Implementation of an Electronic Patient Reported Outcome system in the Prostate Clinic at the Vancouver Prostate Centre

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Background

- 15 year relative survival rate for prostate cancer (PC) is 96%.
- PC treatments can result in physical and psychological side effects that impair subsequent quality of life.
- Patient Reported Outcomes (PROMs) can identify problems, facilitate the care, and improve overall survival of cancer survivors.
- The Vancouver Prostate Centre (VPC) implemented systematic collection of electronic Patient Reported Outcomes (ePROMs) as part of the standard of care at the Prostate Clinic.
- Initially, ePROMs were collected using an iPad system, adopted from the University Health Network in Toronto, as part of a research project “Prostate Cancer Survivorship 360”, approved by the UBC Research Ethics Board (H16-02631).
- The objective of this abstract is to describe the successes and challenges encountered during the first 12 months of implementation of ePROMs in an established urology clinic.

Methods

Subjects: Between April 3rd 2017 and March 31st 2018, all PC patients at pre- and/or post-PC treatment appointments were approached at each clinic visit. Eligible patients were identified using the clinic’s electronic medical record, and after arrival and check-in, were asked to complete the ePROMs. A coordinator provided assistance with the initial profile setup on the iPad and was available as required to troubleshoot any problems.

ePROM measures on iPad:
EPIC-26
EQ-5D-5L
WHODAS 2.0
Distress Thermometer

One question each from:
EORTC QLQ-PR25
Utilization of Sexual Medicines/Devices

After the questionnaires, consent to be contacted about future prostate cancer research was requested.

Results

Between April 3rd 2017 and March 31st 2018, 621 patients were eligible to complete ePROMs over 1060 visits. 92% (572/621) of patients filled out ePROMs at least once. Figure 1 depicts the number of patients who have completed a certain number of ePROM assessments to date. Most have completed 1 or 2 ePROM assessments.

Figure 1: Number of patients completing number of ePROM assessments

Conclusions

The combination of a high percentage of participants (92%), high percentage of completed ePROMs (77%) and low patient refusal (3%) over the first 12 months of operation suggests that implementation of the system was successful.

Challenges encountered included:
- Push back by clinic staff regarding an additional step in patient work flow
- Technical difficulties with WiFi connectivity
- Need for staff to interact with each patient individually to ensure the ePROMs assessments are completed per ethics board
- Tendency for partners/family members to assist in answering ePROM questions for the patient

Mitigation strategies:
- Educate clinic staff re: survival benefits of ePROMs
- Invest in improving WiFi strength
- Meet with ethics committee to appeal requirement that patients be consented by coordinator vs electronically on iPad
- Encourage partners/family members to allow patients to answer ePROMs independently

Next steps:
- Provision real time of ePROM results to urologists prior to clinic appointment--first on paper and then by direct feed into EMR
- Display of serial data over time for patients and clinicians
- Generation of flag system for symptom complex of concern, eg suicide, spinal cord compression

References


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