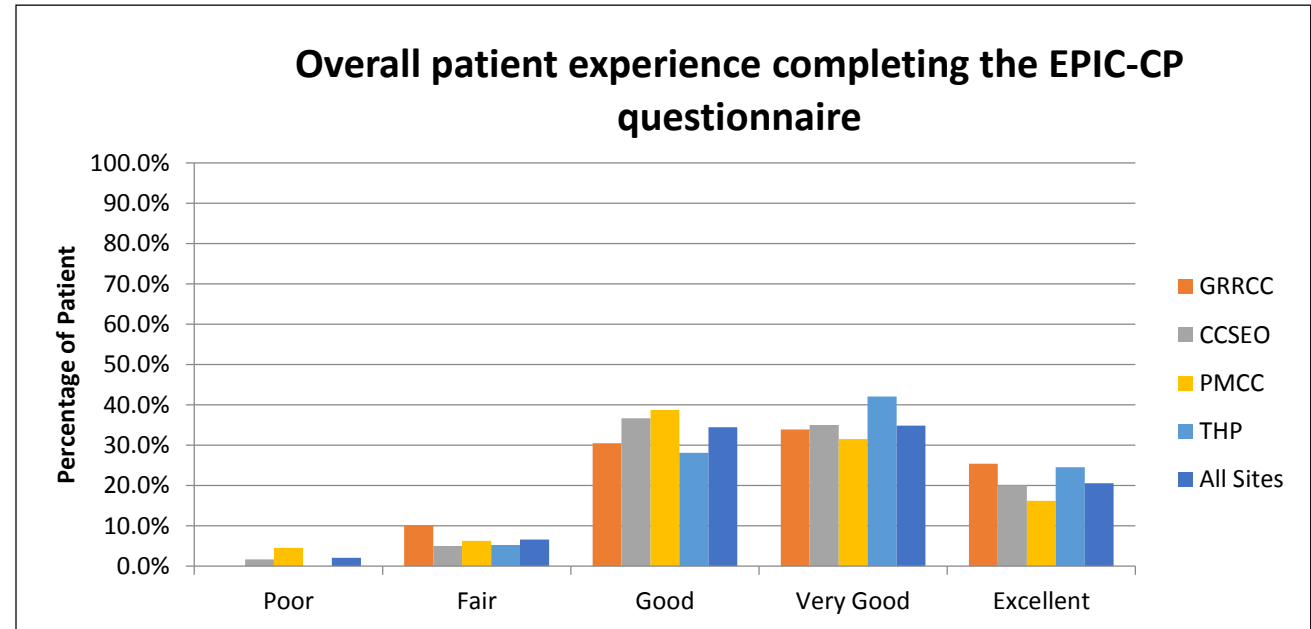
"...so the gentlemen in their 50s and 60s are quite literate, they have iPads at home....use to a touch screen...they fly through those questions...other men are less comfortable...it took a long time... and that would be a whole other challenge if you've got someone for whom English is not their first language...they need someone to help them in the absence of a medical translator".

- Clinician

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EPIC-CP Phase II Pilot Results

The comparison of EPIC-CP and ESAS-r in prostate cancer patient clinical practice

- Depression

ESAS Depression scores		EPIC Depression Scores		
		0 – 1	2- 4	Total
	0 - 3	86.82% (718)	7.13% (59)	93.95% (777)
	4 +	0.36% (3)	5.68% (47)	6.05% (50)
	Total	87.18% (721)	12.82% (106)	100% (827)

EPIC-CP cut point detects a higher proportion of patients self-reporting depression than does ESAS

- Vitality

ESAS fatigue /tiredness scores		EPIC vitality		
		0 - 1	2- 4	total
	0 - 3	75.79% (623)	8.27% (68)	84.06% (691)
	4 +	3.65% (30)	12.29% (101)	15.94% (131)
	Total	79.44% (653)	20.56% (169)	100% (822)

EPIC-CP cut point detects a higher proportion of patients self-reporting fatigue/tiredness than does ESAS

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