A cancer diagnosis often produces an overwhelming emotional response, including feelings of shock, denial, fear, anxiety, anger, grief, and/or depression. Because a multitude of medical tests and consultations typically are needed to determine a definitive diagnosis and course of treatment, a cancer patient’s path through the healthcare system can be complicated and confusing. Even worse, some patients may not fully comprehend the importance of prompt evaluation and treatment of their disease. To address these challenges, more and more cancer programs are looking to assist patients through this process. Here’s how Billings Clinic embarked on its journey to create a care navigation program to meet the unique needs of the people it serves.

When medical oncologist Thomas Purcell, MD, joined Billings Clinic in 2003, his vision was to create a regional comprehensive cancer center designed to be a premier destination facility characterized by an interdisciplinary team approach to cancer treatment. Based on his previous experience with patient navigation at the Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins, patient navigation was central to this vision. Dr. Purcell had witnessed the many successes and contributions navigation brought to comprehensive cancer care and was successful in championing the initiation of a patient navigation program at Billings Clinic by engaging senior leadership’s support and relating program benefits to potential effects on existing market share.

**Our Navigation Model**

Billings Clinic launched its patient navigation program in 2003 with one navigator. The model put patients at the center of decision making; with patient navigation to assist them as they move through the cancer treatment continuum (see Figure 1). Over the last six years, the navigation program has grown in an organized, phased manner into today’s team of eight navigators (see Figure 2). This phased approach allowed Billings Clinic to build upon incremental successes, expanding the scope of the program with a focus on navigating a majority of patients served in our vast geographic service area (see “Serving, the Underserved in the Last Frontier, page S22). The overall goal of our navigation program is to ensure seamless and coordinated care among the physicians, the diagnostic tests, and the cancer treatments, while offering education, support, and guidance to help patients and families cope with their challenges.

All of our patient navigators are registered nurses with oncology experience. The navigator’s primary focus: to provide one-on-one support and coordination of services for cancer patients and their families as they move through the care pathway. Specifically, Billings Clinic patient navigators:

- Assess for clinical, emotional, spiritual, psychosocial, financial, and other patient needs
- Coordinate the timely scheduling of tests, procedures, appointments, and treatments
- Help eliminate barriers to obtaining a definitive diagnosis
- Ensure patients receive a treatment plan that is understandable and feasible
- Reinforce patient education and direct patients and families to available resources and supportive services
- Facilitate access to clinical trials.

**Phase I—2003**

As stated above, our program started with a 1.0 FTE patient navigator who received referrals for patients requiring complex coordination of care after diagnosis and upon treatment initiation. At the outset, the navigation
We found that the mere presence of a patient navigator on a consistent basis within these departments enhanced communication, trust, and provider referrals for navigation services.

The program focused on two primary areas. The first goal: to establish an understanding of navigation within the Cancer Center among the medical oncologists, staff, and support services. The second goal: to develop standardized educational and support materials for patients.

**Phase II—2004**

Phase II of the program brought a second 1.0 FTE patient navigation position to the team, as well as a clearer focus on site-specific navigation. We assigned each navigator two of the most common cancer types—breast and colorectal cancers and lung and prostate cancers. At this point, it

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**Figure 1. Billings Clinic Patient Navigation Model**

*This figure depicts patients as the center of decisions with patient navigation to assist them as they move through the cancer treatment continuum rather than responsibility for coordination and communication between multiple disciplines and specialists being left to the patient alone. ©Billings Clinic*
Some of the most common roles and responsibilities of patient navigators at Billings Clinic include:
- Acting as the single point of contact for patients and families, including telephone triage regarding symptom management
- Accompanying patients to initial appointments during diagnosis and treatment planning period
- Assessing patients’ physical, emotional, psychosocial, spiritual, and financial needs
- Initiating referrals (both internal as well as connecting patients with community resources)
- Coordinating diagnostics, procedures, and specialist appointments
- Providing patient education
- Collaborating with physicians and following up on multidisciplinary tumor conference recommendations
- Contributing to multidisciplinary program development, such as education materials, clinical pathways, and quality studies.

We found that the mere presence of a patient navigator on a consistent basis within these departments enhanced communication, trust, and provider referrals for navigation services.

Phase III—2005
Two additional 1.0 FTE patient navigator positions were added during phase III. Each of the patient navigators assumed primary responsibility for one major cancer site (breast, colorectal, lung, and prostate), with hematological cancers distributed among three of the navigators due to the intense needs of these patients. Major goals during phase III included:
- An increased focus on processes to clarify role expectations
- The development of a variety of flowcharts and fishbone diagrams (see Figures 3 and 4)
- A navigator orientation manual to ensure consistency among the patient navigators.

Marketing and public relations promotions continued to increase community awareness of the program. In addition, we designed and carried out a patient satisfaction survey to obtain feedback on the effectiveness of our navigation program (see Figure 5).

Phase IV—2006
Phase IV of our patient navigation program involved the largest expansion yet—three additional 1.0 FTE patient navigator positions. One navigator was assigned to hematological malignan-
cies, another to gynecologic cancers, and the third focused on breast diagnostic navigation. Our program was now seven navigators strong, with one navigator assigned to the organization’s Breast Center rather than the Cancer Center. The breast diagnostic navigator guides patients from abnormal mammogram through diagnosis:

- Ensuring timely scheduling of diagnostic procedures
- Providing appropriate patient education and support during procedures
- Notifying patients promptly of diagnostic results.

Patients with a cancer diagnosis are then transferred to the breast cancer navigator who further coordinates services related to treatment and survivorship.

Major program efforts during phase IV included the development and advancement of multidisciplinary teams led by physician leaders in collaboration with the site-specific navigators for breast, gastrointestinal, genitourinary, gynecologic, hematological, and lung cancers.

Expanding to seven navigators allowed us to focus on establishing meaningful program metrics. In addition, our physicians expressed a strong desire to have a designated navigator for all patients undergoing multimodality treatment. With this request, work
began on establishing a patient acuity system whereby navigation assignments could be determined based on estimated workload rather than mere navigator-to-patient ratios. One lesson learned throughout the previous three phases of program implementation was that patients’ needs varied widely based on tumor site, stage at diagnosis, treatment(s) chosen, and existing support systems. Because of these variables, we felt that distributing the various tumor sites based on volume alone was unrealistic. Instead, we completed a workload analysis and defined seven different acuity levels (see Figure 6).

Next, we evaluated the previous year’s cancer registry data, including number of cancer cases by type and stage. In consultation with the patient navigators, we matched defined acuity levels with the various stages of disease by tumor site. Then an acuity calculation was created (volume multiplied by acuity level = estimated workload). While the acuity system was not scientifically validated, it served as an effective mechanism to distribute the various tumor sites so that all patients undergoing multimodality treatment could be assigned a patient navigator.

**Phase V—2007**

In 2007 Billings Clinic was one of ten organizations across the United States chosen to participate in the...
ACCC's Cancer Care Patient Navigation: A Call to Action

A significant portion of the regional navigator’s time involves traveling and relationship-building through face-to-face interactions with community physicians, agencies, and organizations. As a result of this networking, the regional navigator has hosted two navigator training programs for individuals who recently assumed patient navigator roles within their own organizations in the region. The regional navigator also helps connect patients with local resources and collaborates with community-health offices and tribal leaders to promote community education and increase prevention awareness and early-detection screening programs (e.g., mammograms, Pap smears, fecal immunohistochemical testing, and prostate specific antigen screening) in the rural and frontier regions. To date, seven Cancer 101 programs have...
been offered to Native American communities in Montana and Wyoming. During this phase, patient navigators looked again at program quality metrics. Previously metrics had focused largely on patient satisfaction and program volume, including the number of new patients navigated by cancer type and referrals initiated. Now, we began to evaluate additional data related to timeliness of care (time from abnormal finding to diagnosis and time from diagnosis to treatment initiation) and appropriateness of care (compliance with clinical pathways).

**Phase VI—2008**
For the first time since we initiated the patient navigation program, no additional positions were added during 2008. However, program enhancements throughout the year included:

- Developing an electronic version of the patient navigation intake worksheet
- Refining existing electronic documentation templates
- Successfully launching a multidisciplinary lung clinic coordinated by the lung patient navigator in collaboration with pulmonologists, thoracic surgeons, medical oncologists, and radiation oncologists
- Planning for two additional multidisciplinary clinics (rectal and prostate).

The success of the program has led other clinical departments to request information regarding the development of patient navigation programs for other chronic diseases.

**Future Directions**
Upcoming endeavors for patient navigation at Billings Clinic include the implementation of two additional multidisciplinary clinics (rectal and prostate), which will be coordinated by the site-specific navigators in collaboration with involved physician specialties. In addition, each multidisciplinary program will establish ongoing quality measures that span the continuum of care for breast, colorectal, lung, prostate,

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...we began to evaluate additional data related to timeliness of care... and appropriateness of care...

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continued on page S24
Significant healthcare disparities exist in the region served by Billings Clinic Cancer Center, a vast geographic area of 207,000 square miles encompassing the state of Montana, the northern half of Wyoming, and the western edge of North Dakota. This service area is 33 percent larger than the entire state of California, with a population of approximately 1.25 million people (compared to over 33 million in California). A lack of access to primary care physicians is a well-known characteristic of the region with approximately 87 percent of Montana counties (some as large as entire states) designated as Health Professional Shortage Areas, Medically Underserved Areas, and/or Physician Scarcity Areas.

Cancer rates are driven by a complex set of social, economic, cultural, and health system factors. The lack of local medical care, including cancer prevention information and screening, affects the stage at the time of cancer diagnosis—an important predictor of the outcome of treatment. Between 2002 and 2006, less than half of all cancers (48 percent) in Montana were diagnosed at the local stage. Twenty percent of all cancers diagnosed were regional and 22 percent were diagnosed at a distant, or metastasized, stage.¹

Regionally, Billings Clinic has long been dedicated to working collaboratively with communities to address healthcare disparities in remote and frontier areas. Each month, the Billings Clinic Cancer Center provides 21 outreach clinics in 9 rural communities (see map below).

References
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**Care Navigator Feedback Section**

Directions: In the section below, Care Navigators will enter scores based on their perceptions of the service quality offered during this treatment plan.

| Patient had quick, seamless access to cancer services. | Yes ☐ No ☐ N/A ☐ |
| I was allowed an appropriate level of involvement in patient care. | Yes ☐ No ☐ N/A ☐ |
| The identified clinical plan of care (clinical guidelines) was initiated and followed. | Yes ☐ No ☐ N/A ☐ |

**Patient Feedback Section**

Directions: In the section below, scores will be reported by patients during telephone follow-up.

Phone number: ___________________________

Hello. My name is _____ with Billings Clinic. Is ________ available? I am calling on behalf of the Cancer Center and would like to ask a few brief questions with regard to the care you received. Is this a good time for you? I have 5 statements and I would like you to respond to each statement with a number indicating your agreement. A low number would indicate you disagree with the statement I have read, whereas a high number indicates your agreement. I will begin if you are ready.

1. My cancer care was provided in a timely fashion. 
   1 2 3 4 5 6 7 8 9 10
   ○ ○ ○ ○ ○ ○ ○ ○ ○ ○

2. My care navigator helped me develop my unique treatment plan.
   ○ ○ ○ ○ ○ ○ ○ ○ ○ ○

3. My care navigator was important in ensuring seamless care between different areas of the clinic.
   ○ ○ ○ ○ ○ ○ ○ ○ ○ ○

4. My care navigator coordinated my care to meet my unique needs.
   ○ ○ ○ ○ ○ ○ ○ ○ ○ ○

5. My care navigator answered my questions in a manner I could easily understand.
   ○ ○ ○ ○ ○ ○ ○ ○ ○ ○

Was there any additional information or education that would have been beneficial for your care navigator to give you?

Do you have any comments you would like to make?

Thank you for taking the time to respond to these questions. Your input is very important so that we can offer the best possible care. Have a nice day!

**Date/Time of All Attempts**

| 1. _______________ | _______________ |
| 2. _______________ | _______________ |
| 3. _______________ | _______________ |

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hematological, and gynecologic cancers. The navigators will monitor and report on the measures quarterly by using a clinical quality dashboard. Lastly, given the success of patient navigation within the Cancer Center at Billings Clinic and the recent interest expressed by other service lines, it would not be surprising if patient navigation programs for other chronic diseases emerged over the next year.

In summary, patient navigation is integral to the interdisciplinary team approach to cancer treatment that Billings Clinic proudly endorses. It has become the link that integrates every aspect of patient care through the facilitation of timely communication, seamless patient flow, and optimal clinical outcomes.

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