BY TRICIA STRUSOWSKI, MS, RN,
AND JEREMY STAPP, MBA

Patient Navigation Metrics

Measuring the impact of your patient navigation services

The Oncology Nursing Society (ONS), the Association of Oncology Social Work (AOSW), and the National Association of Social Workers (NASW) all take the position that patient navigation—whether provided on-site or in coordination with local agencies or facilities—is an essential component of cancer care. Patient navigation programs have achieved more traction over the last several years, including the release of the 2013 ONS Nurse Navigator Core Competencies and the 2012 Commission on Cancer (CoC) Standard 3.1, Patient Navigation Process, which went into effect in 2015. While these guidelines and standards have provided cancer programs with additional justification to support the navigator role, navigation programs, like many support services, are often not a billable service; hospital executives and/or cancer program administrators tend to heavily scrutinize navigation programs because of this fact. Thus, it is incredibly important for managers and administrators to be able to report the true impact navigation programs have on cancer patients, as well as the cancer program.

What type of reporting is best suited to communicate patient navigator efficacy? The answer is clear: data and metrics. The challenge is that while navigation programs have existed for decades, standardized national metrics to measure programmatic

success have yet to be created. After a comprehensive literature search on the topic of navigation metrics, we identified three main categories of metrics:

1. Business performance/return on investment (ROI)
2. Clinical outcomes
3. Patient experience.

To be able to support continuation or perhaps even expansion of patient navigation services, cancer programs will need to collect quality metrics in all three of these categories. In this article, we outline example metrics to help you best communicate how your navigation program is positively impacting patients and the healthcare organization as a whole.

As the focus on cancer treatment broadens...navigators increasingly have opportunities to enhance patient experience from outreach and screening through survivorship and/or end-of-life care.

Patient Experience Metrics

The "patient experience" is increasingly emerging as a more enhanced method for measuring navigation success. The 2013 Consumer Assessment of Healthcare Providers and Systems (CAHPS) cancer survey identified that patients' expectations were exceeded when they felt their healthcare provider actively listened and incorporated their personal psychosocial goals into the treatment plan. The results of this survey also confirm the importance of navigators and support staff knowing how to provide the appropriate level of education, asking patients about their experience(s), and encouraging patients to actively participate in treatment discussions. These actions lead to increased levels of understanding and satisfaction of the patient and their family.

As the focus on cancer treatment broadens to include the entire continuum of care, navigators increasingly have opportunities to enhance patient experience from outreach and screening through survivorship and/or end-of-life care. Especially as patients complete active treatments, the focus will need to shift to prevention and wellness, as well as implementing a successful surveillance plan in the outpatient setting for the balance of their life. Table 1, right identifies navigation metrics that cancer programs should collect related to patient experience.

Patient experience interventions are not difficult to create for a navigation program, and there may be additional metrics not listed below that are currently in use nationally. However, it is vital to remember that patient-centered care methodology must always be applied in order to create appropriate metrics.

Clinical Outcomes Metrics

Clinical outcomes metrics are much more familiar to healthcare providers as clinicians have always measured success through patient clinical outcomes. Example metrics include distress screening, pathway compliance, and timeliness of care. Table 2, page 66, identifies clinical outcomes metrics related to navigation, including how to measure the metrics and corresponding benchmarks and sources.

Business Performance Metrics

Business performance metrics, unlike patient experience or clinical outcomes, are much less familiar for navigation programs. Yet, this category is becoming increasingly important as cancer program administrators question the return on investment (ROI) for navigation services. Navigators focusing on business performance metrics may require additional training or education on such measures. To fully understand the "what" and "why" of business metrics, navigators should be knowledgeable about business-related cancer topics including:

- Value-based cancer care
- Federal healthcare reform and reimbursement
- Centers for Medicare & Medicaid Services (CMS) quality measures
- Affordable care organizations (ACOs), oncology medical homes, and bundled payments
- Commission on Cancer standards—beyond navigation standards
- NCI Community Oncology Research Program (NCORP) research related to: symptom and treatment-related toxicities, post-treatment surveillance, over- and under-diagnosing, social factors, financing systems, organizational structure, health technologies, and individual behaviors
- Future reimbursement models for medical care based on quality measures rather than fee for service
- Population management and the initiation of penalties for readmission
- Patient-Reported Outcomes Measurement Information System (PROMIS), which standardizes health-related patient-reported outcomes.

Table 3, pages 67-68, identifies business performance metrics that cancer programs should collect to justify ROI on navigation services.

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Table 1. Navigation Metrics Related to Patient Experience

METRIC: WHAT TO MEASURE	DEFINITION: HOW TO MEASURE	BENCHMARK AND/OR SOURCE
Quality of life (QOL) survey	• Number of patients that received a QOL survey at pivotal medical visits throughout the continuum of care • Number of interventions provided as a result of QOL survey results	Internal benchmark Source: Ferrell B, et al. Quality of Life, Patient/Cancer Survivor Version, (QOL/CSV); 2012. midss.org/sites/default/files/qol-cs.pdf.
Patient experience survey	Percentage of patients extremely satisfied with the patient experience	Internal benchmark Source: the Consumer Assessment of Healthcare Providers and Systems for Cancer Care (CAHPS for Cancer Care); 2012. For more information on the CAHPS for Cancer Care survey, email CancerCAHPS@air.org.
Discharge experience	Number of patients that received a discharge assessment and educational packet upon discharge (i.e., medication reconciliation, safety tips for home, discharge instructions, navigator contact information, etc.)	Internal benchmark; ideal: 100%
Surgical oncology patient education	Number of patients that received a surgical oncology educational packet (i.e., discharge instructions, incentive spirometer, pain medication prescription, etc.)	Internal benchmark; ideal: 100%
Patient decision aids or tools by disease site or department	Number of patients that received decision aids and/or tools by disease site	Internal benchmark; ideal: 100% Source: O'Connor A, et al. Decision aids for patients facing health treatment or screening decisions: systematic review. *BMJ*. 1999; 319(7212):731-734.
Toolkit for caregiver(s): provides patient and family with education and support	Number of caregivers that received a caregiver resource toolkit and their satisfaction with the toolkit	Internal benchmark; ideal: 100% Source: Hook A, et al. Breast cancer navigation and patient satisfaction: exploring a community based patient navigation model in a rural setting. *Oncol Nurs Forum*. 2012; 39(4): 379-385.
Complementary and alternative therapies and/or outcomes	Number of patients that were referred for complementary and/or alternative therapies and outcomes	Internal benchmark; ideal: 100%
Utilization of decision-aid tools and outcomes for treatment discussions with physicians or healthcare providers	• Number of patients that used decision-aid tools with a successful outcome • Additional metric: survey patients after a decision aid was utilized regarding the level of patient empowerment during discussions with the healthcare provider	Internal benchmark; ideal 100%

Table 2. Navigation Metrics Related to Clinical Outcomes

METRIC: WHAT TO MEASURE	DEFINITION: HOW TO MEASURE	BENCHMARK AND/OR SOURCE
Tumor conference compliance with NCCN guidelines	Percentage of treatment plans that followed the NCCN guidelines and recommendations as discussed in the tumor conference	Internal benchmark; ideal: 100%
Psychosocial distress screening	• Number of patients that received psychosocial distress screening • Additional metrics may include the number of interventions provided to the patient, types of interventions, and outcomes	Internal benchmark; ideal 100% Source: CoC Standard 3.2 Psychosocial Distress Screening: Patients with cancer are offered screening for distress a minimum of one time per patient at a pivotal medical visit (to be determined by the program).
Patient compliance on pathway and guidelines	Percentage of patients that were compliant with their treatment plan	Internal benchmark; ideal: 100% Source: Quality in Health Care Advisory Group. Oncology Quality Improvement Collaborative. info.cecity.com/assets/Oncology_QCDR_Narrative_Specifications.pdf. Source: Case MA. Oncology nurse navigator. *Clin J Oncol Nurs.* 2011;15(1):33-40.
Interventions provided to address patient barriers to care	Number and type of intervention provided to patients based on barriers to care	Internal benchmark Source: Naylor K, et al. Interventions to improve care related to colorectal cancer among racial and ethnic minorities: a systematic review. *J Gen Intern Med.* 2012, 27(8):1033-1046.
Timeliness of care: the time between diagnosis and the patient's first treatment modality	Number of days from the time the patient is diagnosed until the first cancer physician appointment to receive and/or review the treatment plan	Internal benchmark Source: Gilbert JE, et al. Nurses as patient navigators in cancer diagnosis; review, consultation and model design. *Eur J Cancer Care.* 2011; 20(2):228-236. (Article also reviews results related to reduced anxiety and higher satisfaction.)
Clinical trial education: educating patients on clinical trials and reducing patient's barriers to participate	• Number of patients educated regarding clinical trials • Number of patient barriers identified and/or documented and the interventions provided	Internal benchmark; ideal: 100% Source: Holmes DR, et al. Increasing minority patient participation in cancer clinical trials using oncology nurse navigation. *Am J Surg.* 2012;203(4):415-422.

Table 3. Business Performance and ROI Metrics

METRIC: WHAT TO MEASURE	DEFINITION: HOW TO MEASURE	BENCHMARK AND/OR SOURCE
Decreased patient outmigration and increased patient retention rates	Percentage of patients that are diagnosed and treated at your cancer center	Internal benchmark
Referrals to revenue-generating services and downstream revenue	Number of patients referred to revenue generating services, i.e., registered dietitian, health psychologist, palliative care, imaging, etc.	Internal benchmark
30-day readmission rate via emergency department (ED)	Number of patients readmitted through the ED within 30 days	• Average 30-day readmission is 32.5% • Preventable, unexpected, and unplanned 30-day readmission rate is 3.6% Source: Quality in Health Care Advisory Board.
ED admissions per number of chemotherapy patients	Number of ED admissions per 1,000 chemotherapy patients	• National average is 929 ED visits per 1,000 chemotherapy visits • Lowest is 465 ED visits per 1,000 chemotherapy visits Source: Quality in Health Care Advisory Board.
Number of referrals of self-pay patients for financial counseling and/or assessment	Number of self-pay patients referred for financial assessment for Medicaid, Medicare, Social Security Disability, or hospital charitable applications	Internal benchmark; ideal: 100%
Home care for elderly (Medicare) oncology patient	• Amount of money saved by beneficiary for elderly (>65) years old oncology patients that received home care coordination. • Measures could also include number of elderly patients referred to home care and 30-day readmission rate to hospital, skilled nursing facilities, and ED visits	Benchmark: $8,477 less per Medicare beneficiary over 2 years Source: DeJonge K, et al. Effects of home-based primary care on Medicare cost in high risk elders. *J Amer Geriatric Society*. 2014;62:1825-1831.
Adherence to treatment plan	The percentage of patients that received the appropriate treatment as outlined by the treatment plan: • Was the recommended surgery performed? • Was the recommended chemotherapy received? • Was the recommended radiation therapy provided?	Internal benchmark; ideal 100% Source: Fillion L, et al. Professional patient navigation in head and neck cancer. *Semin Oncol Nurs*. 2009;25(3):212-221.
Medication reconciliation program	Number of patients that participate in the medication reconciliation program and what interventions were provided	Internal benchmark Source: The Joint Commission, July 2011, National Patient Safety Goal #3.

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METRIC: WHAT TO MEASURE	DEFINITION: HOW TO MEASURE	BENCHMARK AND/OR SOURCE
Medication coverage	Number of patients eligible vs. the number of patients that were assisted with pharmaceutical indigent programs and co-pay cards, and/or free drug programs	Internal benchmark; ideal 100% of eligible patients
Follow-up calls post-hospitalization	• Number of patients that received a discharge call 24 hours after being discharged from the hospital and what interventions, if any, were provided • Weekly follow-up calls for 4 weeks • Measures could also include 30-day readmissions and ED visits of those patients receiving follow-up calls after discharge and the 4 weekly follow-up calls	HealthLeaders Media Breakthroughs: Strategic Solutions for the Readmissions Challenge, June 2012. (healthleadersmedia.com/breakthroughs/281599/Strategic-Solutions-for-the-Readmissions-Challenge) The initiative started with heart failure patients. The first year the program was in place, participants saw a drop in inpatient admissions by 44% on the hospital side.
Measurement of and reduction in: 1. Length of stay (LOS) 2. Carve out days 3. Discharge delays	• Average LOS for inpatient oncology unit (medical and surgical) • Partner with the inpatient oncology units	Identify internal benchmark for oncology unit LOS
Proactive discharge planning for home care prior to admissions for surgical procedure	Number of patients that received proactive discharge planning prior to being admitted for a procedure and/or surgery that required home care or infusion services, i.e., PEG tube, Penrose drain, tracheostomy, etc.	Internal benchmark; ideal: 100%
Disease-site specific rehabilitation or prehabilitation programs, including but not limited to: • Cancer-related fatigue • Chemotherapy-induced peripheral neuropathy • Lung cancer • Head and neck cancer • Lymphedema management • Advanced stage cancer rehabilitation	Number of patients referred to rehabilitation or prehabilitation services	Internal benchmark; ideal: 100%
Hospice LOS of less than 3 days	Percentage of patients who died from cancer and were admitted to hospice and had a LOS of <3 days	Average 27% to 35% Source: ASCO, QOPI/EOL measures
Oncology medical home	Number of patients referred to the oncology medical home to prevent avoidable admissions and ED visits.	Internal benchmark

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Going Forward

Using metrics such as those referenced in this article provides a level of detail into navigation services not previously available. Regardless of the metrics' focus—be it patient experience, clinical outcomes, or business performance—navigators should be creative and collaborate with other departments within their cancer program to identify areas of greatest impact.

It has been our experience that when establishing metrics, navigation programs should keep in mind a few variables:

1. How easy is the information to collect?
2. Who will collect the data?
3. How often will data be collected?
4. How many metrics should be monitored at a time?

Do not overwhelm your navigators by collecting too much data. When too much data is collected, it becomes diluted, time consuming, and too much information to digest. We would also like to note that the process of selecting metrics to measure and the reporting of those metrics is an iterative process that ultimately leads to better understanding of how navigation services can have the greatest impact on patients and the cancer program. Metrics are the first step towards recognizing what cancer patients need and how the navigation program can be adapted to fit those needs. The ultimate outcome for all metrics is to provide the best possible care for the oncology patient and their caregiver(s). OI

Tricia Strusowski, MSN, RN, is a senior associate, and Jeremy Stapp, MBA, is an analyst at Oncology Solutions LLC, Decatur, Ga., an oncology-specific consulting firm, providing strategic, programmatic, and financial advisory services to help healthcare organizations advance their cancer programs.

LITERATURE REVIEW

1. Battaglia T, et al. Assessing the impact of patient navigation. *Cancer*. 2011;117(15 Suppl):3553-3564.
2. Case MA. Oncology nurse navigator. *Clin J Oncol Nurs*. 2011;15(1):33-40.
3. Crane-Okada R. Evaluation and outcome measures in patient navigation. *Seminars Oncol Nurs*. 2013;29(2): 128-140.
4. DeJonge K, et al. Effects of home-based primary care on Medicare cost in high risk elders. *JAGS*. 2014; 62(10):1825-1831.
5. Ferrell B, et al. Quality of Life, Patient/Cancer Survivor Version (QOL/CSV); 2012. Available online at: midss.org/sites/default/files/qol-cs.pdf. Last accessed Nov. 9. 2015.
6. Fiscella K, et al. Patient-reported outcome measures suitable to assessment of patient. *Cancer*. 2011;117(15 Suppl):3603-3617.
7. Gilbert JE, et al. Nurses as patient navigators in cancer diagnosis; review, consultation and model design. *Eur J Cancer Care*. 2011;20(2):228-236.
8. Guadagnolo A, et al. Metrics for evaluating patient navigation during cancer diagnosis and treatment. *Cancer*. 2011;117(15 suppl):3565-3574.
9. Holmes DR, et al. Increasing minority patient participation in cancer clinical trials using oncology nurse navigation. *Am J Surg*. 2012;203(4):415-422.
10. Hook A, et al. Breast cancer navigation and patient satisfaction: exploring a community based patient navigation model in a rural setting. *Oncol Nurs Forum*. 2012;39(4):379-385.
11. National Institutes of Health: PROMIS Working Group. PROMIS: Dynamic Tools to Measure Health Outcomes from the Patient Perspective. Bethesda, MD: National Institutes of Health; 2012.
12. Naylor K, et al. Interventions to improve care related to colorectal cancer among racial and ethnic minorities: a systematic review. *J Gen Intern Med*. 2012; 27(8):1033-1046.
13. O'Connor A, et al. Decision aids for patients facing health treatment or screening decisions: systematic review. *BMJ*. 1999;319(7212):731-734.
14. Palos G, et al. Patients, family caregivers, and patient navigators. *Cancer*. 2011;117(15 Suppl):3592-3602.
15. Pratt-Chapman M, et al. Survivorship navigation outcome measures. *Cancer*. 2011;117(15 suppl):3575-3584.
16. Whitley E, et al. Establishing common cost measures to evaluate the economic value of patient navigation programs. *Cancer*. 2011;117(15 Suppl):3618-3625.