breast cancer survivors who have completed treatment have different needs and concerns than patients receiving active therapy. Although their hair may have grown back and they have resumed some or all of their usual activities, they still must manage long-term adverse effects of cancer and its treatment, such as chronic fatigue, lymphedema, pain, diminished concentration, weight gain, limited mobility, and sexual dysfunction (Hewitt, Greenfield, & Stovall, 2006; Jacobs et al., 2009; Miller, 2008); psychosocial morbidity, including anxiety, depression, changed body image, and personal relationships (Hart, 2007); and increased risk of recurrence and late effects such as cardiovascular and pulmonary disease (Ganz, 2009; Hollowell et al., 2010). Some cancer survivors are sufficiently empowered to ask medical providers what to expect or how to cope after completion of active treatment, but many are not (Corner, 2008). Too often, patients are discharged from active treatment without guidance, education...
care providers to offer quality survivorship care; the concerns may be shared by primary care providers who are unprepared to provide follow-up specialty care beyond their normal scope of practice (Jacobs et al., 2009; Kantsisper et al., 2009).

Survivors often return to the cancer clinic for a long wait amongst newly diagnosed and actively treated patients who are seeing the same specialists. The experience is described by many survivors as emotionally difficult, and their wait is followed by a brief session with the oncologist that focuses on cancer surveillance. Little time is available to discuss long-term adverse treatment effects that significantly impair quality of life, explore alternative techniques such as biofeedback for symptom treatment, or receive counseling about implementing lifestyle changes to reduce the risk of cancer recurrence.

The number of newly diagnosed patients with cancer is increasing as the U.S. population ages. To date, the United States has 12 million cancer survivors, including 2.5 million breast cancer survivors (American Cancer Society, 2010; Lichtenfeld, 2009; Shulman et al., 2009). Workforce projections that too few oncologists will be available to serve all of the patients have prompted recommendations that oncologists should delegate follow-up care of cancer survivors to primary care providers (Shulman et al., 2009).

In this context, an urgent need exists to develop procedures for executing a smooth transition from the oncologist to the primary care provider or gynecologist (Kantsisper et al., 2009). Without systems in place to ensure the effective transfer of medical information and continuity of care between cancer specialists and primary care providers (Jacobs et al., 2009), patients with cancer may be “lost in transition” from patient to survivor (Hewitt et al., 2006). The Institute of Medicine report on survivor care by Hewitt et al. (2006) stressed coordination and attention to survivor concerns as key issues in improving follow-up care. Hewitt et al. (2006) recommended implementing survivorship care plans to address those issues in a holistic context. Miller (2008) underscored the value of the nursing perspective in expanding the focus of the care plan from surveillance to a coordinated, patient-centered document; such a document should embody “personalized, preventative, and participatory” care (Jacobs et al., 2009, p. 400).

In a 2006 focus group, survivors receiving follow-up treatment at a cancer clinic in a southeastern U.S. tertiary medical center expressed strong affiliation with their oncologists and appreciation for their diagnostic and treatment expertise (T. Piccirilli, personal communication, October 17, 2007). However, survivors expressed displeasure with long waiting room times and lack of provider attention to chronic issues. In response to the survivors’ needs and a request from an oncologist for assistance with care delivery to a large volume of follow-up patients and survivors, an interdisciplinary team of healthcare providers led by a nurse practitioner implemented a pilot clinic for breast cancer survivors within the cancer center. The clinic incorporates elements of two survivorship care models identified as particularly promising in Hewitt et al.’s (2006) Institute of Medicine report: (a) a nurse-led model that holds the nurse responsible for survivor follow-up care with oversight from physicians and (b) a specialized survivorship clinic offering multidisciplinary health care in a single location.

The pilot clinic features an innovative care model adapted from the Centering Healthcare Institute model of group care (Rising, 1998) to address the needs of cancer survivors as well as their healthcare providers. The clinic provides avenues for provision of psychosocial support, health-promotion activities, survivor empowerment, surveillance for recurrence and late effects, and production of a written breast cancer survivorship care plan for each survivor to share with her primary care provider as she transitions back to primary care. At the same time, the clinic frees appointment slots and space for newly diagnosed patients whose treatment generates more revenue by decreasing the high volume of returning patients, thus enhancing the viability of the cancer clinic.

**Group Medical Visit Model**

The group medical visit model is a patient-centered, cost-effective care innovation that improves access, outcomes, and care quality (Martin et al., 2004). Also described as shared medical appointments, group medical visits, group care, cluster visits, cooperative healthcare clinics, or chronic care clinics, the model gives patients the opportunity to receive one-on-one medical assessment and patient education within a framework of social support from peers with similar issues. Group visits are a vehicle to involve and empower patients, potentially build confidence and self-management skills, and encourage them to set and meet appropriate goals (Barud, Marcy, Armor, Chonlahan, & Beach, 2006; Jaber, Braksmaier, & Trilling, 2006a, 2006b).

Most applications of the group visit model have been based on the Centering Pregnancy (Rising, 1998) or chronic care clinic (Beck et al., 1997) models. Group visits are particularly effective in delivering prenatal and postpartum care (Ickovics et al., 2007; Kershaw, Magriples, Westdahl, Rising, & Ickovics, 2009) and well-child care (Osborn & Woolley, 1981; Taylor, Davis, & Kemper, 1997), as well as improving self-management and health outcomes in diverse populations of patients with diabetes (Bastiaens et al., 2009; Beck et al., 1997; Bray et al., 2005; Clancy et al., 2003; Clancy, Dismuke, Magruder, Simpson, & Bradford, 2008; Coleman et al., 2001; Deakin, McShane, & Frazier, 2004).

- Health assessment occurs in the group space.
- Participants are involved in self-care activities.
- A facilitative leadership style is used.
- The group is conducted in a circle.
- Each session has an overall plan.
- Attention is given to the core content, although emphasis may vary.
- Group leadership is stable.
- Group conduct honors the contribution of each member.
- The composition of the group is stable, but not rigid.
- Group size is optimal to promote the process.
- Involvement of (family) support people is optional.
- Opportunity for socializing within the group is provided.
- Evaluation of outcomes is ongoing.

**Figure 1. Essential Elements of the Centering Healthcare Model of Group Care**

Clinic Space
- Group space
  - The group space is a conference room that has been cleared and set up with a circle of chairs in the center.
  - Two tables are positioned outside of the circle of chairs for snacks and educational materials.
  - One blood pressure measurement station is set up beyond the circle to accommodate patients who are left or right postmastectomy. Wrist blood pressure cuffs are used.
- Examination space for group participants
  - A private examination room across from the group space is reserved for individual assessment and surveillance of each patient by the nurse practitioner.
  - A second private room is available down the hall for the social worker if needed.

Supplies
- Facing Forward take-home notebook for each patient
  - The notebook is prefilled with program announcements, contact information for local and national services for cancer survivors, breast self-examination cards, and tips for symptom control. Returnees receive a smaller updated folder.
  - The notebook has pockets to hold each patient’s survivorship care plan and educational materials selected by her during the clinic.
- Optional educational materials on topics of interest to survivors
  - Nutrition
  - Exercise
  - Bone health
  - Stress management (e.g., healthy sleep, relaxation techniques, guided imagery CDs for home use)
  - Treatment of lymphedema
- Interactive supplies
  - Name tags for patients and clinicians
  - Stretch bands, balls, and other items for patients to use in sessions as directed by the physical therapist
  - “Super food” flashcards designed by dietician
  - CD player with upbeat instrumental music for use as icebreaker at start of visit
- Healthy snacks and beverages appropriate for wellness nutritional themes (e.g., fruit, low-fat cheese, yogurt).

Figure 2. Logistic Arrangements for the Clinic

Cade, & Williams, 2005; Kirsh, Lawrence, & Aron, 2008; Loney-Hutchinson et al., 2009; Noffsinger, 2008; Scott et al., 2004; Trento et al., 2010; Vachon et al., 2007; Wagner et al., 2001). Group visits also deliver primary care effectively to chronically ill older adults (Beck et al., 1997; Coleman et al., 2001; Scott et al., 2004) and provide specialty care to patients with asthma (Rhlee, Ciuzyznski, & Yoos, 2008), chronic obstructive pulmonary disease (De Vries, Darling-Fisher, Thomas, & Belanger-Shugart, 2008), dermatologic conditions (Sidorsky, Huang, & Dinulos, 2010), rheumatoid arthritis (Shojania & Ratzlaff, 2010), hypertension (Beck et al., 1997; Hyman, Pavlik, Taylor, Goodrick, & Moye, 2007; Kawasaki, Muntner, Hyre, Hampton, & DeSalvo, 2007), and heart failure (Lin, Cavendish, Boren, Ostfad, & Seidensticker, 2008; Watts et al., 2009; Yehle, Sands, Rhyniders, & Newton, 2009).

Despite its success in decreasing preterm delivery rate, providing more frequent preventive health services for self management, and improving health outcomes (e.g., decreased hemoglobin A1c level) in patient populations with chronic illnesses such as diabetes, the effectiveness of the group visit model in cancer survivors has not been explored. The model appears well-suited to addressing survivors’ unique chronic healthcare needs, including interdisciplinary medical care for late physical and psychological cancer and treatment sequelae, regular surveillance for recurrence, educational interventions to promote healthier lifestyles, patient empowerment, and peer support.

The Centering Healthcare Institute’s model of healthcare delivery provides three components of care (assessment, education, and support) in a group setting, facilitated by a credentialed healthcare provider (see Figure 1). The model was initially implemented as the Centering Pregnancy program, which provided clinic-based group prenatal care with a nurse midwife as provider and facilitator (Rising, 1998). The model has been extended to provide well-woman and well-baby care through and beyond the first postpartum year and is being adapted for use with groups of patients with chronic illnesses including asthma and diabetes (for more information, visit www.centeringhealthcare.org). The adaptation of the model for cancer survivors was dubbed Centering Cancer Survivorship (CCS).

Implementing Group Visits for Cancer Survivors

The CCS pilot clinic was designed to provide multidisciplinary care to breast cancer survivors, with a nurse practitioner as primary healthcare provider and session facilitator and a consultant physician available by pager. With administrator support, other clinician team members were recruited, including a physical therapist with certifications in lymphedema and women’s health, a registered dietician with expertise in nutrition of patients with cancer, and a licensed clinical social worker in the oncology specialty. The specialists all are available without charge immediately after the group visit for brief one-on-one educational and consultation sessions for each survivor as desired. At each visit, every survivor receives a full examination and consultation with the nurse practitioner after the group discussion. Survivors also have opportunities to receive usual follow-up services such as mammograms, bone-density testing, and laboratory tests during the time period allotted for the appointment. The clinic also provides ongoing follow-up care to cancer survivors, with visits scheduled regularly at intervals of 6 or 12 months.

Participant Recruitment

Initial referrals were made by one medical oncologist; a second physician started referring patients after the clinic had been in operation for six months. Breast cancer survivors who were at least three years since time of diagnosis, without metastatic disease, were eligible to participate and were invited to attend the breast cancer survivor clinic. Hundreds of survivors in the center met the inclusion criteria, but the pilot began with those in the care of oncologists with the largest panels of long-term survivors. About 100 prospective participants received an invitation letter signed by their
oncologist and the nurse practitioner, followed two weeks later by a telephone call from the nurse practitioner reinviting them and explaining the program. Most invited survivors chose to participate in the new clinic, especially after receiving the personal telephone call from the nurse practitioner. No further solicitation was made as the clinic began to fill; thereafter, new participants arrived via direct oncologist referral.

Team Training

Before the first group visit, the nurse practitioner dedicated two half-day training sessions to preparing members of the clinician team to handle group dynamics in a nontraditional space and develop facilitation skills needed to establish a supportive and empathic environment that validates patient experiences and insights. All clinician team members were prepared to assess participants throughout each group visit by listening to survivors and learning about their priority concerns, backgrounds, health behaviors, and coping strategies. Notes were seldom taken during a session; therefore, providers were encouraged to document their assessments in patient charts after the session ended.

Preparation for Group Visit

Effective implementation of a group visit requires advanced preparation to ensure available and adequate space and supplies for the survivor clinic (see Figure 2). Each group is comprised of six cancer survivors randomly scheduled in the same block of appointment time. Having six survivors allows for strong group interaction and support. A full copy of the breast cancer survivorship care plan template is shown in Figure 3.

<table>
<thead>
<tr>
<th>Name:</th>
<th>Blood pressure:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical record number:</td>
<td>Heart rate:</td>
</tr>
<tr>
<td>Date of birth:</td>
<td>Weight:</td>
</tr>
<tr>
<td>Cancer diagnosis and treatment summary:</td>
<td>Height:</td>
</tr>
<tr>
<td>Date of diagnosis:</td>
<td>Allergies:</td>
</tr>
</tbody>
</table>

Please list any new concerns (e.g., pain, swelling, rashes).

Medication (Add over-the-counter drugs and herbal supplements.)

General Medical History

Goals (patient to fill out)

Plan

Multidisciplinary team:

Follow-Up Plan

<table>
<thead>
<tr>
<th>Visit Frequency</th>
<th>History and Physical</th>
<th>Mammography</th>
<th>Bone Density</th>
<th>Laboratory Tests</th>
<th>Nutritionist</th>
<th>Physical Therapy</th>
<th>Social Work and Therapy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Six month</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yearly</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Date: _______________  Nurse practitioner (facilitator): _______________

Figure 3. Breast Cancer Survivorship Care Plan Template

Note. Courtesy of Duke Center for Survivorship Services. Used with permission.
Women are interested in many things in the years following breast cancer treatment. Which topics are you most interested in learning about or discussing in your visit today? Put a check (✓) next to topics that are most important to you. Then rank the top three issues for you: 1, 2, and 3.

- Abuse issues
- Aches and pains
- Arm swelling
- Body image
- Bone health
- Breast reconstruction options
- Depression or anxiety
- Exercise
- Fatigue and energy level
- Fertility
- Finances, employment, and health insurance
- Genetic risk
- Medication side effects
- Menopausal symptoms
- Nutrition
- Other (specify):__

Figure 4. Facing Forward Self-Assessment: Patient Concerns

Note. Courtesy of Duke Center for Survivorship Services. Used with permission.

dynamics, avoids extended waiting time between services, and provides reimbursement income. The group of survivors may choose to return as a cohort for the next visit.

Before the clinic, the nurse practitioner reviews each survivor’s chart and manually enters a synopsis of her diagnostic and treatment history on a personalized breast cancer survivor care plan. The survivorship care plan, a working document for both patients and clinicians, includes a synopsis of the cancer diagnosis and treatment; areas for recording current vital signs, allergies, patient concerns, current medical history, and medications; a list of personal goals for the coming year (for completion by the patient); and a clinician plan for upcoming care and preventive screening (see Figure 3). The care plan is designed to be simple and interactive, with patient input during the appointment.

Patients receive the partially completed survivorship care plan during check-in; the nurse practitioner often adds to the care plan while meeting with patients one-on-one. In addition, patients set upcoming goals and plans within the document. The other specialists may add specific ideas for the planned goals to the care plan or offer key contact information for referral sources. The specialist input makes the survivorship care plan individualized and dynamic. Patients take the document home and are encouraged to share it with their other healthcare providers. A copy is scanned into the electronic medical record and categorized as a support document.

Structure of Group Visit

Initial check-in: All women check in at the clinic desk at the same time and are promptly invited by team members to the survivor clinic group space to meet and greet the clinicians and each other. Healthy beverages and snacks are offered to model good nutritional practice during this teachable moment.

Each woman receives a copy of her personal survivorship care plan and is asked to check it for accuracy. Each woman then takes her own blood pressure with a digital wrist blood pressure cuff, weighs herself on a portable digital scale, and writes down her vital signs on the survivorship care plan. Clinicians lead survivors through the process. Women then are asked to list all current prescription drugs, over-the-counter medications, and herbals in her survivorship care plan. The nurse also asks each survivor to designate her primary care provider or gynecologist.

Self-assessment sheet: Clinic staff ask each woman to review the list of survivor concerns on the self-assessment sheet (see Figures 4 and 5) and select the three she considers most important. Survivors’ partners, if present, are encouraged to identify their own concerns on a similar sheet.

Facilitated group session: After initial check-in, the nurse practitioner facilitates a 45-minute group session. All participants (survivors and family members) sit in a circle. The nurse practitioner opens by reminding all participants that confidentiality must be maintained and reviewing services available to patients and the choices they can make during the visit. A three-minute icebreaker dyad exercise is performed to help survivors meet and introduce each other, followed by a group discussion. The discussion is directed toward priority concerns identified on survivors’ self-assessment sheets and usually is lively as the women share information that they have heard, read, or located on the Internet. The sharing of information provides a teachable opportunity to separate fact from fiction. The nurse practitioner creates and sustains a supportive environment by using group facilitation techniques.

Most women find that they have something they would like to change in their life. Look at the items below, decide how happy you are with each of them, and identify those you want to change.

<table>
<thead>
<tr>
<th>Item</th>
<th>Okay</th>
<th>Could Be Better</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exercise</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Healthy diet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decrease stress</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smoking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drugs or drinking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support system</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship with partner</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Managing time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bone health</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other: ____________________</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Looking at that list, I want to improve ________________.

Figure 5. Facing Forward Self-Assessment: Personal Goals

Note. Courtesy of Duke Center for Survivorship Services. Used with permission.
to encourage survivors to suggest answers whenever questions are posed. The women’s responses can be more powerful than those of any clinician; therefore, survivors are empowered by providing assistance to their peers and sharing stories about their strategies for solving problems and coping with common challenges. Shared empathy and storytelling provide therapeutic benefit and growth opportunities for all participants (Heiney, 1995).

Although the group discussion focuses primarily on survivors’ current concerns, guest experts (sleep specialists, radiologists, yoga instructors, bra and compression sleeve fitters, pharmacists, and nurses with expertise in concentration and memory issues) may be invited to offer suggestions and medical information to the group in brief interactive presentations. Other group activities may include review of the breast self-examination, signs of cancer recurrence, or the most current breast cancer surveillance guidelines. The group session usually ends with a relaxation exercise or stretching session, often spontaneously led by one of the patients (see Figure 6).

**Individual activities:** After the group session, survivors are invited to choose from several options. They may remain at the session for one-on-one consultations (typically 15–20 minutes long) with the physical therapist, the registered dietitian, and the social worker. Women with prescheduled appointments may go to the radiology unit for a prescheduled mammogram or to the laboratory for blood tests; survivors often spontaneously use the buddy system to go together. During this period, the nurse practitioner gives every patient a medical assessment in a private examination room across the hall from the group space. Twenty minutes are allotted for the nurse practitioner visit, but less time usually is needed because the group visit often has answered many of the survivor’s questions.

Near the end of the visit, each patient selects personal goals in consultation with one or more team clinicians and enters the goals on her survivorship care plan. Each patient takes home her original survivorship care plan and is encouraged to share it with her primary care provider. The nurse practitioner keeps a copy of each survivorship care plan to scan into the patient’s electronic medical record.

**Interdisciplinary Care Within the Group Model**

The CCS model provides a structure within which breast cancer survivors can receive interdisciplinary clinical care from the physical therapist, registered dietitian, and social worker. Health behaviors such as physical activity and diet can significantly affect the risk of cancer recurrence (Demark-Wahnefried et al., 2007), but only a minority of cancer survivors comply with American Cancer Society exercise and nutrition recommendations (Blanchard, Courneya, & Stein, 2008). The model gives survivors access to specialists who can help them develop the confidence and skills needed to implement permanent improvements in these crucial health behaviors.

**Nutrition:** After completing treatment, cancer survivors often develop heightened interest in lowering the risk of recurrence through improved nutrition. Patients come to the clinic with the following questions: What kind of diet should I be eating to reduce my risk of cancer? How do I maintain bone health? What supplements do I need?

Before the clinic session, the registered dietitian reviews each cancer survivor’s medical history, identifying nutrition issues that patients may want to discuss in one-on-one consultation (e.g., dietary guidelines for patients with diabetes or hypertension, weight management, use of supplements). In consultation with the registered dietitian, each survivor selects two or three achievable nutritional goals and objectives, and strategies are developed to help achieve them. Each woman records personal goals and strategies in her survivorship care plan and is encouraged to communicate them to her primary care provider. Women also are asked to contact the dietitian within two to three weeks to monitor progress and adjust the plan as needed.

**Physical therapy:** Physical therapy is an important adjunct to breast cancer survivorship care because regular exercise can decrease the risk of cancer recurrence (Demark-Wahnefried et al., 2007). However, persistent fatigue and conflicting work or family obligations often prevent cancer survivors from complying with exercise recommendations (Alfano et al., 2009; Blanchard et al., 2008). Although the issues are seldom discussed during follow-up visits with oncologists, they can be managed effectively within the group model. Survivors can address specific concerns in one-on-one consultation with the physical therapist and create customized exercise programs that target individual weight management issues with consideration for personal preferences and physical limitations.

**Lymphedema:** The physical therapist can assist women with lymphedema. Lymphedema frequently affects breast cancer survivors, particularly those whose surgical treatment included mastectomy with axillary node dissection or who gained weight after active treatment ended (Lucci et al., 2007; McLaughlin et al., 2008; Petrek, Senie, Peters, & Rosen, 2001). Lymphedema is a chronic condition requiring ongoing care, with high risk of treatment failure when patients attempt to maintain therapy on their own (Vignes, Porcher, Arrault, & Dupuy, 2010). Group visits give survivors an opportunity to address the condition immediately in individual consultation with the physical therapist, who can refer them for compression sleeve fittings, a key factor in effective
lymphedema management (Langer et al., 2007; McLaughlin et al., 2008), and arrange for further treatment as needed.

**Psychosocial issues**: Psychosocial stressors that affect patients with cancer during treatment and into survivorship include anxiety, depression, fear of recurrence, body image concerns, and relationship issues (Alfano & Rowland, 2006; Hewitt et al., 2006; Miller, 2008); some stressors intensify when patients return to the cancer center where initial treatment was received. Preexisting mental health conditions often are exacerbated by the diagnosis of cancer and the subsequent treatment. The CCS clinic addresses those issues on several fronts. Contact information for support groups and individual therapists are included in the take-home notebooks. In addition, educational materials about strategies to manage and reduce stress are displayed on tables in the group space, and patients are encouraged to take materials that meet their needs.

The social worker is available to explore psychosocial issues with patients in one-on-one consultation and can help mobilize resources to meet additional needs (e.g., financial assistance, medication procurement, safety referrals). The social worker may pair with the registered dietitian or physical therapist to help patients set goals. The registered dietitian or physical therapist work with patients to identify desired behavioral changes, while the social worker helps patients use problem-solving techniques such as motivational interviewing (Freeman, Felgoise, Nezu, Nezu, & Reinecke, 2005) to address barriers to making the changes.

### Reimbursement for Services Provided in Group Visit

In this pilot model, the nurse practitioner bills the visit according to the complexity of the medical examination. Current procedural terminology codes for evaluation and management are similar to those used for one-on-one standard office visits. A 99213 or 99214 code typically is used because the patients are receiving a thorough history, physical examination, and review of completed surveillance techniques and often receive prescriptions for adjuvant therapy or future testing. Medicare has released a billing code for group visits (99078, physician educational services rendered to patients in a group setting) but has not consistently reimbursed medical providers for this model except in the case of diabetes group visits led by a certified diabetes educator (Barud et al., 2006; Davis, Sawyer, & Vinci, 2008). Code 99078 was added to billing encounter forms during the CCS's pilot year. Although education and counseling are being offered, third party payers have not yet reimbursed for the group visit code. To date, the nurse practitioner spends 15% of the week in the group visit model of survivorship care.

The physical therapist submits an individual bill if she does an evaluation for a patient and is available for follow-up evaluation and treatment. The registered dietitian's time is supported by grant money. The social worker is supported by departmental release from hospital duties, with an average of 15% of her weekly hours spent in survivorship care.

### Preliminary Outcomes

The clinic initially operated at one morning per week (accommodating one group visit); it has expanded to six sessions per month. Space limitations have prevented further enlargement.

The number of patients serviced doubled from 160 in the first year of the clinic to 340 in the second year as the visibility and popularity of the clinic rose. Improved scheduling and an increase in the number of patient appointments from four to six per session enabled the growth in service. Only three providers to date have referred all patients; therefore, potential exists for clinic expansion through additional referrals, contingent on allocation of additional space and training a second nurse practitioner.

### Patient Outcomes

Almost 90% of breast cancer survivors who participated in a group visit returned to the clinic the following year. About 10% transitioned to their primary care provider or gynecologist thereafter. Those patients often had been survivors for more than 15 years. A small number of patients chose to see the nurse practitioner in her traditional clinic for their return visit. Fewer than 10 patients per year have returned to their oncologist, with three being referred by the nurse practitioner when found to have recurrent or new breast cancer.

An informal written patient satisfaction survey conducted during the first 18 months of the program indicated that almost all surveyed patients found the clinic helpful. Several suggested giving patients the opportunity to receive follow-up through the clinic earlier in their cancer journey. Participants had very different clinical histories and represented diverse socioeconomic, racial, and ethnic backgrounds, but patient comments repeatedly demonstrated strong feelings of connection among group members and the value of sharing with other survivors. For example, one survivor stated that what she liked best about the clinic was gaining “a better understanding of what I need to do to improve my health, sharing, [and] being able to ask questions.” In addition, patients expressed appreciation of the range of resources provided and the clinic’s focus on meeting the specific needs of survivors. General comments included, “[The clinic is] always informative, encouraging, motivational, and fun.” One breast cancer survivor’s husband said, “Why don’t you have this for me? I have had prostate cancer,” indicating possible interest among other populations of cancer survivors.

Periodic review of patients’ self-assessment sheets identified menopausal symptoms, fear of cancer recurrence, aches and pains, weight management, bone health, fatigue, and difficulty with concentration as priority concerns. The clinic staff have used this ranking of topics to focus interactive educational activities and expand the list of visiting guest experts.

### Provider Outcomes

When asked by their administrator for feedback, members of the clinician team were highly satisfied with the opportunities to exercise creativity and provide quality care to survivors. Information about medications, diagnostic tools, treatment protocols, and adverse treatment effects shared by participants in the group sessions also broadened the knowledge base of each specialist.

### Cancer Center Outcomes

Oncologists support the pilot clinic and have expressed interest in referring more cancer survivors, but availability
of space for the group visits limits capacity to date. Evidence supporting cost effectiveness of group visits has been documented for diabetes, heart failure, prenatal care, and dermatology (Sidorsky et al., 2010). A comprehensive cost-benefit analysis of this group visit model for cancer survivors is being completed to determine its economic viability. A three-hour group visit that provides the services of a nurse practitioner, a registered dietitian, a physical therapist, and a social worker to six to seven patients is not in itself a break-even venture, but some expenses may be offset by downstream revenue. The clinic has referred a number of patients for compression sleeve fittings, mammograms, bone density tests, and additional laboratory tests. Each group visit frees follow-up appointments for six survivors from oncologists' schedules, thus opening two or three slots for newly diagnosed, active patients. The new patient appointments require at least twice as much time but generate considerably more income. Additional financial benefits may accrue from increased satisfaction among survivors, who are more likely to encourage family and friends to seek care at the same cancer center.

Implications for Survivor Care

Preliminary assessments indicate that the pilot clinic has been well received by patients and participating clinicians. However, formal program evaluation is a prerequisite for the integration of such a program into the services provided by the cancer center. Components of a formal evaluation could include comparison of satisfaction and health outcomes in survivors participating in the group clinic versus those receiving usual care (one-on-one follow-up with oncology providers). In addition, pre- and post-group visit assessments of patient anxiety may be significant because a noticeable decrease in this symptom seems to occur throughout the course of facilitated discussions. The breast cancer survivorship care plan should be converted from handwritten to electronic format, and its overall depth should be improved. Collaboration with a panel of primary care and gynecology providers would be ideal to develop this tool. Finally, a cost-benefit analysis of the model's economic viability and a survey of oncology providers will be key because the program cannot succeed unless stakeholders are convinced that the model is effective. The model could be adjusted to fit other cancer survivor populations, and preliminary discussion has begun with the prostate cancer team.

Conclusion

The model of survivor care presented in this article appears to provide quality medical assessment and surveillance, offers avenues for individual empowerment and peer support, and provides increased time with the healthcare team. This service offers reliable, accurate information about nutrition, exercise, and mental health to cancer survivors as they transition away from active treatment and continue to move forward in their lives.

The authors gratefully acknowledge Amgen, Inc., for providing a two-year unrestricted grant to the Duke Center for Cancer Survivorship (a portion of which funded the dietitian's time); Tina Piccirilli, CRT, CTRS, administrative director of the Duke Center for Cancer Survivorship, for her administrative support and vision; and Elizabeth P. Flint, PhD, of the Duke University School of Nursing for assistance with manuscript preparation and editing.

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