Clinical Intelligence

Cancer Care Coordination
With Nurse Navigators
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Cancer Care Coordination With Nurse Navigators

As cancer transitions to a disease that is more chronic than acute, emerging trends in cancer care are creating an increasingly complex care delivery landscape. Advances in imaging, radiation, surgery and medical treatments are increasing treatment frequency and the cross-reliance among these services. The number of options cancer patients face is daunting even to those with plentiful support and resources. Care coordination through a nurse navigator program can facilitate the process.

Successful care coordination programs have been developed for many chronic diseases, including heart disease and diabetes. Such programs have improved clinical outcomes by increasing compliance, and operational outcomes by increasing efficiency and decreasing redundancy.

The primary role of nurse navigators is to improve patient preparedness for treatment by providing education and psychosocial support. Nurse navigators also facilitate interaction between patients and their physicians, provide logistical support, secure referrals, and assist with financial and insurance issues.

In oncology, the nurse navigator concept is most evolved for breast cancer. On a national scale, however, implementation of nurse navigator programs can be challenging because models are poorly defined. The health care industry has only recently begun to appreciate the improvements in cancer care delivery that can be effected by these programs. This report provides an analysis of the potential impacts of nurse navigator programs, a model for key roles and program types, and strategies for successful implementation.

Essential Facts
- Cancer is a chronic disease.
- Cancer care is increasingly complex.
- Complex cancer care requires coordination.
- Nurse navigators improve outcomes and efficiency.

Nurse Navigator Roles
- Contact patients at high-stress points.
- Offer psychosocial support and access to resources.
- Educate to enable patient-led treatment decisions.
- Liaise between specialists and family physicians.
- Streamline care path transitions and logistical issues.

4 Steps for Implementing a Nurse Navigator Program
- Train.
- Build consensus.
- Define clinical pathways.
- Operationalize.
Complex Cancer Care Requires Navigation

Cancer care is continuously evolving as new technologies and treatment approaches enhance the effectiveness of cancer therapy. Many of these advances do not replace current approaches to treatment, but are complementary. As a result, the delivery of cancer care has become increasingly individualized and complex.

Cancer Care Is Multidisciplinary

The amount of time required and the types of services cancer patients are using are expanding across prevention, screening, diagnosis and treatment. In general, the length of time a patient is engaged with the health care system is increasing as more cancer patients live with chronic illness.

Gaps in Care May Lead to Missed Opportunities

Lack of coordination during the complex phases of cancer care can create serious consequences.

<table>
<thead>
<tr>
<th>Care Phase</th>
<th>Gaps</th>
<th>Consequences</th>
</tr>
</thead>
</table>
| Prevention | ■ Ineffective identification of eligible patients  
■ Inability to reach underserved populations | ■ More patients develop preventable cancer. |
| Screening  | ■ Appointment wait times too long  
■ Patients not contacted with abnormal test results | ■ Patients seek screening elsewhere.  
■ Cancer is detected at a later stage. |
| Diagnosis  | ■ Referrals not made  
■ Patients not understanding diagnosis | ■ Patients seek care elsewhere.  
■ Treatment is delayed. |
| Treatment  | ■ Lack of patient compliance  
■ Missed clinical trial accruals  
■ Fractured care experience | ■ Patients miss neoadjuvant opportunities.  
■ Outcomes are inferior.  
■ IP and ED utilization are higher. |
| Surveillance| ■ Lack of coordinated follow-up services | ■ Patients seek care elsewhere. |
| End-of-Life Care | ■ End-of-life issues not proactively addressed | ■ IP utilization is high.  
■ Palliative care is insufficient.  
■ Patients miss palliation opportunities. |

Source: Sg2 Analysis, 2005.
Coordination Affects Patient Care

The cancer care continuum can be separated into 2 phases. The high-stress phase begins after the first abnormal finding and continues through diagnosis. Nurse navigators play a critical role during this phase by evaluating the individual needs of patients in order to coordinate psychosocial and educational support resources. The second phase begins with the initiation of active treatment. Here the patient faces a variety of treatment choices and the daunting task of coordinating care across multiple modalities.

### Without Nurse Navigator Program

**High Stress Phase**

- Few mechanisms exist to ensure that patients receive timely test results and follow-up for abnormal test results.
- Psychosocial needs often are overlooked.
- Delays in treatment cause unnecessary anxiety.
- Inadequate attention causes patients to seek alternate providers.

**Disease Course: Breast Cancer**

- Abnormal Mammogram
- Biopsy
- Cancer Diagnosis

**Active Treatment Phase**

- Opportunities for neoadjuvant treatment and clinical trial participation were missed.
- Patient is unable to navigate complicated multimodality treatment schedules.
- Opportunities for research and combined modality treatment are lost.

### With Nurse Navigator Program

**High Stress Phase**

- Patients are guided through diagnosis while their psychosocial and educational needs are met.
- Coordinated resources provide patients with tools for coping with grief and anxiety.
- Physicians and patients focus on clinical management instead of education and logistical issues.

**Disease Course: Breast Cancer**

- Abnormal Mammogram
- Biopsy
- Cancer Diagnosis

**Active Treatment Phase**

- Patients are empowered to make treatment decisions and navigate multimodality therapy.
- Patient and family satisfaction is increased.
- Outcomes are improved.
- Costs are decreased due to increased efficiency and reduced redundancy.

**Without Nurse Navigator Program**

**With Nurse Navigator Program**

- Surgery of breast and axillary lymph nodes
- Node negative
- Node positive
- Diagnostic imaging

- Opportunities for research and combined modality treatment are lost.

**Clinical Trials**

- Radiation
- Palliative Care
- Chemotherapy

**Active Treatment Phase**

- Surveillance
- Diagnostic imaging
- Remission
- Terminal
- Hospice
Care Coordination Reduces Costs and Boosts Efficiency

Coordination and integration make a nurse navigator program an effective aspect of a cancer disease management strategy.

**Education, Follow-up and Guidance Can Improve Care**

Cost savings and efficiency improvements can be attributed to decreased ED visits, reduction in inappropriate admissions and readmissions, standardized treatment protocols, effective therapy management, reduced duplicate tests and increased use of hospice care.

**Average Annual Cost per Cancer Patient**

<table>
<thead>
<tr>
<th>Year</th>
<th>Cost Reduction With Care Coordination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>15,000</td>
</tr>
<tr>
<td>Year 1</td>
<td>34%</td>
</tr>
</tbody>
</table>

**Percent Changes From Year 1 to Year 2 With Disease Management**

- Pain Admissions: -36%
- Readmissions: -24%
- Supportive Care Drug Costs: -54%
- Hospice Utilization: +47%

Downstream Revenue Can Offset Costs

As early disease detection and better therapeutic options continue to increase survival for cancer patients, the disease course will begin to resemble that of a chronic condition. This presents an opportunity for providers to focus on patient loyalty to ensure new and repeat service utilization.

Cost Benefits Are Easy to Realize

Downstream revenue resulting from effective care coordination and follow-up through a nurse navigator program may offset the personnel costs of such a program. Diligent follow-up after regular screening will increase downstream treatment utilization. For example, patients undergoing cancer screening may eventually require profitable intensity-modulated radiation therapy (IMRT).

### Outpatient IMRT Regimen

<table>
<thead>
<tr>
<th>CPT Code</th>
<th>2006 Medicare Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple*</td>
<td>$18,803</td>
</tr>
</tbody>
</table>

*Includes consultations, treatment planning, imaging and treatment delivery for a typical 38-fraction regimen.

### Annual Navigator Cost Compared With Downstream Utilization Payment

Capturing unanticipated or additional downstream revenue from a handful of patients may offset the personnel costs of a nurse navigator program.

Sources: CMS; Sg2 Analysis, 2005.
Nurse Navigators Improve Outcomes and Efficiency

Coordination and integration of a cancer program using nurse navigators will improve outcomes and efficiency for patients, physicians and administrators. This includes operational advantages for administration, professional benefits and improved resource utilization for physicians, and better clinical and psychosocial outcomes for patients.

<table>
<thead>
<tr>
<th>Minimal Coordination</th>
<th>Coordination with Nurse Navigators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration</td>
<td></td>
</tr>
<tr>
<td>Low patient throughput</td>
<td>Increased efficiency</td>
</tr>
<tr>
<td>Unnecessary IP admissions</td>
<td>Decreased average lengths of stay (ALOS)</td>
</tr>
<tr>
<td>Redundancy in services</td>
<td>Increased revenue</td>
</tr>
<tr>
<td>Suboptimal capture of charges</td>
<td>Increased retention of staff and patients</td>
</tr>
<tr>
<td>Dissatisfied staff/patients</td>
<td></td>
</tr>
<tr>
<td><strong>Physicians</strong></td>
<td></td>
</tr>
<tr>
<td>Episodic care</td>
<td>Coordinated access to facilities</td>
</tr>
<tr>
<td>Difficulty coordinating patient services</td>
<td>Improved flow of information between collaborating physicians</td>
</tr>
<tr>
<td>Scheduling challenges</td>
<td>Improved flow of information between physicians and their patients</td>
</tr>
<tr>
<td>Inefficient use of resources</td>
<td>Improved access to technology</td>
</tr>
<tr>
<td>Ineffective flow of information</td>
<td>Better perceived by patients</td>
</tr>
<tr>
<td></td>
<td>Reduced wait times between visits and procedures</td>
</tr>
<tr>
<td></td>
<td>Streamlined referrals to specialists</td>
</tr>
<tr>
<td></td>
<td>Reduced ED and acute care admissions</td>
</tr>
<tr>
<td></td>
<td>Increased utilization of counseling, support, nutritional and other ancillary services</td>
</tr>
<tr>
<td>Patients</td>
<td></td>
</tr>
<tr>
<td>Delays in access to care</td>
<td>Better informed about disease</td>
</tr>
<tr>
<td>Lack of communication and education about treatment options and plans</td>
<td>Empowerment to make health care decisions</td>
</tr>
<tr>
<td>Minimal coordination of services</td>
<td>Preparation for physicians visits</td>
</tr>
<tr>
<td>Heightened anxiety</td>
<td>Convenience in visit scheduling</td>
</tr>
<tr>
<td>Uncoordinated referral to emotional support, hospice care and follow-up services</td>
<td>Positive patient/family experience</td>
</tr>
<tr>
<td></td>
<td>Reduction in physical pain, fatigue, anxiety and depression</td>
</tr>
<tr>
<td></td>
<td>Access to emotional and social support network</td>
</tr>
<tr>
<td></td>
<td>Improved compliance with treatment program</td>
</tr>
<tr>
<td></td>
<td>Reduction in medical morbidities</td>
</tr>
<tr>
<td></td>
<td>More likely to return for other services</td>
</tr>
<tr>
<td></td>
<td>Referrals to friends and family</td>
</tr>
</tbody>
</table>
The dominant model emerging for cancer care organizations is the virtual cancer center. The need to reach patients in the community is fueling the growth of this model.

**Coordination Overcomes Physical Separation**

Cancer services can be segmented by modality and delivered in several settings, including the physician’s office, freestanding centers, satellite offices and outpatient hospitals. Integration across sites is necessary to overcome the physical separation of the model.

**Challenges to Overcome**

- Physician communication is slower between sites.
- Communication of test results requires concerted coordination.
- Multi-site appointments cause scheduling difficulties.
- Logistical stress is shifted to patients.
- Care path can be operationally inefficient.
- Frustrated patients may be lost to competing providers.

**Nurse Navigators Coordinate and Integrate Virtual Cancer Centers**

Nurse navigators guide patients through the care process, providing resources, services and support so that patients are not burdened with complex logistical matters.

**Physician Benefits**

- Enhances interaction among MDs
- Relieves burden of patient education
- Increases patient preparedness
- Enables focus on clinical management
- Increases referrals

**Patient Benefits**

- Provides simplified “one-stop shop” care process
- Addresses educational and psychosocial needs
- Provides multidisciplinary care
- Simplifies process of scheduling physician visits
- Facilitates access to a variety of resources and ancillary services
Demand Is Related to Volumes and Tumor Complexity

The demand for nurse navigator services is driven by the combined effects of a number of factors, including service utilization and disease complexity. Demand can be measured by the relative utilization of high-tech services, such as advanced imaging and radiation therapy, by patients with different types of tumors.

Volume Alone Does Not Project Need

Analysis of tumor type distribution for one institution reveals that this type of analysis masks the need for nurse navigator services for patients with complex tumor types (e.g., brain cancer).

Tumor Type Distribution for Single-Institution Program

Demand Analysis Must Consider Utilization and Disease Complexity

Complexity of disease treatment can be determined by comparing the ratio of radiation oncology and imaging volumes to visits. This analysis provides a more accurate assessment of the relative nurse navigator opportunities for a range of common tumor types.

Nurse Navigator Demand by Tumor Type

<table>
<thead>
<tr>
<th>Tumor Type</th>
<th>2003 Inpatient Discharges</th>
<th>2002 Outpatient Volumes</th>
<th>Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2003</td>
<td>2002</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Visits</td>
<td>Imaging</td>
<td>Med Onc</td>
</tr>
<tr>
<td>Brain</td>
<td>55,000</td>
<td>254,000</td>
<td>62,000</td>
</tr>
<tr>
<td>Breast</td>
<td>140,000</td>
<td>5,652,000</td>
<td>1,192,000</td>
</tr>
<tr>
<td>Lung</td>
<td>295,000</td>
<td>2,617,000</td>
<td>603,000</td>
</tr>
<tr>
<td>Colorectal</td>
<td>227,000</td>
<td>1,399,000</td>
<td>125,000</td>
</tr>
<tr>
<td>Gynecologic</td>
<td>133,000</td>
<td>1,337,000</td>
<td>134,000</td>
</tr>
<tr>
<td>Head/Neck</td>
<td>74,000</td>
<td>1,337,000</td>
<td>134,000</td>
</tr>
<tr>
<td>Prostate</td>
<td>141,000</td>
<td>3,989,000</td>
<td>850,000</td>
</tr>
<tr>
<td>Lymphoma</td>
<td>134,000</td>
<td>2,012,000</td>
<td>609,000</td>
</tr>
<tr>
<td>Other GI</td>
<td>64,000</td>
<td>1,650,000</td>
<td>406,000</td>
</tr>
<tr>
<td>Urinary</td>
<td>102,000</td>
<td>858,000</td>
<td>181,000</td>
</tr>
</tbody>
</table>

Sources: Cancer Care Nova Scotia; Sg2 Analysis, 2005.
Program Type Is Context-Dependent

The benefits of a nurse navigator program can be realized by implementing one of a wide spectrum of models. This flexibility allows institutions to develop a useful program that fits their specific needs and goals.

3 Institution-Specific Models Are Possible

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Benefits</th>
<th>Drawbacks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Shared Model</strong></td>
<td>Indirect navigation provided by several people involved in patient care</td>
<td>Interaction with experts and dedicated staff may be unnecessary.</td>
</tr>
<tr>
<td><strong>Facilitating Model</strong></td>
<td>Led by a nurse, assistant or volunteer with a psychosocial and logistical role</td>
<td>Nurse navigator acts as a consultant, offers suggestions, but ensures that patient makes decisions.</td>
</tr>
<tr>
<td><strong>Active Model</strong></td>
<td>Led by a nurse with cancer experience, who has a proactive clinical and psychosocial role</td>
<td>Nurse navigator schedules appointments, assists with referrals, has direct contact with physician, provides disease education to the patient, and assists with treatment decisions.</td>
</tr>
</tbody>
</table>

Chosen Model Should Complement Institution

Institutional Attributes

**Shared Model**
- Highly motivated professional staff
- Very limited resources
- Only basic treatment options offered
- Low patient volumes

**Facilitating Model**
- Moderate patient volumes, focus on several high-incidence tumor types
- Limited resources
- Successful integrated program already in place
- Highly educated patient population

**Active Model**
- High patient volumes, treatment of many tumor types
- Many complex treatment options offered, poor integration
- Patient population that is underserved, undereducated
Navigator programs can work in a variety of hospital settings, be implemented by a variety of professionals, and use several different methods of patient interaction.

### 3 Key Factors Define a Nurse Navigator Program

<table>
<thead>
<tr>
<th>Setting</th>
<th>Rural</th>
<th>Community</th>
<th>Academic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resources</td>
<td>Low</td>
<td>Sufficient</td>
<td>Plentiful</td>
</tr>
<tr>
<td>Volumes</td>
<td>Low</td>
<td>Substantial</td>
<td>High</td>
</tr>
<tr>
<td>Navigator Type</td>
<td>Non-Specialized</td>
<td>Non-Specialized and Specialized*</td>
<td>Specialized*</td>
</tr>
<tr>
<td>Program Model</td>
<td>Shared or Facilitating</td>
<td>Shared, Facilitating or Active</td>
<td>Facilitating or Active</td>
</tr>
</tbody>
</table>

*By tumor type.

### Hospital Setting Will Likely Determine Navigator Type

- **Rural**
  - Non-Specialized

- **Community**
  - Non-Specialized or Specialized

- **Academic**
  - Specialized

A rural provider with minimal resources and lower volumes should invest in a non-specialized navigator to handle a wide range of tumor types and circumstances.

A community provider with sufficient resources and substantial volumes should invest in several specialized navigators to handle the unique aspects of tumor types such as breast, prostate and lung. A non-specialized navigator may be hired to manage lower-volume tumor types.

An academic provider with plentiful resources, high volumes for a variety of tumor types and the most innovative treatment options should invest in specialized navigators for a wide range of circumstances.
Key Qualifications/Roles Define Nurse Navigators

Although the roles of a nurse navigator are context- and program-specific, there is a set of basic qualifications and key job functions that Sg2 uses to define them.

### Nurse Navigators Possess Specialized Qualifications

#### Staff
- RNs with oncology experience are ideal.
- Social workers or volunteers may be adequate for institutions with lower volumes or fewer resources.

#### Roles
- Educate on disease specifics and treatment options.
- Improve coordination of treatment and support.
- Assist with logistical navigation through the care continuum.
- Provide a link between patient and physician.
- Facilitate access to support networks and psychosocial assistance.
- Enable informed follow-up care and hospice care decisions.

#### Goals
- Identify potential gaps in care.
- Monitor care through a close relationship with the patient.
- Improve patient education by enabling informed decision making.
- Reduce patients’ anxiety by coordinating cancer care.

### Nurse Navigators: Key Roles

- Contact patients at high-stress points.
- Offer psychosocial support and access to resources.
- Educate to enable patient-led treatment decisions.
- Liaise between clinical specialists and family physicians.
- Streamline care path transitions and logistical issues.
Nurse navigators provide information and education about a patient’s diagnosis to better prepare the patient and family for their cancer journey. Because the phase immediately following diagnosis is usually the time of highest stress for a patient, this is the optimal time for the nurse navigator to become involved.

### Contact Patients at High-Stress Points

#### 4 Key Nurse Navigator Interaction Points Address Patient Needs

1. **Interval Between Cancer Diagnosis and First Visit to Surgeon**
   - Provide an overview of the care pathway; familiarize the patient with your institution.
   - Explain what to expect during the initial surgeon consultation.
   - Inform the patient of potential treatment options.
   - Provide educational information.
   - Facilitate access to support network if necessary.

2. **Pre-Surgery**
   - Ensure patient understands treatment decision; confirm surgery date.
   - Familiarize the patient with your institution’s admission and discharge procedures.
   - Explain the details of post-surgery pain and provide management options.
   - Facilitate access to emotional and practical support if necessary.

3. **Post-Surgery, 2–3 Days After the Operation**
   - Provide encouragement.
   - Assist with post-surgery pain management.
   - Provide access to emotional support if necessary.

4. **After Follow-Up**
   - Provide continued support and encouragement into recovery phase.
   - Facilitate access to post-surgical educational and support sessions.
   - Prepare the patient for upcoming therapy, if applicable.

Source: Cancer Care Nova Scotia.
Cancer Care Coordination With Nurse Navigators

Offer Psychosocial Support and Access to Resources

Timely access to support services is essential during the high-stress period after a cancer diagnosis. It is equally important to determine the patient’s needs and capabilities in order to effectively tailor the intervention.

Patient Needs Drive Intervention

The results of a survey of 162 cancer patients revealed that, unprompted, patients identified the emotional effect of cancer to be their area of highest concern. When patients were prompted with a list of possible concerns, they still ranked emotional impact highest; however, other more logistical issues also were important.

Percentage of Cancer Patients Concerned About Treatment Issues

Navigators Provide Direct Support and Access to Resources

Nurse navigators facilitate access to supportive, rehabilitative and palliative care services for cancer patients and families. Navigators can initiate and/or run support programs, or they can help patients identify established programs that fit their needs.

Resources:
- Pastoral care
- Family counseling
- Treatment support groups
- Survivor support groups
- End-of-life care
- Psychological services
- Psychiatric services
- Cosmetic services
- Complementary therapies

Source: Cancer Care Nova Scotia.
Education benefits patients by empowering them to take part in the design of their treatment plan and more effectively communicate with their physicians. Patient education and preparedness benefit physicians by allowing them to focus on medical management instead of psychosocial and logistical issues. The result is increased efficiency for the physician and more effective communication with patients.

Education Is a Primary Function of Nurse Navigators

84% of patients initiate interaction with a nurse navigator in conjunction with a new cancer diagnosis. This group has a significantly higher need for education than the remaining 16% who initiate interaction in conjunction with recurrent disease.

Types of Actions Taken

<table>
<thead>
<tr>
<th>Type of Information</th>
<th>Percent of Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancer information</td>
<td>32%</td>
</tr>
<tr>
<td>Kits/brochure</td>
<td>18%</td>
</tr>
<tr>
<td>General information</td>
<td>6%</td>
</tr>
<tr>
<td>One-on-one teaching</td>
<td>4%</td>
</tr>
<tr>
<td>1-800 line</td>
<td>2%</td>
</tr>
<tr>
<td>Group education</td>
<td>1%</td>
</tr>
<tr>
<td>Web site</td>
<td>1%</td>
</tr>
</tbody>
</table>

Source: Cancer Care Nova Scotia.

Typical patient questions:
- What are my current treatment options?
- What side effects should I expect?
- Am I a candidate for clinical trials?
- What is my prognosis?
- What alternative therapies are available?
- How long will it take to schedule my surgery?
- Should I get a second opinion?
- How am I going to pay for treatment?
- Is my cancer inherited?

Education Increases Patient Preparedness

Nurse navigators consistently provide expertise to patients about complicated treatment options to empower them to make informed decisions.

Distribution of Information Requests by Patients
Cancer management requires the combined expertise of a range of specialists, including medical oncologists, surgeons, radiation oncologists, nurses, pathologists, radiologists and others. Multispecialty care is complex and demanding for both providers and patients.

### Coordinate Across Specialties

Many nurse navigators are charged with promoting collaborative/consultative relationships among cancer team members. There are a number of strategies navigators can employ to improve communication.

- **Tumor Board**
  - Coordinate attendance of a multidisciplinary team.
  - Ensure that patient records and tests are up-to-date and available.
  - Appropriately communicate recommendations to patients.

- **Clinical Evidence**
  - Distribute novel clinical research findings to physicians.
  - Track modifications to off-label indications.
  - Build clinical cases to support payment.

- **Multidisciplinary Clinics**
  - Coordinate schedules of various specialists.
  - Attend multidisciplinary patient consults.
  - Ensure patient tests and records are accessible to specialists.

- **Test Results**
  - Communicate test results to patients in a timely manner.
  - Consolidate test results and reports in medical records.
  - Monitor for redundancy.

### Increase Awareness Among Primary Care Physicians and Community Specialists

Nurse navigators strengthen and support the role of primary care physicians and community-based specialists in cancer care because they initiate the vast majority of referrals.

**Sources of Patient Referrals**

*Source: Cancer Care Nova Scotia.*

Keeping primary care physicians informed and involved with their patients’ therapeutic plans and treatments will result in future referrals. Communication also fosters easier transitions for patients from oncology specialists back to their primary care physician following treatment.
Once the high stress following cancer diagnosis and initiation of treatment subsides, logistical issues usually take on greater importance for many patients. Navigators manage the important transitions between the active and surveillance phases of care. Navigators can help patients transition to surveillance by making follow-up appointments for screening tests. Conversely, patients with recurrent disease can easily access the services they require via their navigator and will be more likely to return to the same program.

### Transitions Between Care Settings Require Attention

The transition between care settings and care approaches can be difficult for some patients. Nurse navigators can effectively identify patients at highest risk for gaps in care or missed opportunities and provide logistical support.

### Navigators Assist With Logistical Issues

Navigators play the important role of either actively coordinating logistics or empowering patients to coordinate their own care. Navigators also act as an important link between physicians and patients, efficiently improving clinical care and the patient’s care experience.

#### Major Logistical Issues Addressed by Nurse Navigators

<table>
<thead>
<tr>
<th>Issue</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation</td>
<td>Inability to make regular appointments</td>
</tr>
<tr>
<td>Second Opinions</td>
<td>Patients reluctant to coordinate</td>
</tr>
<tr>
<td>Hospice</td>
<td>Confusion around end-of-life wishes</td>
</tr>
<tr>
<td>Research</td>
<td>Low clinical trial accrual</td>
</tr>
<tr>
<td>Accommodations</td>
<td>Patient must travel for care</td>
</tr>
<tr>
<td>Referrals</td>
<td>Requirement for multispecialty consults</td>
</tr>
<tr>
<td>Refills</td>
<td>Unnecessary ED utilization</td>
</tr>
</tbody>
</table>

Source: Sg2 Analysis, 2005.
### Implementation of a Nurse Navigator Program

Implementing a successful nurse navigator program requires 4 key steps. After obtaining appropriate staff and providing training, institutional support for the program must be emphasized among referring physicians and other key stakeholders. Defining the institution-specific roles, goals and expectations is essential. The operations process must be delineated and metrics for evaluation determined to facilitate initialization of the program.

<table>
<thead>
<tr>
<th>Strategies</th>
<th>Goal:</th>
<th>Stakeholders:</th>
</tr>
</thead>
</table>
| **Train**  | Plan for extensive staff training. | - Nursing staff  
- Medical staff  
- Ancillary staff  
  - Social work  
  - Nutritional counseling  
  - Pastoral care |
| **Build Consensus** | Build institutional support for the program. | - Referring MDs  
- Payers  
- Administration  
- Advocacy  
- Support networks |
| **Define Clinical Pathways** | Determine the program goals, staff roles and process. | - Patient selection  
- Staff involvement  
- Interaction points  
- Process  
- Program goals |
| **Operationalize** | Begin the process and proactively collect data for program evaluation. | - Standing orders  
- Charting electronic medical record (EMR) protocols  
- Scheduling  
- Referral patterns  
- Performance metrics  
- Evaluation |

Source: Cancer Care Nova Scotia.
Strategies to Implement a Nurse Navigator Program—
Road Map for Success

<table>
<thead>
<tr>
<th>Strategies</th>
</tr>
</thead>
</table>
| **Train** | □ Train the nurse navigators to meet the unique demands of the specialized position. Use commercial programs and information from leading practice models to prepare the staff.  
□ Educate all cancer-related staff, including physicians and support staff, on the program and their specific roles.  
□ Prepare any ancillary services for cancer-specific needs. |
| **Build Consensus** | □ Recognize that the vast majority of patient referrals into the program will come from physicians. Solicit support from your physicians to ensure program success.  
□ Obtain hospital administration support for integrated cancer care.  
□ Talk to local support networks and advocacy groups about the program to prepare them for increased utilization. |
| **Define Clinical Pathways** | □ Determine the tumor types and patient types the navigator will target.  
□ Assign appropriate responsibilities to staff members involved in patients’ care paths.  
□ Develop a strategy for the initial navigator interaction point and subsequent points along the care path.  
□ Establish a simple process for coordination with physicians and ancillary staff, and for follow-up.  
□ Set realistic and measurable goals for improving integration and coordination with the program. |
| **Operationalize** | □ Set goals for workload and average time dedicated to each patient.  
□ Encourage cooperation from physicians and others involved in the care path.  
□ Measure actual time spent with each patient.  
□ Track referrals generated as a result of the program.  
□ Assess utilization of education materials.  
□ Evaluate patient preparedness.  
□ Quantify effectiveness of community marketing.  
□ Facilitate follow-up interaction.  
□ Identify opportunities for program modification. |

Source: Cancer Care Nova Scotia.
Although the nurse navigator program at Henry Ford is only a year old, the program has been successful at integrating care across the cancer program. Using minimal resources, the program has resulted in positive feedback and increasing participation from patients and physicians.

**Program Facilitates a Multidisciplinary Approach**

Interaction begins with diagnosis.

<table>
<thead>
<tr>
<th>Academic</th>
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</thead>
<tbody>
<tr>
<td>Henry Ford’s nurse navigator program is in an academic setting.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-Specialized</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three trained oncology nurse navigators interact with all newly diagnosed cancer patients.</td>
</tr>
</tbody>
</table>

**Roles by Tumor Type**

- Breast and prostate: Coordinate with patient and doctors during multidisciplinary clinic
- Brain and head/neck: Managed by specialty department nurses
- All others: Attend tumor boards, contact patient by phone or in person

<table>
<thead>
<tr>
<th>Facilitating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Navigator Roles</td>
</tr>
<tr>
<td>- Schedule appointments</td>
</tr>
<tr>
<td>- Provide disease literature</td>
</tr>
<tr>
<td>- Answer questions on care process</td>
</tr>
<tr>
<td>- Provide access to support and ancillary services</td>
</tr>
</tbody>
</table>

Further interaction is primarily patient-initiated.

**Physician Support and Patient Utilization Enable Success**

Awareness of the program among hospital staff and increasing utilization by patients drive improvements in satisfaction and wait times.

<table>
<thead>
<tr>
<th>Building Awareness</th>
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</thead>
<tbody>
<tr>
<td>- Navigators initiated program by visiting local primary care providers, including family physicians.</td>
</tr>
<tr>
<td>- Nurse-staffed cancer call center answers questions and refers patients to the program.</td>
</tr>
<tr>
<td>- Hospital marketing, including radio advertising, highlights the system’s focus on integrated cancer care.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>- The average time from cancer diagnosis to first treatment has decreased.</td>
</tr>
<tr>
<td>- Patient surveys conducted by the medical and radiation oncology departments have both experienced rising scores.</td>
</tr>
<tr>
<td>- Patient volumes and utilization are growing.</td>
</tr>
</tbody>
</table>

Source: Henry Ford Health System.
OhioHealth has a unique breast health nurse navigator program that initiates interaction with patients any time they receive abnormal mammography results. By providing specialty nurse navigators for both the outpatient and inpatient settings, the program ensures that patients are guided seamlessly through the care process.

Emotional and Logistical Support Occur at the Earliest Possible Stage

Community
The breast health nurse navigator program at OhioHealth is in a community setting, encompassing 3 hospitals and 6 outpatient centers.

Specialized
The program has 8 dedicated OP nurse navigators, and a group of IP nurses that manage patients during surgery and treatment.

Nurses
- Bachelor of Science in Nursing (BSN) degree is required.
- All have clinical oncology experience; many have imaging experience.
- Qualifications place these nurses at the top of their pay grades.

Active
Nurse navigator intervention occurs when patients receive abnormal results from a standard screening mammogram.

Patient Receives a Mammogram
- Normal: Navigator monitors for compliance with next annual visit.
- Abnormal: Navigator calls patient, schedules diagnostic exam and discusses results with the patient.
- Positive Biopsy
  - Refers patient to IP breast health nurse
  - Meets with patient and surgeon prior to surgery
  - Educates patient on the care process and provides support
  - Calls patient periodically during treatment, provides access to ancillary services

Program Ensures High Quality Standards

Effects
- Shifting the point of entry to occurrence of an abnormal mammogram captures a period of high patient stress and uncertainty that is often overlooked.
- Time from cancer detection at the diagnostic exam to informing the patient of the diagnosis dropped from an initial goal of 9 days to less than 7.5 days in 2005.
- Ensuring the continued involvement of primary care physicians and directing coordination during conferences has made the program popular with physicians.

Source: OhioHealth.
Anticipate the Impact of Change

Sg2’s analytics-based health care expertise helps hospitals and health systems integrate, prioritize and drive growth and performance across the continuum of care. Over 1,200 organizations around the world rely on Sg2’s analytics, intelligence, consulting and educational services.