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Implementation of Survivorship Care Plans at Three Health System-Based Cancer Centers in a Rural State

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SECTION 1: BACKGROUND AND METHODS

Cancer incidence continues to increase in the United States (U.S.), with an estimated 1,685,210 new cases of cancer expected to be diagnosed in 2016.[1] Advancements in cancer care, including early detection through screening, improved treatment methods, and the development of new modalities such as targeted therapies and immunotherapy, are leading to an increase in survival rates. As of January 2016, an estimated 15.5 million cancer survivors represent 4.8% of the U.S. population.[2-3] In South Dakota (SD), an average of nearly 4,000 new cancer cases are diagnosed annually.[4] The American Cancer Society (ACS) reports 40,130 cancer survivors reside in SD, with 6.8% of SD adults that report ever having cancer.[5]

While the cancer incidence and survivorship rates in SD may be similar to the rest of the nation, SD's unique geographic and demographic landscape offers challenges in cancer survivorship care that are unlike most of the country. Access to health care services is significantly impacted by SD's rural geography. The state encompasses over 75,000 square miles and is one of the nations' most rural and frontier geographic areas. U.S. Census data showed 814,180 persons living in SD in 2010, with an average population density of 10.7 people per square mile.[6] Of the 66 counties in the state, only 8 counties are classified as metropolitan.[7] The remaining 58 counties are rural with 33 counties meeting the criteria for frontier areas, having a population density of 6 or less people per square mile.[6,8]

Approximately two-thirds of SD is designated by the federal government as a Health Professional Shortage Area (HPSA), signifying geographic disparities in healthcare access.[9] Other barriers to appropriate healthcare access include lack of insurance, with 9% of the population uninsured in 2014[10], as well as limited access to reliable transportation for low-income and elderly populations.[11] These barriers impede access to services with a quarter of the population in rural and frontier areas traveling more than 30 minutes one way to see a primary care provider and even further to see a specialist.[12] Barriers are compounded within the American Indian reservations by the lack of a reliable transportation system and a 35.1% uninsured rate.[13]

The percent of SD cancer survivors who report fair or poor health status is more than double that of South Dakotans without a cancer diagnosis (28.5% vs. 12.3%).[14] Cancer survivors may face numerous long-term and late effects from cancer treatment, including medical and psychological adversities. Furthermore, cancer survivors have an increased risk for additional cancers compared with persons without a cancer history.[15] In addition to late effects from cancer treatment, research has demonstrated that up to 60% of cancer survivors in the U.S. do not have a summary of their cancer treatment and 25% do not receive instructions for follow-up care.[16] The identified effects from cancer treatment, the challenges in receiving appropriate cancer care, and the importance of communication for follow-up care underscore the imperative to address the survivorship needs of cancer patients in SD.

Through a 3-year cooperative agreement with the Centers for Disease Control and Prevention, the SD Department of Health (SD DOH) established the SD Cancer Survivorship Program in 2015. One objective of the funding includes a focus on providing cancer survivors with a summary of their treatment, including instructions for their follow-up care once active treatment is complete. The development and implementation of survivorship care plans (SCPs) for cancer survivors is vital for meeting this objective. The three largest health systems in SD agreed to partner with the SD DOH to increase implementation of SCPs at six of their cancer centers, located across the state.

Purpose of the Project

The purpose of this project is to describe the development and implementation of cancer SCPs at three health systems' cancer centers in a rural state. Collectively, these centers serve most cancer patients residing in SD, making the partnership across the cancer centers innovative. Each of the three health systems and their affiliated cancer centers is unique in its history, culture, and infrastructure. In addition, each cancer center was at a different point in the development and implementation of SCPs at the time of this project. Therefore, a description of the processes, successes, and challenges involved in the development and implementation of SCPs at each health system provides useful insights to support the adoption of SCP's in similar low-population states or regions.

Methods

The project used an observational qualitative design. Key players for developing and implementing SCPs at each health system were interviewed at their flagship cancer centers using a structured interview.

Participants

Six cancer treatment center sites within three health systems agreed to partner with the SD Cancer Survivorship Program to increase development and implementation of SCPs in SD. A description of the health system and the associated cancer center(s) is as follows:

- Avera Health includes the Avera Cancer Institute (ACI), which provides comprehensive cancer care at six regional cancer centers and 40 outreach sites in SD and surrounding states. Four Commission on Cancer (CoC) accredited cancer centers, located in the SD cities of Sioux Falls, Aberdeen, Mitchell, and Yankton, are partners for the project. The Sioux Falls location is accredited as a comprehensive community cancer program by the CoC. The other three rural sites are accredited as community cancer programs.
- Regional Health's John T. Vucurevich Regional Cancer Care Institute (RCCI) is located in Rapid City, SD, and includes a cancer outreach clinic in Spearfish, SD. RCCI is not accredited by the CoC at this time.
- Sanford Health operates four CoC accredited cancer centers in a three state area. The Sanford Cancer Center (SCC) in Sioux Falls is accredited by the CoC as an academic comprehensive cancer program. SCC became a National Cancer Institute's (NCI)

National Community Cancer Centers Program (NCCCP) partner site in 2007. In 2014, the NCI Community Oncology Research Program (NCORP) replaced the NCCCP, and SCC remains actively involved. SCC is also certified by the Quality Oncology Practice Initiative (QOPI).

Interview Questions

The evaluation team, in collaboration with leadership from the SD Cancer Survivorship Program, developed a structured interview guide to gather information describing the SCP development and implementation processes within each facility. The interviews varied slightly between health systems in order to accommodate each system's current level of development and implementation.

To explore the processes, challenges, and successes of survivorship care plan development and implementation, this project assessed the following questions among the participating health systems:

1. How did you develop the templates for the survivorship care plan?
2. How has the process evolved since you initiated the survivorship care plan?
3. Describe how a patient is identified and then scheduled for the survivorship care plan appointment.
4. What is your current process for inputting information into the survivorship care plan template?
5. Describe how a patient receives the survivorship care plan.
6. How do you share the survivorship care plan with the patient's primary provider?
7. What have you found to be the most challenging aspects of the process of developing, populating, delivering, and then sharing the survivorship care plan?
8. Have you witnessed any evidence of how the survivorship care plan has resulted in better patient care or outcomes?
9. Is there anything else that you think would be helpful for us to know as we review your process for survivorship care plans?

Procedures

A contact person was identified from each of the three health systems affiliated with the SD Cancer Survivorship Program. The contact was invited by email to participate in an interview to gain understanding of the process of SCP development and implementation. Each site enlisted a representative or representative team from their health system to contribute. Interviews were conducted in person at each health system's cancer center headquarters. All interviews were audio-recorded and later transcribed to capture responses in their entirety. A member of the evaluation team reviewed the transcripts alongside the audio-recordings ensuring accuracy. Two members of the evaluation team separately analyzed the narratives from each health system to identify common themes. They then collaboratively reviewed their independent findings, reaching consensus on the common themes. The interview participants reviewed the narratives of their respective health system, and their feedback was incorporated.

SECTION 2: PARTNER CANCER CENTERS - PROCESSES FOR DEVELOPMENT AND IMPLEMENTATION OF SURVIVORSHIP CARE PLANS

The interviews provide insight into how each health system elected to design and employ SCPs within their cancer centers located in SD. Each of the three health systems received funding as part of their participation agreement to design and implement cancer survivorship efforts, specific to the needs of their system for the SD Cancer Survivorship Program. To capture the uniqueness among the health systems specific to initiation of SCPs, each health system's process is presented separately in narrative format. The information provided is from the perspective of the interviewed health system representatives, who from this point forward will be referenced as Health System A, Health System B, and Health System C. Health systems have been de-identified to preserve anonymity and capture differences and similarities in implementation processes. It is important to note that the three systems are in different stages of implementation.

Health System A

Multiple individuals with administrative and clinical roles form the leadership team responsible for coordinating the implementation of the SD Cancer Survivorship Program within Health System A. At the time of the interview, Health System A had already developed and implemented SCPs. All cancer types deemed curable currently receive SCPs across all cancer center sites within Health System A.

Survivorship Care Plan Development

Gathering the team. SCPs and the associated implementation teams were in place at Health System A when the partnership with the SD Cancer Survivorship Program began. In 2011, Health System A created pilot SCP templates for head and neck cancers, as well as gynecologic cancers as part of an American Recovery and Reinvestment Act (ARRA) project with NCI. A breast cancer SCP template was developed in 2014 due to the significant patient need and the professional interest of a single medical oncologist from Health System A. Subsequently, SCP templates for all cancers deemed curable were "made live" in 2015. The same SCP templates and procedures are used across all Health System A sites, with small variations in procedural execution due to local resource differences.

Survivorship care plan templates. Preparing for SCP development began when Health System A was selected by a national partner as one of a few cancer centers nationwide to participate in an evaluation of publically available SCP templates**.** The medical oncologist from Health System A, referenced above, championed the development of a SCP template for breast cancer that "gleaned the best" from all of the available SCPs in 2014. In the development stages of the breast

cancer SCP template, the oncologist solicited input from a peer group of physicians that included oncologists, radiologists, and surgeons from each of Health System A's cancer center locations. The oncologist utilized the input to develop a breast cancer SCP template that is usable across all of Health System A's cancer center locations and has been endorsed by all of the physicians. This successful strategy was subsequently employed for developing SCP templates for other curable cancer types, one by one. As the physician peer groups familiarized themselves with the process, they provided input online rather than in person. To facilitate and expedite this process, Health System A's information technology (IT) department designed an electronic portal.

A deliberate decision was made to integrate the agreed-upon SCP templates into the electronic health record (EHR) system. The team wanted a "living, breathing" document that would populate, to the greatest extent possible, with data already available. The national EHR vendor utilized by Health System A did not have SCP templates, nor did its structure allow for incorporating a SCP template that could be populated in an ongoing fashion. Other SCP templates commercially available at the time (e.g., Journey Forward) had many desired features, but were stand-alone products, so completion would have required considerable time for gathering and entering data from the EHR. Therefore, the IT department worked to facilitate EHR integration of the SCP templates in a manner that best addressed the identified shortcomings. Currently, the EHR vendor has progressed and has a more efficient structure for SCP template completion on an ongoing basis for individual patients. However, the technology to populate templates automatically with data from the patient's record remains unavailable.

The structure of the first breast cancer SCP template was rather simple. Sections were included for treatment summary, follow-up care plan, local and national resources, exercise/nutrition recommendations, the medical care plan, psychosocial recommendations, and the care team. Subsection choices were based on National Comprehensive Cancer Network (NCCN) guidelines.

The formatting and the design of the printed SCP has evolved considerably over time, with the goal of making the SCP useful to the patient while including only the essential components. Cancer center sites within Health System A and individuals who want to provide recommendations for revisions to the templates may submit suggestions electronically. A work group reviews SCP templates annually, or more frequently as needed when treatment guidelines change. This workgroup discusses suggested changes, external regulations, and clinical guidelines in order to come to consensus on revisions.

Survivorship Care Plan Creation and Delivery

Providers responsible. Health System A emphasized that providers prefer a section of the EHR called Cancer History for their ongoing documentation of patient care. Physicians, nurse practitioners, and nurse navigators are encouraged to use this section for all documentation related to a patient's cancer treatment and diagnostic testing. Due to limitations within the EHR system to automatically populate the SCP template with data from the patient's record, those who

complete individual SCPs draw their information from the Cancer History section. This saves considerable time, especially if all parties have consistently used and updated the Cancer History section. Nonetheless, it can take from 30 to 60 minutes to complete the SCP in preparation for the patient's visit.

A survivorship coordinator at Health System A creates the SCP by transferring existing information into it from the Cancer History section of the EHR. Nurse navigators may add data into the SCP as well. A nurse practitioner then reviews the SCP before the survivorship visit to ensure completion, and personalizes it by deleting all template portions not pertinent to the individual patient. If the physician will be providing the SCP to the patient, the survivorship coordinator has the physician review it first to verify accuracy.

Patient identification, scheduling, and receipt of survivorship care plan. The process begins with tumor board meetings during which a team of physicians discuss each patient in Health System A's tumor registry to determine the best course of treatment. Following these meetings, the nurse navigators share the developed treatment plans with the survivorship coordinator. It is the responsibility of the survivorship coordinator to follow each of these patients and to remain informed of active treatment completion. Patients who remain in active treatment, in particular those with Stage IV cancers with metastasis, are ineligible for SCPs. When active treatment ends, the survivorship coordinator will contact the patient to schedule a survivorship visit. Timing for the visit is one to three months after active treatment ends. If the patient declines, the survivorship visit will be scheduled at the time of the next normal surveillance visit with the physician. Patients not returning within six months receive their SCP via mail or patient portal in addition to a follow-up telephone call from the survivorship coordinator.

If the survivorship visit is a stand-alone visit, which is preferred, a nurse practitioner reviews the SCP with the patient, who receives a paper copy. As completion of this visit usually takes one to two hours, Health System A codes these visits using time based coding for billing purposes. If the physician sees the patient at a surveillance visit instead, billing is based on the surveillance visit rather than the survivorship component of the visit. The patient's primary care provider receives a copy of the SCP, via EHR for providers within Health System A, or by mailed paper copy for providers outside of the system.

Health System B

To implement the SD Cancer Survivorship Program within Health System B, a full-time staff position was created to guide the process of SCP development and implementation among the cancer centers. Health System B elected to implement SCPs in a staged process, beginning with two sites within their system and expanding to others. Health System B based this decision primarily on a staged transition to a new EHR system that was underway.

Survivorship Care Plan Development

Gathering the team. Health System B issued an open invitation across the system welcoming anyone with interest and time to participate in the template development process. Health System B described the development of each SCP used across the system as an evolving process. Health System B explored current practice within their cancer centers, revealing inconsistency. One site had originated several "home-grown templates," while the other locations used templates from Livestrong or OncoLink. Health System B then conducted a review of the literature regarding best practice specific to SCPs, identifying templates from the American Society of Clinical Oncology (ASCO) as containing the most complete recommended practices from the body of published research. Transparency throughout all the phases of template development was identified as a key component of success. Staff were asked to voice their opinions and provide feedback via an online survey. Future surveys are planned to solicit feedback on an ongoing basis.

Survivorship care plan templates. The SCPs incorporate best practice evidence and staff input, placing into one document the cancer treatment summary and the survivorship plan. Recognizing the inefficiency of the ASCO templates, which can require multiple deletion of items unrelated to a patient's treatment and survivorship, Health System B elected to capitalize on their Microsoft Word-friendly EHR system. To create an individualized SCP, the designated healthcare professional transfers relevant information from the EHR with user friendly options such as drop-down menus and free-text capabilities. The ultimate goal is for staff to be able to create a SCP within 15 minutes. In addition, as the EHR workflows improve with future software updates, the SCP templates will be updated to allow for automatic population of some of the fields within the care plan. Evaluation of the SCP process gleaned positive feedback and identified future directions for enhancements. Health System B conveyed that staff understand SCP templates are an evolving process and that they may openly suggest revisions or raise concerns in order to improve the process.

Survivorship Care Plan Creation and Delivery

Providers responsible. Health System B elected, where available, to have advanced practice providers (APP) complete and deliver the SCPs. These providers may be in the role of patient navigator or work directly with a physician. While the actual inputting of information may be considered more of a clerical role, a high degree of clinical decision making occurs during the creation of the SCP that necessitates this advanced level of provider. Additionally, since the APP delivers the SCP, knowledge of information within the plan facilitates the SCP session with the patient. In sites where no APPs are employed, a registered nurse member of the patient's care team creates the SCP and delivers it to the patient.

Patient identification, scheduling, and receipt of survivorship care plan. Patients eligible for a SCP are determined using the CoC standards and input from the providers. Ideally, the intent is

for the SCP delivery to follow the CoC guidelines (12 months post-diagnosis and no later than six months after completion of adjuvant therapy or 18 months if on long-term hormonal therapy) with the majority of these visits occurring at one of the patients' first follow-up visits. However, scheduling of the SCP is not prescriptive and is left to the judgment of the provider due to the uniqueness of each patient situation. Health System B cancer centers have the ability to make specific appointments and bill for SCP delivery; currently patients receive their SCP as part of their standard follow-up visit. Patient convenience drives this process, as many patients commute over 100 miles for this follow-up visit. Delivery of the SCP by either the physician or APP typically takes 15 to 60 minutes, though the time varies depending upon the site, provider, and patient. The SCP is shared with the patient's identified primary care provider either through the EHR or by paper copy when the provider does not practice within Health System B.

Health System C

Two staff members were designated to implement the SD Cancer Survivorship Program within the flagship cancer center of Health System C, including a health system supervisor and an EHR support staff. At the time of the project interview, Health System C was planning for SCP implementation, with a strategy to start SCPs incrementally beginning with breast cancer survivors.

Planning for Survivorship Care Plans

Health System C had no prior history of implementing SCPs, but noted that survivorship care has been "talked about" for years and that physicians are aware of survivorship care. It was expressed in the interview that despite a slow progression, Health System C is dedicated to developing and implementing SCPs, and they are "going to do it right from the bottom-up."

The physicians at this system are accustomed to dictating a detailed final note upon treatment completion. Treatment plans and follow-up care are described in physicians' dictation of the final note. Physicians base treatment plans and future care on national guidelines. The treating physician shares the final note with the patient's primary care provider. The thoroughness of the physicians' documentation in patient records was conveyed as a source of pride by Health System C.

Health System C reflected on the value the information in the final note gives to the cancer survivor. Specifically, emphasis was placed on the importance of cancer patients understanding their cancer diagnosis, knowing what they need to do to take care of themselves, and recognizing how to ensure they are receiving the best cancer care. Health System C noted that a detailed SCP would further facilitate continuity of care. An anecdote provided in the interview was of a cancer patient who was traveling from Tennessee without any medical records. The patient received a needed treatment for her cancer while she was in SD. Health System C had made the extra effort

of giving the patient a copy of her records from Tennessee as well as documentation of treatment while in SD. The patient expressed much gratitude for this simple, yet essential, gesture.

Health System C identified three steps necessary for implementing SCPs at their facility. The first step is identification of patients needing a SCP at diagnosis. The second step involves scheduling an additional "quick" appointment for the patient to discuss the SCP with their oncology healthcare professional, and the final identified step involves ensuring receipt of the SCP by the patient's primary care provider.

Survivorship Care Plan Development

Gathering the team. Health System C was in the early stages of gathering the team due to a number of unique challenges, as described further in Section 3. Preparing for SCP development began in late 2015. Shortly after, EHR support staff met in person with staff from Health System B as they had offered collaborative assistance in shaping the SCP template for Health System C. In January 2016, Health System B and Health System C took part in a collaborative web-based meeting in which Health System B shared their SCP templates and demonstrated the ways that the SCPs were populated for individual patients. As both health systems used the same EHR platform, the information was highly relevant. The proposed SCPs were presented to physicians within Health System C in May of 2016. Health System C stated that the physicians are in "preliminary discussions," but "they need more clinical input."

Survivorship care plan templates. As noted, Health System B shared the SCP templates that they had developed with Health System C. After that meeting, Health System C chose breast cancer as the initial focus for SCPs within their system.

Health System C was impressed with Health System B's SCP templates as reviewed on the web-based meeting. The ease of automatically bringing information from the EHR into the SCP template when possible, as well as the drop-down selection menus and areas for free text within the Microsoft Word template were seen as particularly helpful by Health System C. Since the collaborative meeting, Health System C spent time personalizing the breast cancer template by changing the header and providers to align with their own system. Health System C indicated plans to further "tweak" the SCP to eliminate information from the template that would not pertain to patients within their system.

Survivorship Care Plan Creation and Delivery

Providers responsible. While Health System C had not yet implemented SCPs, they believed that the cancer center's nurse practitioners would be responsible for completing the SCPs. During the collaborative meeting with Health System B's staff, the nurse practitioners stated they would prefer to complete the SCP templates, rather than nurse navigators, to ensure accuracy. It was expressed that nurses certainly could help "build" the care plan, once staging of a patient's

cancer was completed and a treatment regimen started. Nurse practitioners usually conduct a one-month follow-up appointment after treatment completion, allowing an opportunity for the patient to receive the SCP. However, if the physician conducted the follow-up appointment instead of the nurse practitioner, then the physician would likely be responsible for completing the SCP. Ultimately, Health System C believed that the provider who signs off on the SCP would be the one responsible for delivering it to the patient.

Patient identification, scheduling, and receipt of survivorship care plan. To start the process, an EHR support staff within their system would pull a list of potential patients from the EHR and go through their care plans to see who received treatment. It had not been decided yet which stages of breast cancer would be included for SCPs. Further discussion would be necessary to decide upon the timing in cases where patients continue with hormone treatment after completing chemotherapy. The nurse practitioners would schedule the appointment for a month after their final treatment appointment. Systems would need to be built into the EHR so that the follow-up visit would be continually tracked in order to reduce an oversight failure. After scheduling the follow-up appointment, the nurse practitioner could send herself an electronic reminder to start completing the SCP ahead of time. Health System C suggested that patient preferences for who gives them the SCP could be investigated before initiating the SCP development process. Specifics for billing are pending, but would most likely be based on time spent with the patient.

SECTION 3: SUCCESSES, CHALLENGES, AND SUPPORT NEEDED FOR IMPLEMENTATION OF SURVIVORSHIP CARE PLANS

The three health systems partnering in the SD Cancer Survivorship Program were each at unique phases of development and implementation of SCPs. These diverse stages of process completion offer distinct perspectives into the planning, design, and infrastructure needed to implement the SCP into practice. This section describes the successes, challenges, and support needed across the health system spectrum for the development and implementation of SCPs. The information provided is from the perspective of the representatives from each team interviewed. Again, because of the uniqueness of each health system, information is presented separately for each topic.

Successes

Health System A

Process outcomes. Health system A began with implementation of SCPs for head and neck cancer patients and gynecologic cancer patients, followed by breast cancer patients, and has since expanded their survivorship program to include all curable cancer types. Post surveys are sent to all survivorship patients, with Health System A indicating that all feedback has been positive in nature. Patients appear to be particularly grateful for recommendations and resources available for physical fitness.

Effective strategies. Health System A identified several effective strategies for success. Having a medical oncologist take the lead in developing the SCP templates and communicating them to physician peer groups (in person and on-line) for input, buy-in, and endorsement, along with the use of NCCN guidelines and consensus of physicians when revising SCPs, has led to greater acceptance of SCP process changes. Resources to fund a full-time survivorship coordinator (funding split between another grant funding mechanism and the SD Cancer Survivorship Program) and additional nurse practitioners (funded by the system) was noted as essential for ensuring the success of the survivorship program. Finally, by using the existing EHR for the SCP templates, the survivorship team has effectively achieved maximal outreach to the patients' primary care providers within Health System A.

Health System B

Process outcomes. Positive impacts from SCP implementation included patient satisfaction, patient linkage to additional resources within their home communities, and extra support provided to patients by the healthcare professional delivering the SCP. A Health System B representative conveyed that after witnessing a SCP visit, it was clear that delivery of the SCP is more than just the giving of a piece of paper. Health system B expressed the importance is not

only in the paper SCP, but in the "high quality conversation" that occurs between the provider and the patient as a result of the SCP.

Effective strategies. Health System B expressed the importance of recognizing the success of previous work and sensitively transitioning this work to a new full-time staff member. For large health systems encompassing numerous cancer center sites, Health System B conveyed it is essential to acknowledge the diversity of the cancer center sites and the populations they serve and to create a flexible process for providers. However, Health System B sees the importance for standardization across the systems, as due to their geographical location, one primary care provider may realistically have patients receiving treatment at up to three different cancer treatment centers. Additionally, Health System B values buy-in from providers and staff, and has future plans to encourage primary care providers within the system to offer input on the approach to survivorship care. These frank discussions between oncology practice and primary care may help increase the opportunities for survivorship care in the future and lead to enhanced patient outcomes.

Health System C

Process outcomes. Process outcomes are not applicable for Health System C. At the time of the interview, Health system C was in the early stages of planning and developing for their breast cancer SCP.

Effective strategies. A helpful strategy, facilitated by grant personnel, was collaboration with Health System B, as described above. SCP templates were already developed by Health System B using the same EHR platform as Health System C. Access to developed SCP templates provided a jump-start toward the implementation of SCPs.

Challenges

Health System A

Health System A found that working within existing EHR systems to create SCPs presents challenges that are unique to each EHR system. Across cancer centers, the goal for the near future is to have EHR systems automatically populate SCP templates using information already in the EHR. This would save significant time for healthcare professionals completing the SCPs.

Survivorship is time consuming, and finding the resources to be successful was noted as a significant challenge in the interview. Also noted as an unexpected hurdle was that not all sites for cancer are amenable to SCPs, even though templates are in place for them. An example is small cell lung cancer, where patients are frequently in and out of active treatment. Providing a SCP to this specific patient population can cause confusion, as they may resume active treatment again shortly after being informed they are a survivor.

The final challenge noted in the interview was that some patients will be counted as a survivor for the SCP process, even though they actually were never seen at the health system's cancer center. For example, prostate cancer patients may be treated by outside urologists whose only ties with Health System A are their surgery privileges. They may perform surgery at the facility, or their patients may be on the system's tumor registry, but the physicians are independent. It can be difficult to reach out to these physicians and make sure that patients are receiving their SCPs when deemed appropriate.

Health System B

Health System B noted that operability of the EHR for populating templates has been the most challenging aspect of creating and delivering SCPs. No challenges were reported to date regarding the delivery of the care plans; however, sharing the care plans with primary care providers has just begun with feedback unavailable at this time.

Health System C

Health System C has faced a number of unique challenges and barriers to progress while in the early stages of SCP planning and development. Staff involved in the SD Cancer Survivorship Program were assigned the new duties associated with SCP development and implementation, which added to an already heavy workload. Although staff possessed the necessary skills to create and implement SCP processes, concerns were expressed as to whether the allocation of time and resources were enough to complete the requirements of the grant.

A second major challenge noted was an unusually high number of professional workforce absences within Health System C, due to summer vacation leave, family leave, or position vacancy while hiring new personnel. The remaining physicians, nurse practitioners, and nurse navigators were impacted by these extended absences, and would continue to be for the foreseeable future. Although new professional personnel were hired, completion of their orientation and credentialing were additional major stressors. The timing of these professional workforce deficits did not support an ideal framework for obtaining the input and extra effort needed from physicians, nurse practitioners, and nurse navigators to move forward with implementation of the SCP efforts.

The third major challenge identified in the interview was variance in EHR platforms within Health System C and future EHR changes. At the time of the interview, the health system's cancer center utilized a different EHR platform than that of the larger health system. Provider dictations were available in both EHRs, but providers outside of the cancer center had no direct access to pertinent patient information generated at the cancer center. This challenge was further complicated by an upcoming transition to a new, singular EHR for the entire health system, replacing both current EHR platforms. The amount of effort, time, and additional resources needed to prepare for and implement such a substantial EHR change can be overwhelming for those involved.

The anticipated change to the EHR system also created uncertainty as to the best approach to SCP implementation, as the transition was not scheduled to take place for over a year. Health System B was willing to collaborate with Health System C to share the SCP templates designed to work within their current cancer center EHR. This collaboration alleviated some of the barriers for Health System C. However, it was acknowledged that the looming change to the new system would likely mean "having to recreate the wheel" for SCP template development and implementation in their new EHR system.

Support Needed

Health System A

Health System A has been a pioneer in SD for development and implementation of SCPs. With a solid history of success in obtaining grants to support and sustain its survivorship program, the system is well-positioned for maximizing the impact of the SD Cancer Survivorship Program.

Health System B

The financial assistance from the SD Cancer Survivorship Program allowed the system to hire a full-time staff person dedicated to the development and implementation of a survivorship program. This role has been pivotal in nurturing collegial relationships among various cancer center sites specific to cancer SCPs, developing the cancer SCP templates, implementing the SCPs, and evaluating and refining the templates and processes. Future financial support from the SD Cancer Survivorship Program will be integral to the evolution and success of Health System B's work on SCPs.

Health System C

Concerns for moving forward presented by Health System C included staffing shortages and the lack of dedicated time for development and implementation of SCPs. Health System C also conveyed that a dedicated nurse practitioner would be beneficial in management of the survivorship program, and for development and implementation of SCPs. Until then, staff would need designated time to work towards program outcomes.

SECTION 4: KEY FINDINGS AND RECOMMENDATIONS

Summary

Statewide, six cancer center sites within three large health systems agreed to partner with the SD Cancer Survivorship Program to implement SCPs into practice that provide survivors with a summary of their cancer treatment and instructions for their follow-up care. The partnership is innovative as it provides a means for improving health and long-term survivorship to most cancer patients residing in SD. Each of these three health systems is unique in its history, culture, and infrastructure. In addition, each cancer center was at a different point in the development and implementation of SCPs at the time of this project, ranging from not yet having implemented SCPs to having several years of implementation experience with annual revision processes in place. This project provides an understanding and a framework of the processes, successes, and challenges involved in the development and implementation of SCPs throughout each stage in the spectrum. Insights from each health system can be used to support adoption of SCPs in similar low-population states and regions.

Gathering a leadership team or a designated staff role for survivorship care is an important step to initiate the process and provide a structure for development. In SD, the three health systems chose different leadership structures to implement the SCP process. Staffing included appointing existing employees to survivorship without taking away from their other job-related responsibilities, hiring an individual to lead implementation of the survivorship care program across all sites within the system, and using multiple administrators and clinicians who already worked together in SCP implementation to manage survivorship within the health system. Success of the survivorship program at the time of the interviews appeared to be impacted by the chosen leadership structure.

Development of an SCP template was a significant step in the process for all health systems. Individual health system approaches were unique in some ways and overlapped in other ways. Approaches included gathering literature and best practice evidence to guide the template development, looking to NCCN, ASCO, and CoC guidelines, utilizing consensus from physician peer groups, and collaboration between health systems to share existing templates and practices. EHR platforms presented a challenge shared by all health systems, as adaptations were needed to make templates user friendly. Auto-population of SCP templates within the EHR seems essential to reduce the time burden of SCP completion.

Responsibility for SCP completion and patient delivery was approached differently among health systems. Multiple individuals from the patient's care team may be responsible for SCP population and completion, including a nurse navigator, survivorship coordinator, or an advance practice provider such as a nurse practitioner or a physician assistant. All health systems

expressed that completion needs to be done by a health care professional with a high level of knowledge of the patient's history, as a high degree of clinical decision making occurs during the creation of the SCP. Typically, the nurse practitioner, physician assistant or physician delivering the SCP reviews and approves the SCP prior to meeting with the patient during the follow-up surveillance or survivorship appointment. It is ideal for the providers who are delivering the SCP to be the ones to conduct the final review of the SCP, not only to ensure accuracy, but also so that knowledge of the information within the plan facilitates the SCP session with the patient.

Tracking processes for patient identification, scheduling, and receipt of the SCP were similar, yet varied due to the types and stages of cancer that currently receive SCPs within each system. Typically, patient eligibility is determined following CoC standards and further identified by the health system's tumor registry. The majority of survivorship visits occur within three months post-treatment, but the timeframe may vary due to the uniqueness of patient situations, and is usually left to the judgement of the provider. Time required for this visit fluctuates greatly, taking anywhere from 15 minutes up to 2 hours. If provided as a stand-alone survivorship visit, some systems will bill for the SCP visit based on time based coding. Currently, the SCP visit is designed for patient convenience; if the patient does not wish for a separate appointment, the survivorship component is added into the typical follow-up or surveillance visit for the patient, and not billed separately. Once the provider has reviewed the SCP with and provided it to the patient, a copy of the SCP is also provided to the patient's primary care provider via EHR or paper copy. Future efforts will include ongoing dialogue with the primary care providers of cancer survivors to address their concerns and identify training needs for successful utilization of SCPs.

Framework for Implementation

Key findings were identified in this project that suggest a process framework for the development and implementation of SCPs. As health systems explore processes to develop and implement SCPs, consideration of the following recommendations may be helpful:

Build a foundation.

Gather the appropriate individual or team to drive the process and be a champion for survivorship care. Success was demonstrated in SD health systems through utilization of a singular, dedicated professional staff position with survivorship coordination as the majority of his/her role. Organize interested and motivated individuals to help develop, implement, and evaluate SCP templates, processes, and outcomes.

Gather resources.

Access available local, state, or national grants to help fund the creation of a survivorship program. Utilize a portion of funds to support a dedicated manager role within the survivorship program. Identify collaborative health system partners. Collaboration between SD health systems supported development of survivorship services and SCPs statewide. Learning from health systems that have been successful in SCP

implementation is an important part of the process, as is willingness to share experiences and lessons learned with subsequent health systems just initiating the process.

Review the evidence.
A thorough review of the evidence is necessary as the literature on best practices specific to SCPs grows. An evaluation of existing templates, such as ASCO, LiveStrong, OncoLink, or templates available directly from EHR vendors is suggested for applicability. Identify the ideal template based on the unique health system, resources available, and recommended practices evidenced in the body of research published specific to SCPs.

Elicit input.
Allow for transparency in the SCP development process. Request provider input, listen to feedback regarding patient/provider preferences, and recognize the diversity among cancer centers. Structure an open forum to allow individuals to provide recommendations for SCP template revision. Arrange a team of providers or a survivorship taskforce to discuss the submitted recommendations, review external regulations, and monitor clinical guidelines in order to maintain and update SCP templates as needed.

Implement in stages.
Health systems in SD achieved successful execution of SCPs through a phased implementation approach. Initiate the SCP template within one cancer center site, or for smaller systems, initiate SCPs for one cancer type as a starting point. As the SCP implementation process becomes customary for that cancer type or for that cancer center site, begin to expand SCP implementation practices throughout the health system. Utilization of a phased approach to implementation can alleviate some of the complexity in the initiation of SCPs, and allows for a thoughtful integration into standard care practices.

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