Development and Implementation of a Novel Web-based Application Integrating Cancer Registry Data into Survivorship Care Plans

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Background
As advocated by the Institute of Medicine, survivorship care plans (SCP) are comprehensive plans that outline past, present, and future goals of care for cancer survivors. As of 2016, delivery of SCP to 25% of eligible patients will be mandated for cancer programs accredited by the American College of Surgeons’ Commission on Cancer (CoC). Standard 3.3; this percentage will incrementally increase to 75% by 2018 and beyond. Research suggests that cancer program readiness to implement the new standard is sub-optimal, and tools are needed to improve efficiency in generating and delivering SCP.

In January 2015, University of Kentucky Markey Cancer Control Program investigators were awarded one of four Markey Cancer Center Cancer Center Support Grants to support the design, implementation, and evaluation of a novel web-based application for prepopulating SCP templates using patient data collected by hospitals and entered into KCR’s Cancer Patient Data Management System (CPDMS). The purpose of this poster is to describe activities leading up to the application launch in June 2015 as well as preliminary evaluation findings.

Methods
In this research, informatics metrics, process evaluation measures, and qualitative data are triangulated using a case-study approach to provide iterative feedback necessary for refining and customizing the application.

Informatics metrics
- Number of plans generated, search criteria utilized, application user type, etc.

Process measures
- Webinar evaluation, pilot feedback

Qualitative data
- In-depth interviews with KCR staff, hospital registrars, nurse navigators

Results

Application Usage
As of May 2016, 759 SCP have been generated with 70% created for breast cancer (n=533), followed by 15% (n=114) created using the “generic” JF template. 315 patients have had one report generated; 121 patients have had 2-5 reports generated.

Informatics team members indicated that mapping cancer abstract data into JF’s SCP template fields required substantial expertise and time from KCR staff. The informatics team also continued to make application improvements.

Since the application’s launch in June 2015, the median number of plans created is 57 (range 23-156); there was a notable increase in SCP generation in October and December 2015 (156 and 109 plans, respectively). Of SCP generated to date, the majority (n=443, 64%) were created within one year of the patient’s date of diagnosis, aligning with overall CoC guidelines.

Conclusions
Over 700 SCPs have been generated since the launch of the SCP application in June 2015. Development of the application was a significant undertaking, but has resulted in a new method for prepopulating SCP with registry data that may ease logistical burdens that hospitals face in meeting CoC-accreditation requirements. Additional qualitative and quantitative data collection and analysis will allow us to assess trends over time and continue to make application improvements.

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