Master of Public Health Field Experience Report

FIELD EXPERIENCE REPORT: TAMMY WALKER CANCER CENTER

by

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submitted in partial fulfillment of the requirements for the degree

MASTER OF PUBLIC HEALTH

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Summary

My public health field experience at Tammy Walker Cancer Center at Salina Regional Health Center in Salina, Kansas was completed in July and August of 2013. Under the supervision and direction of Linda Hinnenkamp, RN, I completed 240 hours of experience. Ms. Hinnenkamp is the cancer outreach coordinator at Tammy Walker Cancer Center (TWCC) and is responsible for planning many local outreach and public health events in Salina and the surrounding region, often in partnership with other local organizations. In addition, she coordinates cancer survivor events and support groups and oversees the Breast Cancer Awareness Program at TWCC, which works in fifteen counties in north central Kansas to educate women about the importance of breast cancer screening and refers women for free and low-cost mammograms.

During my time at TWCC, I had the opportunity to work on several different projects and help plan several public health events. I served on two planning committees: one for free cancer screening events and the other for an educational workshop and seminar for middle school girls co-sponsored by TWCC and the local school district (USD 305). I also conducted a written survey of cancer survivors in the local community to assess their needs and the adequacy of current support services. Based on the survey, I made recommendations for improvement of survivor events and support services at TWCC. I also produced two public reports describing the demographics and characteristics of the patients served by TWCC and assisted in the annual reapplication process for the Avon Breast Cancer grant.

Subject Keywords: Tammy Walker Cancer Center, Salina Regional Health Center, cancer prevention, nutrition education, cancer survivorship, breast cancer awareness

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Chapter 1 - Field Experience Report

Introduction

My public health field experience was completed at Tammy Walker Cancer Center at Salina Regional Health Center in Salina, Kansas. Between July 10, 2013 and August 23, 2013, I completed 240 hours. Tammy Walker Cancer Center (TWCC) is a comprehensive cancer treatment facility that is part of Salina Regional Health Center. Salina Regional Health Center (SRHC) formed in 1995 when Asbury-Salina Regional Medical Center and St. John's Regional Health Center merged to form a community-owned, not-for-profit hospital to better serve Salina and north central Kansas ("Salina Regional Health Center – Our Mission," 2014). Tammy Walker Cancer Center at SRHC opened in 2004 with the goal of providing comprehensive cancer treatment services to Kansans living in the north central region of the state ("Tammy," 2015). In addition to cancer treatment services, TWCC offers numerous support services, including nutritional and dietary support, rehabilitation, counseling services, and support groups ("Tammy," 2015). TWCC has also partnered with others in the local community to improve public health and is involved in numerous educational events, health screening services, and cancer survivor events.

I completed my field experience under the supervision of Linda Hinnenkamp, RN. She is the cancer outreach coordinator at Tammy Walker Cancer Center. Her duties include the planning and organization of educational and health screening events in the community. She often works with other community leaders and organizations to serve the needs of the local community and plan events to improve public health. She also organizes events for local cancer survivors and coordinates local cancer support groups. In addition to these duties, she oversees the Breast Cancer Awareness Program, which provides free clinical breast exams and mammograms to women in fifteen rural Kansas counties with funding from the Avon Breast Health Outreach Program. While working with Ms. Hinnenkamp, I was involved in planning several public health screening events and helping reapply for the Avon Breast grant. I also conducted a survey of cancer survivors to assess their needs and their satisfaction with the cancer survivor support services available at TWCC.

Although Ms. Hinnenkamp was my direct supervisor, I also spent time working with Pam Ehlts, the cancer registrar at TWCC, and Jeanne Byquist, the cancer program dietitian, during my field experience. Under Ms. Ehlt's direction, I produced two reports for TWCC's website informing the public about the demographics and characteristics of patients treated for cancer at TWCC and how patients treated for prostate cancer at TWCC compared to the rest of the United States in terms of treatment choices and outcomes. With Ms. Byquist, I helped plan an educational workshop and seminar for middle school girls (in partnership with USD 305, the local school district). The event focused on educating girls about bullying, body image, healthy eating habits, and healthy relationships. In addition to serving on the planning committee, I developed two activities for the healthy eating part of the program and created promotional material about the event. These projects fit well with my educational background and with my interest in medicine. It was an exciting opportunity to apply my public health education and to further explore the medical field.

Background

Public Cancer Screening: During my field experience at TWCC, I was involved in screening events for skin and prostate cancer and explored the potential for a lung cancer screening program. There are numerous preventive screening guidelines issued by different medical and professional organizations in the United States every year. One of these organizations is the United States Preventive Services Task Force, a panel of national experts that creates screening guidelines using evidence-based medicine ("About the USPSTF," 2016). At the time of my field experience, the USPSTF found that there was insufficient evidence available to recommend full-body skin exam for asymptomatic adults ("US Preventive," 2016). However, in a 2005 survey, 60% of primary care physicians and 81% of dermatologists reported that they routinely conducted full-body skin exams of their patients ("US Preventive," 2016). In addition, the American Cancer Society recommends individuals who are at high-risk for skin cancer undergo regular skin exams by their doctor ("Skin Exams," 2016). Participants in the skin cancer screening event at TWCC did not have to be high risk specifically to undergo an exam, but most scheduled their appointments because they had concerns about skin lesions, but did not have access to a primary care doctor. In 2012, the year before my field experience, the USPSTF issued new prostate cancer screening guidelines that recommended against using PSA as a screening tool in low-risk, asymptomatic men due to the lack of evidence of any benefit and the harms associated with unnecessary treatment ("Final Recommendation: Prostate Cancer," 2012). However, the American Cancer Society and the American Urological Society strongly disagreed with the USPSTF's new recommendation and still encouraged men aged 55 and 70 to make an informed decision about PSA screening in consultation with their doctor (Amiel, Hollis, Kreshover, & Terris, 2016). TWCC decided to continue its prostate cancer screening event despite the new USPSTF recommendation, but ultimately included more patient education about the appropriateness of PSA testing in the event. As part of my field experience, I examined the evidence for starting a lung cancer screening event. Lung cancer is the leading cause of cancer death in the United States and has a very poor prognosis if not detected early ("Final Recommendation Statement: Lung Cancer," 2016). During my field experience, the USPSTF released a preliminary recommendation that adults aged 55-80 with a 30 pack-year history of smoking and who had smoked within the past 15 years should undergo annual screening for lung cancer with a low-dose CT scan ("Final Recommendation Statement: Lung Cancer," 2016). This recommendation was based on a large randomized clinical trial published in 2013 that showed a reduction in lung cancer mortality of 16% when those screening criteria were applied (Pinsky, Church, Izmirlian, & Kramer, 2013).

Cancer Survivors Needs Assessment: During my field experience, I conducted a survey of cancer survivors to identify their needs, and their satisfaction with survivor events and services available at TWCC. Cancer survivorship is defined as anyone with a history of cancer ("About Survivorship," 2016). This includes individuals who have been cancer-free for decades and those who have just been diagnosed. There are more than 15.5 million cancer survivors in the United States today ("About Survivorship," 2016) and research has shown that their needs may differ from the general population. Chemotherapy and radiation treatment can both cause long-term side-effects to survivors' physical health and some types of radiation therapy increase the risk of developing a second type of cancer ("Long-term," 2015). In addition, studies have shown that cancer survivors have higher rates of anxiety disorders than the general population (Greer et al., 2011) and that depressive disorders may be more disabling to cancer survivors' daily functioning (Pirl et al., 2009). Events and support groups for cancer survivors are mostly intended provide community and social support. There is some evidence that strong social support may improve cancer survivors' quality of life (Usta, 2012), but I could not find any research specifically about the impact of support groups and survivor events on cancer survivors' quality of life.

Breast Cancer Awareness: As part of my field experience, I learned a great deal about TWCC's Breast Cancer Awareness Program which educated women about breast cancer and the importance of mammography. Breast cancer is the most common cancer in American women, besides skin cancer, and the second leading cause of cancer deaths in women ("How Common," 2017). The appropriate screening guidelines for breast cancer are currently a matter of great debate. The USPSTF recommends screening every other year from aged 50 to 74 and most other organizations, including the American Cancer Society and the American College of Obstetrics and Gynecology recommend screening annually starting at age 40 (Rebner, 2016). TWCC uses the American Cancer Society recommendation when educating and identifying women to refer for mammography. Despite the controversy over the age at which to begin screening, multiple randomized controlled trials have shown that regular screening with mammography between ages 40 and 79 is associated with a 15% to 20% relative reduction in breast cancer mortality ("Breast Cancer," 2017). The Breast Cancer Awareness Program at TWCC has a specific focus on educating, and increasing mammography among rural women. This is important because rural women in the United States are more likely to be diagnosed with breast cancer at an advanced stage than urban women (Nguyen-Pham, Leung, & McLaughlin, 2014).

Healthy Eating Education: During my field experience, I helped develop two healthy eating activities for middle school-aged girls participating in an educational workshop and seminar. One of the activities was a small-group discussion about food choices and the ability of participants to make healthy choices and changes to their diets. I developed the discussion questions for the activity using social cognitive theory. Social cognitive theory proposes that individuals can learn through the observation of others and that behavior is a result of an interaction between cognitive factors such as knowledge and expectations, behavioral factors such as practice and self-efficacy, and environmental factors such as social norms and community support (Bandura, 1989). One of the concepts incorporated into the discussion questions was self-efficacy. Several studies have shown that high levels of nutrition-related self-efficacy in individuals are associated with successfully adopting healthier eating behaviors (Renner et al., 2008), including one study of adolescent girls (Lubans et al., 2012).

Focus and Scope of Work

Prior to starting my field experience, I met with Ms. Hinnenkamp to determine which projects at TWCC would give me the broadest possible exposure to public health and also align with my education and interests. After some discussion, we identified five areas of focus that were interesting to me, would help me gain a real-world understanding of working in public health, and which would also provide me the opportunity to work in the community and partner with other community organizations.

I joined Ms. Hinnenkamp on the planning committee for free public cancer screening events sponsored by TWCC, Midwest Cancer Alliance, and other community partners. This committee is in charge of organizing screening events and also determining which free cancer screenings are appropriate to offer to the community based on various national recommendations. Ms. Hinnenkamp also works with local cancer survivors to plan survivor events in the community and helps coordinate several cancer support groups that meet at TWCC. We decided that I would conduct an assessment of local cancer survivors and make recommendations about support services TWCC could offer these survivors. I also expressed interest in the process of applying for grants, so Ms. Hinnenkamp allowed me to assist her in reapplying for the Avon Breast Cancer grant to support TWCC's Breast Cancer Awareness Program.

Every year, TWCC releases a public report describing the characteristics and demographics of patients treated at its facility. They also release a report focusing specifically on one common type of cancer treated at TWCC and how treatment outcomes compare to national data. As part of my field experience, I agreed to create these annual reports under the supervision of TWCC's registrar. I also joined the planning committee for an educational event and workshop for middle school girls that TWCC sponsors with USD 305. Since my public health emphasis is in nutrition, I was given the responsibility of planning the healthy eating portion of the program under the supervision of TWCC's dietitian.

Chapter 2 - Learning Objectives

My first learning objective was to describe and characterize the needs of the patient population served by Tammy Walker Cancer Center. This objective was accomplished in two different ways. First, I worked with the cancer registrar to produce two reports describing the demographics and characteristics of patients treated at Tammy Walker Cancer Center between 2009 and 2011. While writing these reports, I analyzed patient data and learned about the most common types of cancer treated at TWCC, how advanced the cancers were at diagnosis, which counties patients were from, what types of treatment the patients underwent, and survival outcomes. I compared some of this patient data to national data from the National Cancer Database to statistically identify any differences between our patient population and the national data. I also further investigated the needs of the community by creating a written survey for cancer survivors involved in survivor events and support groups at TWCC. The survey elicited responses about the support services currently offered at TWCC and identified other needs or services respondents would like to see.

My second objective was to identify the needs of the local community and then develop outreach, fundraising, and educational events and programs to engage and serve the local community. This objective was partially accomplished through the survey of cancer survivors. I did not specifically develop any new programs from this survey, but I was able to identify several changes survivors wanted to see, and make recommendations about future programs and events. I also accomplished this objective by serving on the planning committees for public cancer screening events and the planning committee for the workshop and seminar for middle school girls. While working on the public cancer screening planning committee, I met and discussed the needs of the community with several local doctors, the Midwest Cancer Alliance representative, and other employees of TWCC. We then decided together the most appropriate types of public education and screening events to plan. While planning the workshop for middle school girls, I learned more about the physical and social development of school-age children, and the state of nutrition education in Salina through discussions with a local psychologist, several USD 305 counselors, and the cancer program dietitian. The content of the educational event and my healthy eating activities were influenced by these discussions.

My third objective was to gain an understanding of how to develop and produce written outreach and educational materials that promote public health issues and engage the public. This objective was accomplished through my work writing TWCC's annual reports and my work on the workshop and seminar for middle school-aged girls. The two reports I wrote under the supervision of Ms. Ehlts, the cancer registrar, had to accurately characterize the patient population treated at TWCC. The second report specifically focused on prostate cancer, so it also included educational information about what prostate cancer is and how it is diagnosed and treated. These reports were aimed at the public, so they had to be written so they were easily understandable by a layperson. While planning the workshop, I developed activities to engage the participants and educate them about healthy eating habits. I also helped develop an informative, promotional brochure about the workshop to be used to solicit donations for future workshops.

My fourth objective was to apply knowledge and engage directly with members of the local community about issues of health and medical care. I feel as though I got to apply my public health knowledge to all my projects during my field experience and I engaged directly with local community members during three of my projects. While serving on the two planning committees, I worked directly with other local health professionals and also with professionals from other fields like education. While conducting the needs assessment of cancer survivors, I spoke with several members of the cancer survivor community to help develop the questions for the written survey. I also had the opportunity to volunteer at several health fairs and survivor events with Ms. Hinnenkamp during my field experience. These events were not directly related to my areas of focus, but I was able to engage with members of the local community at these events and gain more exposure and understanding of all of Ms. Hinnenkamp's work in public health.

My final objective was to gain new knowledge and understanding of the grant-writing and application process. I completed this objective by helping Ms. Hinnenkamp reapply for the Avon Breast Cancer grant for 2014. TWCC had successfully received the grant for several years prior to my field experience, so I was able to read through the previous applications for the grant to gain an understanding of what sort of information was included in a grant request and how the application was completed. Ms. Hinnenkamp allowed me to write several parts of the reapplication on my own and then she made corrections and gave me feedback so I could improve. I had no previous experience with grant applications, so it was a very informative process.

Activities Performed

Public Cancer Screening Events

Based on the U.S. Preventive Services Task Force recommendations and the recommendations of other medical professional organizations, Tammy Walker Cancer Center organizes and sponsors multiple free cancer screening events for the public throughout the year, often in partnership with other local health professionals and clinics. Ms. Hinnenkamp heads the planning committee for these events and I joined the committee, which meets weekly, as part of my field experience. Other committee members included a nurse employed by the Saline County Department of Health, representatives from Salina Family Healthcare and Mowery Clinic (two local clinics), and a representative from the Midwest Cancer Alliance (who attended via teleconference). Other local health professionals and TWCC employees attended periodically, depending on their involvement in the specific events being planned.

Prior to the start of my field experience, TWCC sponsored a free skin cancer screening event that was co-sponsored by the Midwest Cancer Alliance and involved several local doctors. Participants had full-body skin exams by a volunteer physician and were then referred to a dermatologist or a primary care physician for follow-up care if a suspicious lesion was found. My initial task as part of the committee was to conduct phone calls with event participants who were found to have abnormal lesions to assess their follow-up rates and to encourage them to follow-up if they had not. I also mailed a hand-out listing local medical resources for individuals without health insurance to those who reported they had not followed-up due to lack of insurance or money. At the first committee meeting, I gave a brief oral report to the committee about participant follow-up.

The committee began planning for the next free prostate cancer screening event at the next committee meeting. Prior to that meeting, I examined and summarized the current national recommendations for prostate cancer screening. I explained the recent USPSTF recommendation against PSA screening and how it differed from the American Cancer Society and the American Urological Association recommendation. After some discussion, the committee decided that every participant who signed up for the event should be mailed educational material about the appropriateness of PSA testing for men based on their age and risk factors and be asked about their understanding of the material at the beginning of their screening appointment.

The prostate cancer screening event occurred on a Saturday morning after my field experience ended, but I was actively involved in the planning process. I created and posted fliers for the event at the health department, local clinics, local gyms, churches, the Elks Club, the YMCA, the Masonic Lodge, and several local bars and restaurants that had public bulletin boards. I also wrote a press release for the event that was posted on Salina Regional Health Center's website. When people called TWCC to schedule their screening appointment, I answered their questions, scheduled their appointment, and mailed them the educational material about PSA screening. I also called and arranged for hospital volunteers to be present at the event to help with registration, rooming people, and clean-up.

Prior to starting my field experience, Ms. Hinnenkamp and I discussed the possibility of TWCC starting a free lung cancer screening event in the future. TWCC did not have the resources or local partners in place to plan the event during my field experience. However, at the last planning committee meeting, I gave a short PowerPoint presentation on the available evidence and recommendations for lung cancer screening and the committee discussed how TWCC might go about planning such an event in the future.

I was a little disappointed not to be able to do more to develop a lung cancer screening event at TWCC, but overall my involvement with the planning committee was a very good learning experience. I was able to meet community members from several different organizations who are involved in public health and I learned how much work it can be to coordinate multiple organizations to plan an event. I also appreciated the opportunity to talk to participants in the screening events who had concerns about their health, take an active role in helping educate them, and guide them to available medical resources.

Cancer Survivors Needs Assessment

Prior to starting my field experience, Ms. Hinnenkamp invited me to attend and volunteer at Salina's National Cancer Survivor's Day event. At the event, I spoke with several cancer survivors who mentioned how much they enjoyed local survivor events. After some discussion with Ms. Hinnenkamp, I decided to conduct a written survey of local cancer survivors, to assess their needs and see if TWCC could improve the events and services offered to cancer survivors. To help formulate my questions, I used the Community Tool Box, an online resource developed by the University of Kansas, which provides information and advice for conducting community needs assessments. I also spoke to Ms. Hinnenkamp, several other TWCC employees involved in organizing survivor events and support groups, and a local cancer survivor who was actively involved in many survivor events at TWCC.

After writing the survey, I spoke at the men's and women's cancer support group meetings and asked attendees to complete the survey. I made the survey available in the waiting rooms at TWCC and placed boxes where patients could return the survey. The survey was also distributed at the annual Relay for Life event. Unfortunately, I was not able to mail the survey to local cancer survivors, so survivors who were not undergoing treatment or were not involved in any survivor events were not able to participate in the survey.

I collected responses to the survey for three weeks. The number of participants in the survey was fairly low (43) and the distribution methods meant that a large number of survivors who were not undergoing treatment may not have had a chance to participate in the survey. Due to the low number of responses, the analysis of the results was primarily descriptive. A few significant findings were identified, however, using Fisher exact tests. Based on the descriptive analysis, Fisher exact test findings, and the written responses to open-ended questions, I created several recommendations for how survivor events and support groups might be changed to better meet the needs of local cancer survivors. The results of the survey can be seen in Appendix 1 and my recommendations in Appendix 2.

Breast Cancer Awareness

In 2001, Salina Regional Health Center began the Breast Cancer Awareness Program with financial support from the Avon Breast Health Outreach Program. When TWCC opened in 2004, the program moved to the new center. With annual funding from the Avon grant, TWCC conducts seminars, attends health fairs, and establishes partnerships with local medical providers to increase awareness of the importance of mammograms. TWCC also works with local providers, health departments, private donors, and the American Cancer Society to refer women for low-cost or free mammograms and clinical breast exams with local providers. TWCC's awareness program covers fifteen counties in north central Kansas and focuses on reaching rural and older women. In 2012, TWCC educated about 5000 women at various events and health fairs and referred over 1500 for mammograms and clinical breast exams ("Avon Breast Health," 2013).

During my field experience, I attended several health fairs in rural Kansas communities with Ms. Hinnenkamp where she educated women about the importance of mammograms and breast cancer screening. At these fairs, I helped women complete the appropriate paperwork so they could be referred for free or low-cost mammograms. After the fairs, I copied and filed patient forms, so our numbers could be reported to Avon and kept on record at TWCC.

Prior to my field experience, I expressed an interest in learning more about grant applications. Ms. Hinnenkamp was in the process of reapplying for the Avon grant for 2014 during my field experience, so she allowed me to assist in the process. She already had a template of the grant request from previous years, so I used the template she had and updated it with information about the work the Breast Cancer Awareness Program had done over the previous year. Then, she evaluated my work, offered feedback, and explained some of the edits she made. I did not complete the budget appendix portion of the grant application, but Ms. Hinnenkamp walked me through how she calculated and completed that part of the form. It was a very good learning experience. I was able to gain some practical experience with grant writing, while having close guidance and oversight.

Public Reports

Tammy Walker Cancer Center is a comprehensive cancer treatment center that maintains a cancer registry and employs a full-time cancer registrar. Ms. Ehlts reviews patient records and abstracts different information which is then reported to the Kansas Cancer Registry at Kansas University Medical Center and the CDC. She also periodically writes reports that describe the patient population served by TWCC and their treatment outcomes in comparison to national data. These reports are posted on TWCC's website to help educate and inform the public about cancer treatment and outcomes in the region TWCC serves.

Prior to my field experience, Ms. Hinnenkamp and I decided that it would be important for me to gain a better understanding of the patient population served by TWCC and gain more experience with producing written material aimed at informing and educating the public about matters of public health. After discussions with Ms. Ehlts, we decided that I would write the public cancer report for patients treated at TWCC between 2009 and 2011 using the data in the cancer registry. Under her guidance, I learned how to search TWCC's cancer registry for the patient information I needed.

I ended up writing two reports because TWCC also releases an annual report focusing on one cancer type commonly treated at the center. For 2013, the cancer type chosen to report on was prostate cancer, so I wrote a report specifically about prostate cancer diagnosis, treatments, and outcomes at TWCC from 2009 to 2011. For this report, Ms. Ehlts showed me how to use the National Cancer Database to search for national statistics about cancer type, stage at diagnosis, and survival. The report was primarily descriptive, but I did conduct some statistical comparisons between TWCC's patient population and national data. Chi-square analysis showed that patients treated for prostate cancer at TWCC differed significantly in age when compared to patients in the NCDB treated for prostate cancer (p=0.005). TWCC patients were older than the NCDB population. This may be because younger prostate cancer patients from north central Kansas choose to be treated in Wichita or Kansas City at higher rates than older patients, but the cancer registry does not contain any data about patients' choices of cancer treatment facility. I also compared five-year survival rates between TWCC prostate cancer patients and prostate cancer patients in the NCDB using patient data from 2004 to 2011. TWCC prostate cancer patients had a five-year survival rate of 83.1% and patients in the NCDB had a five-year survival rate of 87.6%. Chi-square analysis showed that this was not significantly different (p=0.26). Additionally, when stratified by age at diagnosis and stage at diagnosis, chi-square testing showed no significant differences in five-year survival rates between TWCC prostate cancer patients and prostate cancer patients in the NCDB. I incorporated this information into multiple figures in my report to help visually compare TWCC patients and their outcomes to cancer patients nationwide. Learning more about prostate cancer while writing this report tied in well with my work planning the prostate cancer screening event, and also gave me the opportunity to work with a local urologist, Dr. Ryan Payne, who reviewed my report before it was published on TWCC's website.

Overall, the project was a very good one to work on. I gained a better understanding of the patients who are served by TWCC. I learned where they are from, the most common types of disease they have, how advanced their disease typically is at diagnosis, and their treatment and survival outcomes. I also had the opportunity to improve my skills in creating visual aids to demonstrate statistics using Microsoft Excel and Microsoft Publisher. In addition, I was able to practice communicating medical information in clear, understandable terms that can be understood by the layperson. Finally, I learned a great deal about the cancer reporting requirements for medical facilities and the vast amount of information that is publically available in the National Cancer Database.

Healthy Eating Education

TWCC often partners with other local organizations to support public health events in the community, which are not directly related to cancer prevention or outreach. One such event is a biannual educational workshop and seminar for middle school-aged girls that is organized by Salina Regional Health Center in partnership with USD 305 and the Salina Educational Foundation. Girls who are identified by their teachers or counselors as peer leaders, either in a positive or negative sense, are selected to participate in the workshop annually. The workshop is a daylong event with activities and lessons aimed at educating the participants about bullying, body image issues, healthy relationships, sexual development, and healthy eating behaviors.

I joined the planning committee for the autumn 2013 workshop as part of my field experience. The committee consisted of Ms. Hinnenkamp, two USD 305 counselors, a USD 305 teacher, a local physician, a local psychologist, and the cancer program dietitian. We met once a week during my field experience to create the program for the workshop. I helped to develop the lesson plan and activities for the healthy eating portion of the program. Several activities were already in place from previous years, but I had the opportunity to develop two new activities under the supervision of the dietitian. The workshop occurred after my field experience officially ended, but I was still able to attend and guide the two activities that I had developed.

A big emphasis of the program is to encourage healthier choices rather than dieting or restricting food intake, so I developed an activity to educate girls about sugary drinks, fast food, and healthier alternatives. I was able to borrow several models from the Saline County Health Department that showed how much sugar and fat is contained in different types of drinks and fast foods. For the activity, the girls were given empty test tubes to fill up with sugar and "fat," so they could guess the sugar and fat content of various drinks and fast foods. The girls who guessed closest to the models received a gift card to Bath and Body Works. Then, there was a group discussion where girls were able to talk about the activity and whether they were surprised by the amount of sugar and fat in different drinks and foods.

I also developed a short activity based on concepts of Social Cognitive Theory. I developed a hand-out with discussion questions about participants' family eating habits. The discussion questions also explored how much control participants felt they had over their food choices and eating behavior. Finally, there were several questions about what healthy changes participants could make to their diet. Girls initially split into groups to discuss the questions and then I guided a group debrief. The concepts of nutritional knowledge, self-efficacy, and outcome expectations were emphasized in the group discussion and the girls all contributed suggestions for small, realistic changes they could make to eat healthier. There was also a discussion of how they could make changes to their environment to make healthy eating easier. For example, several girls wanted to know who made decisions about the snacks available for purchase in the middle school cafeteria and discussed how they might go about requesting healthier options.

I enjoyed my involvement with this project a lot. I got to apply my educational background in public health nutrition while developing the activities for the event. In particular, I applied much of what I learned about theories of health behavior and social determinants of health in my development of the healthy eating activities. In addition, I gained experience working as part of a team with other professionals, some of whom had a very different perspective than my own. For example, I was initially interested in developing an activity about portion sizes, but the psychologist on the committee, who specializes in eating disorders, had concerns that a lesson such as that might encourage teenage girls to adopt restrictive eating patterns. Although I did not think this was a large concern based on what I had learned in my public health courses, I realized that compromise can be very important when working as part of a committee. I had several other ideas for activities, so I decided to shift my focus to encouraging healthier food choices rather than portion control. This alleviated the psychologist's concerns without causing conflict. The workshop itself was a lot of fun too. I was impressed by how engaged the participants were, and the number of suggestions they came up with for ways they could change their own eating habits and environments to be healthier.

Products Developed

During my field experience, I developed or assisted with the development of a number of different products. As part of the planning committee for the free prostate screening event, I created a flier advertising the event (Figure 2.1) and also wrote a press release which was posted on Salina Regional Health Center's website (Figure 2.2). I had never written a press release before, so I read over several previous press releases Ms. Hinnenkamp had written for different events and tried to match that style. I also created a brief PowerPoint presentation about preventive lung cancer screening, which I presented to the planning committee for cancer screening events. I was a little bit nervous about formally presenting to a group of health professionals, but it was good practice in a supportive environment. A printout of the PowerPoint can be seen in Figure 2.3.

I produced a written survey (Figure 2.4) for my assessment of cancer survivors. Using the Community Tool Box developed by the University of Kansas, I learned about Community Needs Assessments and applied several of concepts emphasized by the Tool Box. In particular, I clearly identified the community I was trying to reach and determined the goals of the survey before I started. I established that I wanted to reach local cancer survivors currently undergoing treatment and local survivors in remission. I decided that I wanted to identify how well TWCC was meeting the needs of this community through support groups, survivor events, and educational events. I also wanted to identify other needs that were not currently being addressed by TWCC. With these goals in mind, I wrote the questions and then solicited feedback from several people to insure the questions were clear and easily understood.

I feel like I learned quite a bit about the process of creating a survey for this project. I learned some things I would change if I did another survey in the future. First, I would try to find a better way of distributing the survey to my target audience. I was not able to gain permission to mail or email the survey to local cancer survivors, so only survivors who came to TWCC or were involved in a survivor event had the opportunity to complete it. I think this likely produced a sample that was not representative of the entire population I had hoped to reach. Cancer survivors who were dissatisfied with events and support services were probably less likely to attend survivor events, and therefore, less likely to have the opportunity to respond to the survey. In retrospect, I also would have collected more information about the survey participants and been more comprehensive in my assessment of their needs. The survey identified some interesting differences between survivors currently being treated, and those not undergoing current treatment. I might have been able to identify further differences in needs if I had asked specifically how long ago survivors were treated or what type of cancer they were treated for. I also would conduct the survey over a longer period of time, so I might be able to collect a larger sample size.

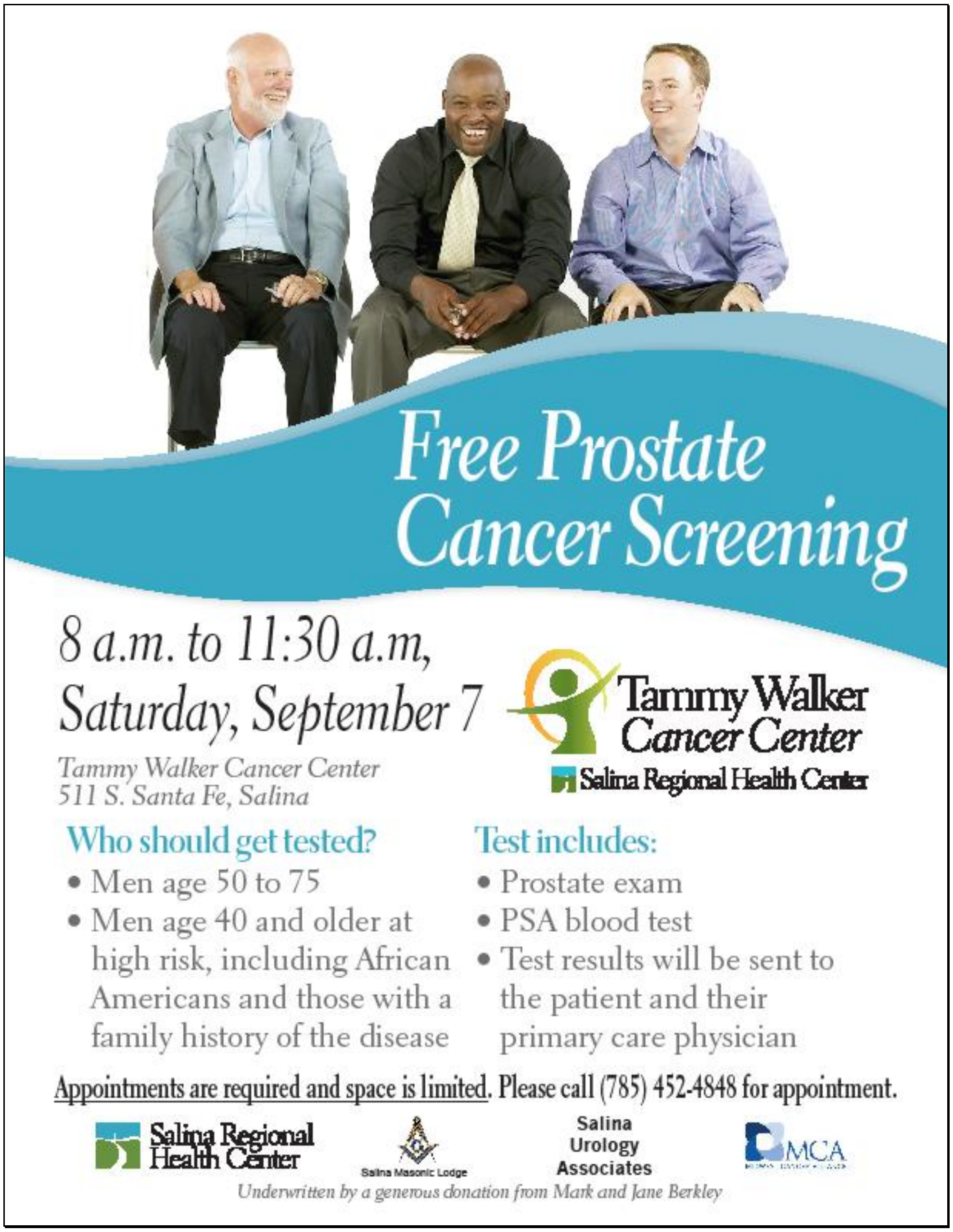
Under Ms. Hinnenkamp's supervision, I helped reapply for the Avon grant for TWCC's Breast Cancer Awareness Program. I used the template she had from previous years and updated it for the 2014 application. Ms. Hinnenkamp then edited the final application and gave me feedback about my work. The application included a budget appendix which I did not complete. Instead, Ms. Hinnenkamp explained to me how she went about calculating the salaries and budget. I felt like this was very helpful and I gained insight into how in-depth and daunting grant applications can be. The grant application was ultimately successful and TWCC received the Avon grant for 2014. The parts of the final application which did not contain budget or salary details are included as Figure 2.5.

The two reports I wrote under the supervision of the TWCC registrar were published for the public on TWCC's website. The first one (Figure 2.6) described the characteristics of the patient population treated by TWCC from 2009 to 2011. The second report (Figure 2.7) provided information about prostate cancer, specifically. It contained information about what prostate cancer is, how it is diagnosed and staged, some of the different treatments available, and the treatments and outcomes of patients treated at TWCC between 2009 and 2011. It also compared outcomes from patients treated at TWCC, to national statistics.

During my work on the planning committee for the educational workshop and seminar, I developed a handout of discussion questions (Figure 2.8). As discussed in the Activities Performed section, the questions were meant to stimulate discussion about Social Cognitive Theory concepts such as self-efficacy, outcome expectations, and the impact of environment on food choices. I also produced a promotional brochure (Figure 2.9) about the event using feedback from girls who had participated in the event in previous years. This brochure was handed out at a fundraising breakfast for the event. I did not play an active role in fundraising, but it was a good reminder that any sort of public health effort is often contingent on being able to justify it to donors and other stakeholders.

Figures

Figure 2.1 – Prostate cancer screening flier



Free Prostate Cancer Screening

8 a.m. to 11:30 a.m,
Saturday, September 7

Tammy Walker Cancer Center
511 S. Santa Fe, Salina

Tammy Walker Cancer Center
Salina Regional Health Center

Who should get tested?

- Men age 50 to 75
- Men age 40 and older at high risk, including African Americans and those with a family history of the disease

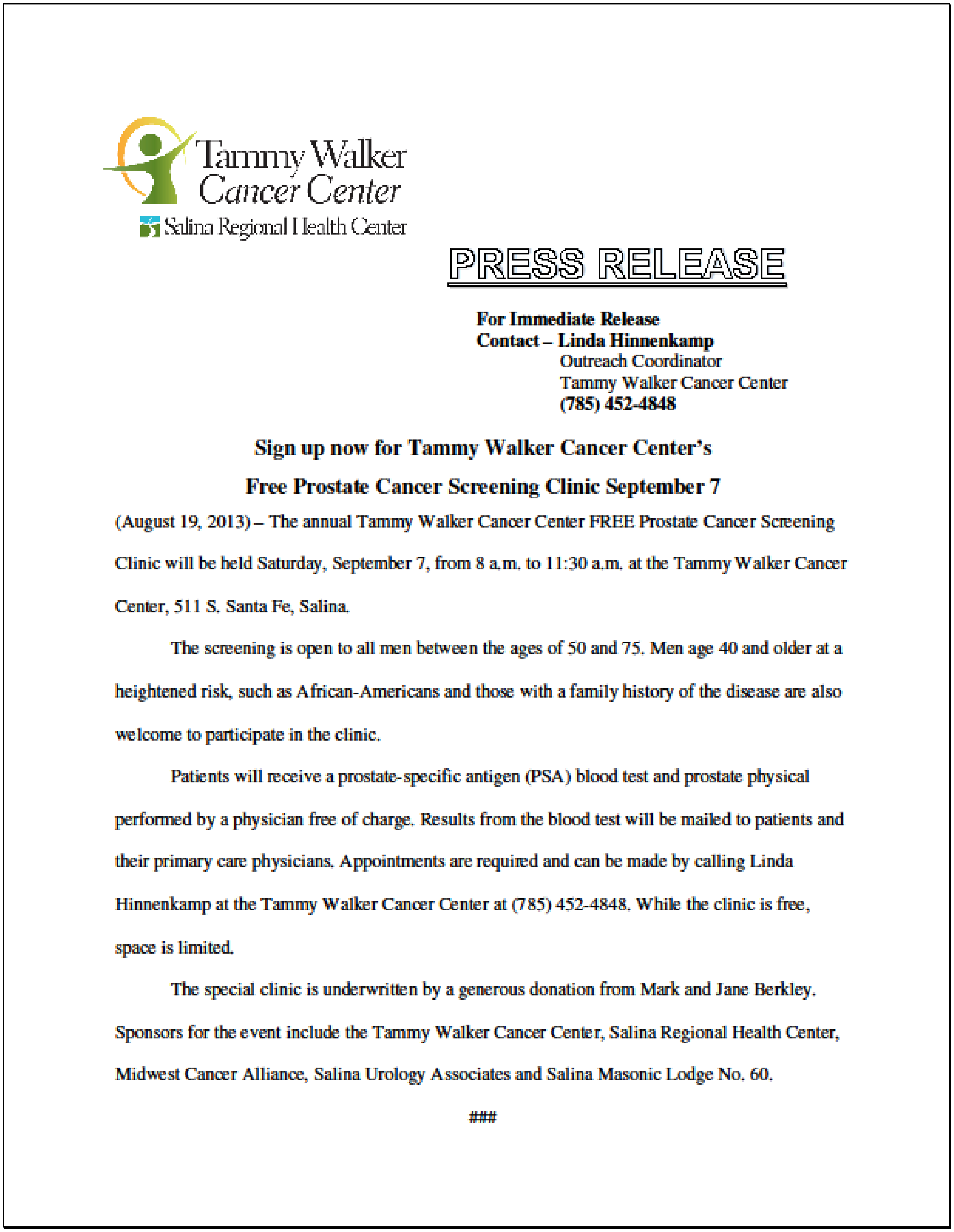
Test includes:

- Prostate exam
- PSA blood test
- Test results will be sent to the patient and their primary care physician

Appointments are required and space is limited. Please call (785) 452-4848 for appointment.

Underwritten by a generous donation from Mark and Jane Berkley

Figure 2.2 – Press release for prostate cancer screening



Tammy Walker
Cancer Center
Salina Regional Health Center

PRESS RELEASE

For Immediate Release
Contact – Linda Hinnenkamp
Outreach Coordinator
Tammy Walker Cancer Center
(785) 452-4848

Sign up now for Tammy Walker Cancer Center's Free Prostate Cancer Screening Clinic September 7

(August 19, 2013) – The annual Tammy Walker Cancer Center FREE Prostate Cancer Screening Clinic will be held Saturday, September 7, from 8 a.m. to 11:30 a.m. at the Tammy Walker Cancer Center, 511 S. Santa Fe, Salina.

The screening is open to all men between the ages of 50 and 75. Men age 40 and older at a heightened risk, such as African-Americans and those with a family history of the disease are also welcome to participate in the clinic.

Patients will receive a prostate-specific antigen (PSA) blood test and prostate physical performed by a physician free of charge. Results from the blood test will be mailed to patients and their primary care physicians. Appointments are required and can be made by calling Linda Hinnenkamp at the Tammy Walker Cancer Center at (785) 452-4848. While the clinic is free, space is limited.

The special clinic is underwritten by a generous donation from Mark and Jane Berkley. Sponsors for the event include the Tammy Walker Cancer Center, Salina Regional Health Center, Midwest Cancer Alliance, Salina Urology Associates and Salina Masonic Lodge No. 60.

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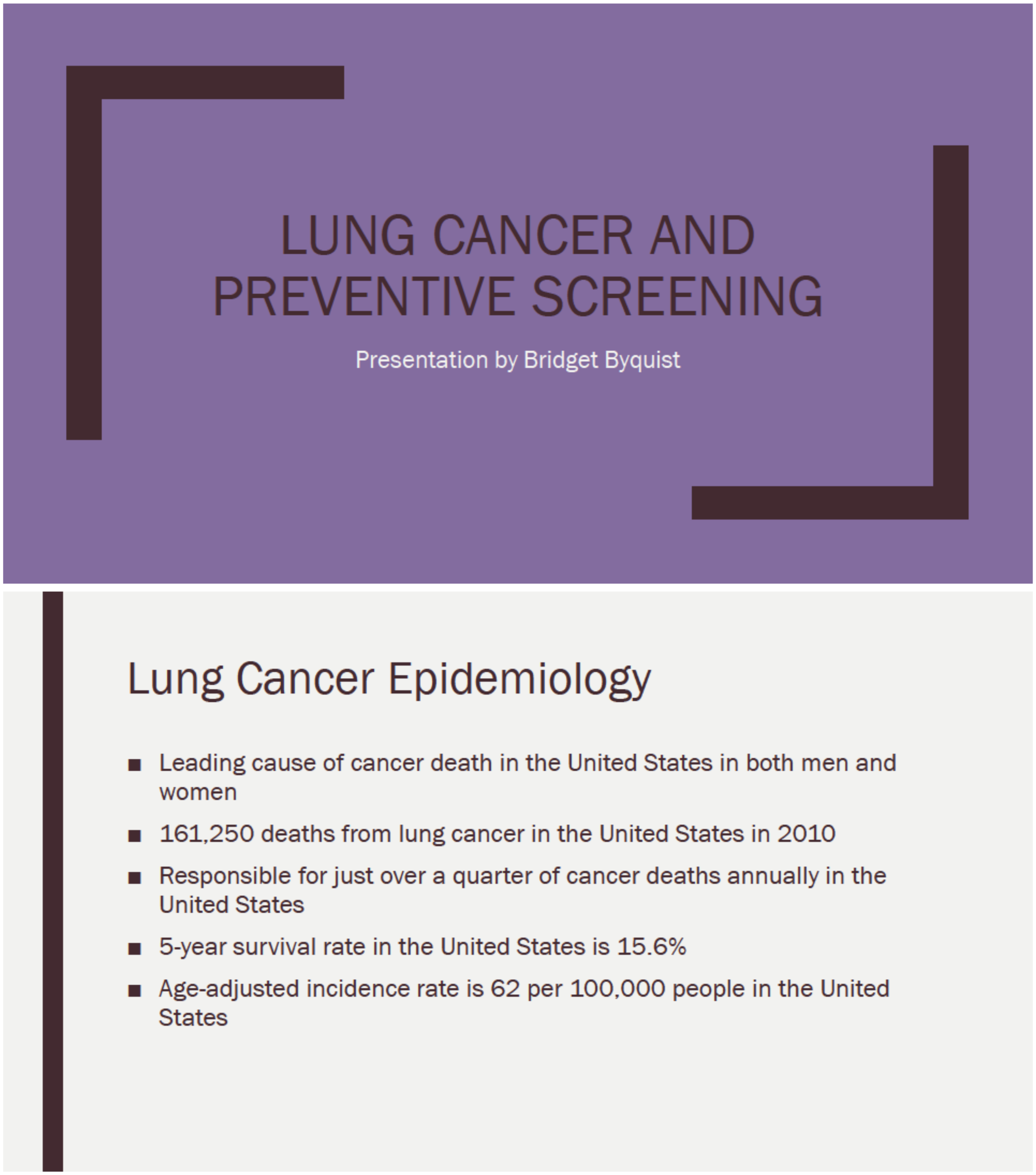
Figure 2.3 – Lung Cancer and Preventive Screening PowerPoint presentation



LUNG CANCER AND PREVENTIVE SCREENING

Presentation by Bridget Byquist

Lung Cancer Epidemiology

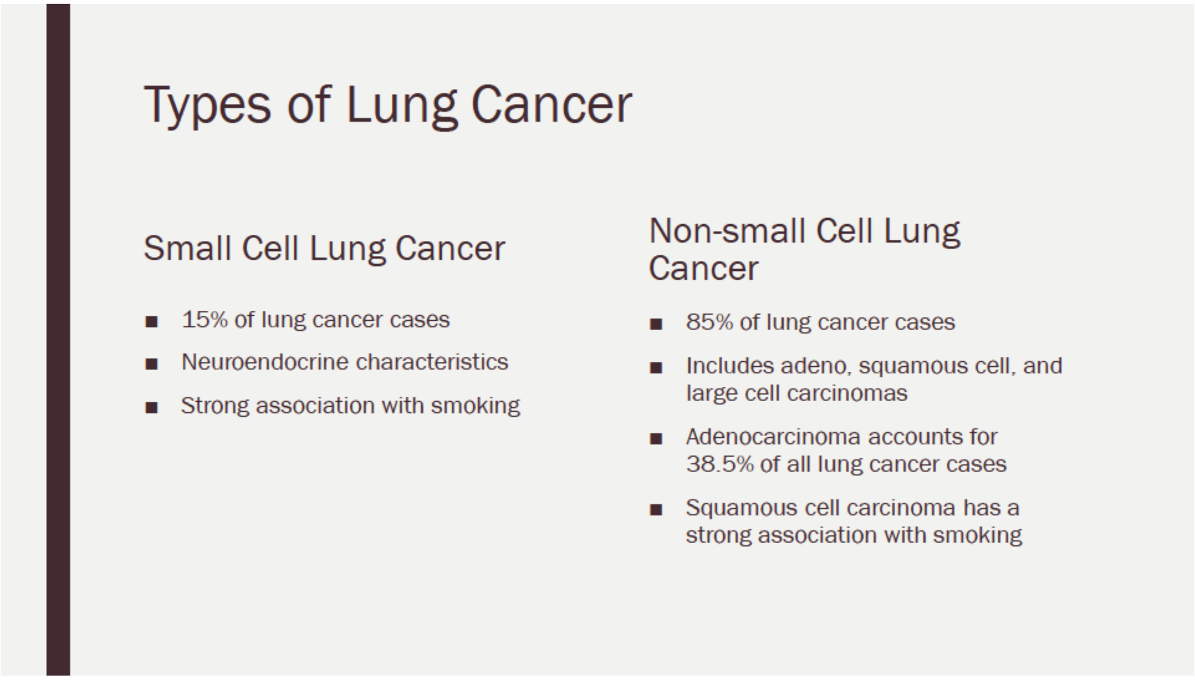
- Leading cause of cancer death in the United States in both men and women
- 161,250 deaths from lung cancer in the United States in 2010
- Responsible for just over a quarter of cancer deaths annually in the United States
- 5-year survival rate in the United States is 15.6%
- Age-adjusted incidence rate is 62 per 100,000 people in the United States

Smoking and Lung Cancer

- Surgeon General first declared link between cigarette smoking and lung cancer in 1964
- 20.6% of American adults currently smoke
- Smoking is more common in those with lower levels of education and those living in poverty
- One in nine smokers eventually develops lung cancer
- Lung cancer risk is proportional to quantity of cigarettes smoked
- Most important modifiable risk for lung cancer
- However, 25% of cases worldwide occur in those who have never smoked

Other risk factors

- Genetics
- Environmental air pollution
- Second-hand smoke exposure
- Infections with some HPV subtypes, Chlamydia pneumonia, and HIV may increase risk
- Obesity



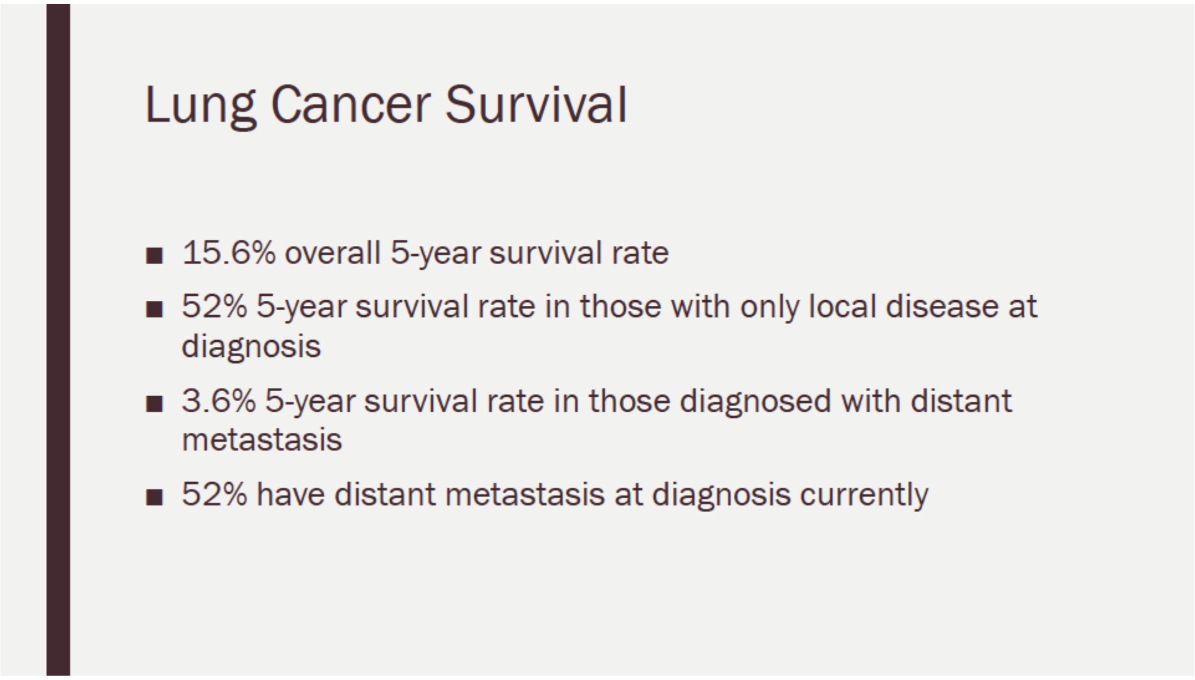
Types of Lung Cancer

Small Cell Lung Cancer

- 15% of lung cancer cases
- Neuroendocrine characteristics
- Strong association with smoking

Non-small Cell Lung Cancer

- 85% of lung cancer cases
- Includes adeno, squamous cell, and large cell carcinomas
- Adenocarcinoma accounts for 38.5% of all lung cancer cases
- Squamous cell carcinoma has a strong association with smoking



Lung Cancer Survival

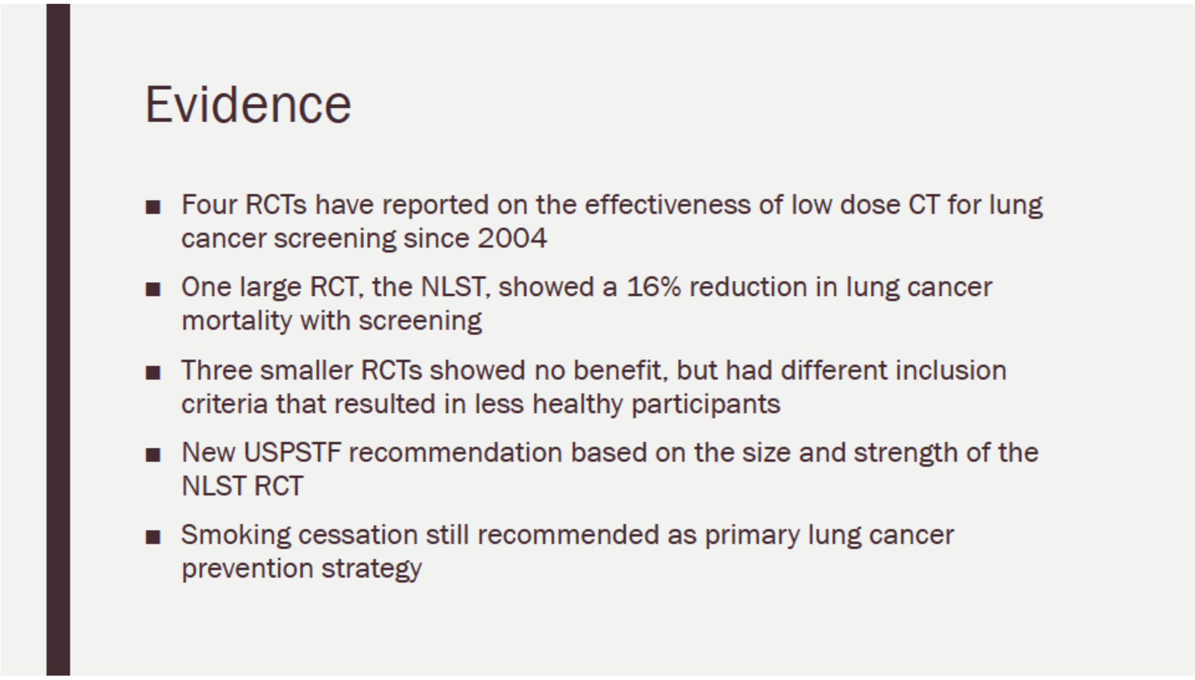
- 15.6% overall 5-year survival rate
- 52% 5-year survival rate in those with only local disease at diagnosis
- 3.6% 5-year survival rate in those diagnosed with distant metastasis
- 52% have distant metastasis at diagnosis currently

2004 USPSTF Screening Recommendations

- Insufficient evidence to recommend for or against screening for lung cancer in asymptomatic persons
- Screening methods evaluated were low-dose CT, chest x-ray, sputum cytologic evaluation, and a combination of these approaches
- Multiple randomized-controlled trials on the topic ongoing at the time of 2004 recommendation

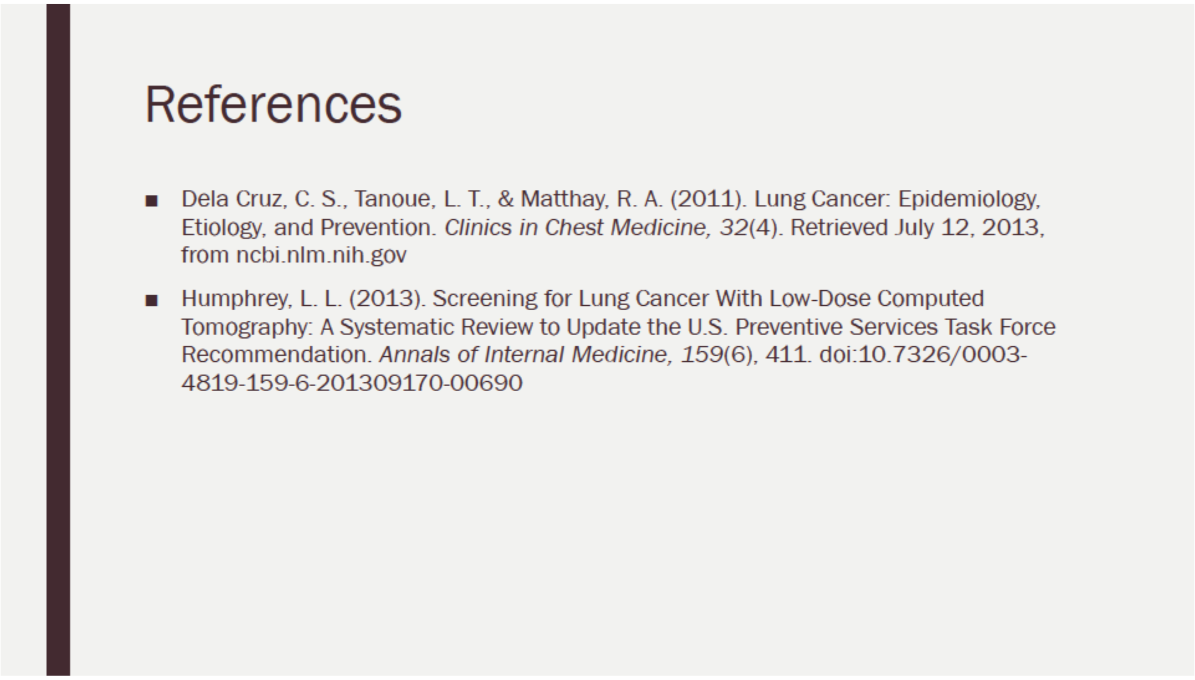
Draft Version of 2013 USPSTF Screening Recommendations

- Published to allow for public comment on July 30, 2013
- Recommend annual screening for lung cancer using low dose CT
- Recommendation for those aged 55-80 with a 30 pack-year smoking history
- Screening can be discontinued once person has not smoked for 15 years
- American Cancer Society, American Society of Clinical Oncologists, and the American Association of Thoracic Surgery also recommend screening



Evidence

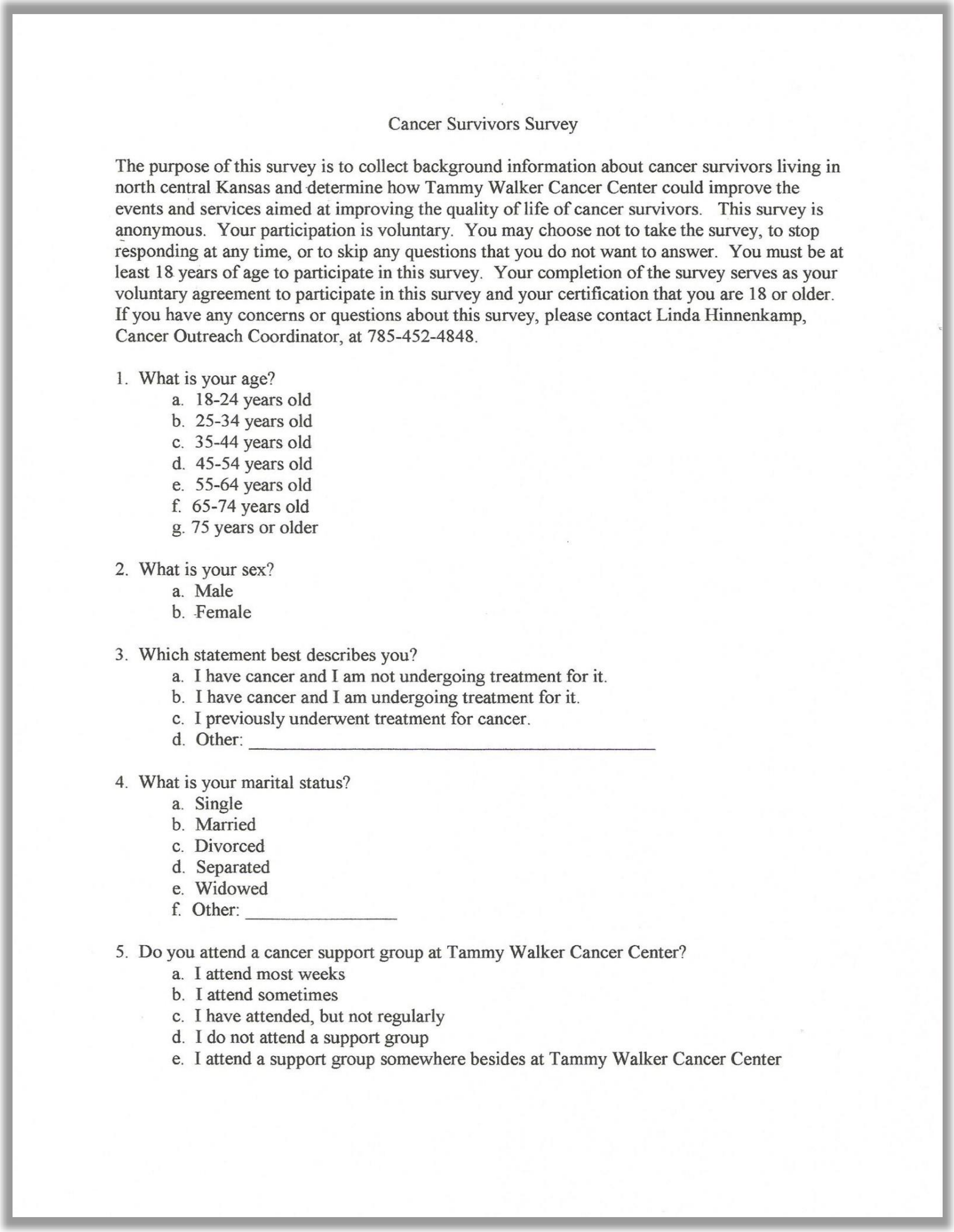
- Four RCTs have reported on the effectiveness of low dose CT for lung cancer screening since 2004
- One large RCT, the NLST, showed a 16% reduction in lung cancer mortality with screening
- Three smaller RCTs showed no benefit, but had different inclusion criteria that resulted in less healthy participants
- New USPSTF recommendation based on the size and strength of the NLST RCT
- Smoking cessation still recommended as primary lung cancer prevention strategy



References

- Dela Cruz, C. S., Tanoue, L. T., & Matthay, R. A. (2011). Lung Cancer: Epidemiology, Etiology, and Prevention. *Clinics in Chest Medicine, 32*(4). Retrieved July 12, 2013, from ncbi.nlm.nih.gov
- Humphrey, L. L. (2013). Screening for Lung Cancer With Low-Dose Computed Tomography: A Systematic Review to Update the U.S. Preventive Services Task Force Recommendation. *Annals of Internal Medicine, 159*(6), 411. doi:10.7326/0003-4819-159-6-201309170-00690

Figure 2.4 – Survey of cancer survivors



Cancer Survivors Survey

The purpose of this survey is to collect background information about cancer survivors living in north central Kansas and determine how Tammy Walker Cancer Center could improve the events and services aimed at improving the quality of life of cancer survivors. This survey is anonymous. Your participation is voluntary. You may choose not to take the survey, to stop responding at any time, or to skip any questions that you do not want to answer. You must be at least 18 years of age to participate in this survey. Your completion of the survey serves as your voluntary agreement to participate in this survey and your certification that you are 18 or older. If you have any concerns or questions about this survey, please contact Linda Hinnenkamp, Cancer Outreach Coordinator, at 785-452-4848.

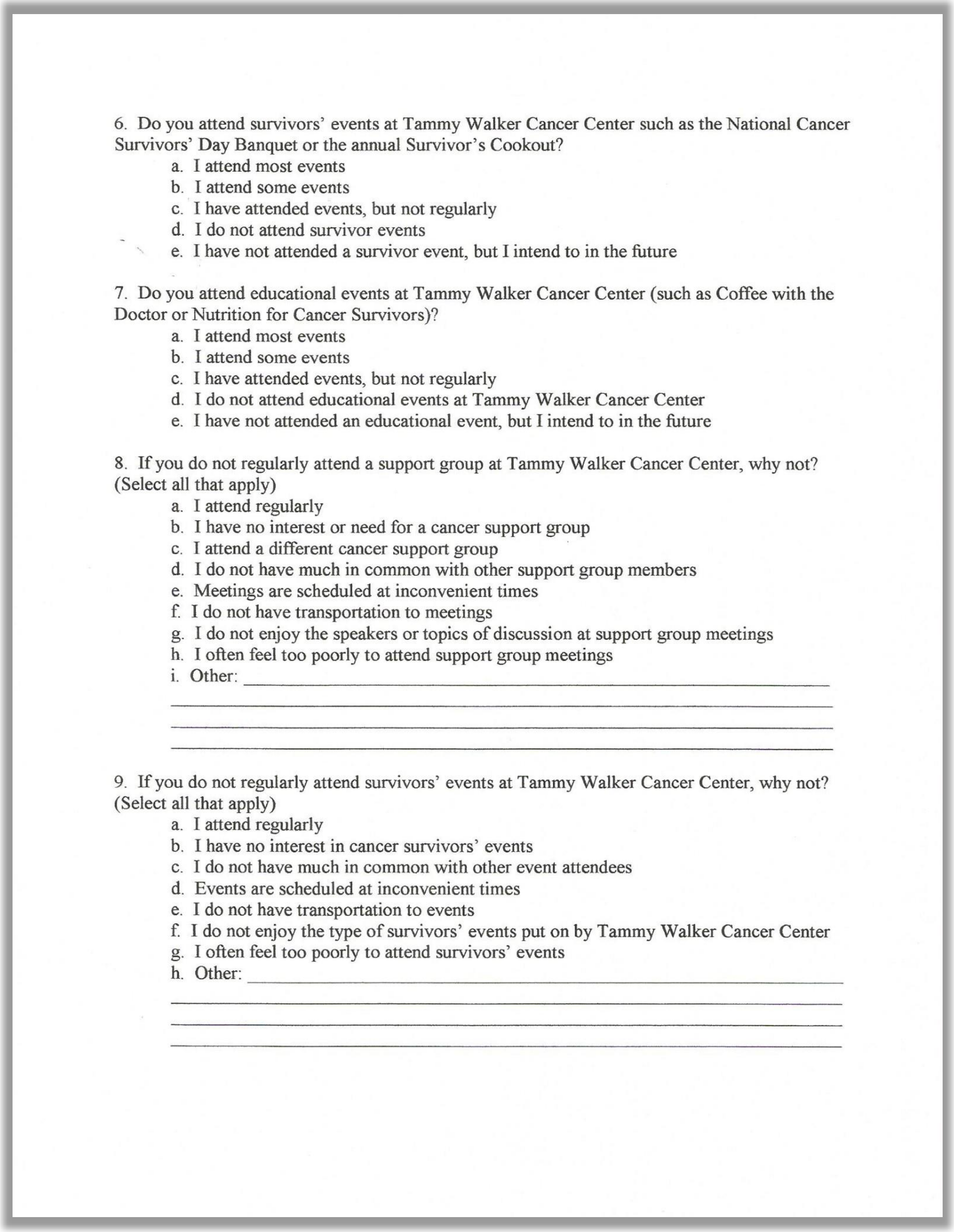
1. What is your age?
    a. 18-24 years old
    b. 25-34 years old
    c. 35-44 years old
    d. 45-54 years old
    e. 55-64 years old
    f. 65-74 years old
    g. 75 years or older

2. What is your sex?
    a. Male
    b. Female

3. Which statement best describes you?
    a. I have cancer and I am not undergoing treatment for it.
    b. I have cancer and I am undergoing treatment for it.
    c. I previously underwent treatment for cancer.
    d. Other: ____

4. What is your marital status?
    a. Single
    b. Married
    c. Divorced
    d. Separated
    e. Widowed
    f. Other: ________________

5. Do you attend a cancer support group at Tammy Walker Cancer Center?
    a. I attend most weeks
    b. I attend sometimes
    c. I have attended, but not regularly
    d. I do not attend a support group
    e. I attend a support group somewhere besides at Tammy Walker Cancer Center



6. Do you attend survivors' events at Tammy Walker Cancer Center such as the National Cancer Survivors' Day Banquet or the annual Survivor's Cookout?

a. I attend most events
b. I attend some events
c. I have attended events, but not regularly
d. I do not attend survivor events
e. I have not attended a survivor event, but I intend to in the future

7. Do you attend educational events at Tammy Walker Cancer Center (such as Coffee with the Doctor or Nutrition for Cancer Survivors)?

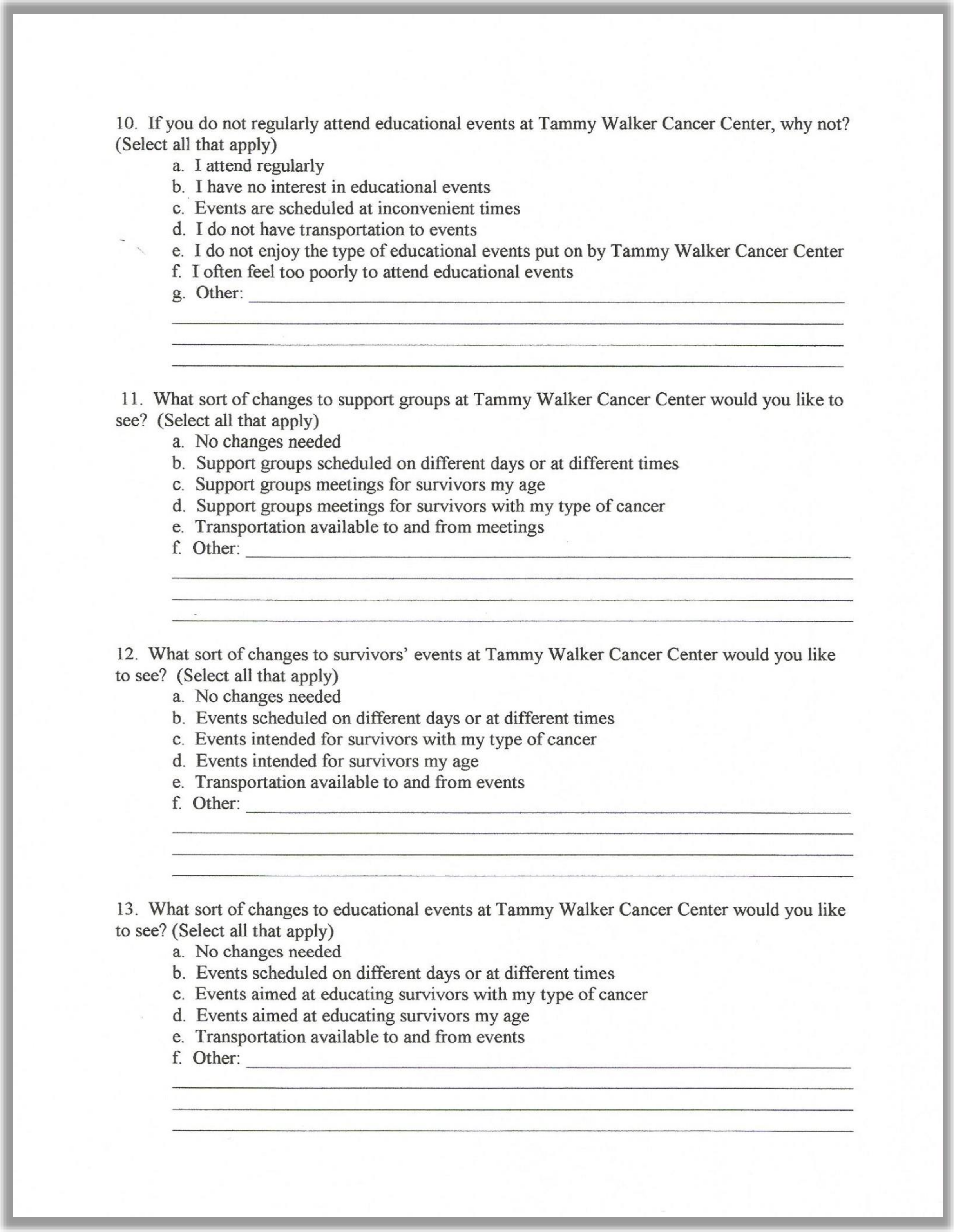
a. I attend most events
b. I attend some events
c. I have attended events, but not regularly
d. I do not attend educational events at Tammy Walker Cancer Center
e. I have not attended an educational event, but I intend to in the future

8. If you do not regularly attend a support group at Tammy Walker Cancer Center, why not? (Select all that apply)

a. I attend regularly
b. I have no interest or need for a cancer support group
c. I attend a different cancer support group
d. I do not have much in common with other support group members
e. Meetings are scheduled at inconvenient times
f. I do not have transportation to meetings
g. I do not enjoy the speakers or topics of discussion at support group meetings
h. I often feel too poorly to attend support group meetings
i. Other: ____

9. If you do not regularly attend survivors' events at Tammy Walker Cancer Center, why not? (Select all that apply)

a. I attend regularly
b. I have no interest in cancer survivors' events
c. I do not have much in common with other event attendees
d. Events are scheduled at inconvenient times
e. I do not have transportation to events
f. I do not enjoy the type of survivors' events put on by Tammy Walker Cancer Center
g. I often feel too poorly to attend survivors' events
h. Other: ____



10. If you do not regularly attend educational events at Tammy Walker Cancer Center, why not? (Select all that apply)

   a. I attend regularly
   b. I have no interest in educational events
   c. Events are scheduled at inconvenient times
   d. I do not have transportation to events
   e. I do not enjoy the type of educational events put on by Tammy Walker Cancer Center
   f. I often feel too poorly to attend educational events
   g. Other: ____
   ____
   ____
   ____

11. What sort of changes to support groups at Tammy Walker Cancer Center would you like to see? (Select all that apply)

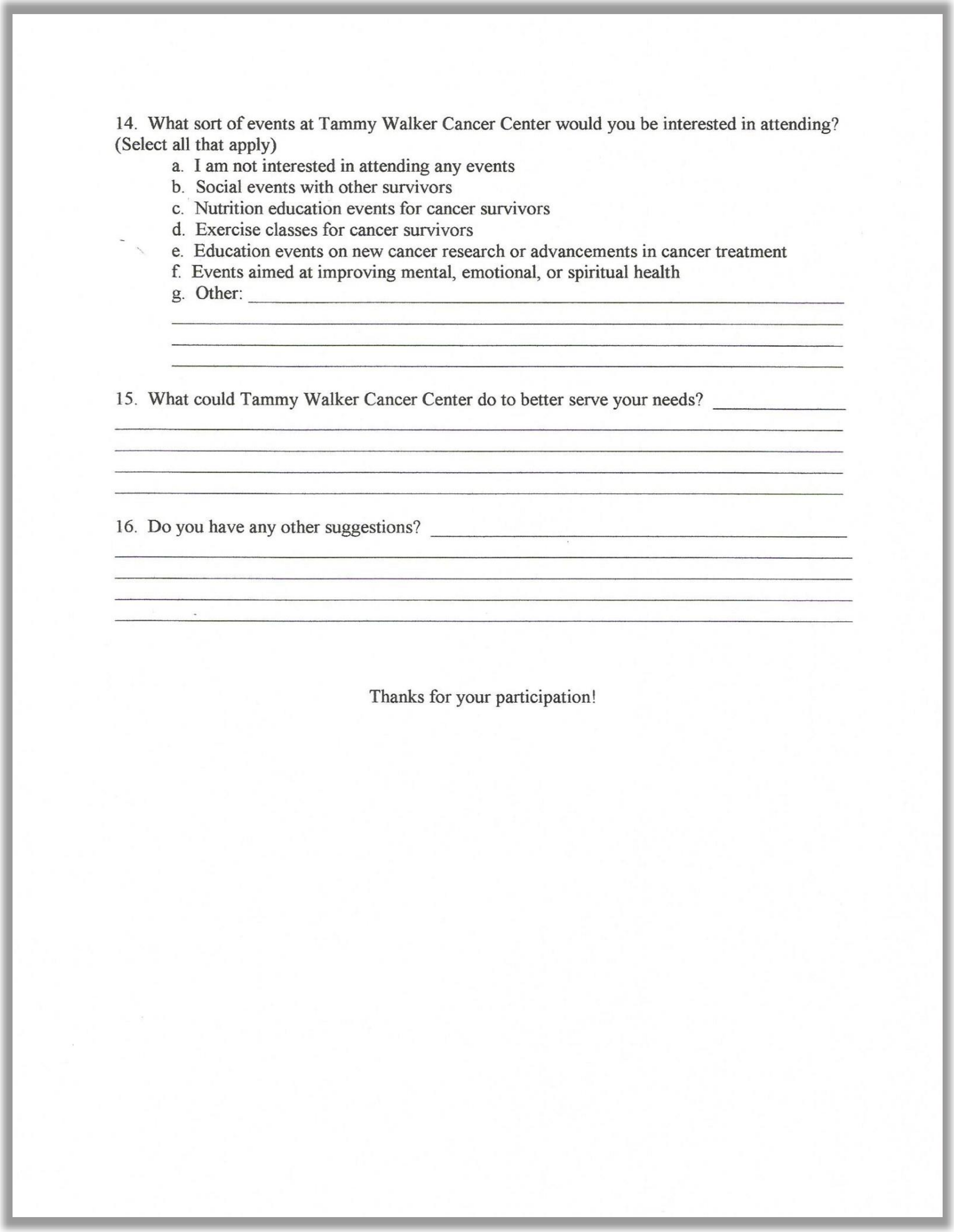
   a. No changes needed
   b. Support groups scheduled on different days or at different times
   c. Support groups meetings for survivors my age
   d. Support groups meetings for survivors with my type of cancer
   e. Transportation available to and from meetings
   f. Other: ____
   ____
   ____
   ____

12. What sort of changes to survivors' events at Tammy Walker Cancer Center would you like to see? (Select all that apply)

   a. No changes needed
   b. Events scheduled on different days or at different times
   c. Events intended for survivors with my type of cancer
   d. Events intended for survivors my age
   e. Transportation available to and from events
   f. Other: ____
   ____
   ____
   ____

13. What sort of changes to educational events at Tammy Walker Cancer Center would you like to see? (Select all that apply)

   a. No changes needed
   b. Events scheduled on different days or at different times
   c. Events aimed at educating survivors with my type of cancer
   d. Events aimed at educating survivors my age
   e. Transportation available to and from events
   f. Other: ____
   ____
   ____
   ____



14. What sort of events at Tammy Walker Cancer Center would you be interested in attending? (Select all that apply)

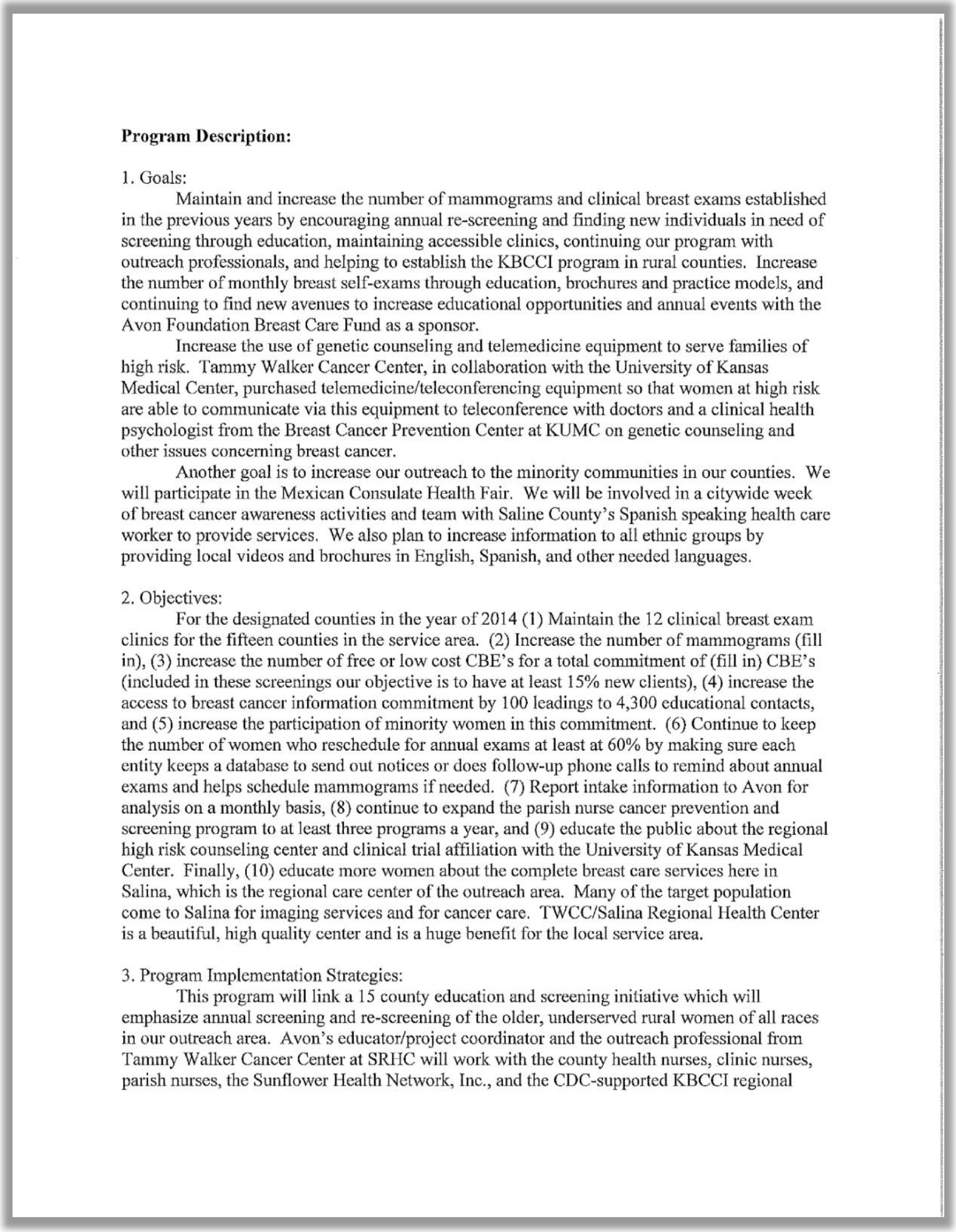
- a. I am not interested in attending any events
- b. Social events with other survivors
- c. Nutrition education events for cancer survivors
- d. Exercise classes for cancer survivors
- e. Education events on new cancer research or advancements in cancer treatment
- f. Events aimed at improving mental, emotional, or spiritual health
- g. Other: ______________________________

15. What could Tammy Walker Cancer Center do to better serve your needs? ______________________________

16. Do you have any other suggestions? ______________________________

Thanks for your participation!

Figure 2.5 – Avon grant application



Program Description:

1. Goals:

Maintain and increase the number of mammograms and clinical breast exams established in the previous years by encouraging annual re-screening and finding new individuals in need of screening through education, maintaining accessible clinics, continuing our program with outreach professionals, and helping to establish the KBCCI program in rural counties. Increase the number of monthly breast self-exams through education, brochures and practice models, and continuing to find new avenues to increase educational opportunities and annual events with the Avon Foundation Breast Care Fund as a sponsor.

Increase the use of genetic counseling and telemedicine equipment to serve families of high risk. Tammy Walker Cancer Center, in collaboration with the University of Kansas Medical Center, purchased telemedicine/teleconferencing equipment so that women at high risk are able to communicate via this equipment to teleconference with doctors and a clinical health psychologist from the Breast Cancer Prevention Center at KUMC on genetic counseling and other issues concerning breast cancer.

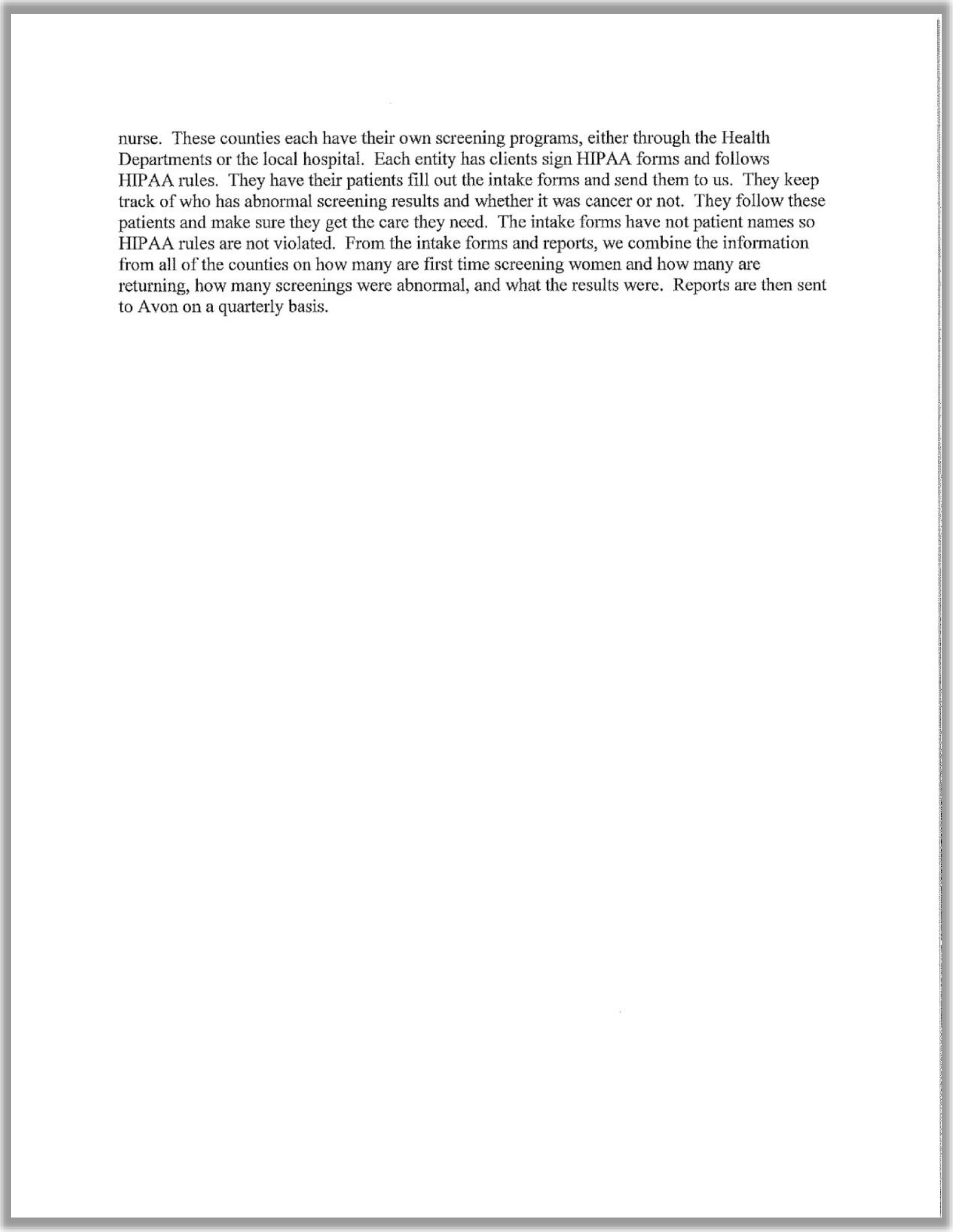
Another goal is to increase our outreach to the minority communities in our counties. We will participate in the Mexican Consulate Health Fair. We will be involved in a citywide week of breast cancer awareness activities and team with Saline County's Spanish speaking health care worker to provide services. We also plan to increase information to all ethnic groups by providing local videos and brochures in English, Spanish, and other needed languages.

2. Objectives:

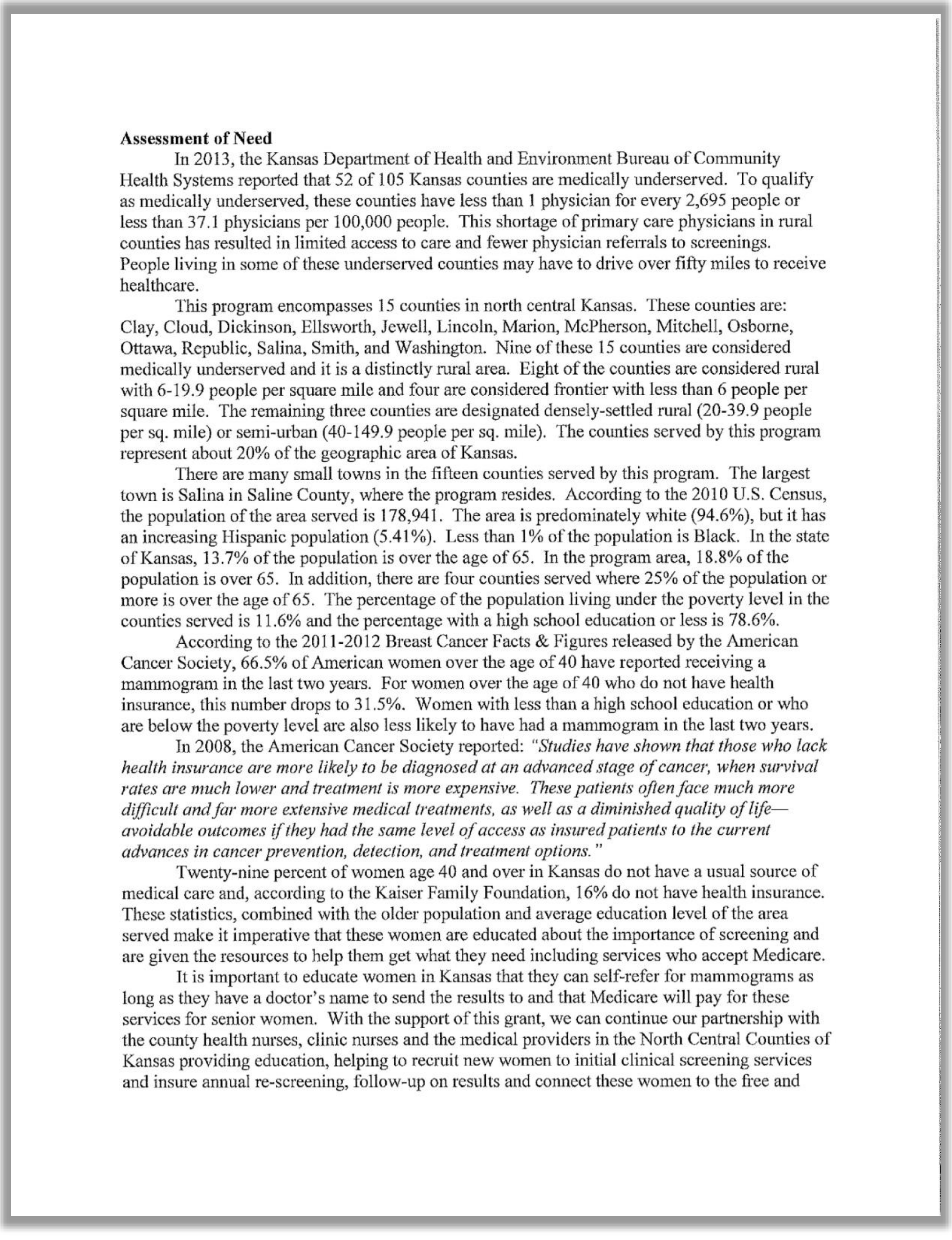
For the designated counties in the year of 2014 (1) Maintain the 12 clinical breast exam clinics for the fifteen counties in the service area. (2) Increase the number of mammograms (fill in), (3) increase the number of free or low cost CBE's for a total commitment of (fill in) CBE's (included in these screenings our objective is to have at least 15% new clients), (4) increase the access to breast cancer information commitment by 100 leadings to 4,300 educational contacts, and (5) increase the participation of minority women in this commitment. (6) Continue to keep the number of women who reschedule for annual exams at least at 60% by making sure each entity keeps a database to send out notices or does follow-up phone calls to remind about annual exams and helps schedule mammograms if needed. (7) Report intake information to Avon for analysis on a monthly basis, (8) continue to expand the parish nurse cancer prevention and screening program to at least three programs a year, and (9) educate the public about the regional high risk counseling center and clinical trial affiliation with the University of Kansas Medical Center. Finally, (10) educate more women about the complete breast care services here in Salina, which is the regional care center of the outreach area. Many of the target population come to Salina for imaging services and for cancer care. TWCC/Salina Regional Health Center is a beautiful, high quality center and is a huge benefit for the local service area.

3. Program Implementation Strategies:

This program will link a 15 county education and screening initiative which will emphasize annual screening and re-screening of the older, underserved rural women of all races in our outreach area. Avon's educator/project coordinator and the outreach professional from Tammy Walker Cancer Center at SRHC will work with the county health nurses, clinic nurses, parish nurses, the Sunflower Health Network, Inc., and the CDC-supported KBCCI regional



nurse. These counties each have their own screening programs, either through the Health Departments or the local hospital. Each entity has clients sign HIPAA forms and follows HIPAA rules. They have their patients fill out the intake forms and send them to us. They keep track of who has abnormal screening results and whether it was cancer or not. They follow these patients and make sure they get the care they need. The intake forms have not patient names so HIPAA rules are not violated. From the intake forms and reports, we combine the information from all of the counties on how many are first time screening women and how many are returning, how many screenings were abnormal, and what the results were. Reports are then sent to Avon on a quarterly basis.



Assessment of Need

In 2013, the Kansas Department of Health and Environment Bureau of Community Health Systems reported that 52 of 105 Kansas counties are medically underserved. To qualify as medically underserved, these counties have less than 1 physician for every 2,695 people or less than 37.1 physicians per 100,000 people. This shortage of primary care physicians in rural counties has resulted in limited access to care and fewer physician referrals to screenings. People living in some of these underserved counties may have to drive over fifty miles to receive healthcare.

This program encompasses 15 counties in north central Kansas. These counties are: Clay, Cloud, Dickinson, Ellsworth, Jewell, Lincoln, Marion, McPherson, Mitchell, Osborne, Ottawa, Republic, Salina, Smith, and Washington. Nine of these 15 counties are considered medically underserved and it is a distinctly rural area. Eight of the counties are considered rural with 6-19.9 people per square mile and four are considered frontier with less than 6 people per square mile. The remaining three counties are designated densely-settled rural (20-39.9 people per sq. mile) or semi-urban (40-149.9 people per sq. mile). The counties served by this program represent about 20% of the geographic area of Kansas.

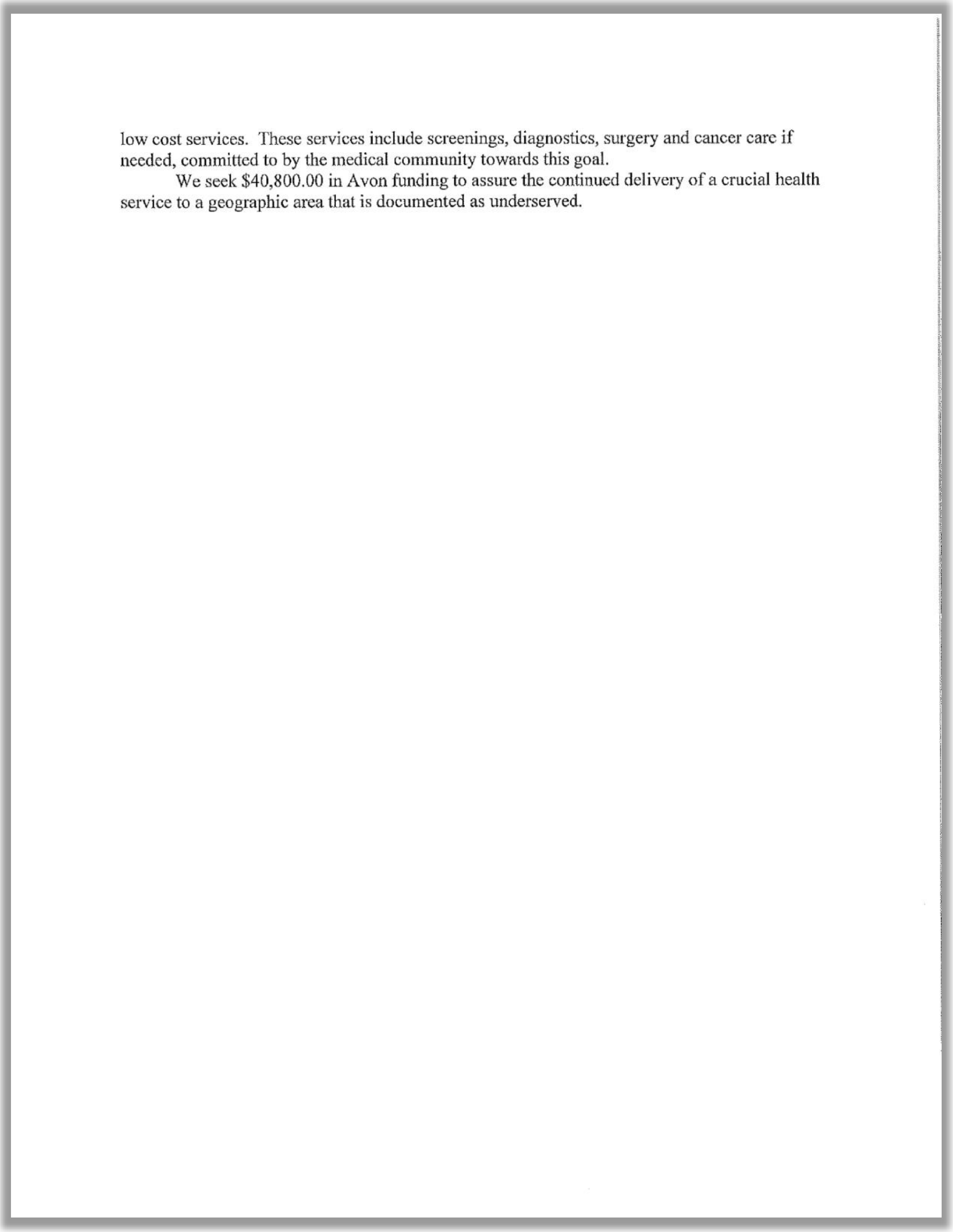
There are many small towns in the fifteen counties served by this program. The largest town is Salina in Saline County, where the program resides. According to the 2010 U.S. Census, the population of the area served is 178,941. The area is predominately white (94.6%), but it has an increasing Hispanic population (5.41%). Less than 1% of the population is Black. In the state of Kansas, 13.7% of the population is over the age of 65. In the program area, 18.8% of the population is over 65. In addition, there are four counties served where 25% of the population or more is over the age of 65. The percentage of the population living under the poverty level in the counties served is 11.6% and the percentage with a high school education or less is 78.6%.

According to the 2011-2012 Breast Cancer Facts & Figures released by the American Cancer Society, 66.5% of American women over the age of 40 have reported receiving a mammogram in the last two years. For women over the age of 40 who do not have health insurance, this number drops to 31.5%. Women with less than a high school education or who are below the poverty level are also less likely to have had a mammogram in the last two years.

In 2008, the American Cancer Society reported: *"Studies have shown that those who lack health insurance are more likely to be diagnosed at an advanced stage of cancer, when survival rates are much lower and treatment is more expensive. These patients often face much more difficult and far more extensive medical treatments, as well as a diminished quality of life—avoidable outcomes if they had the same level of access as insured patients to the current advances in cancer prevention, detection, and treatment options."*

Twenty-nine percent of women age 40 and over in Kansas do not have a usual source of medical care and, according to the Kaiser Family Foundation, 16% do not have health insurance. These statistics, combined with the older population and average education level of the area served make it imperative that these women are educated about the importance of screening and are given the resources to help them get what they need including services who accept Medicare.

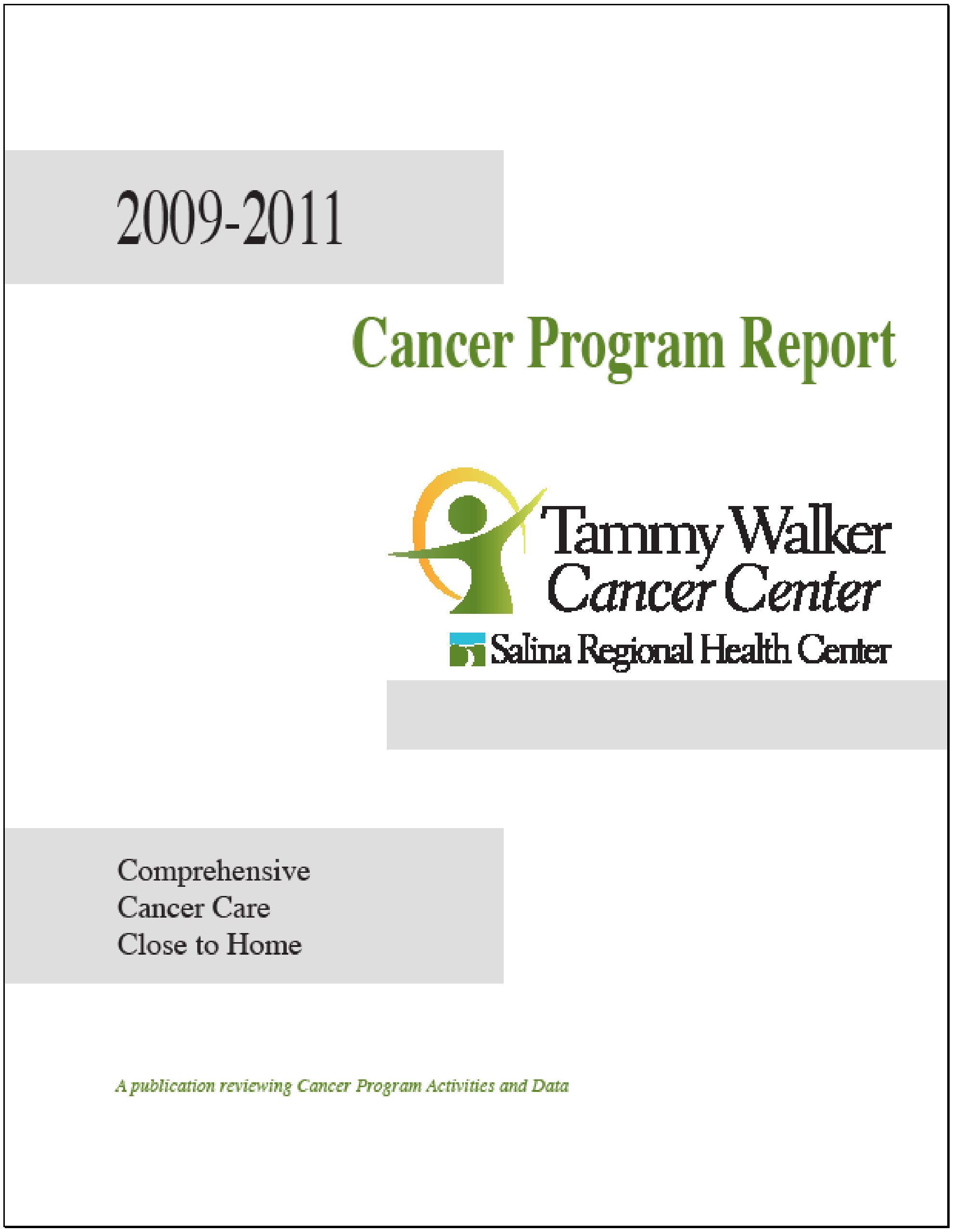
It is important to educate women in Kansas that they can self-refer for mammograms as long as they have a doctor's name to send the results to and that Medicare will pay for these services for senior women. With the support of this grant, we can continue our partnership with the county health nurses, clinic nurses and the medical providers in the North Central Counties of Kansas providing education, helping to recruit new women to initial clinical screening services and insure annual re-screening, follow-up on results and connect these women to the free and



low cost services. These services include screenings, diagnostics, surgery and cancer care if needed, committed to by the medical community towards this goal.

We seek $40,800.00 in Avon funding to assure the continued delivery of a crucial health service to a geographic area that is documented as underserved.

Figure 2.6 – Tammy Walker Cancer Center Program Report



2009-2011

Cancer Program Report

Tammy Walker
Cancer Center
Salina Regional Health Center

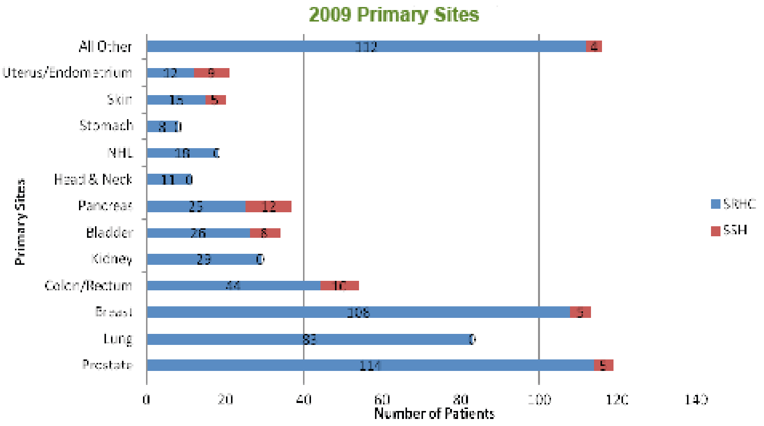
Comprehensive
Cancer Care
Close to Home

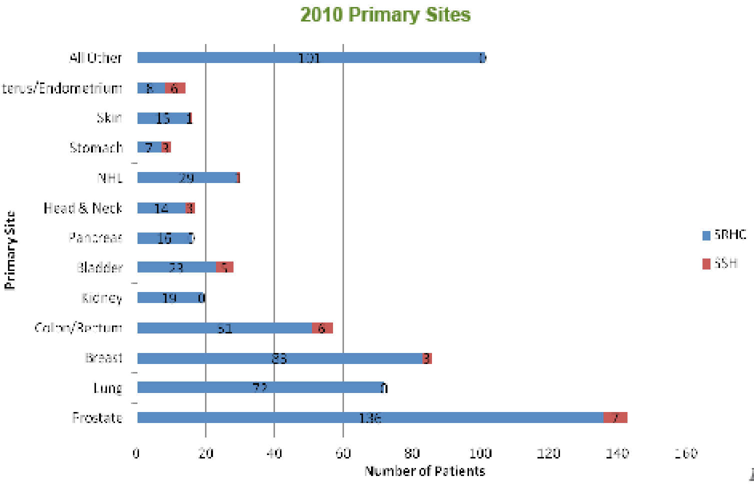
A publication reviewing Cancer Program Activities and Data

Cancer Registry

The Cancer Registry at Salina Regional Health Center collects, manages and analyzes cancer information on all cancer patients who have been diagnosed and/or treated at Salina Regional Health Center, Tammy Walker Cancer Center and Salina Urology.

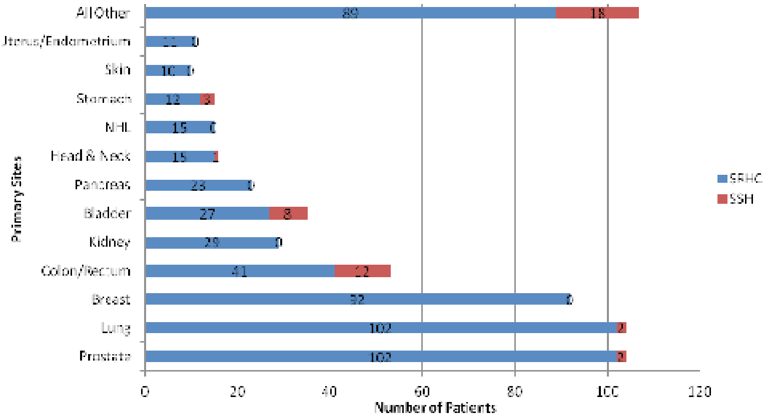
From 2009 to 2011, Salina Regional Health Center and the Salina Surgical Hospital treated 1179 cases of cancer. Prostate, lung, and breast cancer were the most common types seen. The charts below show the distribution of the common types of cancer treated between 2009 and 2011.





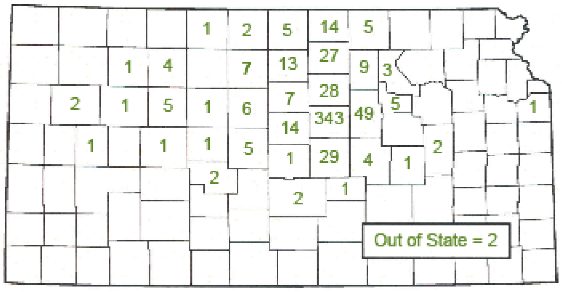
Cancer Registry *continued*

2011 Primary Sites



The majority of cancer patients treated at Salina Regional Health Center between 2009 and 2011 were Saline County residents. However, SRHC serves the entire region and 42 Kansas counties are represented in the patient population. The following maps show the counties of residence of the cancer patients treated at SRHC between 2009 and 2011.

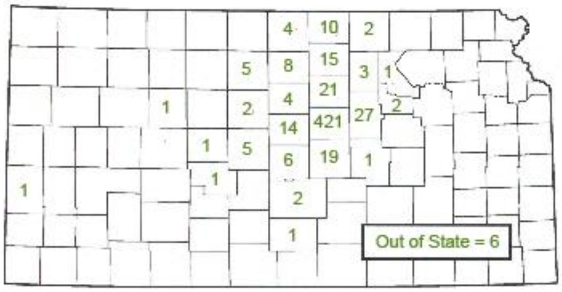
2009 Cancer Patient County of Origin
(605 Total Cases)



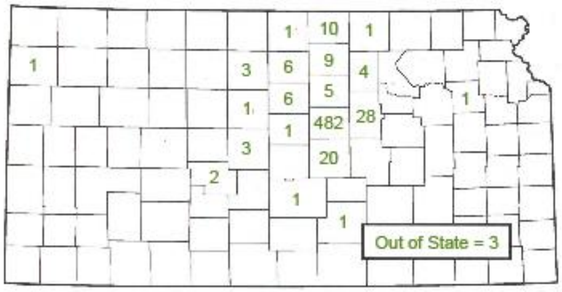
Page 3

Cancer Registry *continued*

2010 Cancer Patient County of Origin
(584 Total Cases)

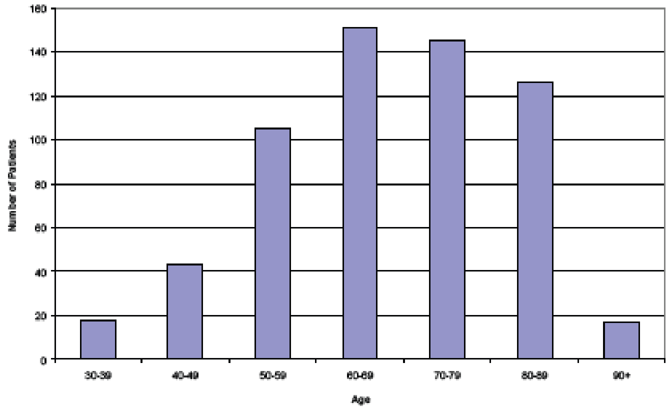


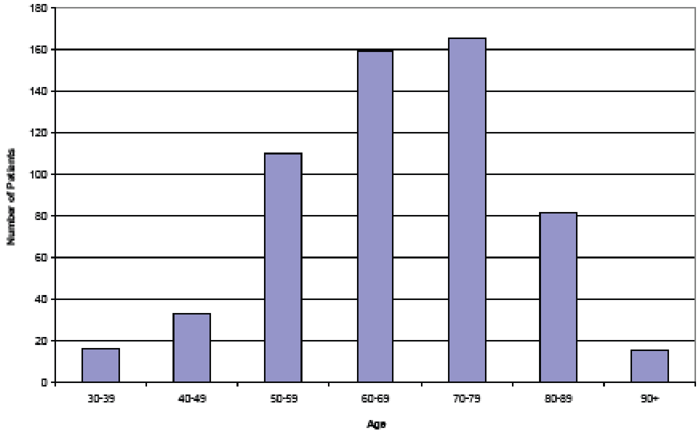
2011 Cancer Patient County of Origin
(591 Total Cases)

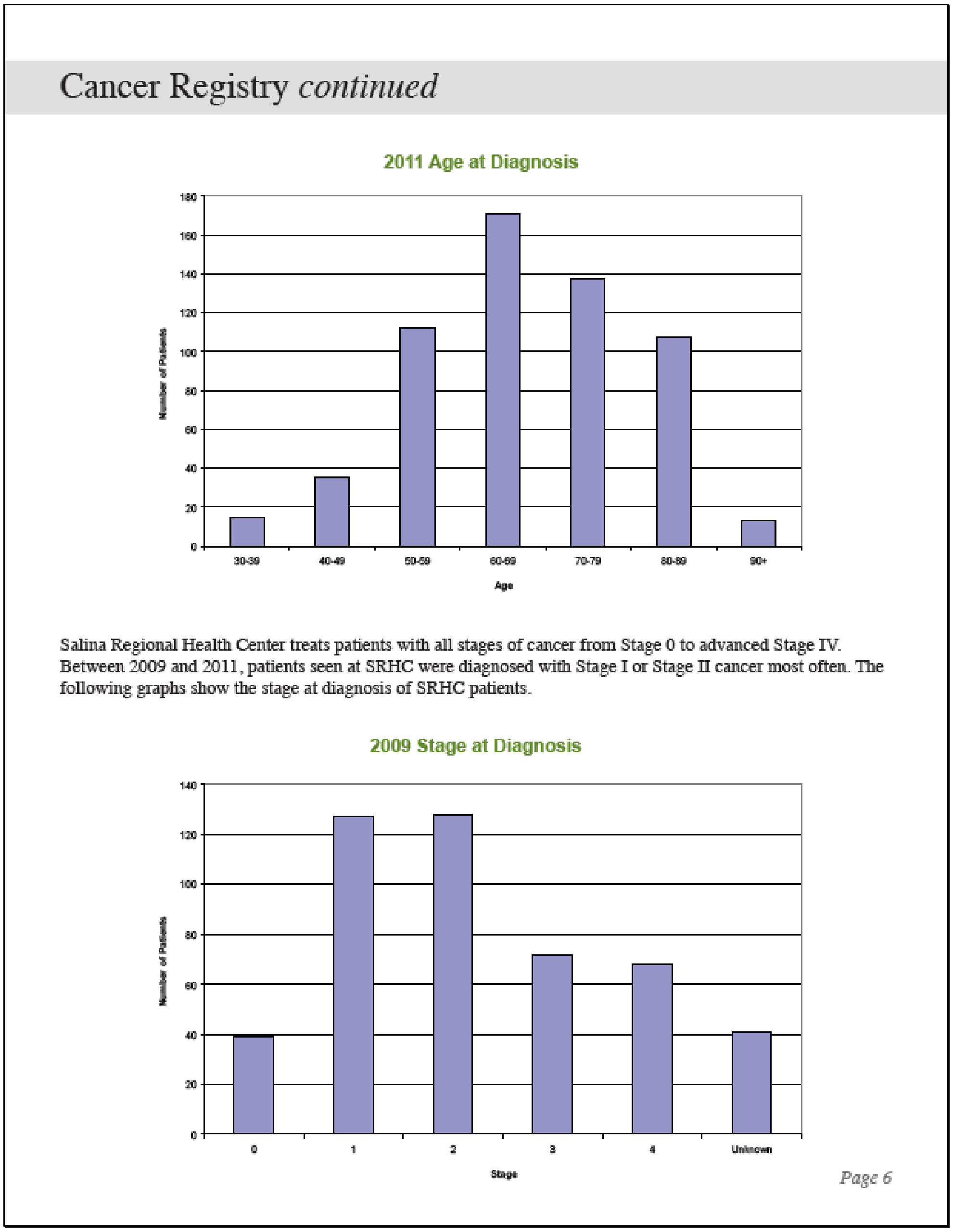


Cancer Registry *continued*

The age of cancer patients at diagnosis ranged from under 30 years old to over 90 years old. However, it was most common for cancer patients at SRHC to be between 60 and 79 years old at diagnosis. The following graphs show the age distribution of patients treated at SRHC.


2009 Age at Diagnosis


2010 Age at Diagnosis



Cancer Registry *continued*

2011 Age at Diagnosis

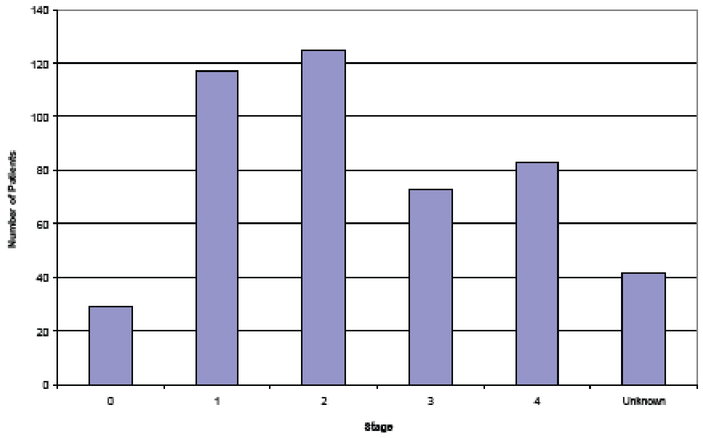
Salina Regional Health Center treats patients with all stages of cancer from Stage 0 to advanced Stage IV. Between 2009 and 2011, patients seen at SRHC were diagnosed with Stage I or Stage II cancer most often. The following graphs show the stage at diagnosis of SRHC patients.

2009 Stage at Diagnosis

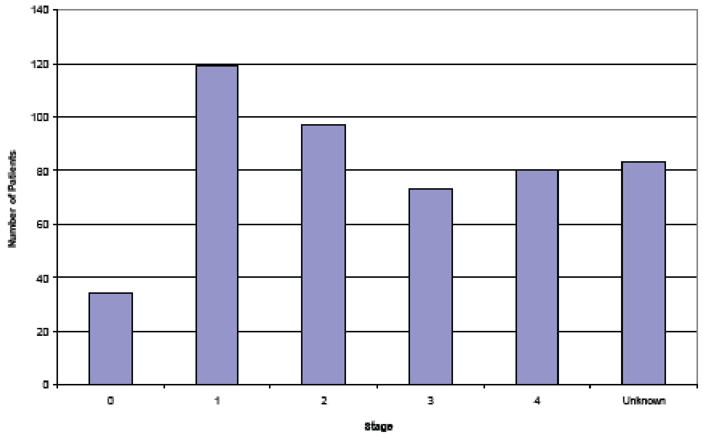
Page 6

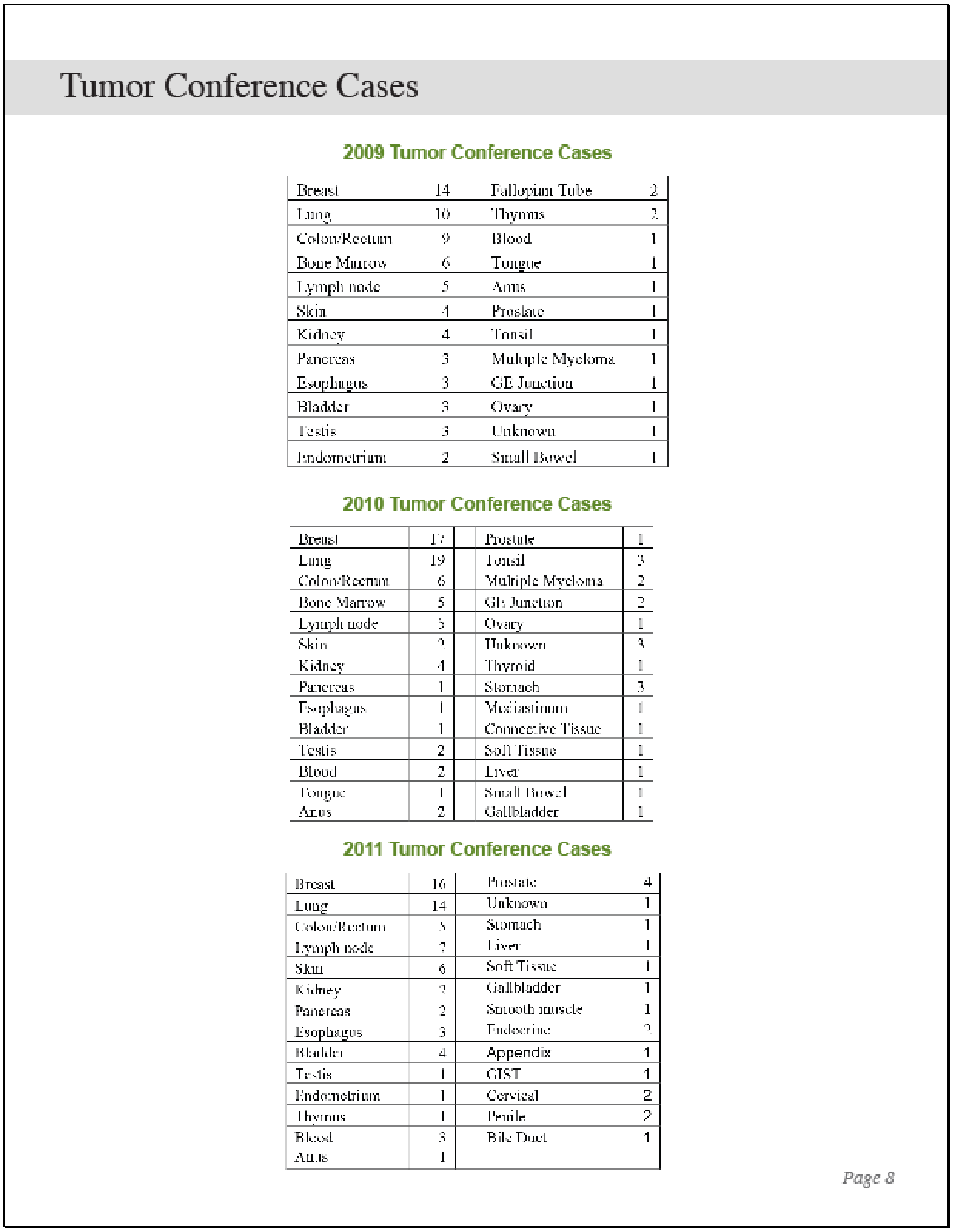
Cancer Registry *continued*

2010 Stage at Diagnosis



2011 Stage at Diagnosis





Tumor Conference Cases

2009 Tumor Conference Cases

Breast	14	Fallopian Tube	2
Lung	10	Thymus	2
Colon/Rectum	9	Blood	1
Bone Marrow	6	Tongue	1
Lymph node	5	Anus	1
Skin	4	Prostate	1
Kidney	4	Tonsil	1
Pancreas	3	Multiple Myeloma	1
Esophagus	3	GE Junction	1
Bladder	3	Ovary	1
Testis	3	Unknown	1
Endometrium	2	Small Bowel	1

2010 Tumor Conference Cases

Breast	17	Prostate	1
Lung	19	Tonsil	3
Colon/Rectum	6	Multiple Myeloma	2
Bone Marrow	5	GE Junction	2
Lymph node	5	Ovary	1
Skin	2	Unknown	3
Kidney	4	Thyroid	1
Pancreas	1	Stomach	3
Esophagus	1	Mediastinum	1
Bladder	1	Connective Tissue	1
Testis	2	Soft Tissue	1
Blood	2	Liver	1
Tongue	1	Small Bowel	1
Anus	2	Gallbladder	1

2011 Tumor Conference Cases

Breast	16	Prostate	4
Lung	14	Unknown	1
Colon/Rectum	5	Stomach	1
Lymph node	7	Liver	1
Skin	6	Soft Tissue	1
Kidney	7	Gallbladder	1
Pancreas	2	Smooth muscle	1
Esophagus	3	Endocrine	2
Bladder	4	Appendix	1
Testis	1	GIST	1
Endometrium	1	Cervical	2
Thymus	1	Penile	2
Blood	3	Bile Duct	1
Anus	1		

Tammy Walker
Cancer Center
Salina Regional Health Center
511 S. Santa Fe • Salina, KS 67402-3617

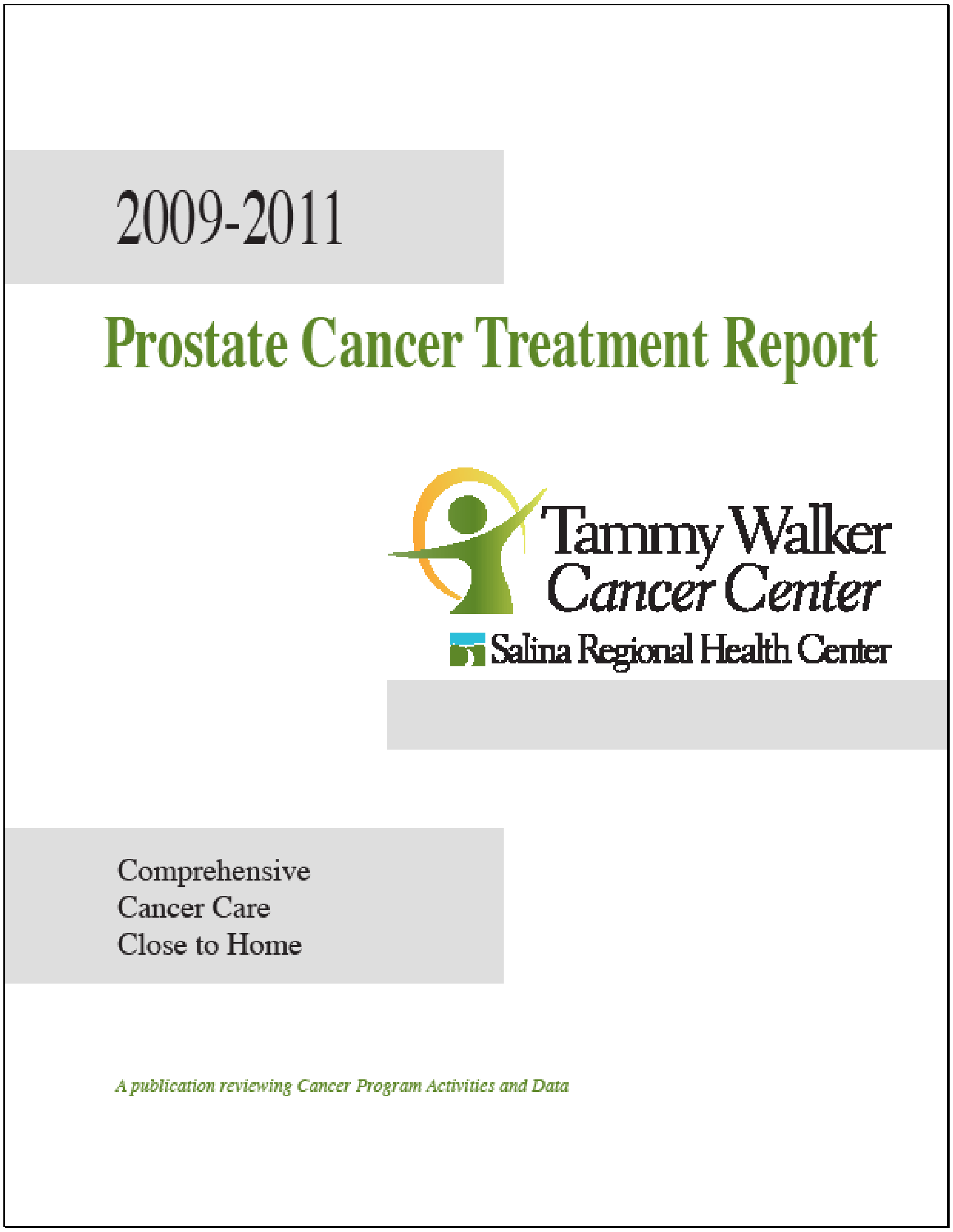
Cancer Committee Members 2009 – 2011

Larry Beck, MD, Chairman – Medical Oncology
William Cathcart-Rake, MD – Medical Oncology
Phillip Munoz, MD/David McKenzie – Pathology
Pam Davis, MD/Jeff Sparacino, MD – Diagnostic Radiology
Jody Neff, MD/Chris Rupe, MD – Surgery – Cancer Liasion Physician
Claudia Perez-Tamayo, MD – Radiation Oncology
Muhammad Ahmed, MD – Medical Oncology
Brian Smith, MD/Ryan Payne, MD – Urology
Mark Wiles, MD – Family Practice
Matthew Carey, MD – Psychology
Jake Breeding, MD – Surgery

Allied Health Members 2009 – 2011

Rebecca Troyer – Radiation Therapy
Pam Ehlts, CTR – Cancer Registry
Ava O'Flannagan – Quality Improvement
Terry Hauschel, RT – Radiology
Mary Quinley, RN – Medical Services Director
Lesli Schrader, RN – Hospice
David Mantz – Cancer Services Director
Joel Phelps, COO – Administration
Keri Kavouras, RN – Clinical Trials
Lynn Marshall, RN – Patient Navigation
Jeanne Byquist, LD – Dietary
Linda Hinnenkamp, RN – Outreach Services
Charlie Grimwood – Sunflower Health Network
Sandy Ferguson, RN – Mowery Clinic
Rev. Daniel Castillo – Chaplain
Jill Smith-Barker, LMSW – Social Worker
Steven Blanner, Rph/Mellissa Hulse, Rph – Pharmacy
Ruth Cathcart-Rake, RT – Physical Therapy
Heather West – American Cancer Society
Charlotte Craig – Cancer Registry

Figure 2.7 – Tammy Walker Cancer Center Prostate Cancer Treatment Report



2009-2011

Prostate Cancer Treatment Report

Tammy Walker
Cancer Center
Salina Regional Health Center

Comprehensive
Cancer Care
Close to Home

A publication reviewing Cancer Program Activities and Data

Prostate Cancer Treatment at SRHC (2009-2011)

Background

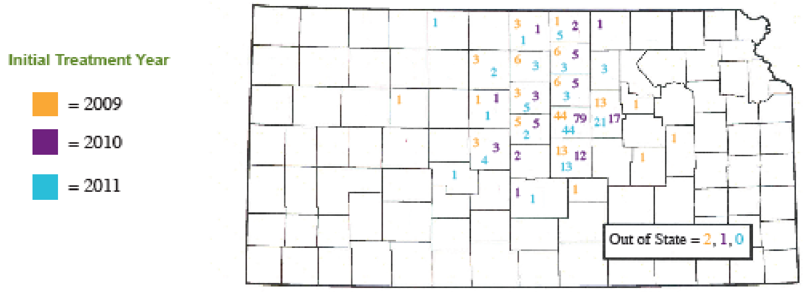
The prostate is a walnut-sized gland that is part of the male reproductive system. It contributes to the production of seminal fluid and is located in front of the rectum and under the bladder. When the prostate becomes enlarged, it can squeeze the urethra, limiting the normal flow of urine.

Prostate cancer is one of the most common types of cancer in men and it develops in the tissues of the prostate. It occurs when new cells are formed abnormally or old and damaged cells fail to die as they should. These abnormal cells form a mass called a tumor. Prostate cancer is generally slow-growing. However, in some cases it may be aggressive and can invade nearby tissues or spread to other parts of the body. Prostate cancer can spread when cancer cells travel from the prostate through blood vessels, nerves, or lymph system to other tissues in the body.

Prostate cancer generally does not cause symptoms until it has spread. However, some men with prostate cancer experience frequent urination, increased urination at night, difficulty urinating, blood in the urine and painful urination. Men with advanced prostate cancer may suffer from bone pain.

Salina Regional Health Center treats many men from north central Kansas with prostate cancer each year. The graph below shows the distribution of prostate cancer patients at SRHC by their county of residence.

Prostate Cancer Patient
County of Origin

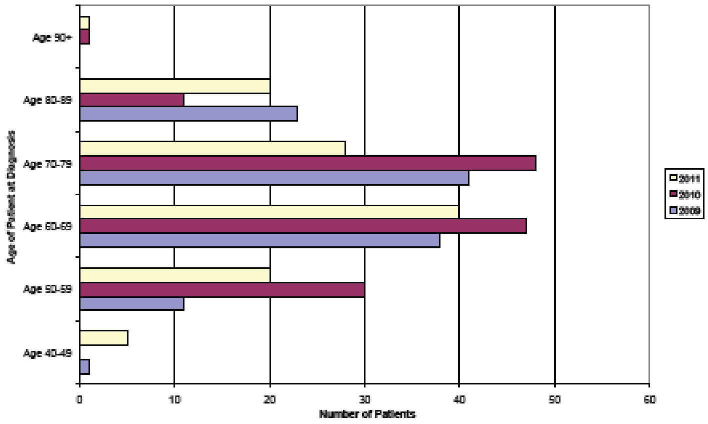


Prostate Cancer *continued*

Age

The risk of prostate cancer increases with age and it is most common in men over the age of 65. The graph below shows the ages of patients treated at SRHC.

Prostate Cancer Patients Treated at SRHC by Age



Prostate cancer patients treated at Salina Regional Health Center in 2009 ranged in age from 50 to 89 years old. This age range was narrower than was seen nationally in 2009. The table below shows SRHC prostate cancer patients by age and prostate cancer patients by age nationally.

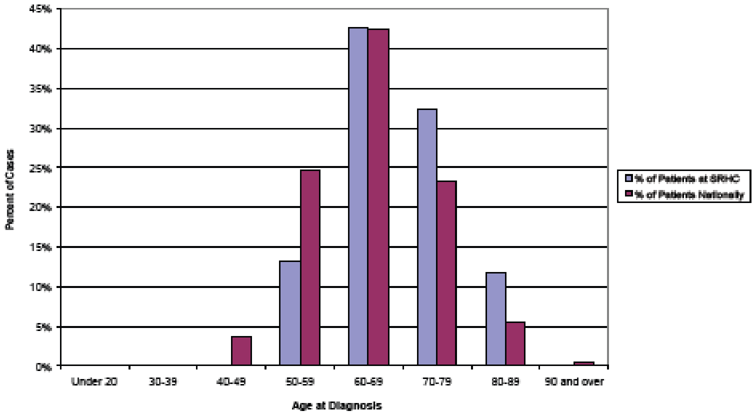
Prostate Cancer Cases by Age at Diagnosis

Age	Number of Patients at SRHC	Number of Patients Nationally
Under 20	0	7
30-39	0	129
40-49	0	4935
50-59	9	33495
60-69	29	57131
70-79	22	31480
80-89	8	7405
90 and over	0	707

Prostate Cancer *continued*

In 2009, the patients treated for prostate cancer at SRHC were slightly older than the national average. The graph below shows the percentage of prostate cancer patients in each age bracket for SRHC and nationally.

2009 Prostate Cancer Cases by Age at SRHC and Nationally



Stages

Prostate cancer is categorized into stages, which describe the extent of the disease in the patient. In addition to the location and size of the tumor, two other metrics called a Gleason score and a Prostate-specific antigen (PSA) test are used to help stage prostate cancer. A Gleason score is assigned by a pathologist based on the appearance and pattern of the tumor cells under a microscope. The PSA test measures for the aggressiveness of the cells microscopically. It is often elevated in patients with prostate cancer.

Stage I
Early-stage cancer that is located only in the prostate. It has a Gleason score of 6 or less and the PSA level is less than 10. The tumor may be too small to detect during a digital rectal exam (DRE).

Stage II
More advanced than Stage I and considered more aggressive, but the tumor still does not extend beyond the prostate. Stage II has a higher Gleason Score or a higher PSA. Stage II prostate cancer may be diagnosed as Stage IIA or IIB with IIB being more aggressive and organ confined with a higher grade.

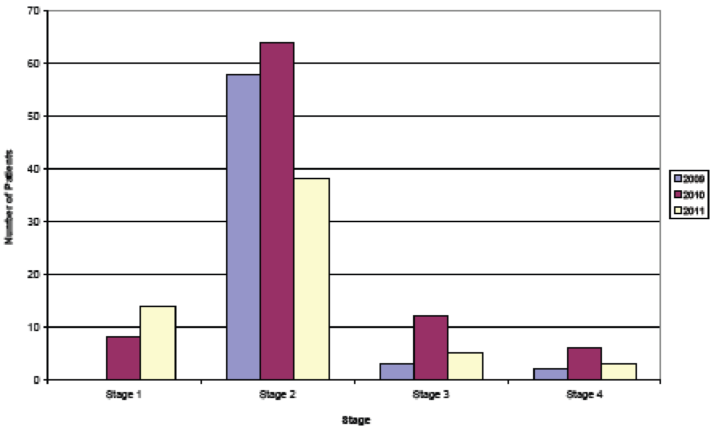
Stage III
The tumor extends beyond the prostate in Stage III prostate cancer. It may have invaded the seminal vesicle or other nearby tissues. However, it has not yet spread to any structure outside the pelvis including lymph nodes or bones.

Prostate Cancer *continued*

Stage IV
This is the most advanced stage of prostate cancer. The tumor has spread and it could have invaded nearby organs like the bladder or rectum. It also may have spread to the lymph nodes and more distant parts of the body like the bones.

Salina Regional Health Center treats men with all stages of prostate cancer. The graph below shows the stages of prostate cancer seen at SRHC from 2009-2011.

Prostate Cancer Cases at SRHC by Stage



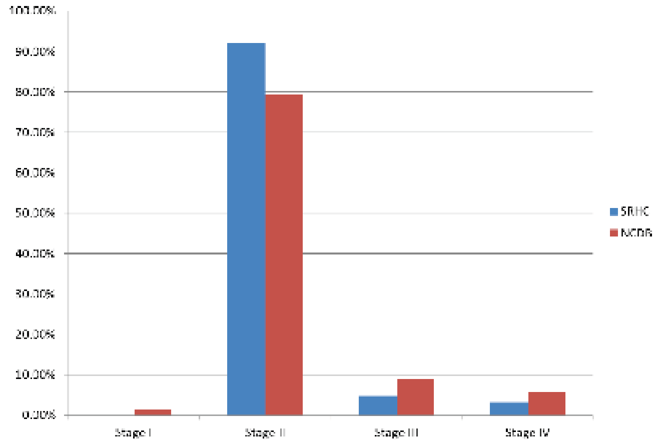
The patients treated for prostate cancer at SRHC were overwhelmingly diagnosed at Stage II of the disease. This trend is also seen nationally; 79% of patients diagnosed with prostate cancer in 2009 in the U.S. were Stage II. The chart below shows the number of patients diagnosed at each stage of disease in 2009 and the graph compares the percentage of patients at SRHC and nationally diagnosed at each stage.

Prostate Cancer Cases by Stage at Diagnosis

Stage	Number of Patients at SRHC	Number of Patients Nationally
Stage I	0	1902
Stage II	58	107529
Stage III	3	11944
Stage IV	2	7725

Prostate Cancer *continued*

2009 Prostate Cancer Cases by Stage at SRHC & Nationally



Treatment Choices

There are several different treatment options available for prostate cancer. The appropriate treatment plan depends on the stage of the cancer, the patient's age, condition of the individual patient and the patient's choice.

Active Surveillance

In some cases of early-stage prostate cancer where the tumor seems to be slow-growing, the appropriate treatment may be active surveillance. With this option, the prostate cancer will be checked regularly by the doctor with tests like digital rectal exams and PSA tests to see if the tumor is changing.

Surgery

Another treatment option that may be appropriate for some men with prostate cancer is surgery. It is most common for men with cancer that has not spread outside the prostate. With this option, the entire prostate and several nearby lymph nodes are usually removed. The total removal of the prostate is called a radical prostatectomy. This procedure may be performed in several different ways. The prostate may be removed through a single incision in the abdomen or it may be removed laproscopically (several small incisions are made in the abdomen and a light and camera are inserted to assist the surgeon in removing the prostate) or it can also be done by a perineal incision. Sometimes, during a laparoscopic prostatectomy, the surgical instruments are attached to a robot, which is controlled by the surgeon.

Cryosurgery

During cryosurgery, needles are inserted into the prostate and a cold gas is placed into the needles. This results in the tissue surrounding the needles freezing. The tissue will be thawed and frozen in cycles during cryosurgery until the cancer cells and some surrounding tissue die.

Prostate Cancer *continued*

Radiation Therapy

Radiation therapy is a common treatment option for men with all stages of prostate cancer. It uses high-energy beams to kill cancer cells. With external beam radiation, the patient lies on a table while a machine directs beams at the prostate cancer. Treatments are usually conducted five days a week for several weeks. In some cases, brachytherapy may be appropriate. In this treatment, radioactive seeds that deliver a low dose of radiation over a long period of time are placed in the prostate tissue by a doctor using a needle and ultrasound.

Chemotherapy

Chemotherapy is a common treatment for men with advanced prostate cancer. This treatment involves intravenously administering drugs which kill rapidly dividing cells in the body. This includes cancer cells and some other types of cells like blood cells and the cells in the roots of hair (which is why chemotherapy may cause low blood counts and hair loss).

Hormone Therapy

The male hormone testosterone can cause prostate cancer to grow, so some men with prostate cancer may undergo hormone therapy to stop producing testosterone or prevent it from reaching the prostate cancer. Medications called luteinizing hormone-releasing hormone (LHRH) antagonist and agonists stop the testicles from receiving the chemical messages telling them to make testosterone. Medications called anti-androgens stop testosterone from reaching the prostate cancer cells. In some cases, the testicles may be surgically removed to reduce testosterone levels in a procedure called an orchiectomy.

High-Intensity Focused Ultrasound

A new surgical technique currently undergoing study is high-intensity focused ultrasound treatment. This treatment uses sound waves to heat up the prostate tumor and kill cancer cells. It is still experimental and is not available at SRHC.

Immunotherapy

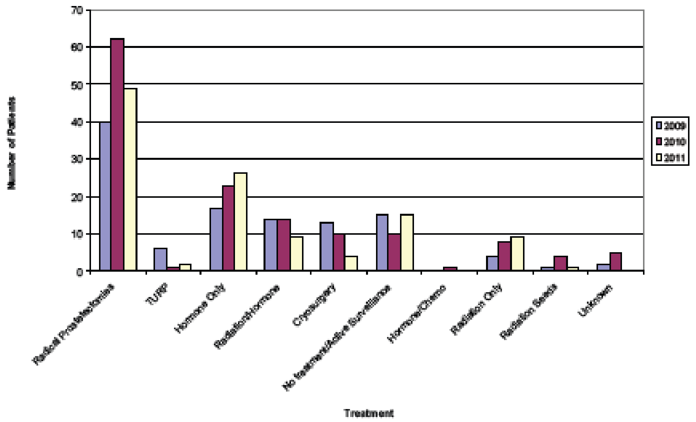
Gene therapy or immune therapy may be more successful in treating metastasized tumors of the prostate. Clinical trials are being conducted with agents that stimulate the body's immune system to fight prostate cancer.

Treatment at Salina Regional Health Center

Patients with prostate cancer who receive treatment at Salina Regional Health Center may undergo one or more types of treatment depending on their age, condition and the extent of their cancer. The graph on the following page shows the treatments received by patients with prostate cancer at SRHC from 2009 to 2011.

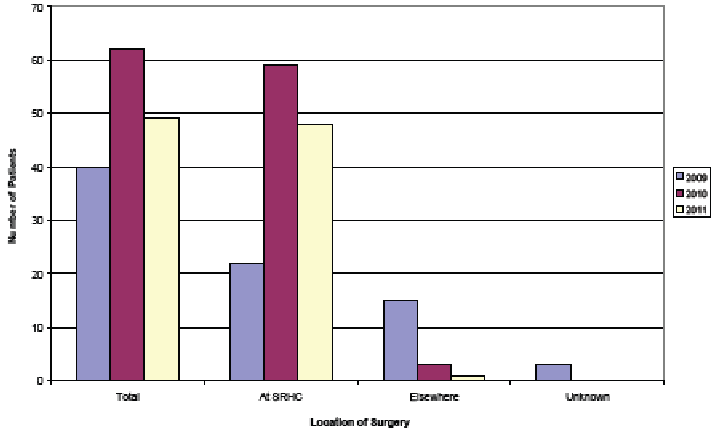
Prostate Cancer *continued*

Prostate Cancer by Treatment at SRHC



A significant number of patients diagnosed with prostate cancer at SRHC underwent radical prostatectomies. Most patients opted to have the procedure done at SRHC, but some had it done at different facilities.

Radical Prostatectomies



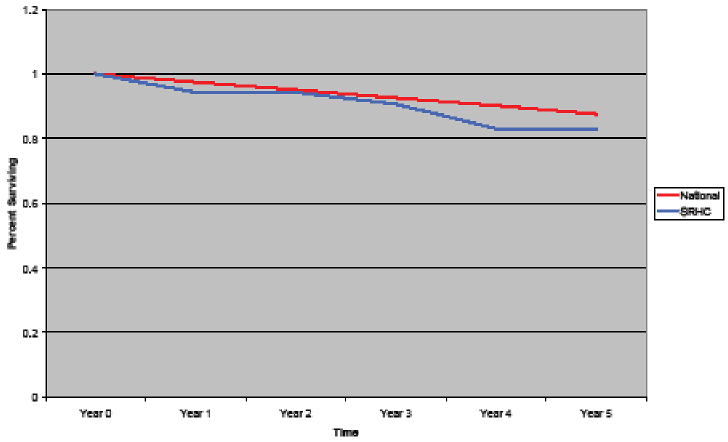
Prostate Cancer *continued*

How does Salina Regional Health Center Compare?

In 2009, SRHC treated a total of 68 men diagnosed with prostate cancer. Nationally, 135,595 men were diagnosed with prostate cancer in 2009.

Survival

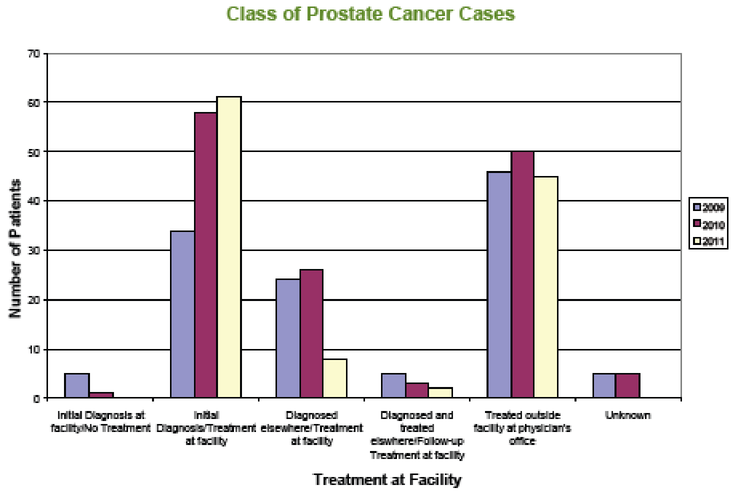
Patients who undergo treatment for prostate cancer at SRHC have comparable survival rates to those seen nationally. The graph below shows the five year survival rates of prostate cancer patients treated at SRHC and nationally.



Classes of Cases

Some prostate cancer patients are diagnosed and receive their entire treatment at SRHC. Others are diagnosed elsewhere and then choose to come to SRHC for treatment. Some are diagnosed at SRHC and then seek out treatment at other facilities. The following graph separates the prostate cancer cases seen at SRHC into classes based on where they were diagnosed and treated.

Prostate Cancer *continued*


Class of Prostate Cancer Cases

Summary

Prostate cancer is the most common cancer reported by the SRHC Cancer Registry. Most patients are in the age range of 60-65 and are diagnosed as Stage II. SRHC has purchased a Da Vinci Robot machine to do robot-assisted prostatectomies. This has increased the choices for men enabling more to undergo treatment at SRHC.

The age of men being diagnosed has changed in 2011 from being mostly aged 70 to 89 to being mostly aged 50 to 69. All treatment options for men with prostate cancer are available at SRHC. The five year survival of prostate cancer patients at SRHC remains comparable with the national five year survival rate of prostate cancer patients.

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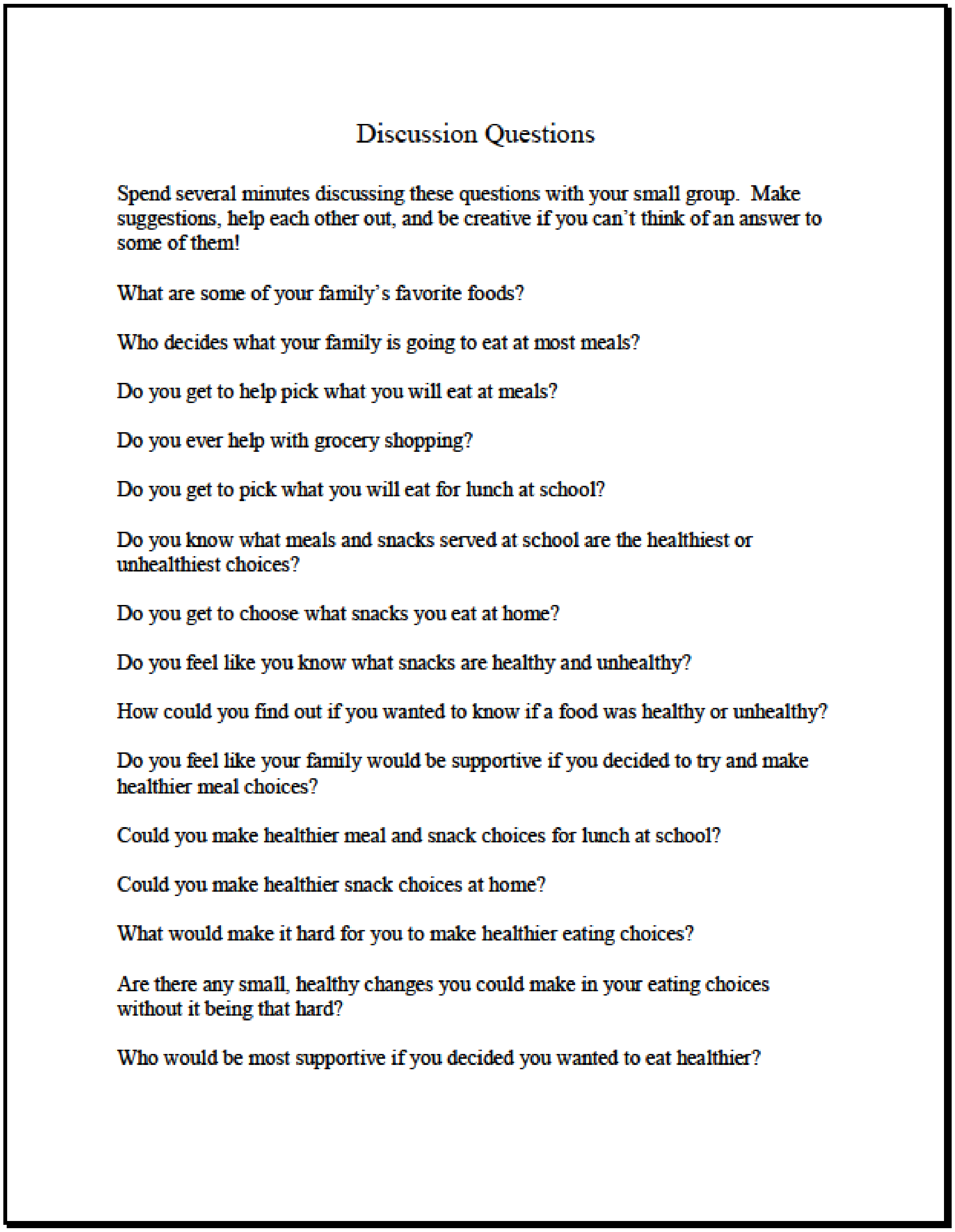
A special thanks to Salina Urologist Ryan Payne, M.D., for reviewing the information in this report.

Figure 2.8 – Discussion questions activity



Discussion Questions

Spend several minutes discussing these questions with your small group. Make suggestions, help each other out, and be creative if you can't think of an answer to some of them!

What are some of your family's favorite foods?

Who decides what your family is going to eat at most meals?

Do you get to help pick what you will eat at meals?

Do you ever help with grocery shopping?

Do you get to pick what you will eat for lunch at school?

Do you know what meals and snacks served at school are the healthiest or unhealthiest choices?

Do you get to choose what snacks you eat at home?

Do you feel like you know what snacks are healthy and unhealthy?

How could you find out if you wanted to know if a food was healthy or unhealthy?

Do you feel like your family would be supportive if you decided to try and make healthier meal choices?

Could you make healthier meal and snack choices for lunch at school?

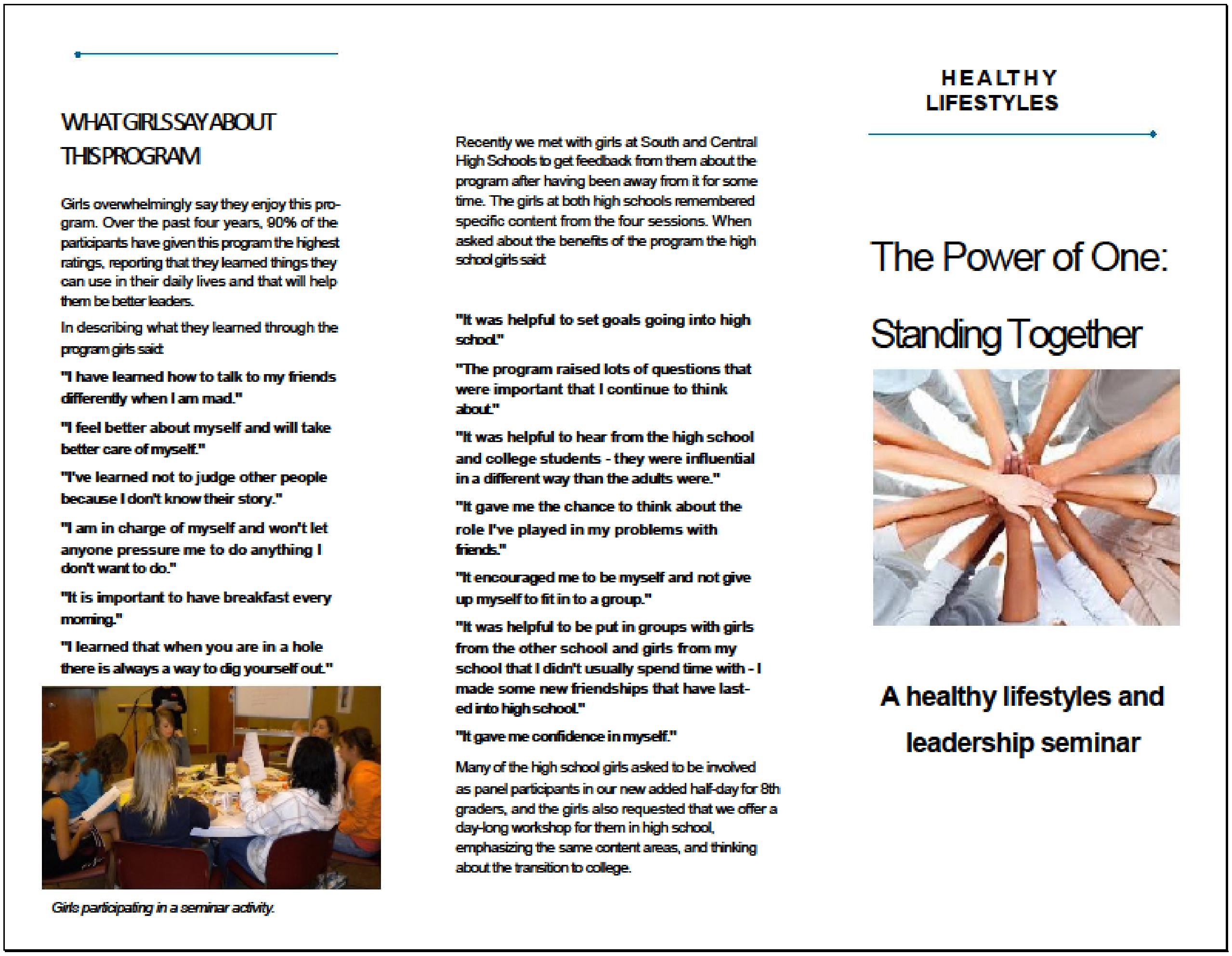
Could you make healthier snack choices at home?

What would make it hard for you to make healthier eating choices?

Are there any small, healthy changes you could make in your eating choices without it being that hard?

Who would be most supportive if you decided you wanted to eat healthier?

Figure 2.9 – Fundraising brochure



WHAT GIRLS SAY ABOUT THIS PROGRAM

Girls overwhelmingly say they enjoy this program. Over the past four years, 90% of the participants have given this program the highest ratings, reporting that they learned things they can use in their daily lives and that will help them be better leaders.

In describing what they learned through the program girls said:

"I have learned how to talk to my friends differently when I am mad."

"I feel better about myself and will take better care of myself."

"I've learned not to judge other people because I don't know their story."

"I am in charge of myself and won't let anyone pressure me to do anything I don't want to do."

"It is important to have breakfast every morning."

"I learned that when you are in a hole there is always a way to dig yourself out."

Girls participating in a seminar activity.

Recently we met with girls at South and Central High Schools to get feedback from them about the program after having been away from it for some time. The girls at both high schools remembered specific content from the four sessions. When asked about the benefits of the program the high school girls said:

"It was helpful to set goals going into high school."

"The program raised lots of questions that were important that I continue to think about."

"It was helpful to hear from the high school and college students - they were influential in a different way than the adults were."

"It gave me the chance to think about the role I've played in my problems with friends."

"It encouraged me to be myself and not give up myself to fit in to a group."

"It was helpful to be put in groups with girls from the other school and girls from my school that I didn't usually spend time with - I made some new friendships that have lasted into high school."

"It gave me confidence in myself."

Many of the high school girls asked to be involved as panel participants in our new added half-day for 8th graders, and the girls also requested that we offer a day-long workshop for them in high school, emphasizing the same content areas, and thinking about the transition to college.

HEALTHY LIFESTYLES

The Power of One:

Standing Together

A healthy lifestyles and leadership seminar

The Power of One: Standing Together

THE PROGRAM

The Power of One: Standing Together, is a healthy lifestyles and leadership seminar offered to 7th grade girls in Salina public schools. Now entering its 5th year, this program brings together 50 girls each year from both South and Lakewood middle schools. These girls, identified by their teachers as either positive or negative leaders, spend a full day with the program in November and then again in April .

CONTENT

During the day-long seminars girls rotate through four different sessions:

-Dealing with Relational Aggression with Barbara Livengood, gifted consultant at South Middle School and Paula Fried, PhD, a psychologist in private practice in Salina.

This session explores the ways that girls can be hurtful and helpful to each other, and examines common dilemmas for girls in their relationships both at home and at school. Girls discuss and practice how to deal with gossip, how to stand up for self and others, and how to express anger appropriately.

-Respecting our Sexual Selves with Vicki Price, CAPS Education Director and Elaine Ferguson, DO, family physician at ComCare, and a panel of older teens/college students. This session provides girls with the opportunity to ask questions about topics such as puberty and healthy development, dealing with pressure from peers, and to examine the media's influence on sexual decision-making.

-Nourishing Our Bodies with Jeanne Byquist, RD, dietitian at Tammy Walker Cancer Center. In this session the girls learn how to make nutritious and appealing food choices in response to "true" hunger signals. The girls also learn the difference between "dieting" and healthy eating, promoting a greater appreciation and acceptance of their bodies.

-Goal Setting with Amy Humphrey, At-Risk Counselor with USD305. This session helps girls think about where they want to go in life. Girls learn how to concentrate their efforts based on their priorities, how to spot distractions that would otherwise lure them from their course, and how to develop "big picture" and "small target" goals for the future.

In between our November and April sessions the girls meet monthly at their respective schools with staff (Barbara Livengood at South Middle School and Sarah Lancaster and Michelle Smith at Lakewood Middle School) to reinforce the concepts introduced at the day long sessions.

At the girls' request, we added a half-day session with them during their 8th grade year, focusing on media literacy, specifically looking at the way that women are portrayed in the media and the impact this has on self-esteem and body image.

Through a partnership with Girl Scouts of Kansas Heartland we have been able to add occasional opportunities for 8th grade girls to explore the impact of media imagery on body image. We plan to add an additional half-day session for the 8th graders this year, focusing on the academic and social transition to high school.

2009 Healthy Lifestyles Seminar

SPONSORED BY:

Salina Educational Foundation
Salina Regional Health Center Foundation
USD 305

Chapter 3 - Alignment with Public Health Core Competencies

Throughout my field experience and my coursework at Kansas State University, I learned the necessary skills and gained experience to meet the public health core competencies.

Biostatistics: I first gained exposure to biostatistics in the Fundamentals of Biostatistics course that I took as part of my MPH coursework. I learned to further apply that knowledge through the Nutritional Epidemiology course, which required the analysis and evaluation of the statistical methods used in published research articles. I also had the opportunity to use biostatistics to analyze raw survey data collected as part of a research project for the Strategic Health Communication course. Finally, during my field experience, I applied my biostatistics knowledge to analyze the results of the survey of cancer survivors. Using Fisher's exact tests, I found several significant differences between survivors currently undergoing treatment and long-term survivors. I also used chi-square tests to compare the TWCC patient population to national data while writing the cancer program report and prostate cancer report.

Environmental Health: I learned about environmental health initially while taking the Environmental Toxicology course. As part of that course, I wrote a report about the environmental hazards and effects of exposure on humans caused by hexavalent chromium. I also learned more about the impact of different environmental factors on the incidence rates of different types of cancer during my field experience.

Epidemiology: This core competency has been a part of many of the courses I took during my public health education at Kansas State. Many courses had assigned readings that required an understanding of epidemiologic concepts. Two courses I took, Introduction Epidemiology and Nutritional Epidemiology, were focused specifically on epidemiology. As part of the Strategic Health Communication course, I conducted an extensive search of health literature on the topic of food choice behavior as part of my research and final paper. This required a solid understanding of epidemiology. I also learned more about this topic from TWCC's registrar while I was writing the two public reports during my field experience.

Health Care Administration: I was exposed to this core competency through the Health Care Administration course and, extensively, during my field experience at Tammy Walker Cancer Center. I got to see the connections between individual patient care and public health through the different programs and events organized at TWCC. I also gained a better understanding of the challenges involved when multiple health care organizations try to work together. Different organizations often have slightly different goals, requirements, and sources of funding depending on their organization's mission and structure.

Social and Behavioral Sciences: I gained exposure to this core competency in several of my courses and in the Strategic Health Communication course, I had the opportunity to design a survey about food choice behavior using different theories of health behavior like Social Cognitive Theory and the Health Belief Model. During my field experience, I applied concepts I had learned about the impact of social and behavior factors on eating behavior to create discussion questions and guide middle school girls through a discussion of realistic changes they could make to adopt a healthier diet.

Conclusion

Through my public health education at Kansas State, I have gained an understanding of the huge impact public health has on the world around me. Prior to starting this program, I had a very limited view of what public health was and how far-reaching its effects were. I believe the knowledge I have gained in public health has made me a better medical student and more aware of how physicians, and the systems they operate in, affect the health of the population. I believe my education in public health will help me be a more aware and effective physician in the future and will open up opportunities for me to make an impact in the area of public health.

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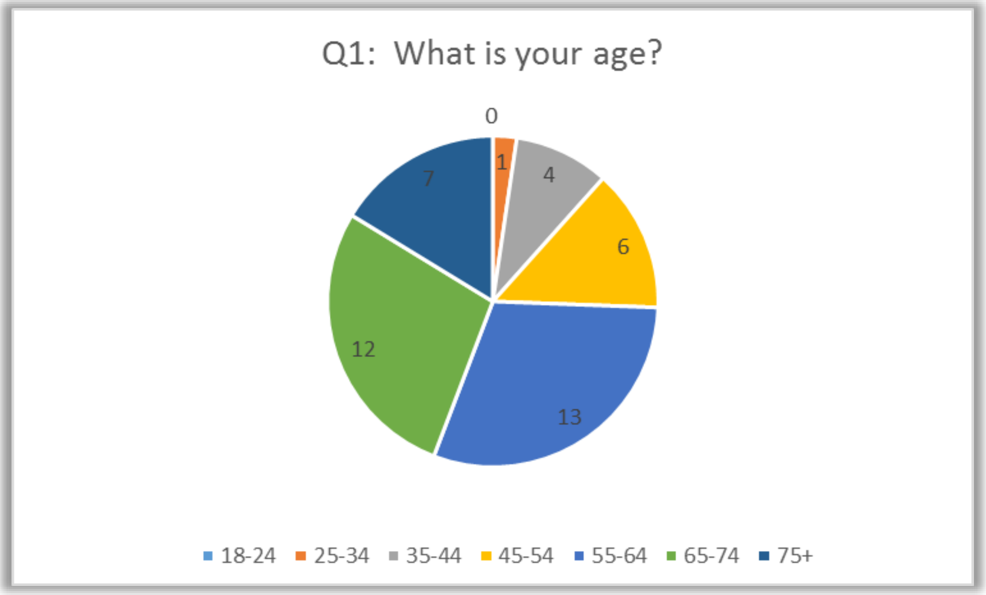
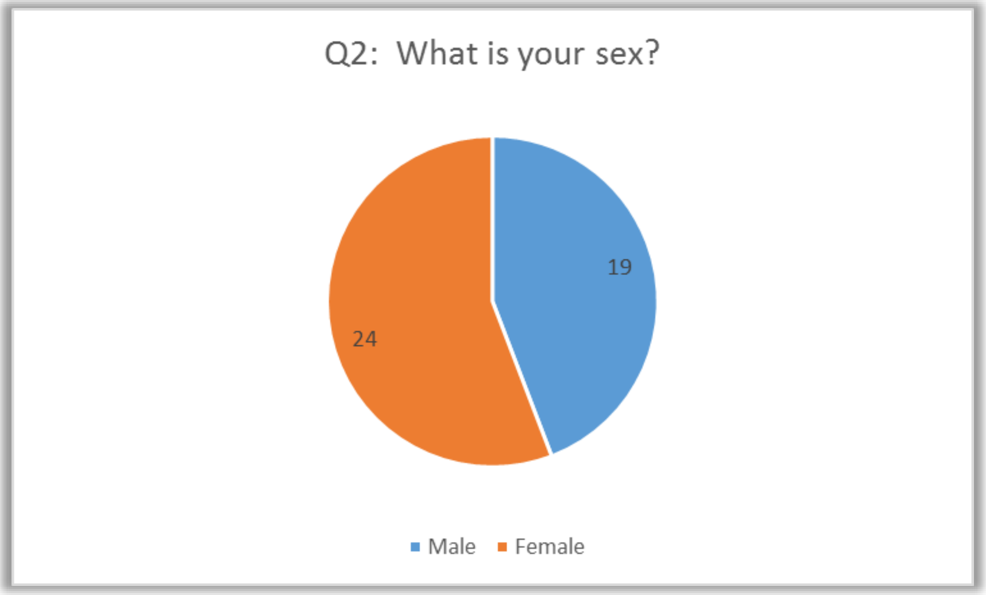
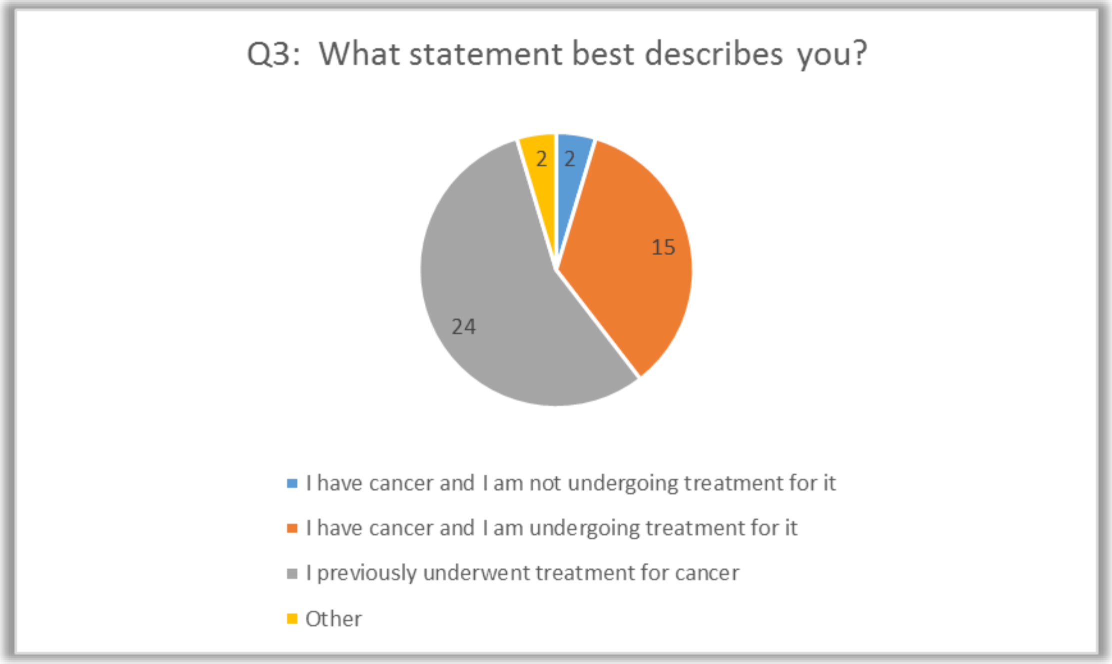
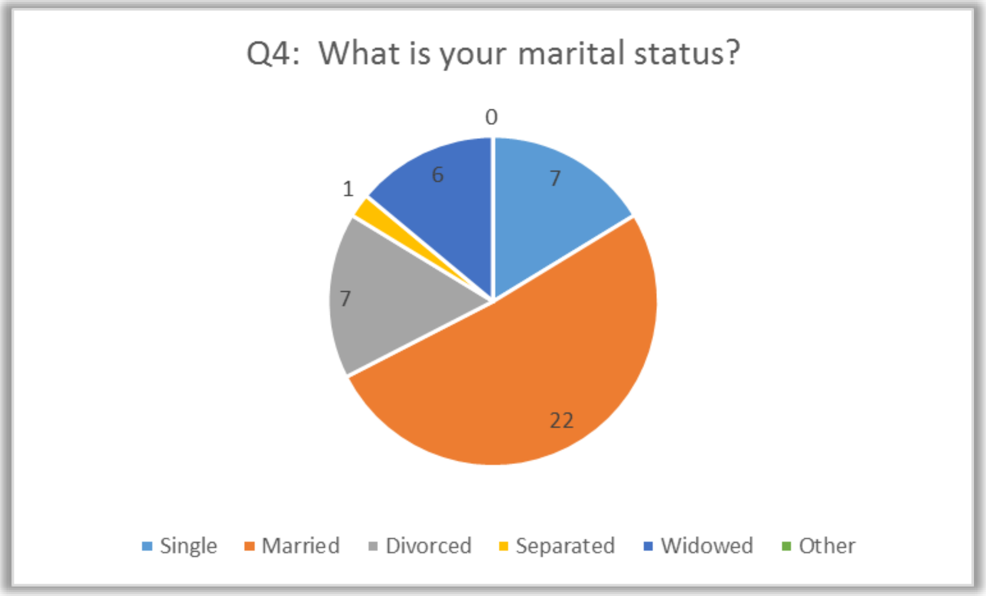
Appendix 1 – Cancer Survivors Survey Results

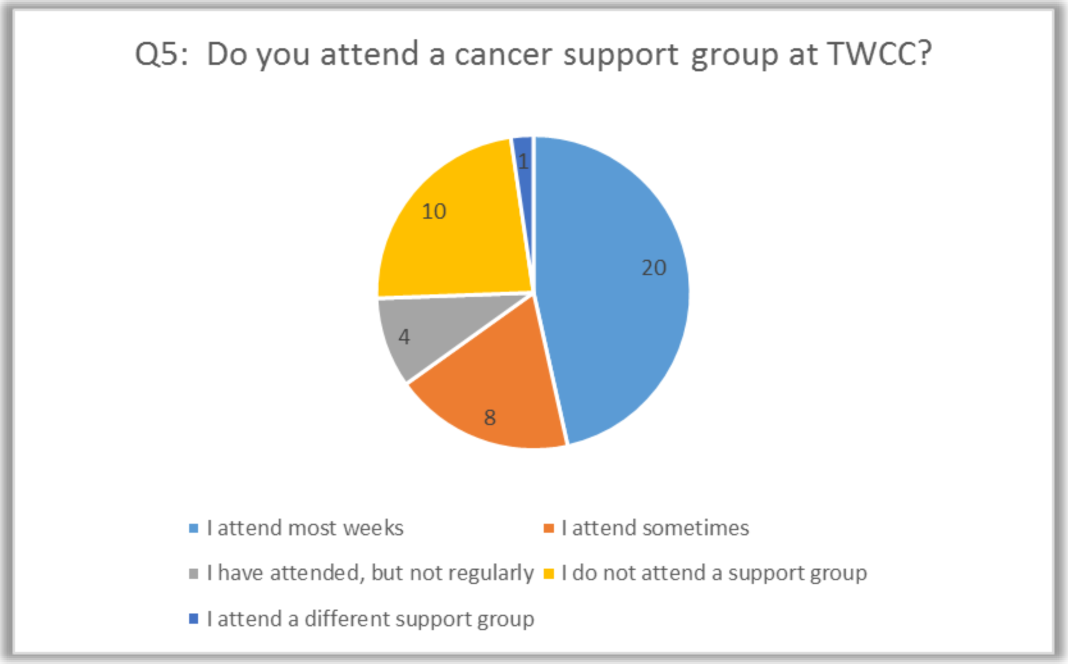


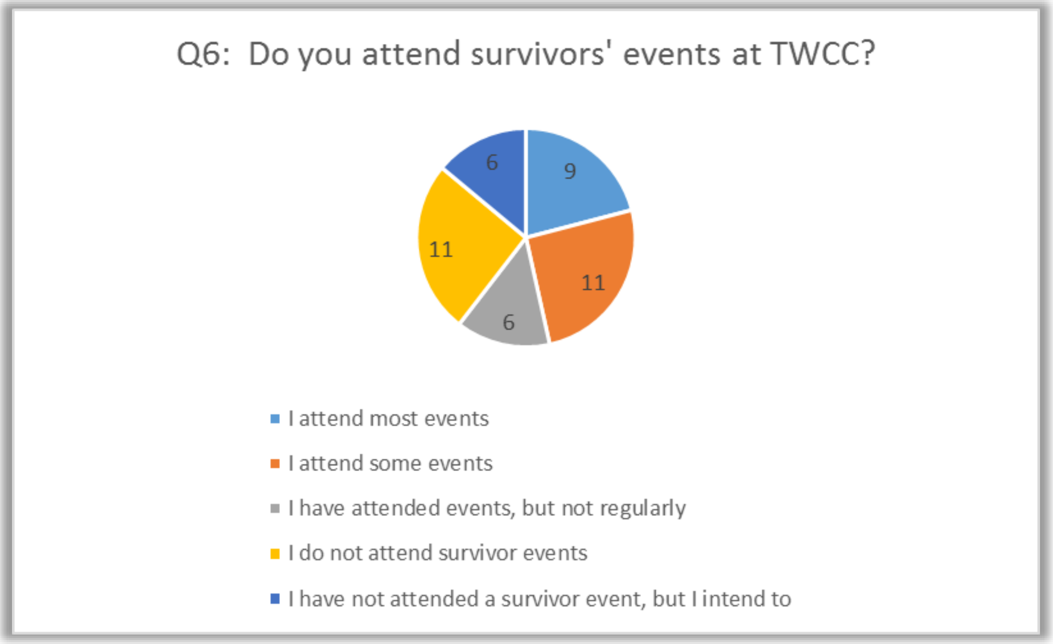


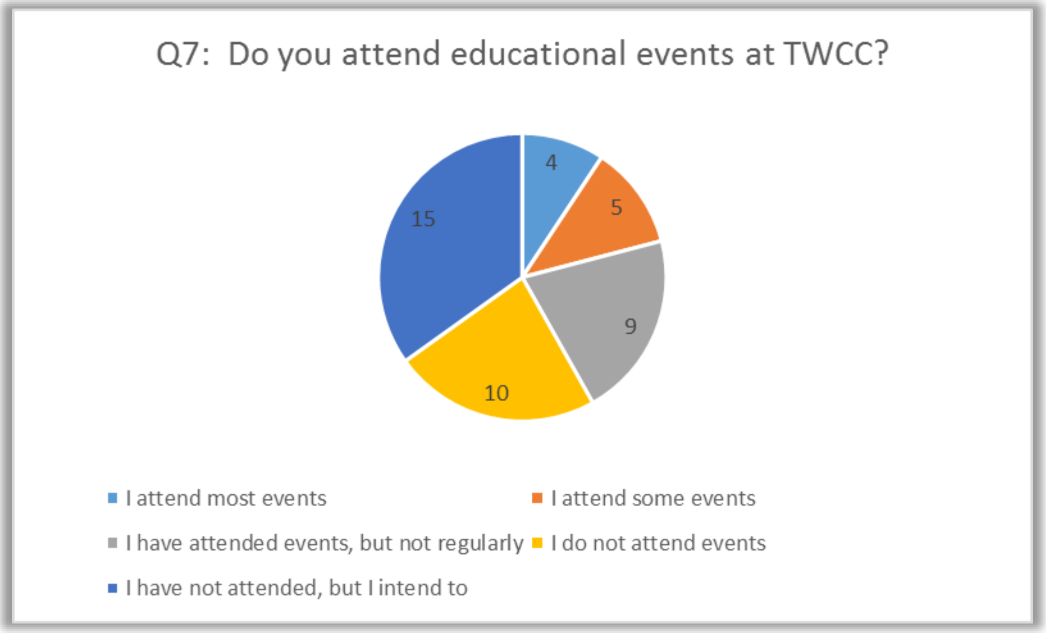


Q3: Other replies
"I am on long-term hormonal therapy for breast cancer"
"Cancer free for 17 years"




Q5: Do you attend a cancer support group at TWCC?
20
8
4
10
1
I attend most weeks
I attend sometimes
I have attended, but not regularly
I do not attend a support group
I attend a different support group


Q6: Do you attend survivors' events at TWCC?
9
11
6
11
6
I attend most events
I attend some events
I have attended events, but not regularly
I do not attend survivor events
I have not attended a survivor event, but I intend to



Q7: Do you attend educational events at TWCC?

Q8: If you do not regularly attend a support group at TWCC, why not?		
I attend regularly	24	55.81%
I have no interest or need for a cancer support group	14	32.56%
I attend a different cancer support group	1	2.33%
I do not have much in common with other support group members	9	20.93%
Meetings are scheduled at inconvenient times	5	11.63%
I do not have transportation to meetings	8	18.60%
I do not enjoy the speakers or topics of discussion at support group meetings	4	9.30%
I often feel too poorly to attend support group meetings	8	18.60%
Other	3	6.98%

Q8: Other replies
"It's all old people."
"More of a social group than a support group!"
"I'd like to come more, but I live too far away from Salina."

Q9: If you do not regularly attend survivors' events at TWCC, why not?		
I attend regularly	10	23.26%
I have no interest in cancer survivors' events	16	37.21%
I do not have much in common with other event attendees	14	32.56%
Events are scheduled at inconvenient times	4	9.30%
I do not have transportation to events	10	23.26%
I do not enjoy the type of survivors' events put on by TWCC	6	13.95%
I often feel too poorly to attend survivors' events	8	18.60%
Other	4	9.30%

Q9: Other replies
"I don't feel much like a survivor."
"People in charge are into hippy-dippy, new-age crap"
"No one cares about us who aren't going to survive"
"Too far from Salina to attend."

Q10: If you do not regularly attend educational events at TWCC, why not?		
I attend regularly	5	11.63%
I have no interest in educational events	11	25.58%
Events are scheduled at inconvenient times	4	9.30%
I do not have transportation to events	9	20.93%
I do not enjoy the type of educational events put on by TWCC	4	9.30%
I often feel too poorly to attend educational events	9	20.93%
Other	5	11.63%

Q10: Other replies
"I feel like they are all the same"
"I can't concentrate on that sort of thing on chemo"
"Pretty boring last time I went"
"Too far from Salina to attend."
"My husband thinks there boring and won't drive me"

Q11: What sort of changes to support groups at TWCC would you like to see?		
No changes needed	20	46.51%
Support groups scheduled on different days or at different times	7	16.28%
Support group meetings for survivors my age	7	16.28%
Support group meetings for surviviors with my type of cancer	6	13.95%
Transportation available to and from meetings	12	27.91%
Other	5	11.63%

Q11: Other replies
"Men's group needs more guest speakers"
"Guest speakers every week"
"Make it less of a club for old guys and more about support"
"Separate support group for prostate cancer men"
Blank

Q12: What sort of changes to survivors' events at TWCC would you like to see?		
No changes needed	23	53.49%
Events scheduled on different days or at different times	4	9.30%
Events intended for survivors with my type of cancer	10	23.26%
Events intended for survivors my age	4	9.30%
Transportation available to and from events	14	32.56%
Other	3	6.98%

Q12: Other replies
"No praying before events. Not everyone believes in God."
"I would like to see more events for women that are not focused on breast cancer."
"Get a different caterer for the BBQ this year"

Q13: What sort of changes to educational events at TWCC would you like to see?		
No changes needed	25	58.14%
Events scheduled on different days or at different times	5	11.63%
Events aimed at educating surviviors with my type of cancer	11	25.58%
Events aimed at educating survivors my age	4	9.30%
Transportation available to and from events	12	27.91%
Other	3	6.98%

Q13: Other replies
"Cover some new topics"
"Some different speakers would be nice."
Blank

Q14: What sort of events at TWCC would you be interested in attending?		
I am not interested in attending any events	10	23.26%
Social events with other survivors	18	41.86%
Nutrition education events for cancer survivors	20	46.51%
Exercise classes for cancer survivors	8	18.60%
Education events on new cancer research or advancements in cancer treatment	10	23.26%
Events aimed at improving mental, emotional, or spiritual health	15	34.88%
Other	2	4.65%

Q14: Other replies
"Maybe a Bible study for survivors?"
Blank

Q15: What could TWCC do to better serve your needs?
"You guys do a great job already! Thanks!"
"Nothing really…"
"Help apply for disability"
"I am so appreciative of everyone who works so hard here. Linda, Jean, and Carrie are great."
"Jeanne used to give me free Boost, but she doesn't have it anymore. I can't afford it myself."
"Nothing!"
"N/A"
"You do a great job already!"

Q16: Do you have any other suggestions?
"Nope."
"Not really"
"N/A"
"Keep doing what you do! You make the world a better place!"
"No."

Appendix 2 – Recommendations Based on Cancer Survivor Survey

The survey was filled out and returned by only 43 cancer survivors and had limited distribution. A more extensively distributed survey with more respondents would be helpful in forming further recommendations. However, several recommendations can be made based on trends identified in this survey.

Summary of Findings:

1. The most common reasons for not participating in a support group at TWCC were a lack of need or interest, having little in common with other group members, lack of transportation, and poor physical health.

    - 78% of those who cited having little in common with group members were undergoing current treatment.
    - All of those who cited poor physical health were undergoing current treatment.
    - Fisher exact testing showed that those undergoing current treatment were significantly more likely to cite having little in common with group members (p=0.015), lack of transportation (p=0.037), and poor physical health (p<0.001) as a reason for not participating in a support group at TWCC.

2. The most common reasons for not participating in survivors' events were a lack of interest, having little in common with other attendees, lack of transportation, and poor physical health.

    - Almost a third of respondents felt they had little in common with other attendees at survivor events.
    - 86% who said they had little in common with other attendees at survivor events were currently undergoing treatment.
    - All but one who cited poor physical health were undergoing current treatment.
    - Written comments suggested that a few survey participants felt alienated by the survivor terminology. This may particularly be a concern for those with terminal disease.
    - As with support groups, Fisher exact testing showed respondents undergoing current treatment were significantly more likely to cite having little in common with other

attendees (*p*<0.001), lack of transportation (*p*=0.027), and poor physical health (*p*=0.0026) as reasons for not participating in survivor events.

3. The most common reasons for not participating in educational events were a lack of interest, lack of transportation, and poor physical health.

- All those who cited poor physical health were undergoing current treatment.
- Written comments suggested that educational events may not be engaging for survivors.
- Fisher exact testing showed respondents undergoing current treatment were significantly more likely to cite lack of transportation (*p*=0.015) and poor physical health (*p*<0.001) as reasons for not attending educational events.

4. Almost half of survey participants were satisfied with support groups at TWCC, but lack of transportation is a concern for some.

- Written comments about the men's group suggest that some would prefer to have a guest speaker at meetings
- Others expressed concern that the men's group was too much of a "club" or social event

5. Over half of survey participants were satisfied with survivor's events, but lack of transportation is a concern and others would like more events focused on their type of cancer.

6. Over half of survey participants were satisfied with educational events at TWCC, but lack of transportation is a concern and others would like more educational events about their type of cancer.

7. Social events for survivors, nutrition education events for survivors, and events aimed at improving mental, spiritual, or emotional health were the most popular events that survey participants would like to see TWCC host.

- 78% of those who wanted social events were not currently undergoing treatment for cancer and verbal feedback indicated a strong interest among long-term survivors.
- However, Fisher exact testing showed this was not statistically different than those undergoing current treatment (*p*=0.098).

Recommendations

1. Develop free transportation options to help survivors who lack transportation attend support groups, survivor events, and educational events. Options for this might include arranging a car pool among survivors, hiring a van to transport survivors, or providing free taxi passes.

2. Consider creating a support group exclusively for survivors currently undergoing treatment for cancer. A number of survivors currently undergoing treatment do not feel they have much in common with others in the current support group and several written comments suggest the support groups can be too much of a social club. A support group specifically for those currently undergoing treatment might better address the physical, mental, and emotional stress caused by recent diagnosis and treatment.

3. Consider hosting several explicit social events for cancer survivors to help prevent other support and survivor events from becoming all about socializing. This may help those who wish to socialize fill that need and provide others the chance to choose not to attend.

4. Consider developing more nutrition education events and events focused on mental, spiritual, and emotional well-being.