



NAVIGATION METRICS TOOLKIT

August 2020

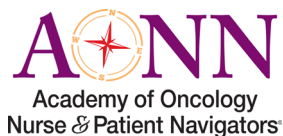


TABLE OF CONTENTS

Acknowledgments.....	4
Definitions for Abbreviations	6
Executive Summary.....	8
Chapter 1: Introduction	11
Chapter 2: National Quality Standards and Quality Indicators	14
Chapter 3: AONN+ Navigation Metrics.....	18
Chapter 4: Common Challenges and Facilitators to Collecting Metrics	23
Chapter 5: Identification of Key Stakeholders to Support the Metrics Measurement Process.....	29
Chapter 6: Working with Stakeholders to Choose the Right Metrics for Your Program	36
Chapter 7: Identifying Data Sources/Systems and Integrating Data into EHR.....	42
Chapter 8: Creating Your Navigation Metrics Dashboard	56
Chapter 9: Performance Improvement Processes and Tools.....	63
Appendices	80

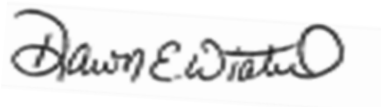
August 2020

To the Users of This Toolkit:

In 2017, AONN+ identified 35 evidence-based navigation metrics that were relevant to cancer care. The work to identify these 35 metrics served as the launching pad for continued efforts to study navigation metrics and implementation activities. In 2018, AONN+, the American Cancer Society, and Chartis Oncology Solutions conducted a national research multisite study to assess the extent to which navigation programs could implement a set of 10 of these 35 metrics. The selected metrics aligned with what many perceive to be national standards and indicators for navigation performance. With the pilot study completed, the next step was to develop a toolkit to help navigators, oncology program administrators, healthcare executives, and other clinicians who are linked to navigation understand and support the integration of standardized metrics measurement into their normal business processes.

This toolkit reflects the current recommendations from AONN+, recommendations from the pilot study, as well as best practices gleaned from navigators and navigation experts across the nation. The toolkit provides navigators with guidance on how to select, implement, report, and utilize navigation metrics as they engage in quality/performance improvement and strategic decision-making. We believe implementing navigation metrics will be transformative to cancer care since metrics can help drive and sustain quality improvements. This toolkit was developed to make it easier for navigators to start that journey and to provide additional momentum for programs that are already on their way. Key Programmatic Questions to Drive Metrics Implementation are provided for you in [Appendix 1](#).

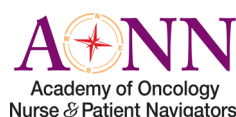
We hope this toolkit is a valuable resource for navigators, administrators, and cancer programs to demonstrate the value and sustainability of oncology navigation.



Dawn Wiatrek, PhD
Strategic Director
Cancer Treatment Access
American Cancer Society



Danelle Johnston, MSN, RN, HON-ONN-CG, OCN
Chief Nursing Officer, Sr. Director of Strategic
Planning and Initiatives
Academy of Oncology Nurse & Patient Navigators



Acknowledgments

This toolkit was developed with input and guidance from healthcare professionals across the United States – tenured medical personnel who have worked for many decades to serve patients with cancer. A debt of gratitude is owed to each individual for volunteering his or her time to help develop this toolkit. Additional thanks are owed to the funding partners that made its development possible.



AONN+ STANDARDIZED METRICS TASK FORCE

AONN+ National Standardized Evidence-Based Metrics Task Force

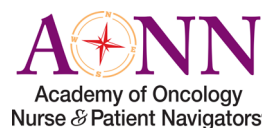
Danelle Johnston, MSN, RN, HON-ONN-CG, OCN, Co-Chair
Elaine Sein, RN, BSN, Co-Chair
Tricia Strusowski, RN, MS, Co-Chair
Cheryl Bellomo, MSN, RN, ONN-CG, OCN
Elizabeth Brown, MSN, MHA, RN, NE-BC, OCN
Sharon Gentry, RN, MSN, ONN-CG, AOCN, CBCN
Rizzo McHale, BS, RN, ONN-CG, OCN, CBCN
Nicole Messier, BSN, RN, OCN



NATIONAL STUDY INVESTIGATORS

National Evidence-Based Oncology Navigation Metrics: Multisite Exploratory Study to Demonstrate Value and Sustainability of Navigation Programs – Study Team

Danelle Johnston, MSN, RN, HON-ONN-CG, OCN – Co-Principal Study Investigator
Lesley Watson, PhD – Co-Principal Study Investigator
Megan Cotter, MPH – Study Investigator
Alex Glonek – Study Investigator
Elaine Sein, RN, BSN – Study Investigator
Kelley D. Simpson, MBA – Study Investigator
Tricia Strusowski, RN, MS – Study Investigator





NATIONAL STUDY SITES

National Evidence-Based Oncology Navigation Metrics: Multisite Exploratory Study to Demonstrate Value and Sustainability of Navigation Programs – Study Sites

Abington-Jefferson Health, Asplundh Cancer Pavilion, Abington, PA
Capital Health Cancer Center, Trenton, NJ
Centra Health, Alan B. Pearson Regional Cancer Center, Lynchburg, VA
MaineGeneral Health, Harold Alfond Center for Cancer Care, Augusta, ME
Medical University of South Carolina, Hollings Cancer Center, Charleston, SC
Rutgers Health, Rutgers Cancer Institute of New Jersey, New Brunswick, NJ
University of Arizona Cancer Center, Phoenix, AZ
University of Colorado Health, Fort Collins, CO



TOOLKIT DEVELOPMENT TEAM

Megan Cotter, MPH
Monica Dean, HON-OPN-CG
Danelle Johnston, MSN, RN, HON-ONN-CG, OCN
Elaine Sein, RN, BSN
Tricia Strusowski, RN, MS
Lesley Watson, PhD
Dawn Wiatrek, PhD



TOOLKIT REVIEW TEAM

AONN+ National Metrics Committee Toolkit Review Team

Tricia Strusowski, RN, MS, Committee Chair
Debbie Bickes, MN, RN, OCN, ONN-CG
Joyce Bynum, RN, BSN, OCN, ONN-CG, CCM, CMF
Trish Tatrai, RN, MS, OCN, CBCN
Sandra Walters, RN, CBCN, ONN-CG
Stacey L. Webb, MPA/HCA, BSN, RN, ONN-CG
Lianna Willhite, RN, BSN, CBCN, ONN-CG

Definitions for Abbreviations

APM – Alternative Payment Models

An alternative payment model (APM) is a payment model that rewards providers for delivering high-quality, cost-efficient care, as opposed to fee-for-service payment models that reward healthcare providers for the volume and types of care they provide.

CO – Clinical Outcome

Clinical outcome is the measurable change in health, function, or quality of life that results from medical intervention(s).

CoC – Commission on Cancer

The Commission on Cancer (CoC) is a consortium of professional organizations dedicated to improving survival and quality of life for cancer patients through standard-setting, which promotes cancer prevention, research, education, and monitoring of comprehensive quality care.

C-Suite

C-suite refers to the executive-level managers within a company. Common C-suite executives include the chief executive officer (CEO), chief financial officer (CFO), chief operating officer (COO), and chief information officer (CIO).

IT – Information Technology

Information technology is the study or use of systems (especially computers and telecommunications) for storing, retrieving, analyzing, and sending information.

MIPS – Merit-based Incentive Payment System

The Merit-based Incentive Payment System (MIPS) is one of the two payment tracks created under the Medicare Access and CHIP Reauthorization Act (MACRA); the other is the Advanced Alternative Payment Model (AAPM) track. MIPS adjusts payment based on performance in four performance categories:

- **Quality** – based on the Physician Quality Reporting System (PQRS)
- **Cost** – based on the Value-based Payment Modifier (VBPM)
- **Promoting Interoperability (PI)** – based on the Medicare EHR Incentive Program (Meaningful Use)
- **Improvement Activities** – requires activities designed to improve clinical practice or care delivery leading to improved outcomes

NAPBC – National Accreditation Program Breast Centers

The National Accreditation Program for Breast Centers (NAPBC) is a consortium of national, professional organizations focused on breast health and dedicated to the improvement of quality outcomes of patients with diseases of the breast through evidence-based standards and patient and professional education.

OCM – Oncology Care Model

The **Oncology Care Model** is an episode-based payment system developed by the Center for Medicare and Medicaid Innovation. The multi-payer model is designed for discrete six-month instances, or episodes of care, especially those involving chemotherapy—the start of chemotherapy treatment triggers the six-month episode. The program combines fee-for-service payments for established services, monthly payments for additional care under a structured guideline, and performance-based payments weighed against quality metrics and benchmarks.

ONN – Oncology Nurse Navigator

An ONN is a clinically-trained individual who is responsible for identifying and addressing barriers to timely and appropriate cancer treatment. The ONN guides the patient through the cancer care continuum from diagnosis through survivorship. More specifically, the nurse navigator acts as a central point of contact for a patient and coordinates all components involved in cancer care, including surgical, medical, and radiation oncologists; social workers; patient education; community support; financial and insurance assistance; etc. This person has a clinical background and is a critical member of the multidisciplinary cancer team.

PE – Patient Experience

Patient experience encompasses the range of interactions that patients have with the healthcare system, including their care from health plans, and from doctors, nurses, and staff in hospitals, physician practices, and other healthcare facilities. Patient experience does not start or stop at the hospital or healthcare provider's door. It includes all interactions, virtual or physical, extending to clinical and non-clinical personnel.

PI - Performance Improvement

Performance improvement is determined by measuring the output of a particular business process or procedure, then modifying the process or procedure to increase the output, the efficiency, or the effectiveness of the process or procedure

QI – Quality Improvement

Quality improvement is a systematic, formal approach to the analysis of practice performance and efforts to improve performance. A variety of approaches—or QI models—exist to collect and analyze data and test change.

NOTE: These definitions were accessed through organizational websites and other common website sources.

QOPI – Quality Oncology Practice Initiative

The Quality Oncology Practice Initiative (QOPI®) is a quality program designed for outpatient-oncology practices to foster a culture of self-examination and improvement. Participating practices can report on more than 150 evidence-based quality measures and receive individual performance scores by practice, site, and provider, as well as benchmarked scores aggregated from all participating practices.

ROI – Return on Investment

Return on investment is a performance measure that can be used to evaluate the efficiency of an investment or compare the efficiency of a number of different investments. ROI tries to directly measure the amount of financial return on a particular investment, relative to the investment's initial cost.

SCP – Survivorship Care Plan

A survivorship care plan is a record of a patient's cancer and treatment history, as well as any checkups or follow-up tests needed in the future. It may also list possible long-term effects of your treatments, and ideas for staying healthy.

TS – Treatment Summary

A treatment summary is simply a document that details the cancer treatments a patient has received. This record should include any surgery, chemotherapy (or other medical therapy), and radiation therapy. The summary should list the diagnosis, stage (using the TNM system when possible), and any relevant information from the pathology report.

VBPCC – Value-Based Purchasing in Cancer Care

Value-based purchasing (VBP) is a provider payment system that rewards providers for improvements in clinical performance. This system is being tested by Medicare and other payors for cancer care (VPBCC) in an effort to hold providers accountable for both the cost and quality of care they provide. It attempts to reduce inappropriate care and to identify and reward the best-performing providers.

Executive Summary

Because evidence guides practice, it is essential for oncology navigation programs to identify core metrics and standardize data collection activities to demonstrate program outcomes in the value-based environment that is currently dominant and will continue to be so in the future.¹ However, the oncology navigation field has lacked clarity about which metrics are most relevant and has failed to provide oncology navigators with a common framework for navigation measurement. Since 2015, AONN+ has been engaged in a process to develop standardized metrics and, most recently, has completed a pilot study to test a subset of these metrics. This toolkit was created to support navigators and navigation leaders who want to establish the relevance and acceptance of their navigation efforts through the implementation of metrics.

Through an extensive literature review, AONN+ defined three main areas of measurement for understanding and prioritization: patient experience (PE), clinical outcomes (CO), and return on investment (ROI).² In 2017, through continued research, AONN+ identified 35 evidence-based navigation metrics that touched at least one of these three areas of measurement. In 2018, AONN+, the American Cancer Society, and Chartis Oncology Solutions conducted a national, multisite research study to assess the extent to which navigation programs could implement a set of 10 of these metrics. Eight healthcare organizations agreed to participate in the pilot project. These organizations served as test sites to assess what could be learned through the implementation of selected navigation metrics over a six-month period.

The selected metrics aligned with national standards and indicators for navigation performance. They were also selected based on the likely availability of data from participating navigation programs. The goal of the pilot project was to study what could be learned through the implementation of the 10 selected metrics, including the feasibility of implementation, and to identify facilitators and barriers to implementation.

Informal surveys at AONN+ national meetings indicate that only 50% of navigators track a set of navigation metrics. This toolkit is designed to help navigators, oncology program administrators, healthcare executives, and other clinicians who are linked to navigation understand and support the integration of standardized metrics into their normal business processes.

This toolkit will provide navigators with guidance on how to select, implement, report, and utilize navigation metrics as they engage in quality/performance improvement and strategic decision-making. The toolkit will illustrate how navigators can elevate their work by:

- Diving deeper into the use of metrics
- Investing in stakeholder relationships
- Engaging information technology and performance improvement leaders
- Creating dashboards to capture and manage navigation outcomes
- Using metrics to implement performance improvement initiatives for navigation efforts

To illustrate how navigation metrics operate in the real world and to help other programs manage similar challenges, this toolkit includes case studies based on the experiences of the eight sites that participated in the navigation metrics pilot study. For six months, the organizations shared historical data, tracked standardized metrics using a unified platform, and disclosed feedback on facilitators and barriers to metrics implementation. Many of these barriers are not surprising: challenges related to information technology (IT), inconsistent methods of capturing data from electronic medical records, health system process barriers, navigation processes that were not standardized within a system or institution, processes that were poorly defined in scope, and misunderstanding of the navigation metrics definitions. Each study site completed at least one quality initiative to improve its implementation of the metrics and demonstrate how to overcome some of the barriers they encountered.

After reviewing findings from the pilot study using the 10 selected standardized metrics (See [Appendix 2](#)), the study team identified five navigation metrics that were understandable, applicable across all participating navigation programs, and relatively easy to implement.³ These five metrics are highlighted below.

CORE NAVIGATION METRICS

Proposed core metrics that are likely universally applicable:



NAVIGATOR
COMPETENCIES



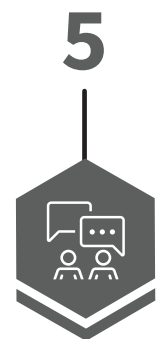
NAVIGATION
CASELOAD



BARRIERS
TO CARE



PSYCHOSOCIAL
DISTRESS SCREENING



INTERVENTIONS

These five areas have specific impacts on navigation and the quality of patient care that is delivered by the navigator. More importantly, by implementing navigation metrics, navigators help to transform overall cancer care.

Implications of Implementing Metrics for Navigation Practice

- Transformative
- Helps with the evaluation of professional practice and care delivery
- Defines oncology navigation practice and outcomes
 - Quality care delivery
 - Health outcomes
 - Overall value throughout the cancer care continuum
- Necessary for the sustainability of navigation

Regardless of what specific metrics might be selected by a given healthcare organization, the pilot study showed that navigation programs face challenges with metrics implementation overall and struggle to define processes for data capture and reporting. These are key activities to metrics implementation that must be addressed.

This toolkit provides suggested solutions for common challenges and serves as a guide to help navigators, navigation leaders, and healthcare executives understand how to collect, assess, and use selected navigation metrics to launch their navigation programs, better manage oncology navigation programs, and support sustainability for their navigation programs. The toolkit reflects the current recommendations of AONN+ and ACS. These recommendations are informed by many factors, including, but not limited to, this pilot study.



1 Introduction

Patient navigation has established itself as a vital feature and function in the patient care process for chronic and critical illnesses. Over the past two decades, patient navigation has matured across several healthcare specialties, but it is perhaps most fully developed in the field of oncology, with many hospitals and advocacy organizations offering comprehensive navigation programs.

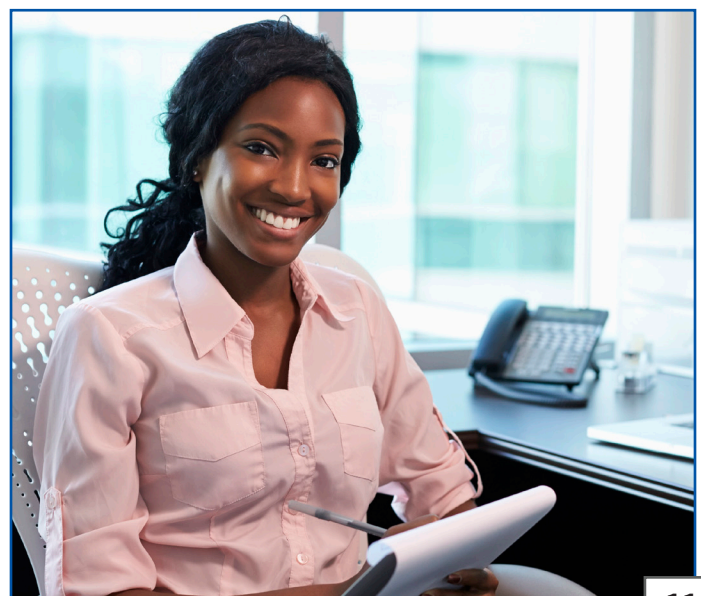
Since the nation’s first patient navigation program was created in 1990 in Harlem, in New York City, by **Dr. Harold Freeman**, hundreds of hospitals and healthcare systems have subsequently created navigation programs. Many of these healthcare organizations support navigation initiatives simply to help them qualify for accreditation programs, e.g., **Commission on Cancer (CoC)**, **Quality Oncology Practice Initiative (QOPI)**, and **National Accreditation Program for Breast Centers (NAPBC)**. Many of these same healthcare organizations do not use standardized metrics to help them rationalize or measure the impact of their navigation programs.

There is a gap in the literature regarding the ways to measure the success of navigation programs and to demonstrate the sustainability of navigation programs. In the report published by the Institute of Medicine (IOM), ***Ensuring Quality Cancer Care, it is stated that quality care is measured using a core set of metrics: “To ensure the rapid translation of research into practice, a mechanism is needed to quickly identify the results of research with quality of care implications and ensure that it is applied in monitoring quality.”***¹ Thus a primary benefit of collecting and using a standard set of metrics to guide the development and management of navigation programs is to align with the driving trend in healthcare overall. Navigation cannot swim against this tide and maintain its professional standing.

Several articles and research projects have discussed various measures that can be used to capture the impact of navigation; most of these discuss time-to-care metrics, patient satisfaction, and measures that assist with care for the underserved, but few discuss the broad range of measures that validate the role of navigation. It is well known that each navigation program is developed to meet the needs of the patients and the institution where the program is being created and that indicators to measure the success of that program need to be tailored to the goals of the navigation program.

Metrics for evaluation of patient navigation must reflect those aspects of diagnosis and treatment in which navigators can have an impact on the specific program being evaluated.²

Tracking navigation performance can help healthcare organizations concretely improve their programs and demonstrate these improvements to various external stakeholders and their health system administrators. For some of these stakeholders, navigation itself is a new topic. **AONN+ defines navigation as** the process of helping patients overcome healthcare system barriers and providing them with timely access to quality medical and psychosocial care from before cancer diagnosis through all phases of their cancer experience.³



Navigation exists because it provides value to patients and their families. It has been documented in evidence-based literature that navigation^{4,5}:

- Facilitates timely access to care
- Helps overcome barriers to care
- Positively impacts patient care outcomes
- Supports coordination of the care for the patient through the entire cancer care continuum
- Improves patient outcomes through education, support, and performance-improvement monitoring
- Facilitates communication between patients, family/caregivers, and the healthcare team
- Helps lower patient distress
- Helps patients identify financial and other support resources
- Provides cancer program and community resources
- Coordinates care with the multidisciplinary team from the time of diagnosis throughout treatment
- Ensures education and access to clinical trials
- Enhances patient satisfaction

In June 2018, AONN+, Chartis Oncology Solutions, and the American Cancer Society (ACS) launched a study to evaluate the implementation of 10 navigation metrics, selected from a list of 35 evidence-based metrics developed by AONN+.

Ten Pilot Study Navigation Metrics

1. Barriers to care
2. Time from diagnosis to initial treatment
3. Navigation caseload
4. Number of navigated patients readmitted to the hospital at 30, 60, and 90 days
5. Psychosocial distress screening
6. Social support referrals
7. Palliative care referrals
8. Identifying patient learning-style preference
9. Navigation knowledge at the time of orientation
10. Patient experience/satisfaction with care



These metrics were developed as a foundation for navigation program measurement efforts. However, many healthcare organizations will manage a unique set of metrics based on their individual oncology program model. **AONN+ does not mean to infer that oncology programs MUST embrace all 35 standardized metrics or attempt to implement them all at once.** It is advised that navigation programs start small and identify a few key metrics with which to track, monitor, and apply performance improvement methodologies to drive practice change and demonstrate success and sustainability.





This multisite exploratory study was designed to: assess what could be learned through the implementation of these selected navigation metrics, identify common barriers and challenges to measurement, uncover strategies for overcoming barriers to metrics implementation, and identify metrics best practices. This toolkit is designed to make the information gleaned from the study available to healthcare organizations that wish to improve their own navigation efforts.

The 10-study metrics align with the AONN+ certification domains in which navigators practice, as well as national standards, which many institutions are already adopting for navigation. Many healthcare institutions track and report data for the CoC, NAPBC, and Quality Oncology Practice Initiative (QOPI), which incorporate navigation standards such as barriers to care and psychosocial distress screening.⁶ However, a lack of industry-recognized metrics and adequate guidance on metrics implementation has been an impediment to measuring the impact of and reporting the value of patient navigation.⁷⁻⁹

Current Evidence (2017)

- Programs report a knowledge deficit related to quality studies and performance improvement methodologies regarding how to measure and demonstrate the sustainability and value of the navigation program.
- Improving standardization of [patient navigation] metrics would allow clinicians, policymakers, patients, and other researchers to better measure the impact of patient navigation across the continuum of cancer care.

AONN+ and ACS have partnered, with funding from the Merck Foundation, to develop this toolkit to address this issue and ensure that healthcare professionals are equipped with the resources necessary to support vibrant oncology navigation programs in acute care and nonacute care settings. However, in order to describe the value of navigation, navigators will have to embrace the practice of implementing navigation metrics.

National Quality Standards and Quality Indicators

Quality measurement is pervasive in healthcare. Quality and business management guru Peter Drucker is renowned worldwide for emphasizing the importance of measurement as a tool for managing work and improving quality.¹ Because he was such an advocate of measurement, he has been famously misquoted as saying, “If you can’t measure it, you can’t improve or manage it.”² Misquoted or not, there is truth in the statement. The goal of measurement should be improvement, and the relevance of measurement and metrics becomes vitally important for navigation leaders who want to improve navigation activities. The imperative for measurement implies that a set of standards exists against which it is possible to signal success. Standards for oncology navigation are not neatly identified, but they do connect with the oncology standards that have been identified for cancer care.

National organizations such as the CoC, QOPI, and the NAPBC have established standards that healthcare organizations must meet in order to receive accreditation.



The Commission on Cancer 2020 Standards

In 2020, the CoC released changes to its accreditation standards,³ and the new standards definitively support the navigation process, even without defining a stand-alone role for a navigator within healthcare organizations. For example, CoC Standard 5.3 addresses psychosocial distress screening and support, and navigators work with the entire multidisciplinary team to address psychosocial concerns and identify and provide appropriate interventions. CoC Standard 8.1 addresses barriers to care, and this assessment is a traditional function for navigators. Even without mandating a role for navigators for accreditation purposes, the 2020 CoC standards clearly signal that navigators are members of the cancer care team. While not specifically identified as a requirement to achieve certification, navigation plays a supporting role in documenting and achieving the patient-centric outcomes the CoC, QOPI, and NAPBC hold up as signals of excellent care.

Value-Based Purchasing in Cancer Care (VBPCC)

The rationale for fully supporting oncology navigation programs should not be simply to achieve accreditation. Many value-based payment programs have components that reward healthcare organizations for certain patient-focused activities or outcomes. Medicare's Quality Payment Program, which repealed the sustainable growth rate formula and changed the way Medicare rewards clinicians to value over volume, streamlines multiple quality programs under the new Merit-based Incentive Payment System (MIPS) and gives bonus payments for participation in eligible Alternative Payment Models (APMs). (More information on these Medicare programs is available [here](#).)

In order to meet some of the quality metrics and patient-care standards that these APMs specify, many healthcare organizations place accountability for meeting payment metrics with navigators, since they address issues such as clinical coordination of care, operations management, community screening, psychosocial screening, and survivorship. (More information on the oncology patient care standards recommended by these quality programs is available [here](#).)

CMS Oncology Care Model (OCM)

The Center for Medicare & Medicaid Innovation (CMS Innovation Center) developed its **Oncology Care Model** with built-in incentives to improve the effectiveness and efficiency of oncology care. The OCM aims to provide higher quality and more highly coordinated oncology care at the same or lower cost to Medicare.

The OCM emphasizes care coordination and enhanced patient care through practice transformation. Medical practices must meet certain requirements to participate in the model and to continue to receive enhanced payment for the care of their beneficiaries. The minimum requirements include effective use of electronic health records (EHR), 24-hour access to practitioners who can consult the patient's medical record in real-time, comprehensive patient care plans, support from patient navigators, and continuous quality improvement.

The IOM has identified gaps in cancer quality care—gaps in existing measures; challenges with measure development; lack of consumer engagement in measurement, development, and reporting; and data to support meaningful, timely, actionable performance measures.⁴

Providers, including healthcare systems, health plans, physicians, program administrators, and navigators, must be held accountable for demonstrating that they provide and improve quality of care through quality measures. Thus, the metrics identified in this toolkit become critical to helping the navigation field demonstrate its value and contributions to achieving and improving quality patient care.

Implementing navigation metrics is not simply a clinical improvement initiative. It is also a business improvement initiative. **The AONN+ metrics harmonize with the national quality standards and payment programs highlighted above.**⁵ Implementation also ensures the capture of data that allow for ROI measurement for navigation efforts, such as the percentage of navigated patients who adhere to institutional treatment pathways per quarter or the number of specific referrals/interventions offered to navigated patients per month. Measuring changes in these percentages and acting to effect positive changes can open doors for more consistent usage of system services, producing measurable revenue (coordinating how to gather this revenue information will be addressed in subsequent chapters). Measuring readmission rates and acting to provide support to reduce the risk of readmissions also adds measurable financial benefit in value-based and capitated payment environments.

Implementing navigation metrics also supplies answers to the questions that administrators are asking.

QUOTES FROM ADMINISTRATORS

“Our navigator has helped us tremendously with our Commission on Cancer quality measures.”

“The outcome of our metrics helped enhance our patient processes.”

“The navigation team helped decrease ER visits and readmissions through performance improvement projects.”

“The navigator helps support our value-based cancer care initiatives.”



Sustaining support in today’s value-based environment is difficult without measurable results or metrics.

As navigation programs strive to demonstrate how their activities do impact oncology patient care, they must have executive support to fulfill their roles.⁶



Administrative Engagement

- Cancer program administrators must become engaged in the development and implementation of navigation processes for their programs.
- Successful program implementation requires **engagement from key stakeholders, including administrators and physicians.**
- Because of the economic challenges, cancer program administrators **must be able to justify the utilization of navigation services and address ROI for the program.**

While 50% of hospitals may be collecting navigation metrics, most are doing so in silos. This is taking place despite the fact that experts acknowledge the benefits that are generated when organizations act synergistically. The creation of standing order sets, pathways, and evidence-based guidelines to support value-based cancer care metrics are essential ingredients to successful oncology programs.⁷

The same is true for the collection of navigation metrics. Providers, administrators, and oncology program department leaders need to discuss the goals of their cancer program and select navigation metrics that support these goals. The goals then need to be shared with every staff member in the cancer program. Each staff member needs to be fully aware of the cancer program metrics, the definition, desired outcome, and benefits of meeting and exceeding the goals. The ultimate goal for the program is to provide the highest level of engaged patient- and family-centered care with clinical outcomes that result in a high ROI. The AONN+ metrics highlighted in this toolkit align with this objective.

AONN+ recognizes that navigation programs are developing at different rates within diverse structural organizations and settings that will individually determine which metrics will be essential to and most feasible for their specific navigation programs. As disease-specific certification evolves and payment models shift from the quantity of care to quality of care, additional evidence-based, disease-specific metrics will need to be developed to align with the standardized navigation metrics.

3 AONN+ Navigation Metrics

The first discussions about developing value-based metrics for oncology navigation originated in November 2015 at the Academy of Oncology Nurse & Patient Navigators (AONN+) Annual Conference. Key stakeholders within the AONN+ membership recognized that the landscape of healthcare continues to evolve as the industry focuses more attention on quality care measures and outcomes that impact reimbursement. Navigation needed to respond by creating a methodology for aligning with this focus.

The AONN+ short definition of navigation doesn't fully illustrate the routine scope of work for navigators. Industry studies provide a broader view¹:

- Provide education and support to the patient and family.
- Assess barriers to care and provide intervention resources.
- Participate in the psychosocial distress screening process.
- Identify the special needs of the patient and delegate to appropriate support staff.
- Enhance the patient's understanding of treatment options available.
- Facilitate patient care plan recommendations by the physician.
- Coordinate multidisciplinary care from the time of diagnosis throughout treatment.
- Improve timely access to care.
- Serve as a resource for the community on health issues, prevention, screening, treatment, and research.
- Participate in multidisciplinary performance improvement teams.

Given this broad scope of responsibilities, AONN+ set about the task of identifying the most commonly accepted responsibilities for navigators.



Standardized Navigation Metrics

In 2010, the American Cancer Society hosted the National Patient Navigation Leadership Summit to develop core metrics to measure evidence-based efficacy navigation outcomes.² The Prevention and Early Detection Workgroup of the National Patient Navigation Leadership Summit established recommendations for researchers and navigation program evaluators, including: (1) clearly document key program characteristics; (2) use a set of core data elements to form the basis of reported metrics; and (3) prioritize data collection using methods with the least amount of bias.³ The Patient Navigator Research Program established and implemented measures of program impact that demonstrated improvements in the timeliness of care following abnormal findings at diagnosis.⁴ Strusowski and Stapp further stratified navigation value by identifying three main categories of navigation—patient experience and clinical outcomes and business performance or ROI—based on a literature review.⁵



In 2015, the Academy of Oncology Nurse & Patient Navigators (AONN+) Standardized Metrics Task Force, under the umbrella of the AONN+ Evidence into Practice Committee, was convened with the goal of developing a list of standard metrics that could be used by all models of navigation in all settings (community, academic, OCM, other) as a baseline to prove the efficacy and sustainability of their programs. These standard metrics were to be developed in the areas of PE, CO, and ROI using the AONN+ knowledge domains: Coordination of Care/ Care Transitions; Research, Quality, Performance Improvement; Operations Management, Organizational Development, Health Economics; Community Outreach, Prevention; Professional Roles and Responsibilities; Psychosocial Support, Assessment; Patient Empowerment, Patient Advocacy; and Survivorship and End of Life. These domains contain a comprehensive list of all areas in which navigators practice to provide quality patient care and financial stability for their organizations.⁶ These **35 standard metrics** (referred to as the Standardized Evidence-Based Oncology Navigation Metrics) provide baseline metrics for all navigation programs that are evidence-based through literature support, patient preference, and clinical practice, using the AONN+ knowledge domains as reference points.⁷

Importance of Navigation Program Metrics

Navigation programs comprise tasks that support key priorities for healthcare systems: clinical excellence, resource management, and revenue enhancement. The creation of standardized metrics to measure programmatic impact and success is vital to coordinating high-quality, team-based care and demonstrating the sustainability of oncology navigation programs. It is imperative that oncology patient navigators understand that active participation in data collection, analytics, and reporting outcomes are not added responsibilities but are already a part of the professional role.⁸ The implications for navigation practices using quality navigation measures are that they are transformative, support the evaluation of professional practice and care delivery, define oncology navigation practice and outcomes, and are necessary for the sustainability of navigation programs.⁹⁻¹¹ Incorporating navigation metrics into standard work practices supports the current and future health dynamics for both clinical and non-licensed or lay navigators.

To prepare to implement navigation metrics and to be able to effectively leverage the metrics performance as part of the overall healthcare organization mission, navigators must develop certain competencies in the navigation domains. These competencies in the domains of practice are described below.^{12,13}

Core Competencies for Navigators: Metrics

CLINICAL NAVIGATOR	NON-LICENSED PATIENT NAVIGATOR
Operational Management <ul style="list-style-type: none"> Health care reform Utilization of resources Workforce shortages Organizational development Healthcare economics 	Knowledge for Practice <ul style="list-style-type: none"> Demonstrate basic knowledge of health system operations.
Quality and Performance Improvement <ul style="list-style-type: none"> Value/role of nursing research to validate practice and build evidence-based practices Research, Quality metrics: (selection of metrics, develop measures, and create dashboards), Performance Improvement: (methodologies-PDSA), SMART Goals Role in identifying quality needs, areas of quality improvement; role in improving the process 	Practice-Based Learning and Improvement <ul style="list-style-type: none"> Contribute to patient navigation program development, implementation, and evaluation. Use evaluation data (barriers to care, patient encounters, resource provision, population health disparities data, and quality indicators) to collaboratively improve the navigation process and participate in quality improvement. Incorporate feedback on performance to improve daily work. Continually identify, analyze, and use new knowledge to mitigate barriers to care.
Professional Roles and Responsibilities <ul style="list-style-type: none"> Critical thinking Problem-solving Tracking workloads 	Interpersonal and Communication Skills <ul style="list-style-type: none"> Communicate effectively with navigator colleagues, health professionals, and health-related agencies to provide patient navigation services.

TESTIMONIAL

Recognizing the Value of AONN+ Navigation Metrics



“Having the AONN+ navigation metrics has enhanced the nurse navigator job description providing a stronger framework for role description and delineation.”

“I have presented the AONN+ navigation metrics to my individual physician teams. Recognizing the importance of care coordination and multidisciplinary care team communication, we now implement team meetings to discuss individual patient cases and their care needs.”

Oncology Nurse Navigator, US Oncology Network
(Part of the OCM Initiative)

AONN+ Pilot Site Navigation Metrics

In 2018, AONN+, the American Cancer Society, and Chartis Oncology Solutions launched a year-long Institutional Review Board (IRB) study to examine a set of 10 of the 35 standardized navigation metrics, recognizing it would be impossible to test all 35 metrics.¹⁴ The study had a six-month window of active data collection.

Connecting to AONN+ Knowledge Domains

As mentioned, the 10 navigation study metrics were selected because they align with national standards and indicators and could be captured within the EHR and navigation program documentation. By standardizing metrics under the AONN+ domains, navigators can measure the impact they have with patients from the initial diagnosis to survivorship and end of life.¹⁵ Utilizing metrics also elevates the professional status of the navigation role.

DOMAIN	10 NAVIGATION STUDY METRICS (WITH MEASUREMENT TASKS)
Care Coordination/Care Transition	Barriers to Care: Measure the number and list the specific barriers to care identified by navigator per month.
Care Coordination/Care Transition	Diagnosis to Initial Treatment: Measure the number of business days from diagnosis (date pathology results delivered) to initial modality (date of 1st treatment).
Operation Management Organizational Development Health Economics	Navigation Caseload: Measure the number of new cases, open cases, and closed cases navigated per month.
Operation Management Organizational Development Health Economics	Measure the number of navigated patients readmitted to the hospital at 30, 60, 90 days.
Psychosocial Support Services/Assessment	Psychosocial Distress Screening: Measure the number of navigated patients per month who received psychosocial distress screening at a pivotal medical visit, using the National Comprehensive Cancer Network distress screening tool (See Appendix 5).
Psychosocial Support Services/Assessment	Social Support Referrals: Measure the number of navigated patients referred to support network per month.
Survivorship/End of Life	Palliative Care Referral: Measure the number of navigated patients referred for palliative care per month.
Patient Advocacy/Patient Empowerment	Identify Learning Style Preference: Measure the number of navigated patients per month whose preferred learning style was discussed during the intake process. (A validated tool must be identified).
Professional Roles and Responsibilities	Navigation Knowledge at Time of Orientation: Measure the percentage of new hires who have completed institutionally developed navigator core competencies.
Research Quality/ Performance Improvement	Patient Experience/Patient Satisfaction with Care: Measure patient experience or patient satisfaction results per month, using the Consumer Assessment of Healthcare Providers and Systems (CAHPS®) Cancer Care Survey .

These metrics support navigation program sustainability and value since they serve as a foundation for navigation program measurement efforts. Keep in mind that these 10 metrics are not prescribed as immediately suitable for all navigation programs.

Connecting Metrics to Patient Experience, Clinical Outcomes, and Return on Investment

The 10 study navigation metrics are connected with healthcare organization imperatives: patient experience (PE), clinical outcomes (CO), and return on investment (ROI).⁶ Many other oncology program metrics will also connect with these imperatives, and it will be important for navigation leaders to make these connections clear, then measure the improvements that can be generated by tracking and targeting the given metrics. (See [Appendix 2](#) for details on various aspects of the 10 study metrics, including numerators and denominators that govern how the metrics are calculated.)

Challenges with Collecting Metrics

In sponsoring the pilot study on navigation metrics, AONN+, the ACS, and Chartis documented numerous challenges that navigators experienced in collecting the data related to the navigation metrics. These challenges are categorized in **Chapter 4** of the toolkit.

None of these challenges are insurmountable, nor should the collection of data be considered outside the navigator's scope of work. When healthcare leaders understand the value of navigation metrics, they can help clear some of the obstacles and help navigators obtain needed resources to collect metrics data. For this enlightenment to occur, navigators need to practice good communication skills and clearly communicate the value of the metrics to stakeholders.

Benefits of Collecting Metrics for Your Program

In collecting metrics, navigators equip themselves to drive performance improvement, offer better care to patients, and link with greater themes in healthcare. Professionals who do not collect and report even simple metrics may struggle to demonstrate the value of their program, find their roles diminished, or even questioned by administrators in the future.



Metrics Training for the Navigation Team

One of the key takeaways from the navigation metrics pilot study was that navigators demonstrated inconsistent understandings of the navigation metrics themselves, not just the 10 metrics in pilot study, but others as well. With this in mind, all current and new navigators should receive exposure to the 35 AONN+ metrics and other metrics that the healthcare organization deems important so that data capture activities, monitoring, measurement and interventions can be consistently managed. Training must emphasize the need to decrease narrative forms of documentation and define and ensure that all the navigators understand the same definition of each metric.

Given that many hospitals and healthcare organization have small navigation teams—sometimes only a single navigator—it might be difficult to implement a home-grown navigation training program. AONN+ offers a wealth of on-demand resources [online](#), as well as live seminars and conferences. At the same time, a number of cities across the U.S. have AONN+ [Local Navigator Networks \(LNNs\)](#), and that figure is growing. The local chapters learn from each other and study issues that impact patients at the local level.

4 Common Challenges and Facilitators to Collecting Metrics

Through the pilot study, AONN+/ACS/Chartis learned that navigators might face multiple obstacles when implementing standardized metrics. The implementation challenges found in the pilot study are listed below.

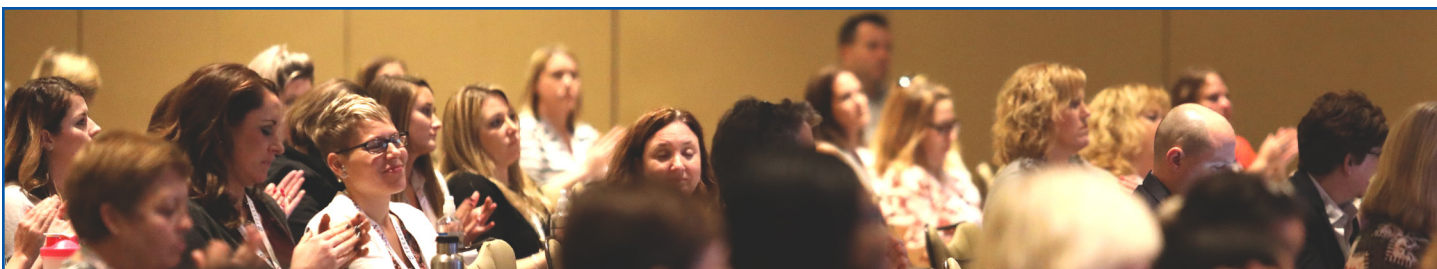
Metrics Challenges

Data Collection Challenges

- Lack of uniformity in data collection practices and procedures by navigators, especially when multiple navigators are employed across a multi-hospital system
- Challenges finding information; information is often contained in electronic or paper charts, various other paper documents, as well as departmental computer systems (radiology, pharmacy, and others) that may or may not feed into a consolidated electronic health record (EHR)
 - Noteworthy events in a patient’s trajectory are not always easily identifiable (e.g., the start of initial treatment is sometimes difficult to identify, and there is often a lack of agreement on when a case is officially “open” or “closed”).
- The volume of data entry
 - In addition to challenges related to collecting data on a large number of patients, there are also volume challenges associated with metrics that are collected repeatedly (e.g., barriers and distress are often assessed for the same patient on a recurring basis).
- EHR challenges
 - Absence of discrete data fields
 - Variations in information technology (IT) capacity and/or organizational support to incorporate navigation metrics into EHR
 - Healthcare organization may be transitioning to new EHR and may be unable to focus on navigation goals
 - Presence of multiple EHRs within a health system that may not interface, which complicates access to data

Process Challenges

- Administering new assessment and documentation tools and initiating new workflows was difficult.
- Dealing with learning curves, i.e., learning the process of collecting data that are housed across multiple IT or filing systems and learning these systems
- Manual tracking of data is the current practice, so getting agreement to move toward a more automated process is difficult.
- Variations in navigation needs by cancer type and stage
- Navigation metrics not entirely aligned with usual navigation processes
- Inability to capture data for patients who were assessed and found to have no barriers
- Low survey response rates from patients hinder the ability to collect information on patient experiences.
- It is difficult for navigators to administer patient surveys (learning styles, distress, and patient experience):
 - Identifying the right time to administer
 - Method—in-person, mail-in, telephone
 - Identifying the right staff to administer to avoid bias or pressure from navigators



Role and Responsibility Challenges

- “Navigation” includes a range of activities conducted by staff beyond those with a navigator title; it can be difficult to recognize all those who play a role in the navigation continuum and even more difficult to collect consistent data across various roles.
- Sites vary in their interpretation of who should be involved in collecting metrics data and what activities should be included.
- Navigated patients may show improved outcomes on time-to-treatment or hospital readmissions rates, but navigators question whether it is appropriate to attribute these outcomes to navigation if navigators have not made explicit efforts to address them.

Value Challenges

- Metrics were valued differently depending upon their fit with the navigation program, objectives, or administration’s preferences.
- The perceived fit between metrics and navigation model affects navigator willingness to collect data and, subsequently, the quality of data collected.
 - Navigators are **more** motivated to collect data on metrics that they feel demonstrate the value of their program.
 - Navigators are **less** motivated to collect metrics they do not find relevant to their program.
- Sites vary widely in their navigation model; thus, they also vary in which metrics they find most sensible or meaningful.
 - Some sites navigate all patients, regardless of stage or diagnosis.
 - Many sites do not “close” patient cases and follow patients throughout all touchpoints.

Resource Challenges

- Additional time and labor associated with data capture and reporting
- Challenge to marshal needed resources amidst competing priorities

Measurement Challenges

- Shifts in patient needs over time
 - Barriers and levels of distress are constantly changing and must be assessed repeatedly, which makes consistent measurement challenging.
- Sometimes multiple navigators see the same patient, and each identifies different issues related to patient barriers, stresses, and other challenges.
 - Collecting, aggregating, and averaging data for repeated assessments is difficult.
- Navigated patients may show improved outcomes on time-to-treatment or hospital readmissions, but navigators question whether it is possible to determine if this is due to navigation specifically, given a number of other factors that affect these outcomes.

Executive Support Challenges

- Leadership needs to make it clear to other cancer program stakeholders why tracking certain metrics is important.
 - Example: tracking readmission rates can demonstrate how navigators contribute to cost and resource savings.
- Failure to leverage executive support to gain broader organizational support for metrics implementation efforts can limit progress.

Facilitators of Metrics Implementation

The pilot study revealed several best practices in terms of implementing navigation metrics. The suggestions highlighted below are based on experiences from pilot study sites, as well as best practice recommendations that are inferred from the pilot site experiences.



Recommendations from Pilot Study Sites

- Engage with quality improvement teams to better understand process improvement and change management techniques.
- Coordinate with IT to identify existing tools that can help capture data.
- Identify internal resources that might be able to assist measurement activities (e.g., data entry staff, analysts, etc.).
- Use an onboarding checklist for navigators to ensure they receive metrics implementation training.
- Clearly define all metrics so that navigators across the organization understand the definitions of open and closed cases (active and inactive cases).
- Communicate why a given metric is important to administrators and other stakeholders.
- Develop standardized ways to collect data within each metric so that the metrics collection is consistent across navigators and patients.
 - Automate data capture when possible.
 - When possible, put all data fields that a navigator needs to collect from in a single location so he or she can see it. The home for these data can be in a spreadsheet format or even a paper report.
 - Establish a uniform time each week, month, or quarter to collect data.
- Map the responsibility for conducting distress screenings.
- Develop process maps to share with care coordination teams so they can see how navigation is folded into their processes (development of the process maps will be a multidisciplinary task).
- Communicate the importance of the metrics and outcome set to the navigation staff—nurse navigators, social services navigators, volunteer navigators, and others who already collaborate with navigation. They will be more willing to accept changes in processes and fight to overcome challenges in metric collection if they understand the potential value and impact.

One other word of guidance based on the pilot study is to start small. The pilot study included 10 standardized metrics, but the study partners do not mandate or even suggest that healthcare organizations must select these same 10 metrics or attempt to implement them all at once. Instead, we recommend starting small, but working in alignment with national standards and indicators, and individual healthcare organization oncology program goals, and their alignment with the AONN+ metrics. Once you successfully establish standardized navigation metrics practices, add additional metrics as needed. Subsequent sections of the toolkit will provide additional guidance on starting points.

CASE STUDY 1

Using a Plan, Do, Study, Act (PDSA) model, one pilot site accepted the pilot study recommendation to use the Edmonton Symptom Assessment System (ESAS tool shown in [Appendix 4](#)) tool to assess patient symptoms: pain, tiredness, nausea, depression, anxiety, drowsiness, appetite, wellbeing, and shortness of breath for cancer patients. The navigators were using the tool to assess any palliative care needs that might exist during treatment. Navigators were not typically involved in such assessments, and the care team did not believe that every patient needed to be assessed. Ultimately the navigation team developed their own assessment tool, which they deployed during the survivorship stage, enabling them to incorporate palliative care assessments in a way that was consistent with their cancer care model.

Main Takeaway: Rather than neglecting the metrics measurement effort in the face of internal challenges, the navigation team adjusted to the circumstances and adapted their process to match the cancer care model that was in place.

PLAN ► DO ► STUDY ► ACT

1 PLAN

Assess navigated patients using the ESAS (see [Appendix 4](#)) for unmet palliative care needs at least once during the study timeframe.

Aim: Increase referrals to palliative care made by ONNs.

No benchmark data available.

2 DO

Develop and implement a formal, systematic process for ESAS assessment.

3 STUDY

They administered the ESAS tool for a 3-4-month period during disease trajectory.

However, the care team did not agree with timing for the use of the tool, nor with the idea that all patients needed this detailed assessment at the beginning of the care process.

Knowledge deficit related to ESAS tool, the value of proactive assessment in the treatment phase, and using a validated tool – Navigation Practice needs to define a standard of practice for symptoms management using a validated tool.

CASE STUDY 1

PLAN ► DO ► STUDY ► ACT

4 ACT

Post-Study Data

Forty palliative care referrals demonstrated an increase in the number of referrals to palliative care by ONN.

Navigators found value in symptom assessment but do not believe they can administer routinely due to their program model (front-end navigation) with a handoff to clinical nurse coordinators for the treatment phase.

Gap: Due to the acuity protocol this site has in place, contact during the treatment phase of care is limited.

Gap: Standardization of ONN scope and role.

THE STUDY DATA

Palliative Care Referrals 0.0%

Description

Number of navigated patients with palliative care referrals

Numerator 40

Number of navigated patients with palliative care referrals

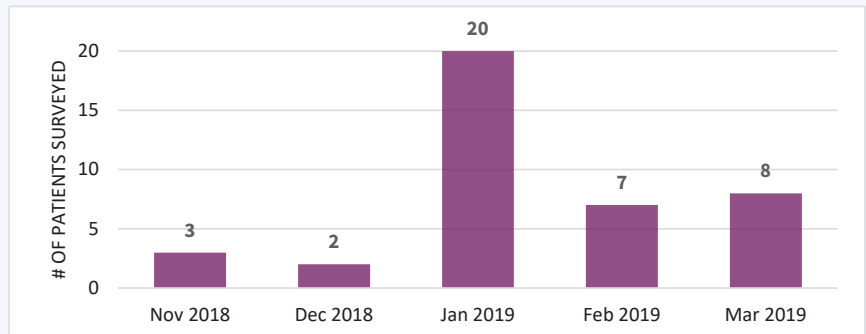
Denominator 1,114

Total number of navigated patients

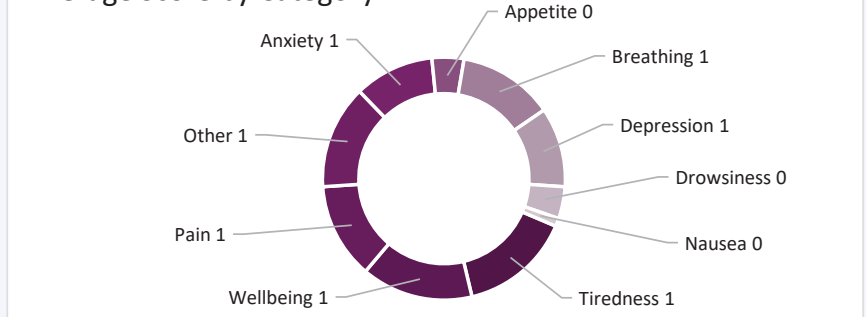
Palliative Care Referrals –

Number of palliative referrals per navigated patient with filters for diagnosis and navigator. Includes the average score for all 10 ESAS categories.

Monthly Trending



Average Score by Category



3.7 Average of anxiety	5.7 Average of appetite	4.4 Average of breathing	5.8 Average of depression	4.2 Average of tiredness
2.7 Average of drowsiness	3.0 Average of nausea	6.3 Average of other	4.6 Average of pain	3.4 Average of wellbeing

CASE STUDY 1

THE REST OF THE STORY

“We elected not to continue with the Edmonton Survey. We switched to another similar form that was developed in-house, administering it during the time of the treatment summary (TS)/ Survivorship Care Plan (SCP) delivery.

The survey was delivered either face-to-face or over the phone. After six months, ONNs did not feel that the time it took to complete the form was worth it because it did not generate many referrals. They also felt that patients didn’t want to take the time to review the form. We have data to show that ONNs completed the form less than half the time and that use of the form generated sparse referrals to palliative care or any other services.

Eventually, we ditched the form. We concluded that the delivery of the Treatment Summary and Survivorship Care Plan was not the best time to be assessing for survivor needs. Our current practice is to come into the picture close to the end of the treatment and meet the patient on the same day they have an oncologist appointment. Most of their needs have already been met by the oncology treatment team or through referrals made by the treatment team.

Before COVID hit and navigation ground to a halt, we were planning to add a 6-month Survivorship follow-up call after the TS/SCP delivery to see if more needs could be identified once the patient was farther out from regular visits with the care team.

Our healthcare organization recently established a Supportive Care for Healing Program, which is the umbrella term for Palliative Care, Integrative Medicine, Wellness/Lifestyle Medicine, Survivorship, etc. We are trying to introduce patients to palliative care sooner – when they start treatment. This may or may not be a navigation intervention; we haven’t worked out a plan yet.”



5 Identification of Key Stakeholders to Support the Metrics Measurement Process

Key Individuals or Departments to Assist with Collecting Navigation Metrics

Having recognized that patient navigation will benefit from implementing standardized metrics, the next step is to begin the process of collecting the data. This activity is a multidisciplinary effort. Therefore, it is important to bring together the key stakeholders who may already capture metrics data, or who can be asked to capture data based on their potential connection to the navigation metric. Who are the stakeholders for most navigation programs? Pilot study site participants identified the following possible stakeholders:

- Physician Champion(s)
- CEOs/COOs/Administrators
- Cancer Center Medical Director/Oncology Service Line Administrators
- IT Directors/EHR Providers
- Social Workers
- Health Psychologists
- Tumor Registry Representatives
- Patient Billing Staff
- Case Managers
- Oncology Navigators
- Clinical Trial Representative (may have information on topics such as patient barriers, etc.)
- Inpatient Oncology Unit Representatives
- Performance Improvement/Quality Improvement Department Representatives
- Patients/Family Caregivers

Ideally, the navigation leader will bring together these individuals to create a single voice and a singular direction for the healthcare organization's cancer program, building a common understanding of which metrics need to be collected based on the patient and program needs, cancer program goals/mission, and program model. If navigation leaders can successfully host a single meeting with stakeholder representatives, the conversation must cover the importance of the standardized metrics initiative and how the effort will benefit the patients and program stakeholders. In other words, navigators must have a clear understanding of how to describe the financial, operational, or patient benefits related to the metrics in order to win support.

When meeting with stakeholders, ask questions such as, “*What are the cancer center’s goals?*” and “*What are common barriers in our community?*”

While an initial meeting is important, many of these connections will require ongoing engagement by the navigator or navigation program manager. This investment in time will support buy-in for data collection over the long term. A best practice from navigators who have engaged in this type of activity would be to share successes/outcomes/lessons learned with regard to metrics performance with the stakeholders on a regular basis.

Core Individuals or Departments to Assist with Collection of Navigation Metrics

Tumor Registrar

The Tumor Registrar is a valuable source of information regarding state and local cancer incidence, the number of patients being treated within the healthcare organization, and the treatments that are underway. The Tumor Registrar manages cancer patient databases, recording information that may be used to help identify cancer earlier, improve treatments, and increase survival rates.

The Tumor Registrar is responsible for compiling and reporting data from all the medical facilities that treat a patient. Other duties include following up with registry patients to track progress. Having access to all of this information will give navigators insights into the denominators that will influence their measurement efforts. In working with the Tumor Registrar, navigators will have access to databases that contain key statistics and quality measures. Gaining access to these data is a critical step in the measurement of many of the key navigation program outcomes.



Best Practice

As a best practice, consider establishing ongoing communication with the Tumor Registrar to gather relevant data. If the Tumor Registrar is not collecting data that are deemed crucial to navigation, explore the possibility of adding data points to the Tumor Registrar's standard reports.



It is important to note that the reports the Tumor Registrar provides will be aggregate data and may include patients who did not receive navigation support. These reports will be a reflection of the entire patient population, not just the navigated population. This is especially critical for cancer programs where only patients with high acuity get navigation support. Ensuring that all stakeholders understand how acuity factors into navigation practices may help with support for data collection.

Performance Improvement Department

If the healthcare organization has a formal Quality Improvement or Performance Improvement (PI) Department or team, oncology navigators may be able to seek guidance on how to leverage data this team collects.

Trained PI personnel will also be familiar with performance improvement methodologies that can help accelerate changes in data collection processes that are important to navigators.

While PI departments are typically focused on clinical and operational issues and issues that have reimbursable consequences, navigators will benefit from regular input from the PI team.

One advantage of connecting with the PI team is they may be able to offer assistance in developing the best methodology to collect data for a given metric. PI team members may also be able to provide guidance on using PI templates such as the PDSA template (See [Appendix 3](#) for an example).

When connecting with the PI team, navigators should ask for:

- Types of data/performance metrics they current track
- Sample reports
- Different Performance Improvement/Quality Indicator (PI/QI) models they utilize



Once the decisions are made regarding the implementation of specific navigation metrics, the next effort should focus on developing guidelines that will direct the rollout of the metrics measurement efforts. Additionally, navigation leaders must develop policies and procedures to ensure consistency in the implementation, as well as process maps to ensure that all parties understand how the new metrics are related to current processes.

Performance Improvement personnel can help navigation leaders develop Six Sigma methodologies to ensure that metrics are being assessed and captured in the same way and to determine if the implementation of the processes used to collect the data can be done more efficiently. Often used in manufacturing, Six Sigma methodologies are tools and techniques that help improve the quality of the output for a process by identifying and removing the causes of defects and minimizing process variability. Six Sigma methodologies are often used now in healthcare.



Information Technology Department

A key question that must be addressed with the IT stakeholders is whether it is possible to automate data collection by including navigation interventions in the healthcare organization's EHR platform. If crucial data points are being captured in various places across the organization in narrative form, determine if it would be possible to add discrete reportable fields into the EHR so that data can be captured through features such as drop-down options in the EHR instead. This would allow navigators to quickly and easily capture and query the metrics and make large-scale, long-term data mining possible.

Patient Billing/Registration

Patient Billing and Registration may have information on re-admissions and ER admissions.

Patient Rounds

Another means of collecting patient-related metrics is to participate in patient rounds. Rounding enables the navigator to participate in multidisciplinary team treatment planning for patients. Rounding also allows navigators to increase collaboration with physicians, social workers, and other patient care team members. This activity might enable the navigator to identify and address barriers to care and observe programmatic barriers that influence metrics performance. Rounding may also provide insights into continuum-of-care issues or aid in the understanding of clinical pathways that are in place for certain types of cancers, which may highlight opportunities for navigators to better understand care processes and find opportunities to influence how metrics measurements can be gathered or implemented.

Recommendations from Navigation Leaders

As navigators strive to implement navigation metrics, it is obvious that this work will require investments in time and the creation of new processes and tools, as well as intensive involvement with internal stakeholders.

Advice from navigation leaders who are further along on this journey¹:

- **Establish a web of influence** across the organization, touching both clinical and administrative areas, and including the C-suite leaders: Chief Executive Officer (CEO), Chief Medical Officer (CMO), Chief Nursing Officer (CNO), Chief Quality Officer (CQO), Performance Improvement Officer (PIO), and Chief Operating Officer (COO).
- **Maintain regular communications** with leaders—Grabbing and holding the attention of C-suite leaders will be difficult for the navigation leader without identified metrics. A successful tactic would be to generate short graphic reports that can be easily transmitted to and consumed by the C-suite leaders on a monthly or quarterly basis. Equally important is the work to adopt language that resonates with executive leaders.
- **Increase visibility for the program** among key clinical leaders (CEO, CMO, CNO, CQO, PIO, and COO), typically through rounds, special programmatic initiatives, and communication tools.
- **Anticipate questions that executives may pose** about the program and be prepared to provide objective responses.



CASE STUDY 2

Using a PDSA model, one of the pilot sites formed a project team to determine if it was possible to develop a standardized process for gathering data on distress screenings for all navigated patients. First, the team had to understand the process of when and where the distress screenings were occurring, then examine whether it was possible to collect data about the screening events, specifically the assessments in radiation oncology and medical oncology. Having identified the data sources, the team discovered it was still difficult to ensure they were capturing all the data on all the assessments.

Main Takeaway: The study effort illustrated the importance of finding data sources and working persistently to develop a process to gather the data consistently.

PLAN ► DO ► STUDY ► ACT

1 PLAN

Distress Screening

Aim: Develop a standardized process for distress assessment within the cancer program to ensure completion of distress screening on all navigated patients.

2 DO

Once a process has been identified, the navigators will trial the collection and utilization process. They will collect data surrounding access and utilization of distress screening results.

3 STUDY

Navigators will evaluate current points in the process at which patients are completing the NCCN Distress Screening (See [Appendix 5](#)). They will evaluate how the data is collected and documented for both radiation oncology and medical oncology. They will then identify if there is a process that can be implemented to collect the distress screening results from each office.

4 ACT

This was still under evaluation at the endpoint of the study. Thus far, this has been a difficult process to determine a standardized process to ensure patients are receiving distress screening.

CASE STUDY 2

THE STUDY DATA

The 800+ screens per year statistic was calculated from 2016 data. In 2017 and the first half of 2018, the screens had already come down by 35%. A hypothesis was that the 2016 data included either non-cancer or non-navigated patients. The study relates to the previous year; it was a 5% difference.

Pre-Study Annual Screens by Month

Month	2016	2017	2018	Growth v2017
1	59	65	49	-25%
2	85	51	46	-10%
3	86	76	49	-36%
4	63	74	46	-38%
5	78	71	47	-34%
6	83	77	34	-56%
7	61	60	69	15%
8	78	69	96	39%
9	51	54	60	11%
10	76		65	-
11	67	43		-7%
12	74	35		20%
Total	861	675	561	



Jan-Jun Screens by Disease

Count of Distress #				
Disease	2016	2017	2018	Growth v2017
Bone		11	10	-9%
Brain	4	20	16	-20%
Breast	85	73	42	-42%
No Diagnosis	157	141	34	-76%
Prostate	48	48	49	2%
Thoracic	53	35	41	17%
Other	87	62	58	-6%
H&N	7	14	13	-7%
Colorectal	13	10	8	-20%
Grand Total	454	414	271	-35%

- Distress screens declined by ~35% in 2017 and the first half of 2018.
- At the disease site level, most of the decline was in breast and in cases without a diagnosis.
- 2016/2017 historical distress screens may include non-navigated or non-cancer patients.

Distress Screening Trends

Month	2016 Pre-Study Period	2018 Study Period	% Change
11	43	40	-7%
12	35	42	20%
1	49	39	-20%
2	46	61	33%
3	49	37	-24%
4	46	35	-24%
Total	268	254	-5%

- Study period distress screens were only 5% lower than the previous period.



CASE STUDY 2

THE STUDY DATA

Distress Screenings 53.0%

Description

Number of navigated patients who received a psychosocial distress screening at a pivotal medical visit with a validated tool

Numerator 248

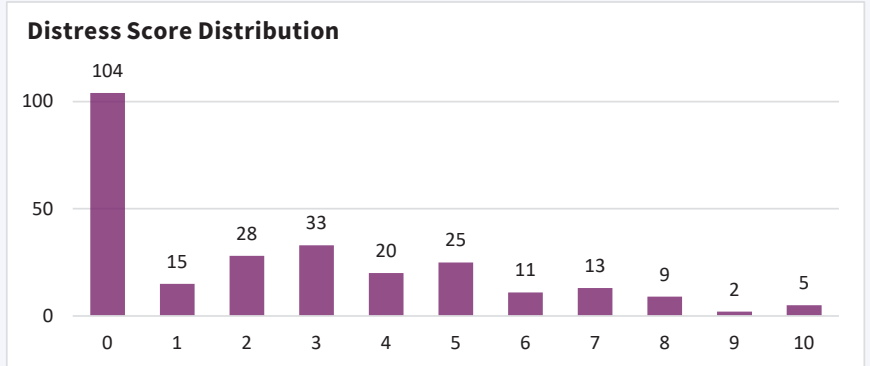
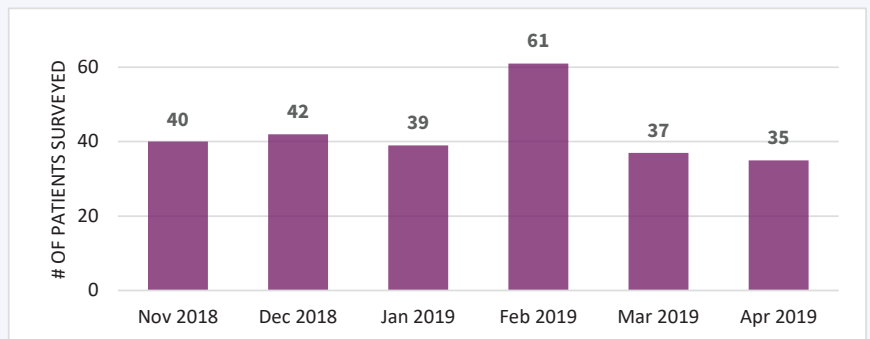
Number of navigated patients who received a distress screening

Denominator 468

Total number of navigated patients

Distress Screenings – Percent of navigated patients receiving distress screening; includes detailed breakdown by distress score (0-10).

Monthly Trending



6 Working with Stakeholders to Choose the Right Metrics for Your Program

The Starting Point

The essential question related to metrics tracking is where to start. AONN+, ACS, and Chartis have highlighted the relevance of the 10 standardized navigation metrics. Even so, the toolkit sponsors recommend the following options, based on the experience of the pilot study and other identified best practices:

- Include easily attainable information that supports the definition of navigation activities or national standards to assure early victories.
- Include data you are already collecting/reporting elsewhere.
- Include metrics that fit with existing program goals.
- Track activities navigators are currently doing/tracking.
- Consider additional opportunities for performance improvement and data collection.
- Include navigation processes that take place with others beyond navigators.
- Identify places in the care continuum/process map where you lack information.
- Consider organizational stretch goals and create internal benchmarks.
- Consider future directions of healthcare and data points that can be anticipated as a future priority.

Review Cancer Program Community Needs Assessment or Selected Resource to Analyze and to Identify Patient Needs for Navigation Metrics

While the new CoC certification standards do not require healthcare organizations to perform a community needs assessment, healthcare organizations should not ignore this crucial step in evaluating opportunities to meet the needs of patients and the community. The results of the community needs assessment could provide insights into which navigation metrics should be tracked and provide motivation for the healthcare organization to do so. At the very least, the assessment might help prioritize the order in which the healthcare organization should pursue certain standardized metrics.

Evaluate Services and Gaps in Care to Understand Where Data Might be Missing

Surveying the cancer care team members and assessing where they see service gaps may help identify obstacles to metrics implementation and spur secondary efforts to fix these issues so the metrics efforts will be more successful. In some cases, gaps in services create a void in metrics data. As the cancer program addresses these gaps, it will be possible to look at metrics in the selected areas. One outcome from the navigator's discussions with stakeholders might be a broader awareness of potential gaps in the services or support offered to cancer patients. These gaps can sometimes exist because of organizational silos that develop over time. Navigators have the opportunity to engage across these silos and raise awareness about gaps in services and hopefully initiate conversations and gain support for closing these gaps.

Review Cancer and Navigation Program Objectives and Goals with Navigation Metrics

A key determinant in selecting metrics should be their alignment with existing cancer program and cancer committee goals and objectives. By relating metrics to work and objectives that may already be occurring, it will be possible to more easily engage stakeholders. To the extent possible, attempt to incorporate navigation metrics into the cancer committee and quality measures goals.

Navigator Activities vs. Navigation Processes

Navigator activities are directly related to the role and definition of navigation, such as identifying barriers to care and interventions. *Navigation processes* require additional resources that could include coordinating with the multidisciplinary team and/or financial resources. For example: referring patients to palliative care and examining data related to 30-60-90-day readmission rates.

By including core navigation activities and navigation process metrics in the measurement mix, navigation leaders will position their programs for success and sustainability. Encourage cancer programs to identify the key navigation metrics that align with oncology national standards, indicators, and cancer program goals. Cancer program leaders will discuss with their multidisciplinary team and stakeholders which metrics to include, reviewing the full list of 35 AONN+ navigation metrics for possible targets for measurement.

Determine Readiness to Implement Core Navigation Activity Metrics or Navigation Process Metrics

One of the challenges navigators will encounter as they establish a plan to implement standardized navigation metrics, especially if measurement has not been a core feature of their navigation program, is to determine a starting point. As a first step to implementing navigation metrics, survey the work that is already being done in-house to capture navigation metrics. This survey serves as a readiness assessment and will dictate the next steps.

Establish Baseline Data

To measure improvement, you must establish internal benchmarks for all metrics. However, in instances where no historical data exists, the first phase of your metrics program will be an initial assessment of the current data points.

For example, some cancer programs may not have a symptom assessment or palliative care referral program in place, so the benchmark starting point is NO DATA. The program must instead begin to assess patient risk for palliative care, for example, and identify the percentage of patients who would benefit from palliative care services but are currently receiving no such service. The navigation program can then use this initial data to raise awareness of the need with the administration and the physician teams and to develop the rationale with evidenced-based practice, as well as to include national standards and guidelines about the benefits of the service.

By having baseline data for various aspects of the navigation program, healthcare organizations are armed with information to make a case for improvements. For example, if navigation leaders know they are not providing the needed amount of distress screenings to their oncology patients, they could report their internal benchmarks, initiate a PI project, and monitor processes and the results of the improvement efforts.

Leverage Process Improvement Methodologies (Process Maps, Lean Six Sigma, etc.) to Support Metrics Implementation

Once the decisions are made regarding the implementation of specific navigation metrics, the next effort should focus on developing a process that will guide implementation. Keep in mind that it will be important to understand all the processes, people, and steps involved in the overall cancer care process for patients to achieve a smoother implementation of the metrics program. These processes can obviously differ for each type and stage of cancer. As part of the metrics implementation effort, the team should consider conducting a study of the care processes to identify gaps, treatment delays, barriers, opportunities for improvement, and variability in how care is being delivered. To guide metrics implementation efforts, AONN+ recommends navigation leaders leverage **Lean Six Sigma methodologies**.

By using Six Sigma techniques, navigation leaders can first ensure that metrics data are being assessed and captured in a uniform, consistent way, allowing them to efficiently manage the improvement efforts.¹ Finding a champion in the healthcare organization's Performance Improvement department, if only for the short-term, can help navigation leaders launch the improvement program more effectively.



Align with Pre-existing Workflows and Processes

To ensure that metrics measurement work will be accepted and supported internally, it is important for navigators to understand existing processes and workflows across the cancer program and within the healthcare organization. With this understanding in mind, navigators can develop measurement efforts that are aligned with the current practices across the organization.

For example, if the healthcare organization is already measuring patient satisfaction, navigation should strive to work within that framework to measure patient satisfaction with navigation, rather than trying to develop a separate patient satisfaction tool for navigation. If navigation metrics measurement processes can align with current workflows, it will help cement the metric measurement efforts into the normal routines and secure access to essential data.

Having readily available metrics empowers navigators and program administrators to tell a story about how navigators are directly impacting patient care and driving quality, while supporting program sustainability (See **Appendix 7** for more information on process mapping).



CASE STUDY 3

Using a PDSA Model, a pilot study site implemented a performance improvement initiative to determine the most appropriate time to administer a patient satisfaction survey.

Main Takeaway: Engage staff across all oncology sites of care to determine who is most relevant to involve in support of satisfaction surveys.

PLAN ► DO ► STUDY ► ACT

1 PLAN

Patient Experience

Aim: Identify the correct time to provide the patient experience survey. The navigation team also wanted to create a solid process so that the patient:

1. Understood the survey
2. Remembered who the navigator was
3. Completed the entire survey

2 DO

Identify opportunities for improvement that exist

The team had already started a QI process on Patient Survey distribution and returns. Patients are provided with a printed survey as the oncology nurse navigators backed out of their interactions with the patients. The survey is distributed within one month of that time so that patients will remember the navigator.

3 STUDY

The Medical Assistant gives out the survey when the patient comes to the physician's office, but the navigators had concerns that the survey was presented by staff in radiation, so they enlisted the support of front desk staff. The navigation team decided to follow the same practice in the chemo infusion suite to see if there was better support and a better survey return rate.

Occasionally, the navigators deliver the survey themselves to ensure it is delivered, although navigators strive not to do this to reduce survey bias in responses.

One main concern is that there is survey fatigue, as the institution was sending out patient surveys after every visit. (The institution stopped this practice recently.)

Other concerns were raised by staff about room and time availability (time for staff to explain the survey, remind the patient who the navigator is, room availability/time for patients to fill out surveys).

CASE STUDY 3

PLAN ► DO ► STUDY ► ACT

4 ACT

New Process

1. Re-educate staff about what the navigation patient satisfaction survey is and reminding patients who the navigator is.
2. Adjust who delivers the survey to patients in certain departments to support the best chance of return. In the radiation department, the survey will be provided by the front desk staff when the patient checks in for an appointment. The Medical Assistant will provide it for oncology and infusion visits.
3. Attach a cover letter explaining what the survey is, highlighting that it is only a 2-page survey to decrease emotional resistance and increase the number of completed surveys returned. The letter will remind patients of the survey and reduce staff time explaining the survey and answering questions. Continue to have survey delivered by front desk staff in radiation.

For the next PI cycles: find a way to track the number of surveys given vs. number returned to get an idea of the return rate. If possible, identify patients or departments to get an idea of more specific areas for improvement. This may be difficult when surveys are anonymous.

Future Steps:

Continue to work to empower department staff to deliver surveys to patients to further reduce the number delivered directly by ONNs.

To improve survey implementation, continue staff education on the importance of patient satisfaction surveys that can be used to increase patient buy-in.

Long-term post-study: Look at using a specialized electronic survey to do deep dives in some specific areas of oncology (including ONN-specific, as well as other support services).

No pre-study data available





CASE STUDY 3

THE STUDY DATA

Patient Experience **0.5%**

Description

Patient experience/satisfaction survey results

Numerator **23**

Number of navigated patients completing a satisfaction survey

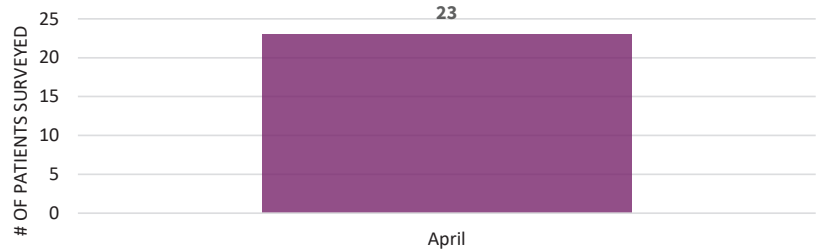
Denominator **4,520**

Total number of navigated patients

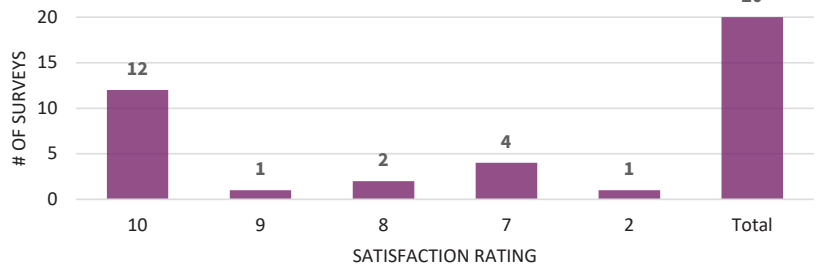
Patient Experience – Percent of navigated patients surveyed during the study; includes satisfaction score distribution (0-10)

Monthly Trending

Year 2019



Satisfaction with Navigator [0-10 scale]



Identifying Data Sources/Systems and Integrating Data Into EHR

To ensure navigation metrics efforts are valued by stakeholders, as well as by other navigators, metrics must be built around reliable data sources. **Chapter 5** of the toolkit highlighted some of these sources. Gaining access to this information may involve pulling information from the EHR, but it may also involve pulling in information from home-grown databases and the acute care healthcare organization. The Cancer Registry is one important source of patient data, but so are the IT systems in billing, pathology, and radiology. Billing may have information on re-admissions and ER admissions. Pathology can provide information on clinical staging and diagnosis data. The radiology and pharmacy departments may also provide useful information. Patients may receive their initial diagnosis and surgery within the context of the hospital system but may move into the community for radiation, chemotherapy, or medical oncology follow-up.

Example of Home-Grown Database Report

For many navigators, the process of simply capturing all this information can seem overwhelming, and many will use some type of database report to create a home for the information. Having this centralized home for the information gives the navigator a sense of control over the information and a starting point for discussions with other audiences, especially IT audiences.

Integrating Your Navigation Metrics into the Electronic Health Record

As important as it is to understand all the possible data sources, it is almost equally important—to the task of reporting on these data—to be able to integrate all pertinent data into the hospital’s EHR system or to feed data into any navigation-specific system.

Sometimes essential navigation data, such as patient barriers, are stored in narrative form, which makes data difficult to standardize and analyze. IT specialists can help identify existing tools or develop new ways of capturing important data in more uniform, consistent ways to facilitate collection, analysis, and reporting.

Integrating navigation metrics into the EHR is the ideal state, and this should be explored continuously, as the IT environment within hospitals and health systems is continually evolving. Doors that were once closed may open down the road. The goal is to create discrete reportable fields that enable the navigator to easily run reports that pull essential data. Hospital IT staff or data analysts may be able to assist in merging these various data sources to create a single database for measurement purposes. To do this, you will need to make sure that there are some common identifiers, such as patient ID, that are shared across all data sources.

The pilot study demonstrated that the development of a comprehensive platform for the collection of navigation data is an important step for consistently capturing and reporting on navigation program activities. For many healthcare organizations that want to expand navigation metrics measurement, the first step in this journey is to create a simple electronic document (using Excel® or some other database) that serves as the home for all of the data that is to be collected. Perhaps the end result of all of the effort will be the integration of this information into the organization’s EHR or some other similar electronic tool. This process takes time and is unlikely to happen overnight.

Create Standardized Template to Capture Metrics

To help normalize the collection of navigation metrics, AONN+, ACS, and Chartis promote the use of standardized templates that can be used by all navigation staff, as well as by staff who are associated with navigation activities, such as social workers and patient care coordinators within oncology. This one step was deemed to be the most important success factor in metrics implementation, according to the pilot study. Sites that successfully created paper or electronic data collection templates were most successful in advancing the use of navigation metrics (See the Case Study at the end of this chapter).

Incorporation of templates into the direct patient care process, or using them retrospectively to capture data, will support long-term reporting and performance improvement efforts for the navigation program.

EXAMPLE

Oncology Navigation Metrics Form

Name: _____ DOB: _____ MRN: _____

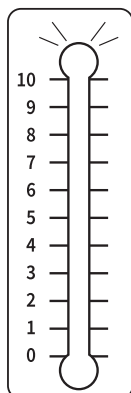
Diagnosis: _____

OPEN

CLOSED

SCREENING TOOLS FOR MEASURING DISTRESS

Instructions: First, please circle the number (0-10) that best describes how much distress you have been experiencing in the past week, including today.



Second, please indicate if any of the following has been a problem for you in the past week, including today. Be sure to check YES or NO for each.

YES NO Practical Problems

- Child care
- Food
- Housing
- Insurance/financial
- Transportation
- Work/school
- Treatment decisions

YES NO Family Problems

- Dealing with children
- Dealing with partner
- Ability to have children
- Family health issues

YES NO Emotional Problems

- Depression
- Fears
- Nervousness
- Sadness
- Worry
- Loss of interest in usual activities

Spiritual/Religious Concerns

Other Problems: _____

YES NO Physical Problems

- Appearance
- Bathing/dressing
- Breathing
- Changes in urination
- Constipation
- Diarrhea
- Eating
- Fatigue
- Feeling swollen
- Fevers
- Getting around
- Indigestion
- Memory/concentration
- Mouth sores
- Nausea
- Nose dry/congested
- Pain
- Sexual
- Skin dry/itchy
- Sleep
- Substance use
- Tingling in hands/feet

UPDATED	

- Social Support Referrals:**
- Psychiatrist _____
 - Psychologist _____
 - Social Worker _____
 - Chaplain Pastoral _____
 - Palliative Care _____
 - Hospice _____
 - Community Resource Group _____
 - Certified Health Coach _____
 - Counseling _____
 - Support Group _____
 - Other _____

- Preferred Learning Style:**
- Visual (Spatial):**
Prefer pics, images, spatial understanding
 - Aural (Auditory-musical):**
Prefer sound and music
 - Verbal (Linguistic):**
Words, both speech and writing
 - Physical (Kinesthetic):**
Body, hands, sense of touch
 - Logical (Mathematical):**
Logic, reasoning, symptoms
 - Social (Interpersonal):**
Learn in groups & with others
 - Solitary (Intrapersonal):**
Work alone & use self-study

Please circle the number that best describes:

No pain	0 1 2 3 4 5 6 7 8 9 10	Worst possible pain
Not tired	0 1 2 3 4 5 6 7 8 9 10	Worst possible tiredness
Not nauseated	0 1 2 3 4 5 6 7 8 9 10	Worst possible nausea
Not depressed	0 1 2 3 4 5 6 7 8 9 10	Worst possible depression
Not anxious	0 1 2 3 4 5 6 7 8 9 10	Worst possible anxiety
Not drowsy	0 1 2 3 4 5 6 7 8 9 10	Worst possible drowsiness
Best appetite	0 1 2 3 4 5 6 7 8 9 10	Worst possible appetite
Best feeling of wellbeing	0 1 2 3 4 5 6 7 8 9 10	Worst possible feeling of wellbeing
No shortness of breath	0 1 2 3 4 5 6 7 8 9 10	Worst possible shortness of breath
Other problem	0 1 2 3 4 5 6 7 8 9 10	

Patient's Name: _____ Date: _____ Time: _____

Completed by (check one):
 Patient Caregiver Caregiver Assisted



Creating Discrete Reporting Fields (Drop-down Responses)

The progression from a template form to being able to use discrete data capture fields in the EHR platform may be slow, but it represents the idealized world for navigation metrics data collection. Using discrete data capture fields, such as drop-down menus, checklists, selectable answers, dates, etc., allows navigators and/or other IT system users to select from the most common set of responses for given metrics. If these drop-down menus can be integrated with the organization's EHR, it will ensure better compliance with data collection efforts.



Navigation leaders must develop a good system for identifying which patients receive navigation services, whether the navigation is offered by clinical or nonclinical navigators, and how many interactions occur. Without first developing a clear understanding of this at the macro-level, it will be difficult to trust that any data being pulled from the healthcare organization's EHR will provide accurate micro-level details.

Examples of Discrete Reportable Fields (Drop-down Responses)

The pilot study identified several examples of possible drop-down menu topics, such as standard barriers to care. Other topics might include:

- Patient Diagnosis/Treatment
- Navigator profiles
- Support referrals
- Distress and palliative care scores
- Learning styles
- Satisfaction surveys

Additional Support for Accessing Data

As stated many times, the pilot study highlighted that navigators are challenged by the process of collecting and managing metrics data. Many data points or data sources are scattered or not easily found, so navigators benefit from recruiting support, officially and unofficially, from the IT department, clerical and administrative personnel, or other members of the cancer care program who may touch various data sources. If the cancer program has a full-time analyst on staff, it is also worth connecting with the analytical staff, if only for insights into how to make data collection easier. More likely, cancer program analysts may shed light on other data sources or better data sources.

CASE STUDY 4

Using a PDSA model, one pilot site created a template that could be used to collect all pertinent navigation metrics data. Before even beginning this specific project, the team was overwhelmed by the prospect of collecting a vast amount of data, and they were intimidated at the prospect of creating an electronic version of the metrics. Eventually, the team created a paper-based template (see [Appendix 7](#)) to guide their work.

Main Takeaway: Centralize data collection so that all audiences understand the collected data set.

PLAN ► DO ► STUDY ► ACT

1 PLAN

Data Capture/EHR

Aim: Build and implement a standardized charting application for the oncology navigator team.

2 DO

Prior to the start of data collection, create a standardized paper-based oncology navigator template that has identifiable data fields that allow navigators to run reports for measurement. This template will be implemented within the new EHR to capture data.

(The mindset of the team was important, as was their proactive engagement before study launch to ensure success.)

3 STUDY

Benchmark data: All navigator patient notes and patient data were in narrative form at the beginning of the study, and no standardized language was used in the data sources to create identifiable fields that could be used later on in electronic formats.

4 ACT

Standardized Charting

Study: Once the new EHR has been built, the navigation team will test the usability of the system. Following a trial period of data entry, reporting will be tested to determine the accuracy and usability of data that has been entered and extracted.

Adjustment to the system will be made once the navigation team has tested the initial build and identified areas needing improvement.

CASE STUDY 4

THE REST OF THE STORY

The navigators stated that one of the most important steps the team took was putting the data into a single place. The navigation team saw benefits regardless of how much technology was involved.

Another pilot site relied on a simple paper document to collect similar information, and even this low-technology solution was a significant facilitator for consistent data collection.

Bringing key stakeholders together to identify what metrics to collect and discussing where the data is housed, how the data can be accessed, and whether the data is in a reportable field, will help create this single repository. Once created, the navigation team planned to share the tool with stakeholders and IT. If the effort is to evolve and become part of the organization's EHR as discrete reportable fields, this is a crucial step.

However, the Navigation Team has thus far been unable to move forward with plans to build the template into the EHR. There have been many roadblocks with other areas of the EHR, and the navigation project has not taken priority. As with many navigation program improvement projects at other healthcare organizations, it has proven difficult to maintain momentum and organizational support.



CASE STUDY 5

One pilot study site recognized the need to capture navigation-related metrics in a more consistent and organized manner. The initial solution was to use the PDSA model to develop a data collection paper document and normalize its use.

Main takeaway: Capture data in a consistent manner.

PLAN ► DO ► STUDY ► ACT

1 PLAN

Data Capture/EHR

Develop a standardized data set with identifiable fields within the EHR to enable data capture and reporting.

2 DO

The navigation team's current EHR is ARIA, where they document their patient encounters and interventions. This platform does not allow for navigation tracking or data capture.

3 STUDY

Through their participation in the national metrics study, the navigation team developed a data collection paper tool to capture the encounters and interventions in order to report the outcome metrics. The eventual goal is to continue to capture the data by leveraging the OncoNav platform.

4 ACT

EHR: This will be a new implementation for the navigation program, which will allow both the program administrator and navigators the ability to:

- report on program outcomes
- trend data over time
- look at data from a program, disease, and/or navigator level
- report navigation measure(s) to senior leadership to help effect change for program needs and growth
- establish a process for the navigator team to identify opportunities for improvement where the outcome measures demonstrate gaps in care or process

The implementation of OncoNav will also improve multidisciplinary team communication. The platform will capture the interventions of the navigators and communicate patient needs to the healthcare team.

CASE STUDY 5

THE STUDY DATA

Pre-study: reviewed navigator notes; barriers and referral fields rarely populated. Occasionally provided info in note text, but not consistent.

THE REST OF THE STORY

“At the end of 2019, the health system implemented the OncoNav software program to enable all navigators to capture navigation metrics and document workflow. We have been using OncoNav for ten months, and we are making progress toward collecting consistent values and using standard practice. The addition of the Navigation Governance Council has helped define and streamline the data. The ability to pull the information and present standardized values creates a professional model for the program and a level of excellence in the work of the navigators.”



CASE STUDY 6

The navigation team at one pilot study site recognized they were missing crucial bits of navigation information because psychosocial distress screening was being captured at different points in the cancer care process. They studied opportunities to change when and where this information was captured so they could ensure consistency in access to the information.

Main Takeaway: Study access points for data collection to improve the consistency of capturing data.

PLAN ► DO ► STUDY ► ACT

1 PLAN

Distress Screening

Psychosocial distress screening for breast cancer patients was often completed, using a standardized tool, at the first chemotherapy infusion visits and during the radiation oncology consultation visit. The navigation team realized they were missing patients who were not being seen in either of these departments.

Aim: Increase the number of patients who are provided with distress screening.

2 DO

Distress screenings will be completed in the breast surgeon's office at the time of the cancer surgery consult. The team monitored the number of distress screenings completed and stored the information in a computer-based tool.

This was a new process. In addition, the distress screenings continued to be offered to patients at their first chemotherapy infusion and radiation oncology consultation visits.

3 STUDY

The collection of data prior to the study was nearly a 100% manual process. The navigation team had to manually tabulate the information that was gathered in order to report to the cancer committee. During the study, they recorded information in their navigation software (ONC iQ). They also loaded historical data in the database.

CASE STUDY 6

PLAN ► DO ► STUDY ► ACT

4 ACT

Implement a new process for distress screenings – identify pivotal visits during initial diagnosis and throughout the treatment phase. Distress scales are scanned and reviewed by the physician and nurse navigator to implement interventions as necessary.

Measured an increase in the number of distress screenings completed with the new process implemented.

At the completion of the study, this practice was continued because it created the ability to document patient distress at the times of diagnosis and first treatment. Navigators are then able to proactively provide interventions.

THE STUDY DATA

Distress Screenings **45.5%**

Description

Number of navigated patients who received a psychosocial distress screening at a pivotal medical visit with a validated tool

Numerator **125**

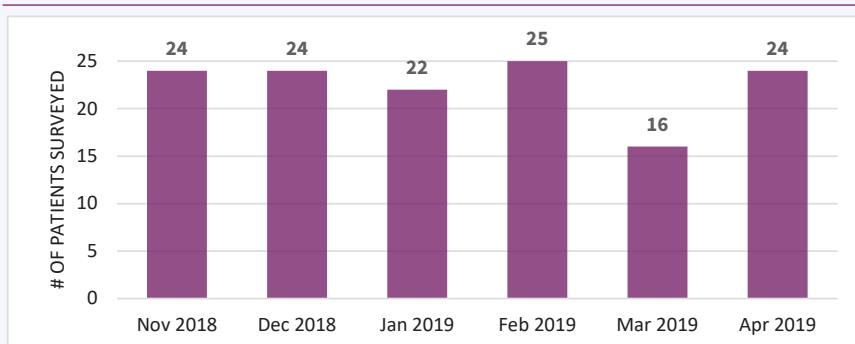
Number of navigated patients who received a distress screening

Denominator **275**

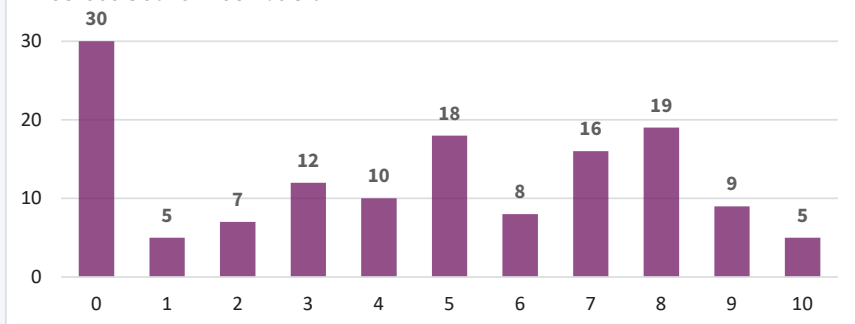
Total number of navigated patients

Distress Screening Data

Monthly Trending



Distress Score Distribution



THE REST OF THE STORY

Following the completion of this study, the navigation team initiated efforts to encourage all cancer specialists to offer distress screenings to their patients so that any needed interventions could be addressed earlier in the diagnosis.

CASE STUDY 7

Another pilot study site focused on creating a standard process and pathway to gather distress screening data on all patients. The distress screenings were initially administered during the first medical oncology visit. The PI project was testing whether it made sense to provide the screening at the second medical oncology visit. The team purchased iPads to enable patients to complete the screening independently. The data were transmitted immediately to the hospital EHR, and the nurses were able to review the information and ensure that appropriate referrals were set up.

Main Takeaway: Make it easy for patients to participate in the process of data collection.

PLAN ► DO ► STUDY ► ACT

1 PLAN

Distress Screening

The distress screening was previously given at the first medical oncology visit.

Aim: Provide the screening at a period that is not as stressful as the first medical oncology visit. The distress screening will be changed to the second medical oncology visit.

2 DO

First medical oncology visit – Patient receives MyChart request; if not completed through MyChart, the screening will be given via paper tool in office. Results reviewed by clinic nurses and referrals made.

3 STUDY

The current process increased workload on staff during patients' first visits, typically a very stressful time. After several meetings with the clinic staff, it was determined that it was best if the clinic personnel administered the distress screening to the new patients instead of the navigator unless the navigator is the first one in the room with the patient. Then the navigator will do it.

4 ACT

After the first PDSA cycle, the following process was determined: The distress screen will be provided at the second medical oncology visit. This was to be rolled out to all the oncology patients.

To reduce the workload on the clinical staff and improve patient engagement, the navigation team also purchased iPads, so the patients could complete the screening independently then share with the navigators.

Results: TBD.

CASE STUDY 7

THE STUDY DATA

For pre-study, it can only match the breast MRNs to their comprehensive distress file (7 screens matched, 349 navigated breast cases).

Distress Screenings 13.1%

Description

Number of navigated patients who received a psychosocial distress screening at a pivotal medical visit with a validated tool

Numerator 121

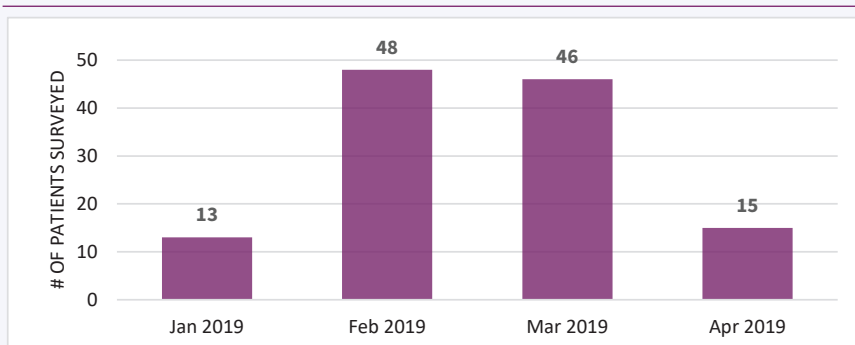
Number of navigated patients who received a distress screening

Denominator 921

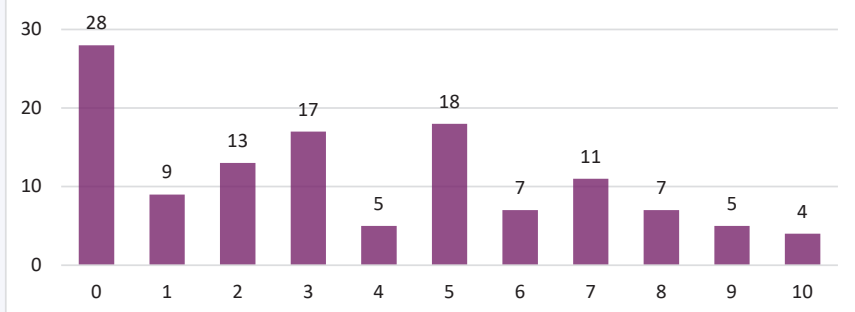
Total number of navigated patients

Distress Screening Data

Monthly Trending



Distress Score Distribution



THE REST OF THE STORY

“We absolutely have plans to keep the distress screening in place. After a patient has his or her first initial consultation with the medical oncologist, the charts are flagged for a distress screening to be administered at the next visit. At that 2nd visit, the patient is handed an iPad by the registration staff to complete the distress screening. If it was not given to the patient while in the waiting room, it was to be given to the patient while they were waiting in the exam room. Once the patient completes the screening, the results are transmitted to the EHR, and the nurse is able to review them and discuss them with the patient to ensure appropriate referrals are made. We created a support services referral that includes referrals to Behavioral Health, Financial Counseling, Social Work, and Chaplain, kind of like a one-stop-shop. Depending on the results of the distress screening, referrals can be made quickly to any of those services.

This process was up and running smoothly until the COVID crisis came along. Now, we’re re-evaluating how we will administer the distress screening with all the virtual visits.

CASE STUDY 8

Another pilot study site wanted to develop a better understanding of when navigation cases were opened and closed in order to begin to measure the caseload metric. The team wanted to create a field in their EHR that allowed them to track when cases were opened and closed. First, they had to develop agreement across all service lines about the definition of an open and closed case and define the process for electronically tracking this information. This case study example illustrates the challenges that health organizations will encounter when they agree to move forward with a specific measure. The outcome of the project was not as anticipated, but the work did allow them to develop an acuity tool that will aid their ongoing efforts in this area.

Main Takeaway: Don't be surprised when a process improvement effort uncovers other opportunities for improvement.

PLAN ► DO ► STUDY ► ACT

1 PLAN

Closed Cases

Presently the navigation team does not close cases in their navigation program.

Aim: Create an active open case list in Epic and to close cases when the patient is done with active treatment.

2 DO

Define closed cases and a process for electronically tracking patients.

The site wanted to look at the differences within each specialty. Pilots were done in thoracic, GI, GYN, and melanoma or sarcoma.

3 STUDY

GAP: At the time of the study, the pilot site had an open, rolling list of active patients. None of the patients' cases were closed to navigation; rather, the navigator's patient list continued to grow exponentially over time. The situation made it difficult to effectively track and manage patients.

After several months of documenting open and closed dates with each active case in thoracic, GI, GYN and melanoma/sarcoma, it was determined that there was no way to pull a report from the My Sticky Note section of Epic, and it was too time-consuming to manually collect the information.

CASE STUDY 8

PLAN ► DO ► STUDY ► ACT

4 ACT

The site is still working on the case volume and closing cases.

They developed an acuity tool and have revised the navigator encounter to be equipped to track the exact caseload each navigator is currently carrying.

The site is still struggling to have a clear definition of a closed case.

Develop a navigation dashboard in Epic that will track open and closed cases.

THE STUDY DATA

Data: During study: # new cases (April): 196, # open cases: 1206 and # closed cases: 0

Navigation Caseload 127

Description

Number of new cases, open cases and closed cases navigated per navigator

Numerator 921

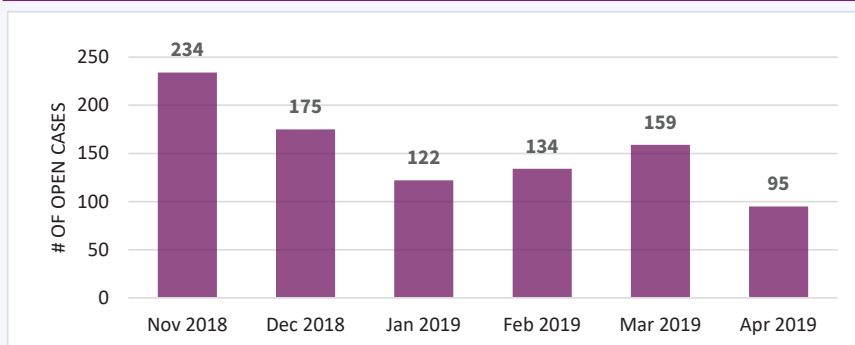
Number of new cases, open cases and closed cases

Denominator 7

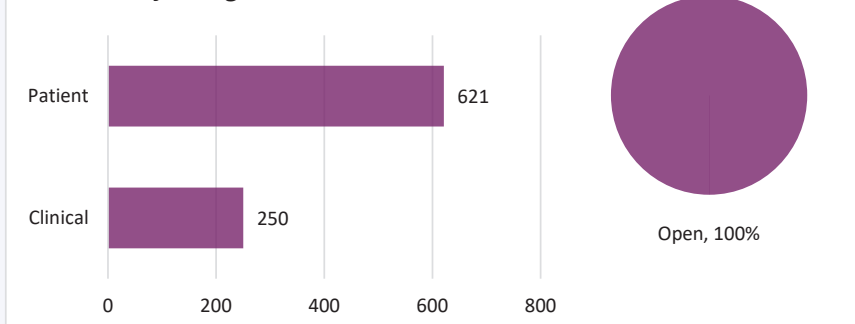
Number of full time employees

Navigation Caseload – Number of patients navigated during the study with filters for diagnosis and navigator type; includes a mix of open vs. closed cases.

Monthly Trending



Caseload by Navigator



CASE STUDY 8

THE REST OF THE STORY

“This is still a work in progress, but something we continue to work on. One of our defining moments as a collective group was understanding the difference between ‘workload’ and ‘patient load’ and explaining that in a way that leadership understood. Once that was achieved, and after we had buy-in from our leadership, we were able to get a Patient Care Coordinator to work with each specialty.

The Patient Care Coordinator manages all incoming referrals and the administrative duties such as the scheduling of appointments, requesting records/scans/path, etc., all the things that at one time fell to the navigator to do. With that in place, the navigators could finally focus on only the patients.

The next step was deciding which patients within any given specialty really required the assistance of a navigator. Of course, as nurses, we’d like to be able to navigate every patient that comes through the front door of the cancer center, but unfortunately, due to limited resources, we’re not able to do that. So, each specialty performed a needs-based assessment on their specific patient population to determine which patients required ‘navigating.’

Once that part of the plan was implemented, the next step was to determine, per specialty, what was considered an ‘active’ patient and when a patient’s case should be considered ‘closed.’ That looks very different from specialty to specialty. Each navigator made an addendum to their ‘list of patients needing navigation’ to include the starting and stopping point of navigation.

Finally, we were ready to move forward with tracking ‘open’ and ‘closed’ cases per navigator and to be able to determine each navigator’s true patient volume. We initially tried this by just adding a checkbox into our existing navigator flowsheet in Epic. However, there were issues with the way Epic was pulling the data from the flowsheet. It wasn’t accurately capturing the information we wanted.

After a couple of months of trialing this process and determining that it was not giving us the information we wanted, we put our thinking caps back on and we are in the process of working with our Epic team to create a functioning dashboard within Epic, mirroring what has been done in the population health arena.

The hope is that with this dashboard we will be able to accurately capture ‘open’ and ‘closed’ cases, which in turn will give us a working caseload per navigator measurement. This work came to a screeching halt with the COVID crisis and the need for all IT folks to stop what they were working on and focus solely on helping with COVID issues.

As a result, this is still a work in progress, but we have made incredible strides as a program to better define the role of the nurse navigator within our cancer center.”

8 Creating Your Navigation Metrics Dashboard

Best Practice Dashboards Key Components

There is a crucial need for all healthcare organizations to track some foundational level of data on their performance and engagement with patients.

While it is important to track navigation metrics, it is most important to share this information with cancer program directors and organizational leaders to help drive improvements. Broadcasting the data is also key to elevating navigation's importance in the eyes of peer-level and upstream stakeholders. The study sponsors recommend doing so via easy-to-read, one-page, visually-driven dashboard reports.

When creating a dashboard, keep these principles in mind:

1	Don't try to place all the information on the same page; prioritize simplicity so that the most relevant information can be contained on a single page. (See the examples below.)	6	Don't use too many colors.
2	Choose relevant key performance indicators (select measures that have been identified through consensus as meaningful by key stakeholders within the cancer program, in the sense that they will drive performance on important initiatives).	7	Use the right type of charts (e.g., line charts, bar charts, pie charts).
3	Provide context in terms of improvement or declines in performance or some other benchmark.	8	Use interactive data if possible, allowing users to drill down to details for each type of cancer.
4	Make it easy to understand.	9	Be consistent with labeling and formatting.
5	Choose your layout carefully.	10	Don't be afraid to change the way the dashboard looks if it is not working for the end-user (test dashboard before officially rolling it out).

Navigation dashboards can be developed using Excel or Access databases, or they can be generated using commercial tools. Some regional and national healthcare systems have proprietary navigation tracking systems.

Potential Tools for Creation of Navigation Dashboards

- **OncoNAV**
- **Nursenav**
- **PN-BOT**
- **Navigation Tracker**
- **OncoLens** (for Tumor Boards)

NOTE: For more information on the software tools offered by these companies, toolkit users will need to communicate directly with the companies listed.

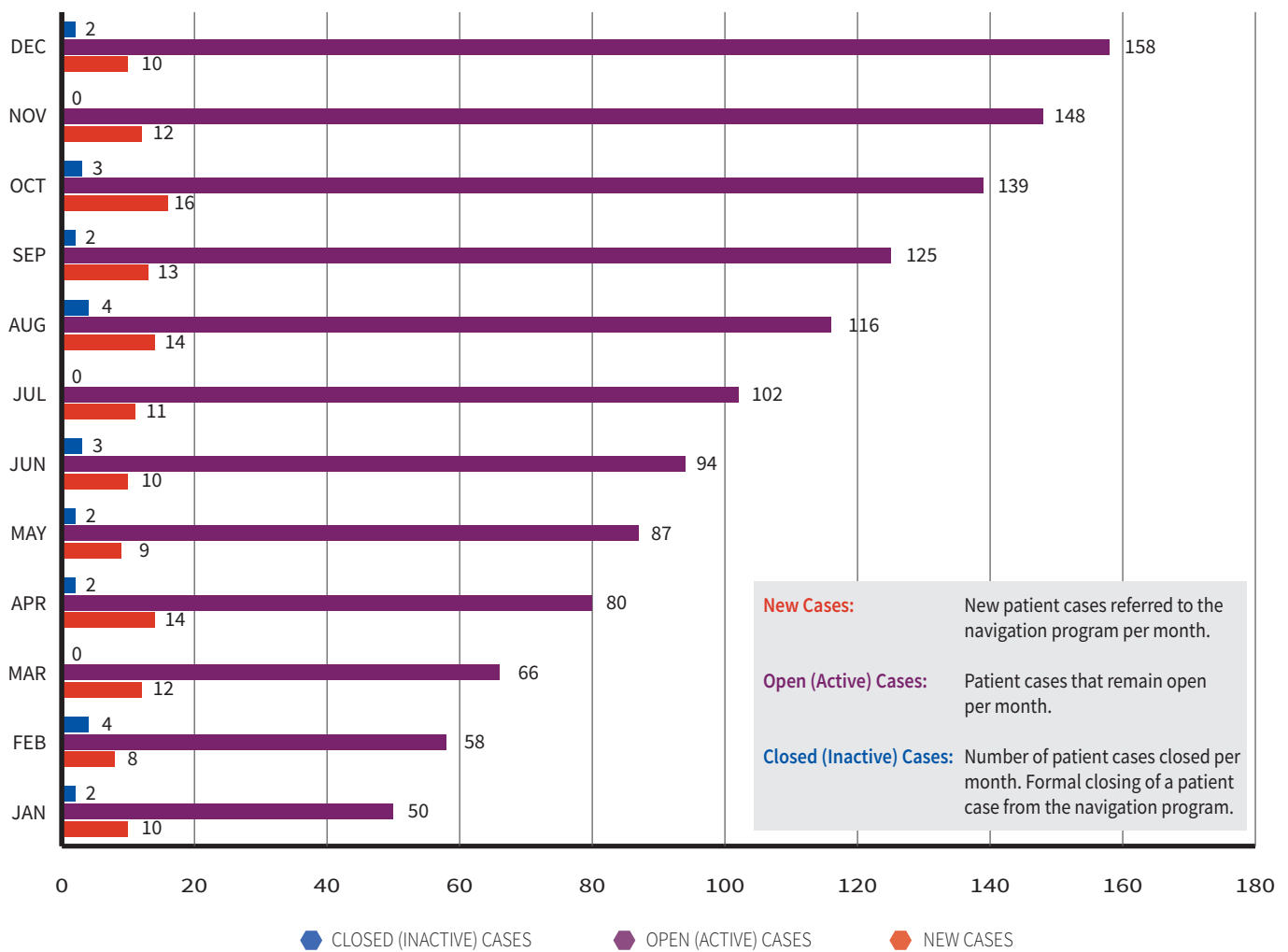


For the pilot study, AONN+ also commissioned the creation of NavMetrics, a tool that allowed navigators to record relevant information in order to generate simple dashboard reports. No matter the platform, the primary objective in developing a navigation dashboard is to create a reporting mechanism that can be easily understood by important stakeholders, including administration, cancer committee, and navigation staff.

The following images are examples of dashboards that navigator programs have implemented to disseminate information.

DASHBOARD EXAMPLE #1

Breast Navigator Caseload 2019



This bar graph dashboard is an easy-to-read approach for reporting metrics information on caseloads, barriers to care, interventions, and clinical trial education. The graph was created using Excel data.

DASHBOARD EXAMPLE #2

Metric	Metric Definition	Q1	Q2	Q3	Q4	Internal Benchmark	Goal Met	Action Plan

This Excel-based format is easy to use and incorporates the internal benchmark goal. This dashboard provides the metric/metric definition, outcomes by quarter, and internal benchmarks and action plan.

DASHBOARD EXAMPLE #3

● Red Light = Below Target
 ● Yellow Light = Warning
 ● Green Light = On Target

Navigation Metric	2019 Q1	2019 Q2	2019 Q3	2019 Q4	Internal Goal	Goal Met
CASELOADS Definition: The number of new cases, opens cases, and closed cases navigated per month	# New Open Closed	# New Open Closed	# New Open Closed	# New Open Closed		Use red, yellow or green circles to indicate goal status ● ● ●
BARRIERS TO CARE Number and list of specific barriers to care identified by navigator per month Barriers to care definition: Obstacles that prevent a cancer patient from accessing care, services, resources and/or support.						

This simple Excel-based form uses a red light/green light/yellow light approach to highlight for management whether a navigation program is meeting goals. This dashboard could also be completed on a monthly basis.

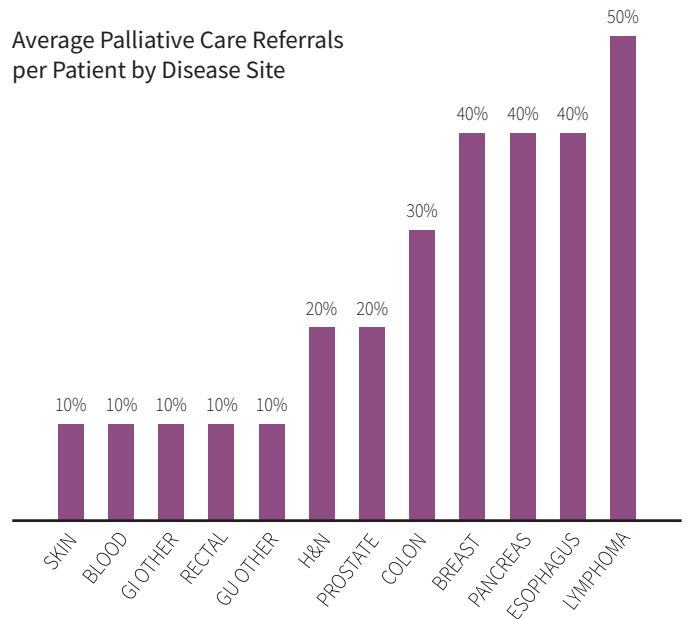
DASHBOARD EXAMPLE #4

Palliative Care: Quantitative Findings

Palliative Care Referrals by Facility and Average Referrals per Patient

Facility	# Palliative Referrals	# Patients Navigated	Percentage Referred
1	326	841	68%
2	35	238	15%
3	200	468	43%
4	40	1,114	4%
5	36	697	5%
6	11	488	2%
7	0	921	0%
8	39	275	14%
Total	687	4,681	15%

Average Palliative Care Referrals per Patient by Disease Site



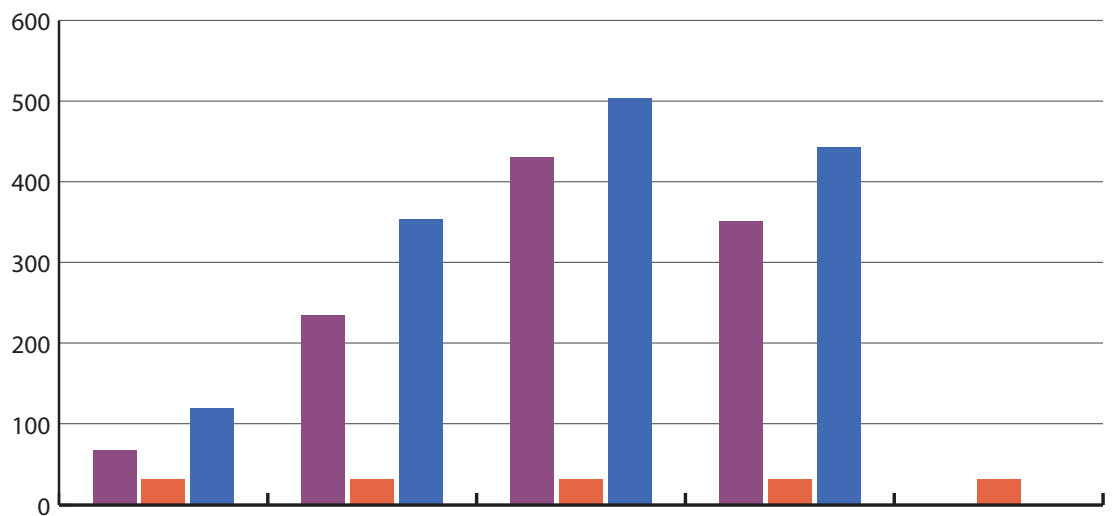
This dashboard depicts palliative care referrals by disease site across a healthcare system.





DASHBOARD EXAMPLE #5

Weekly Barriers – April 2020



	Week 1 - Apr 1	Week 2 - Apr 6	Week 3 - Apr 13	Week 4 - Apr 20	Week 5 - Apr 27
Barriers Addressed	68	235	431	351	0
Goal: 32 per Week	32	32	32	32	32
Total # Barriers	119	354	504	443	0
Percent Addressed %	57%	66%	86%	79%	0%

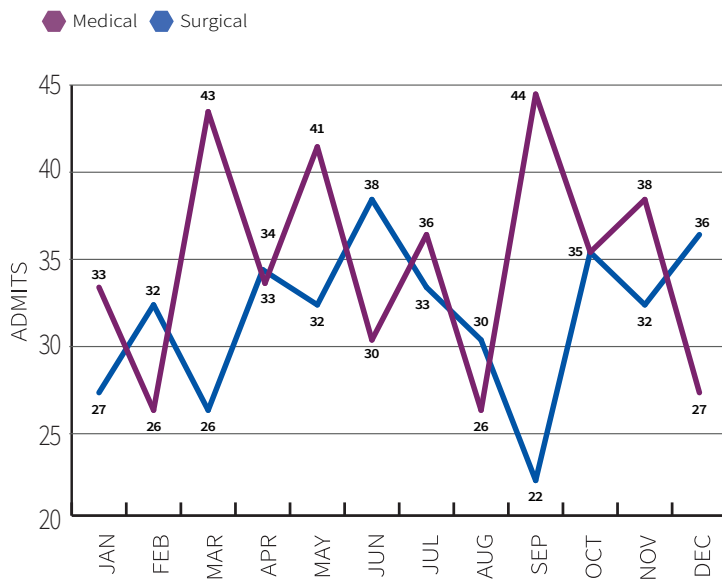
Barriers report for the month of April, providing both visual and statistical information.

DASHBOARD EXAMPLE #6

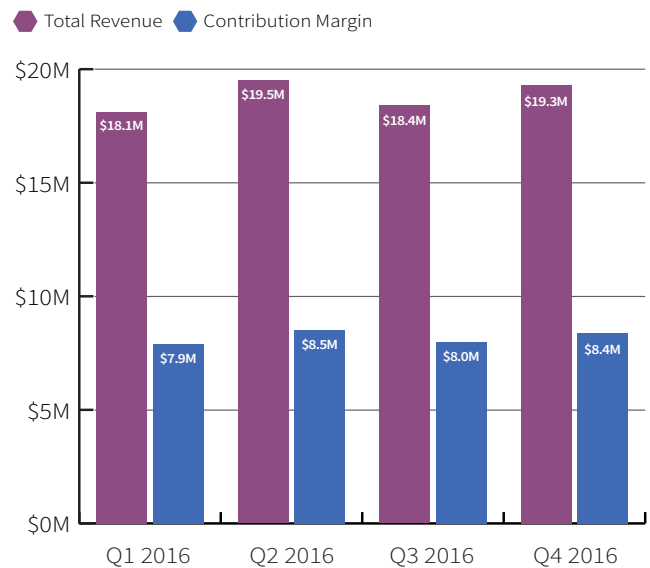
Oncology Dashboard



Inpatient Volume Trend



Financial Trend



Volume & financial metrics for oncology service line (registry cases, admissions, medical oncology/radiation oncology consults); includes quarterly margin snapshot as well as monthly admission trends.

Establish Frequency of Collecting Metrics

It is necessary to regularly collect data on a weekly, monthly, or perhaps quarterly basis to keep pace with the scope of navigation activities, depending upon how frequently the data sources are updated. Be sure to promote the data collection date internally so that personnel who might be involved in supporting data collection will be ready to participate and contribute data according to the appropriate schedule.

Create Internal Benchmarks for Metrics

Before beginning navigation metrics activities, determine if any national or regional benchmarks exist for the given metric. If not, identify the internal benchmarks that will be used. **Appendix 2** includes information on the unit of measure for analysis for each of the standardized metrics in the pilot study. In collecting this information, it will be possible for the navigation team to set an internal benchmark for the 10 standardized metrics if none exists within the organization. In establishing the internal benchmark, set threshold, goal, and stretch objectives for metric improvement.



Establish Frequent Meetings to Review Metrics, Dashboard, Operational Issues, Successes, and Challenges (Remedy Concerns Immediately)

It is advisable to hold monthly or quarterly meetings with stakeholders and executives who have authority over the cancer program to maintain awareness of navigation metrics. The meetings will provide opportunities to review the dashboards in more detail or to review other details on the navigation program. If feasible, hold brief monthly meetings with the clinical director of the cancer program to review the metrics and any associated challenges with metrics measurement, as well as the successes. If possible, pursue meetings once per quarter with C-suite representatives to present metrics findings. Many navigators attend tumor board meetings, but it will also be important to actually get on the agenda occasionally to present navigation information.

If the navigation report identifies negative trends, develop a performance improvement plan using tools identified in **Chapter 9** and the PDSA tool in **Appendix 3** to remedy concerns. Use the navigation report as justification for requesting additional resources or support to develop new procedures to address the issue. At the same time, if the report identifies positive trends, be sure to highlight this boldly, as it provides an opportunity to bring visibility to the impact navigation can have on the cancer program and an opportunity to educate leaders on navigation.

Review Metric Outcomes and Solicit Feedback

In addition to presenting navigation metrics to upstream stakeholders on a regular basis, navigation leaders should seek feedback from peers who are also regular users and consumers of data analytics. By seeking feedback, navigation leaders can better understand how the navigation story is perceived within the organization. By sharing the metrics, it is possible to understand if there are opportunities to improve and whether improvement efforts are affecting the metrics positively.

In the early stages of metrics reporting, navigation leaders and cancer center administrators must express support for navigators because early returns may not meet expectations. If navigators feel threatened by metrics and how they might be used to judge professional performance, they may be less likely to support the collection of data. Overcoming this mentality will be key to successful metrics implementation and the long-term success of the navigation program overall. Keep in mind that the healthcare organization and patients are the primary beneficiaries of the measurement work.

As the toolkit emphasizes, navigators must become adept at telling the navigation story. Highlighting the need for navigation and using data to tell this story must be part of the navigator's job description.

9 Performance Improvement Processes and Tools

Performance Improvement Definition and Goals

Performance Improvement (PI) can be described as a process that helps an organization increase effectiveness, empower employees, or streamline decision-making. For a healthcare enterprise, the goals of PI efforts should always connect to improving the overall health of the patients who are served and also align with the cancer center goals/mission and the **Triple Aim**, which is the concept that healthcare providers should strive to improve patient experience and population health while simultaneously reducing per capita healthcare costs.

The Necessity and Benefits of Performance Improvement

In the context of implementing navigation metrics, improving performance relates to identifying standards or measures that will support improvements in patient experience, clinical outcomes, and organizational return on the investment for the oncology program. Step 1 for the navigator is to pursue implementation of the AONN+ recommended metrics, since they will help drive improvements in these three areas. Once metrics have been defined, tracking performance related to metrics attainment will likely uncover additional improvement opportunities.

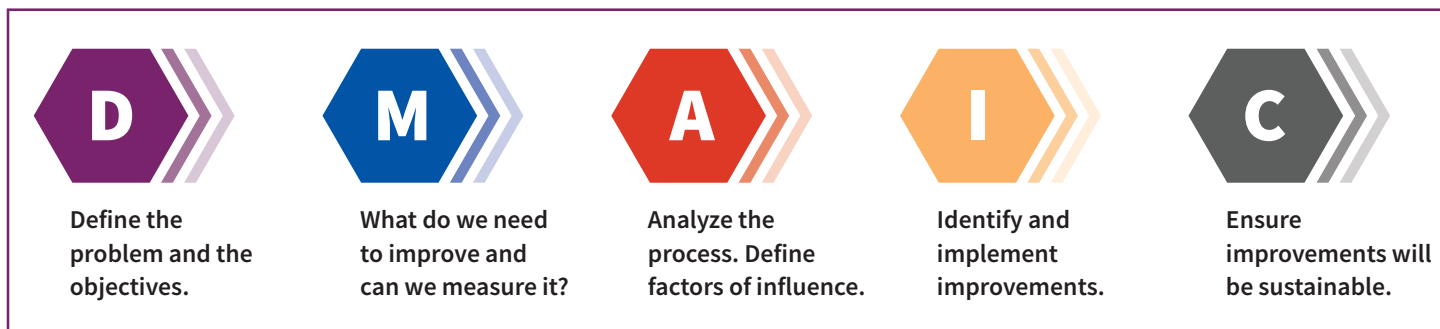
Implementing navigation metrics cannot be accomplished by simply waving a magic wand. The metrics implementation efforts might involve changes in existing processes, and these changes will need to be tested before being fully implemented. False starts or failings with navigation metrics will severely undermine the navigation team within the organization. Therefore, having a plan in place that will guide the team is crucial.

Navigation improvement efforts could involve working with new colleagues and new departments or advancing existing relationships in new ways. But all change comes with a price. People are resistant to change and will resent unnecessary changes if there is no perceived benefit. Therefore, changes must be tested and studied so that only changes that produce desired outcomes will be pursued and/or maintained. If the secondary audiences involved in supporting navigation metrics can be convinced that the changes are being guided by a managed process and evidenced-based tools and will support progress towards improved outcomes, they will be more likely to stay engaged. It is also important to include members of the teams that will be impacted by metrics implementation and to communicate why changes are being made and that leadership is supportive.



Key Elements with a Performance Improvement Project (Key Steps)

To manage the implementation process, many of the pilot study sites incorporated Six Sigma and Lean Six Sigma improvement methodologies for their individual metrics efforts. Six Sigma and Lean Six Sigma are improvement methodologies that rely on collaborative team efforts to improve performance by systematically removing waste and reducing variation. The key elements for a performance improvement project, from a Six Sigma perspective, are as follows:



This **Define-Measure-Analyze-Improve-Control**¹ model guides how a project should be framed and is an essential part of the Six Sigma improvement approach, but other tools must be used to actually implement the improvement efforts.

Performance Improvement Tools and Templates

One of the easier performance models to use in implementing a performance improvement effort is the **Plan, Do, Study, Act Model**. (See **Appendix 3** for a model template. However, it is worth noting that the PDSA model can take many shapes.)

The PDSA cycle forces the navigation team to ask crucial questions:

- What are you trying to accomplish?
- How will you know that change is an improvement (measures)?
- What change can you make that will result in an improvement?
 - Define the processes currently in place; use process mapping or flowcharting
 - Identify opportunities for improvement that exist
 - Decide what you will change in the process; determine your intervention based on your analysis



To ensure the improvement effort can be effectively managed and the data easily tabulated, it is often best to test the improvement effort with a small subset of the overall population, a specific disease site, for example.



Utilization of Evidence-Based Validated Process Improvement Tools²

Navigation programs in the pilot study that implemented changes using evidence-based performance improvement tools achieved greater peer acceptance of their change efforts and tracking efforts. Given this practice, before launching a metrics initiative, navigators should consult with PI team members to identify PI tools that may already be in use in the organization and leverage this familiarity to guide performance improvement efforts. For smaller organizations that do not have distinct PI teams in place, it may be possible to identify similar resources within the organization.

Engaging Leadership in Performance Improvement Efforts

As stated elsewhere in the toolkit, the best way to share information with leadership is to communicate frequently and simply, using a dashboard format. Beyond this, it is still important to engage with leadership via email, rounding, and even posting dashboards in the cancer center for internal audiences to see. Navigators must use every channel available to them to help tell the story of navigation, even offering to draft content for the oncology program's annual report, if the organization produces one. This rich information should also be shared with physicians and physician champions working with navigation.

How to Present Data If You Have Minimal Resources

If time and resource constraints limit navigators' ability to generate or present navigation dashboard details, explore avenues that might allow the PI/QI department to report on the navigation team's performance, recognizing it is suboptimal to have another department carry the navigation team's message.

Challenges with Performance Improvement

In implementing the standardization metrics through the pilot study, AONN+, ACS, and Chartis documented several challenges to implementing performance improvement initiatives for the metrics:

- Unfamiliarity with performance improvement tools, such as the PDSA model
- Healthcare organization silos make data collection harder.
- Lack of standardization of oncology navigator scope and role
- EHR barriers to data collection were difficult to overcome if navigation interventions were not captured as identifiable, reportable fields, which made it difficult to measure navigation efforts and determine if navigation efforts were successful.

Since data collection is key to navigation implementation, and the ability to leverage the organization's EHR platform will enhance this process, the study sponsors recommend inviting representatives of the IT team or IT vendors to join the navigation metrics implementation team. The IT representatives can assess whether it is possible to capture relevant data as discrete fields, and then assess whether this information can be captured as part of the data gathering that takes place through the EHR.

Review Successes and Challenges of Metric Collection

Chapter 4 of the Toolkit provides a broad list of challenges associated with the collection of metrics and offers information on success factors. Each healthcare organization should identify their own success factors and challenges related to metrics collection and share this list with stakeholder audiences in case they can support possible solutions.

Complete Cost-benefit Analysis and Cost-effectiveness and Opportunities

Few navigators are trained financial analysts; thus, it can be difficult for navigators to conduct full-blown financial analyses that outline the cost-benefit statement for navigation. **Some navigation programs have done so.**³

To assess any potential financial impact for navigation, it is crucial for navigators and navigation leaders to work with their service line administrators to understand how the metrics can tie to financial outcomes and to track these data routinely.

Industry thought leaders recommend that navigators start with improvement projects that hold the most concrete potential, either in financial benefit, operational efficiency, and/or benefit to the patients to gain momentum and perhaps more resources for performance improvement and change efforts. Suggestions would include:

- Shortening diagnosis to treatment time
- Percentage of patients who receive distress screening
- Decreasing readmission through navigation intervention

Review Reports and Outcomes with Key Stakeholders

Once the improvement initiatives have been implemented, it is imperative for the navigator to review the outcomes with the audiences involved, either in person or through the submission of a simple dashboard report. The report should always include top-line data trends to show increases and decreases in metrics, metric definitions, the time period (monthly or quarterly), comparisons from the prior time period, benchmark goal (internal vs. national benchmarks), and action steps for enhancement of the metric, as well as requests for feedback.

Timely Reporting of Results to Key Stakeholders for Ongoing Feedback

One of the surest ways to maintain approval and support for the implementation of navigation metrics is to provide regular reports to stakeholder audiences. Keep in mind that the reporting cycle should coincide with the frequency of data change. It doesn't make sense to generate monthly reports if the metrics information only changes quarterly. With each report, it is necessary to share with the recipients when the next report will be issued so that they will have the proper expectation. If possible, time the generation of navigation reports to coincide with cancer program or C-suite meetings so the reports can be reviewed at times when key decisions are being made by stakeholders.

Case Studies

In some cases, implementing metrics measurement programs will mean that healthcare organizations are willing to make changes to existing processes and practices or create new processes.

CASE STUDY 9

One pilot study site recognized they were failing to collect patient satisfaction information on the navigation program in a consistent manner. To address this, the navigation team instituted an education program and several process changes.

Main Takeaway: Be prepared to educate cancer care program colleagues on the purpose and scope of patient navigation as part of metrics implementation.

PLAN ► DO ► STUDY ► ACT

1 PLAN

Patient Experience

Aim: Identify the correct time to provide the patient experience survey. Navigators also want to create a solid process so that the patient:

1. Understands the survey
2. Knows who the navigator is when responding to the survey
3. Completes the entire survey

2 DO

Identify opportunities for improvement that exist. The team has already started a QI process on Patient Survey distribution and returns. Patients are given a printed survey as the ONN backs out of their interactions with them within ~1 month so that the patients remember their navigators.

3 STUDY

The Medical Assistant gives out a survey when a patient comes to the physician's office, but navigators had concerns presented from staff in radiation, so the navigators have enlisted the support of front desk staff in radiation to distribute and will do the same in chemo infusion suite to see if there are better support and survey returns. At some points, the navigators deliver the survey themselves to ensure it is delivered; however, the ONN team is trying to do this as infrequently as possible to avoid causing bias in responses.

One main concern is that there is survey fatigue as the institution was sending out patient surveys after every visit. That has recently stopped, so navigators are hopeful they will get good returns. There have been a few patients who just don't want to fill out another form.

Other concerns exist about room and time availability (time for staff to explain the survey and remind the patient who the navigator is; room availability/time for patients to fill out surveys).

CASE STUDY 9

PLAN ► DO ► STUDY ► ACT

4 ACT

New Process

1. Re-educate staff about what this survey is and reminding patients who the navigator is.
2. Adjust who delivers the survey to patients in certain departments to allow the best chance of return. In the radiation department, the survey will be provided by the front desk staff when the patient checks in for an appointment, versus the Medical Assistant providing the survey during the rooming process.
3. Attach a cover letter explaining what the survey is, highlighting that it is only two pages to increase the number of completed surveys returned. The letter will remind the patient of the survey, and less staff time will be spent explaining the survey and answering questions. Continue to have the survey delivered by front desk staff in radiation.

For the next cycles: find a way to track the number of surveys given vs. the number returned to get an idea of the return rate. If possible, identify patients or departments to get an idea of more specific areas for improvement. This may be difficult when surveys are anonymous.

Continue to work to empower department staff to deliver the survey to the staff in advance of appointments and continue to further reduce the number of oncology nurse navigator-delivered surveys. The team needs to deliver the survey in advance of an appointment to the staff and continue staff education on the importance of the survey to increase buy-in.

Long-term post-study: we plan to look at using a specialized NRC electronic survey to do deep dives into some specific areas of oncology (including ONN-specific, as well as other support services).

The same cancer center also launched an effort to determine the most appropriate way to use the ESAS tool to determine which patients needed referrals to palliative care. In following the PDSA model, they discovered that a modified version of the ESAS tool was being used to assess patients in some clinics, while still other tools [Functional Assessment of Chronic Illness Therapy - Fatigue (FACIT-F), Functional Assessment of Cancer Therapy – General (FACT-G), FACIT Measurement System, and Physical Impairment and Functional Assessment Screening Tool (PIFAST) [the STAR Program] were being used in other parts of the cancer program.

Even so, patients expressed weariness over the number of documents and surveys they were asked to complete. One of the outcomes from the measurement effort was the decision to advocate for the oncology service line departments to work together to use the same validated assessment tool across offices. Ideally, this will result in less confusion among patients, less survey fatigue, and an improved ability to capture data. The effort also resulted in an overall commitment to improving communication across the cancer program and a staff commitment to engage with navigators more often.

CASE STUDY 10

One of the pilot study sites used the PDSA model to study how, when, and for which patient population the ESAS screening tool should be used. The process of studying the issue helped the organization standardize its screening behaviors and better understand how the screening effort could benefit patients who were at various stages in their cancer journey.

Main Takeaway: Patient acuity will impact navigation efforts.

PLAN ► DO ► STUDY ► ACT

1 PLAN

ESAS

The site needed to identify the best time during the cancer continuum to administer the ESAS tool.

Aim: Assess patients “who are at risk.” Assess using the ESAS tool; will be referred to palliative care or palliative care services (if applicable), i.e., support services to address the patients’ needs.

2 DO

The site was not screening ALL patients, but only those they identified as “chronically ill” or at risk.

3 STUDY

No pre-study ESAS data to provide.

Concern was that early-stage patients were not appropriate targets for the palliative care symptom assessment; the team wanted a mechanism to document low-risk patients, who needed no referral at this time.

GAP: Study team learned from other study sites that the assessment may not have led to a palliative care referral but could lead to the oncology nurse navigator being able to be proactive in addressing patient symptoms. This all goes back to the standardization of practice.

4 ACT

The team did recognize that patients with advanced disease/metastases are good candidates for the ESAS assessment and will identify opportunities to change the process. Results: The issue will be explored further.

CASE STUDY 10

THE STUDY DATA

Palliative Care Referrals 0.2

Description

Number of navigated patients with palliative care referrals

Numerator 57

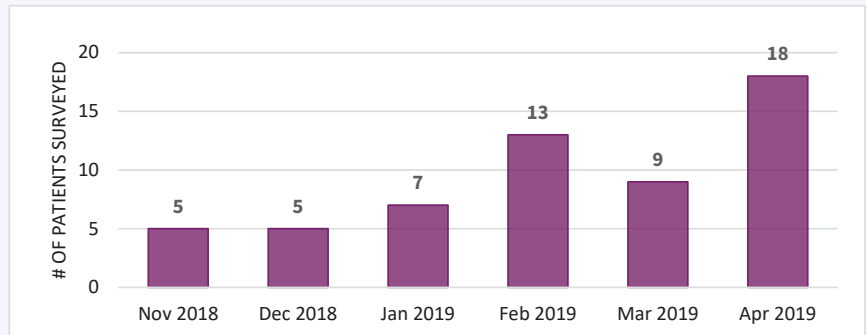
Number of navigated patients with palliative care referrals

Denominator 275

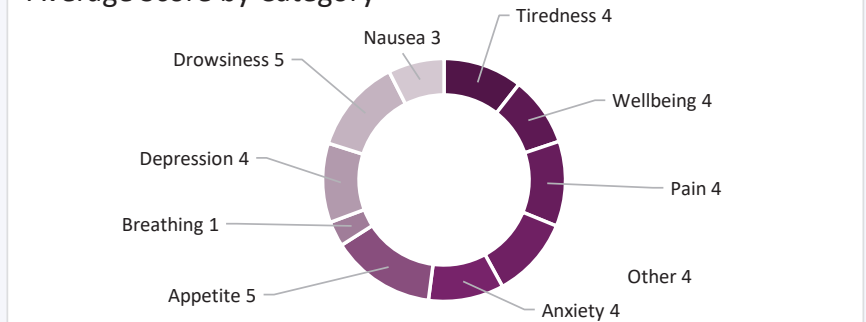
Total number of navigated patients

Palliative Care Referrals

Monthly Trending



Average Score by Category



3.9 Average of anxiety	5.4 Average of appetite	1.3 Average of breathing	4.1 Average of depression	4.1 Average of tiredness
4.9 Average of drowsiness	2.9 Average of nausea	4.2 Average of other	4.4 Average of pain	3.6 Average of wellbeing

THE REST OF THE STORY

Following the completion of this PI project, the navigation team implemented several changes to their patient engagement practices:

- Administer the ESAS tool to all patients, with the understanding that early-stage cancers most likely will not need referrals for palliative care.
- The navigators explained to patients that the survey was part of a study, in hopes of increasing compliance.
- Nurse navigators evaluated the answers patients gave on the tool and referred patients as needed, but also tracked patients who did not receive referrals for palliative care services.
- Nurse navigators documented outcomes in an electronic database that included an option to select low-risk—no referral at this time.

CASE STUDY 11

One of the pilot study sites used the PDSA model to develop a better understanding of how to register cases as closed. Through the improvement project, the healthcare organization developed a consensus that a case would be deemed “closed” based on agreement from the navigator and disease-site team. The team launched a test of this concept with the lung cancer patient population. By developing a better understanding of case closure, the navigation team hopes to be able to develop a consistent metric for caseload.

Main Takeaway: Developing a definition for closed cases will help navigators to manage the caseload.

PLAN ► DO ► STUDY ► ACT

1 PLAN

Closed Cases

Aim: Close cases when the patient has completed active treatment.

2 DO

The navigation team did not close cases unless the patient came for a second opinion or expired during their navigation program.

The process of closing cases will be determined by the disease-site team and navigator in conjunction with the clinician team and patient need. The lung will be the test case, and the site is actively trying to close cases.

3 STUDY

At the time of the study, the site had an open, rolling list of active patients. None of the patient’s cases were closed to navigation except for second opinion or patient death; rather, the navigator’s patient list continued to grow exponentially over time. This growth creates difficulty over time to effectively track and manage patients.

The program model follows the patient through the cancer continuum and through survivorship, so even if the navigator closes the case, the patient will come back to navigation for a survivorship care plan. They are working to have nurse practitioners take over survivorship care.

4 ACT

The site is working to define a closed case. The goal is to close at the end of active treatment even though the patient may reconnect at a later time. The patient case can then be reopened. Lung cases have been the test cases to date. No significant data to report yet.

CASE STUDY 11

THE STUDY DATA

Pre-study data: Navigated patients not directly provided. They average 1,856 analytic cases per year in their registry.

Navigation Caseload **51**

Description

Number of new cases, open cases and closed cases navigated per navigator

Numerator **488**

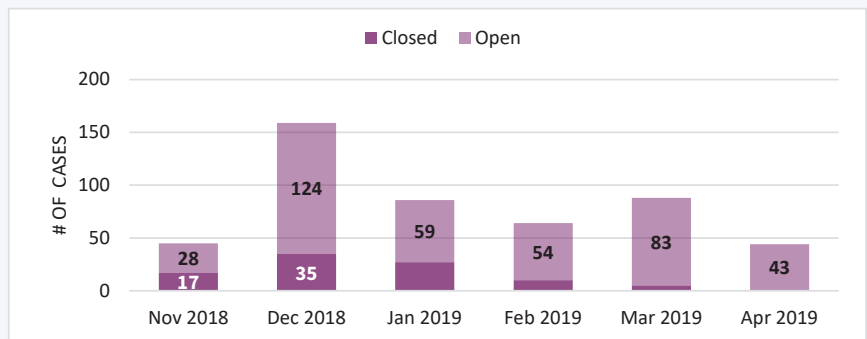
Number of new cases, open cases and closed cases

Denominator **10**

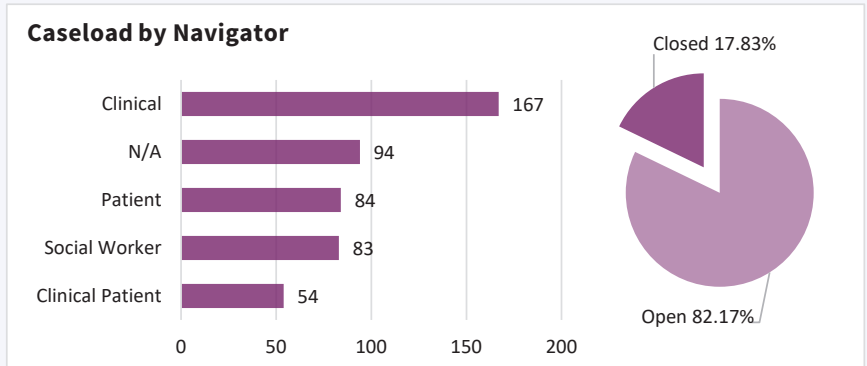
Number of full time employees

Navigation Caseload – Number of patients navigated during the study with filters for diagnosis and navigator type. Includes a mix of open vs. closed cases. During-study: # new cases (April): 44. # open cases: 401#, closed cases: 87.

Monthly Trending



Caseload by Navigator



THE REST OF THE STORY

“The navigation team is still working with the other members of the cancer program’s care teams to define when to close cases. The designation is easier to determine for solid tumors, but it is more difficult with hematology-oncology cases due to the ongoing follow-up most of these patients require.”

CASE STUDY 12

One of the pilot study sites wanted to study whether cancer patients were aware of the navigator role and services. Using a PDSA model, the navigation leaders studied awareness first in the breast cancer population.

Main Takeaway: Educating patients about the role of the patient navigator is a priority.

PLAN ► DO ► STUDY ► ACT

1 PLAN

Patient Experience

Aim: Ensure that the patient is aware of the navigator and the services the navigator offers; breast population.

2 DO

June, July, August, and September 2018

A survey was sent to the patients asking if they were familiar with the navigator. The results were published in the community needs assessment. The results were that 58% of patients were familiar with the navigator. The goal is to make the patients aware of the navigator.

- Patients receiving care at the medical center were surveyed in June, July, August, and September 2018 to determine barriers of care from their perspective.
- 86 respondents completed the survey.

N=166

Other patients with no cancer diagnosis are seen here, such as those with anemia, iron deficiencies, thrombocytopenia, etc. 58% were familiar with the navigator, and 42% were not familiar with the navigator.

3 STUDY

The team will follow up with the next steps once they are identified. The follow-up process involved a mapping exercise:

- Determine total breast cases for 2018.
- Identify which breast cases are internal referral or external referral (outside of the health system.)
- What would it take to get the current Breast Health Nurse to take on more of a point-of-entry role for Breast Health patients?
- Who would manage External Breast Patients?
- Will Breast Health Nurses start going to health system cancer meetings?
- What are the new tasks required for Breast Accreditation that are not outlined in the process map?
- Identify where Accreditation tasks would fit and who would do them.

CASE STUDY 12

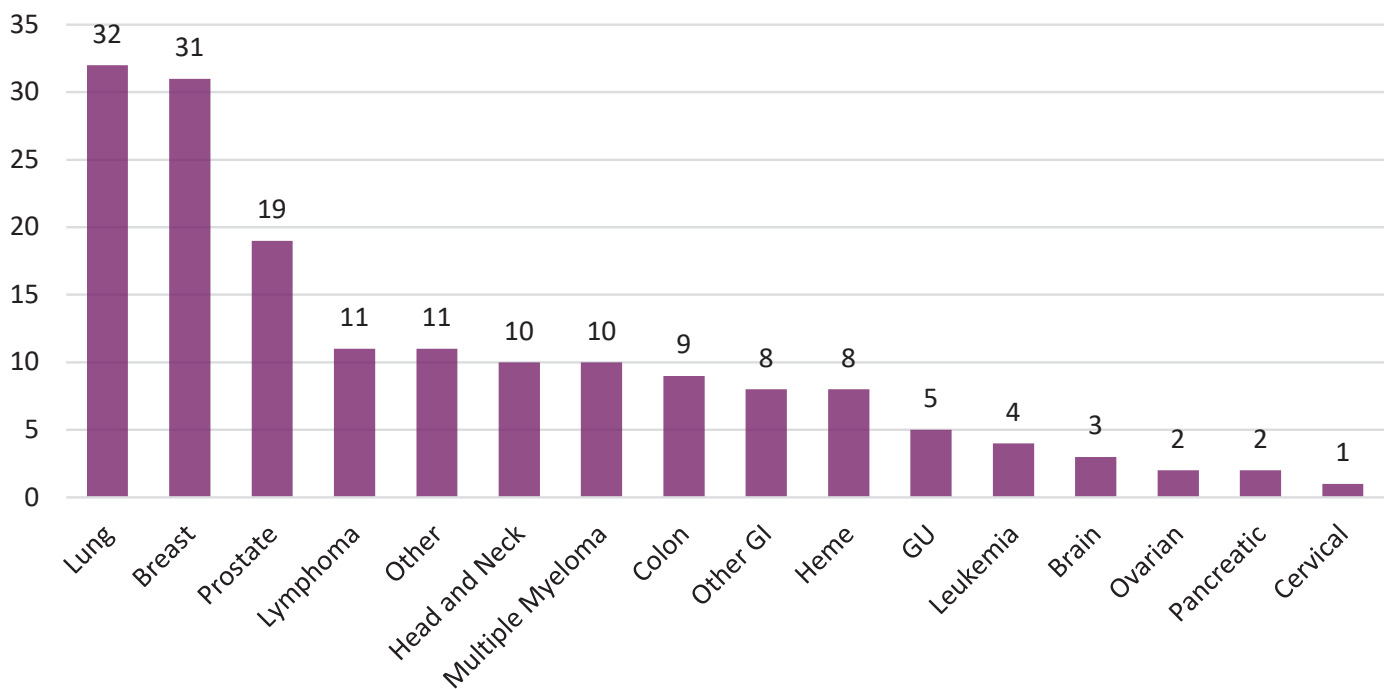
PLAN ► DO ► STUDY ► ACT

4 ACT

In the future, the site will do another patient survey before the Community Needs Assessment is submitted to the CoC. However, the navigation team is working on getting the word out to the community and patients regarding navigation services, so the cancer center may do another survey soon on navigation services.

THE STUDY DATA

Navigation Caseload



THE REST OF THE STORY

“We have hired a Medical Assistant to support our Point of Entry navigators. She is here to do clerical work that we were often bogged down with too often. We also hired a breast navigator for patients who were further into the continuum of care and to capture patients who were diagnosed elsewhere. Previously these patients were not being navigated. We now have every navigator addressing themselves as a navigator and describing the role they have when talking with a patient. Previously, they were introducing themselves as “your nurse.” Now, we all say, “nurse navigator,” and supporting staff identify us as nurse navigators, versus “your nurse.”

CASE STUDY 13

One pilot study site determined that many cancer patients were unaware of navigation services. Implementing a PDSA process, they sought to change the awareness level, starting with breast cancer patients. The navigation team worked with other leaders in the overall cancer program and medical staff to educate patients.

Main Takeaway: Educating patients about the role of the patient navigator will improve care processes.

PLAN ► DO ► STUDY ► ACT

1 PLAN

Navigator Access

Aim: Increase the volume of breast cancer patients navigated, follow the patients longer in the continuum, and make sure they are aware of the resources at the cancer center.

2 DO

Historically, the cancer center has approximately 150-190 new analytic breast cancer cases per year. Two full-time navigators are assigned to the breast cancer patients. Only 70-80 breast cancer patients per year are getting access to the navigator, and only being followed through to surgery. These patients are not aware of the oncology resources.

3 STUDY

The team wanted to study how they could increase the awareness of the navigators and their role, as well as increase the volume of patients navigated through the breast center.

4 ACT

The team is still developing how the change will be measured. They have initiated a Lean Six Sigma process with a multidisciplinary team and the team developed a breast cancer patient process map to identify opportunities for improvement and gaps/barriers. The follow up post the process mapping exercise is as follows:

- Determine total breast cases
- Identify which of above are internal and which are from outside the health system
- What would it take to get current breast health navigator to take on more of point-of-entry role for breast health patients?
- Who would manage external breast patients?
- Will breast health navigator start going to the cancer center's meetings? If so, which ones? What would that look like?
- What are the new tasks not outlined in the process map that are required for Breast Accreditation?
- Identify where Accreditation tasks would fit and who would do them.

CASE STUDY 13

THE STUDY DATA

Navigation Caseload 31

Description

Number of new cases, open cases and closed cases navigated per navigator

Numerator 238

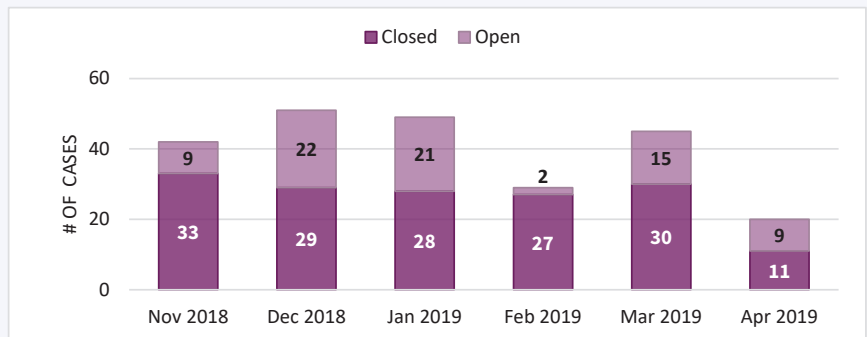
Number of new cases, open cases, and closed cases

Denominator 8

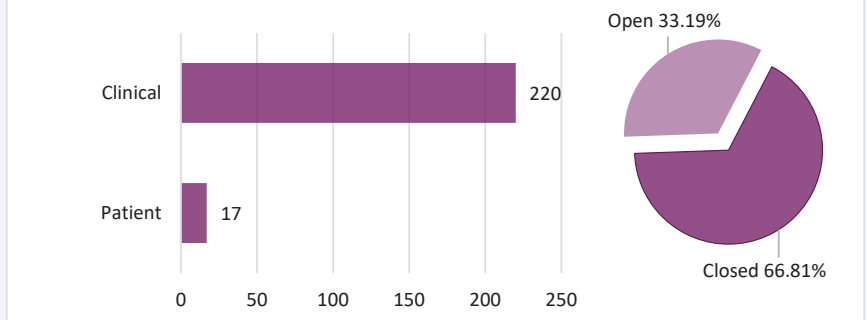
Number of full-time employees

Navigation Caseload – Number of patients navigated during the study with filters for diagnosis and navigator type; includes a mix of open vs. closed cases

Monthly Trending



Caseload by Navigator



Navigator Dashboard

Caseload 17

Open Cases 12

Closed Cases 5

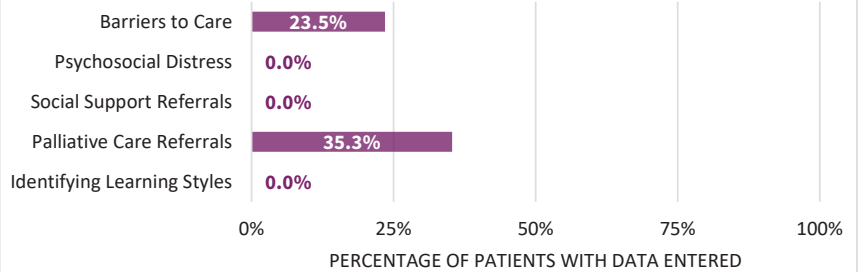
Barriers to Care 4

Social Support Referrals 0

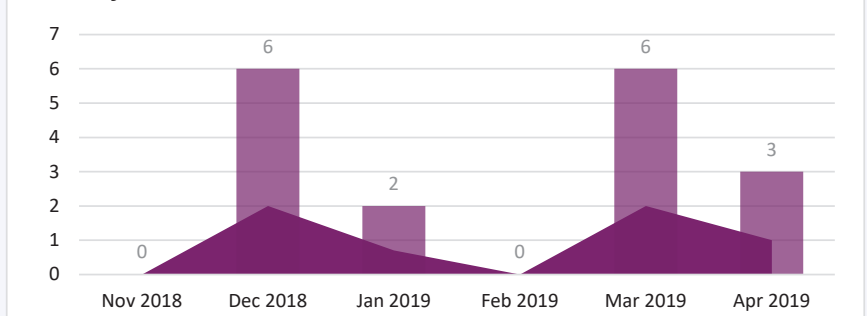
Learning Style Identified 0

Navigator metrics – Volume, barrier and referral metrics for patient navigators; includes the percent of patients with data for key metrics as well as monthly trends in caseload

Metrics Progress



Monthly New Cases



CASE STUDY 13

THE REST OF THE STORY

While this performance improvement project was taking place, the navigation team experienced a change in leadership. The new leader began to explore staffing options in an effort to maintain budget neutrality. The program leader considered restructuring of the reporting model (i.e., bringing at least one of the breast care navigators under the cancer center).

The hospital cancer center sees approximately 190 analytical cases a year. The navigation program leader surmised that if changes occurred in the breast health navigator's workflow and her responsibilities were revised, the breast health navigator would be able to take on the 190 analytical patients that require breast care services and/or partner with our recently hired navigator.

The organization hired another 32-hour navigator to be a point-of-entry navigator for gynecology cases. The analytical caseload was small. They anticipated that the point-of-entry GYN navigator could take external breast cases, too. However, if the breast health navigator took external breast cases, the new point-of-entry navigator could take on another disease, and more of the cancer community could be served by navigation. The restructuring would require a review to determine how best to staff both areas and achieve the desired outcomes. The goal was to have all cancer diagnoses assigned to a point-of-entry navigator.

The oncology nurse navigators currently attend tumor board meetings and are active participants in Cancer Survivor's Day. The additional staff would give navigators time to explore other opportunities to engage with stakeholders.

The cancer center is involved in two ECHO (Extension for Community Healthcare Outcomes) projects, part of an international research program for health-care performance assessment. One is in the navigation of oncology patients, and one is for hereditary breast and ovarian cancer. Taking part in both of these ECHO projects adds to the breast health navigator's knowledge and improves ability to better serve patients. The director and supervisor of the breast health program participated in an education session with the physician who is spearheading the ECHO project and was quite intrigued by navigation's potential to impact patient care. Before the meeting had ended, he was already brainstorming on ways to streamline the process and how to partner with our genetic counselor team. It was very promising.

The organizational linkages the navigation team created as part of the PI process helped improve engagement with new audiences across the health care enterprise. While the PI project itself did not generate earth-shattering outcomes, the initiative created momentum for navigators to elevate their roles.

During the first quarter of 2020, the point-of-entry breast navigator navigated 22 breast cancer patients who were assigned to her by breast coordinators, and she navigated 34 women with breast cancer that were diagnosed outside and referred here for treatment. These 34 patients from outside hospitals previously would not have received the earliest point-of-entry navigation. Furthermore, the 22 patients were navigated further along the continuum of care than they previously would have been, according to the navigation leader.

A Patient Story: Metrics in Action

Susan has been receiving yearly colonoscopies in light of her family history with colon cancer. At her most recent routine screening, she was notified that a small mass was removed, along with some polyps, and the samples were sent to pathology. The pathology report was positive for cancer.

Susan is a 47-year-old single parent with two children in middle school. She is extremely concerned about her upcoming discussion with her children, finances, and how to juggle work and her pending treatment. She was very worried and anxious.

Susan was contacted by her navigator, Mary, who reviewed all the resources available at the cancer center and reviewed what Susan knew about her diagnosis. Susan knew she had cancer but knew nothing about staging or treatment options. Mary said she would meet Susan at her first medical oncology appointment. Susan was very appreciative. Mary asked what her concerns were right now, and Susan shared that she was worried and anxious over family and finances.

Mary asked Susan if she would like to discuss her worries right now. Susan declined and said she wanted a bit more time to process her emotions.

Mary met Susan at her medical oncologist appointment, and after her appointment, Mary sat with Susan and completed a psychosocial assessment. Susan marked that she was concerned with:

- Finances and co-payments for treatment
- Speaking with her children about her cancer diagnosis
- Worried about her children and their high-risk status
- Work and treatment schedule coordination

Susan stated she was an 8 out of 10 on the distress scale (10 being the highest). Mary made appropriate referrals for support and financial assistance; this was coordinated immediately.

Susan received the appropriate interventions from the financial counselor and social worker, and her level of distress decreased considerably to a level 2 on the scale. Susan now felt, “I can do this.”

Susan shared that without her navigator and early intervention, she would not have been prepared for her treatment. “I was in a dark hallway, and my navigator was my flashlight. I could not have done this without her.”



Takeaway

Early identification and interventions to address barriers by a navigator will help decrease psychosocial distress and increase treatment success.



Conclusion

No matter the metrics selected, navigation leaders must audit and monitor the metrics implementation activities until the program reaches the designated internal goals or national benchmarks. If the organization is committed to rolling out one metric measurement at a time, monitor performance, and move on to implementing other metrics only when the organization has established its ability to consistently meet the metric goal. A navigation program that rolls out numerous metrics measurement activities and demonstrates inconsistency in its ability to hit any of the target goals may only serve to shake confidence in the program.

In order for oncology navigation to continue to mature and excel as a key part of the cancer care process, navigators must continue to publish information on their own experience with navigation metrics. This can be done through the submission of abstracts, posters, and journal articles. AONN+ can assist members in this process. The organization makes this knowledge available to members through tools and resources on the website, as well as through the AONN+ National ACQUIRE Committee, which supports professional mentoring on oncology navigation.

While management guru Peter Drucker emphasized measurement and why it matters,⁴ great minds have also pointed out that not everything that can be measured ... matters. This toolkit and AONN+ emphasize the importance of implementing metrics that matter in terms of their impact on patient experience, clinical quality, ROI, and the toolkit is intended to support navigators in making these unique decisions. If navigators nationwide can successfully demonstrate their ability to implement a selected set of the standardized navigation metrics, it would then be possible to establish national benchmarks for measuring navigation performance and set up best practice exchanges/forums that would give navigators broader opportunities to share and learn from their colleagues. AONN+ stands ready to serve as the warehouse and distribution channel for this knowledge and strives to recruit navigators nationwide to engage in this growing movement.

Appendices

Appendix 1

Key Programmatic Questions to Drive Metrics Implementation

1 What national quality standards and indicators are currently being measured by your cancer program? (e.g., CoC, NAPBC, QOPI, OCM, etc.) (Chapter 2)

2 Who are the key stakeholders to support metrics implementation and outcomes processes for your navigation program? (e.g., leadership, IT staff, tumor registry staff) (Chapter 5)

3 What metrics are important to measure for your navigation program and important to identify for key stakeholders? In other words, what metrics will impact patient experience, clinical outcomes, and return on investment? (Chapter 3 and Appendix #2)

4 What barriers and challenges to metrics implementation have the key stakeholders already identified, including data collection, analysis, and reporting? (Chapter 4)



5 What data sources (i.e., EMR, tumor registry, claims data) and systems will be leveraged for data collection and reporting? (Chapters 5 and 7)

6 What challenges might you experience while implementing and managing metrics implementation? How can you plan for these? What potential facilitators/strategies could help to overcome these challenges? (Chapter 4)

7 How will your program track data and monitor trends for reporting? (Chapters 6 and 8)

8 How will you report outcome data and findings to stakeholders and others? How frequently? In what format? Who will conduct the analysis? (Chapter 8)

9 If evaluating your data indicates that performance improvement is needed, what methodology will your program utilize? (Chapter 9)



Appendix 2

TEN PILOT STUDY NAVIGATION METRICS

- 1 Barriers to care
- 2 Time from diagnosis to initial treatment
- 3 Navigation caseload
- 4 Number of navigated patients readmitted to the hospital at 30, 60, and 90 days
- 5 Psychosocial distress screening
- 6 Social support referrals
- 7 Palliative care referrals
- 8 Identifying patient learning-style preference
- 9 Navigation knowledge at the time of orientation
- 10 Patient experience/satisfaction with care

Detailed Study Metrics with Measurement Information

1 BARRIERS TO CARE	
Measure description	Number and list of specific barriers to care identified by navigator per month (obstacles that prevent a cancer patient from accessing care, services, resources and/or support)
Initial population	Number of cancer patients, regardless of age, who were receiving navigation services during the 6-month measurement period
Denominator	Total number of barriers identified per patient during the measurement period
Numerator	Number of barriers identified per patient per month
Exclusion and exception	None
Data sources	<ul style="list-style-type: none"> ■ EHR ■ NAVmetrics™ ■ Institutional navigation software
Key terms, data elements, codes	<ul style="list-style-type: none"> ■ Financial [insurance, transportation, communication, language, knowledge deficits, work/disability, need help at psychological (fear, anxiety, distress)] ■ Practical [children, etc.] ■ Physical [pain, anorexia, mobility] ■ Complex care coordination ■ Other [home, cultural, spiritual]
Unit of measurement or analysis	Number of barriers
Sampling	Care settings will be compared.
Risk adjustment	None per patient (outer data will be analyzed and omitted if necessary)
Data period	October 15, 2018, through April 15, 2019
Measure results	Monthly metric data will be compared between each study site and an aggregate benchmark for all participating sites; the benchmark will use rolling 12-month data and display 25th, 50th, and 75th percentiles.
Calculation/Measure algorithm	Data will be reported in percentiles.

2 DIAGNOSIS TO INITIAL TREATMENT

Measure description	Number of business days from diagnosis (date pathology resulted) to initial treatment modality (date of first treatment)
Initial population	Number of cancer patients, regardless of age, who were receiving navigation services during the 6-month measurement period
Denominator	Total days from pathology result to first treatment (all patients)
Numerator	Days from pathology result to first treatment per patient
Exclusion and exception	Patients who choose to delay treatment for purely personal reasons
Data sources	<ul style="list-style-type: none"> ■ EHR ■ Tumor Registry ■ NAVmetrics™ ■ Institutional navigation software
Key terms, data elements, codes	<ul style="list-style-type: none"> ■ Treatment modalities include chemotherapy, surgery, radiation therapy, endocrine therapy, and biotherapy ■ Pathology reports
Unit of measurement or analysis	Days
Sampling	Care settings will be compared.
Risk adjustment	None per patient (outer data will be analyzed and omitted if necessary)
Data period	October 15, 2018, through April 15, 2019
Measure results	A lower number indicates better quality; monthly metric data will be compared between each study site and an aggregate benchmark for all participating sites; the benchmark will use rolling 12-month data and display 25th, 50th, and 75th percentiles.
Calculation/Measure algorithm	Data will be reported in days.



3 NAVIGATION CASELOAD

Measure description	Number of new cases, open cases, and closed cases navigated per month
Initial population	Number of cancer patients, regardless of age, who were receiving services at that site during the 6-month measurement period
Denominator	Total number of analytic cases per navigated site
Numerator	Number of navigated new cases, open cases, and closed cases
Exclusion and exception	None
Data sources	<ul style="list-style-type: none"> ■ NAVmetrics™ ■ Institutional navigation software ■ Tumor Registry
Key terms, data elements, codes	<ul style="list-style-type: none"> ■ New cases: New patient cases referred to the navigation program per month. ■ Open cases: Patient cases that remain open/month. ■ Closed cases: Number of patient cases closed per month. Formal closing of a patient case from the navigation program.
Unit of measurement or analysis	Number of patients
Sampling	Care settings will be compared.
Risk adjustment	None per patient (outer data will be analyzed and omitted if necessary)
Data period	October 15, 2018, through April 15, 2019
Measure results	A higher number equals better quality; monthly metric data will be compared between each study site and an aggregate benchmark for all participating sites; the benchmark will use rolling 12-month data and display 25th, 50th, and 75th percentiles.
Calculation/Measure algorithm	Data will be reported as a percentage of patients.

4 30-, 60-, 90-DAY READMISSION RATE

Measure description	The number of navigated patients readmitted to the hospital at 30, 60, 90 days, reported quarterly.
Initial population	Number of cancer patients, regardless of age, who were receiving navigation services during the 6-month measurement period
Denominator	Number of navigated patients on caseload
Numerator	Number of navigated patients readmitted at 30, 60, 90 days
Exclusion and exception	None
Data sources	<ul style="list-style-type: none"> ■ Institutional financial database ■ NAVmetrics™
Key terms, data elements, codes	Diagnosis codes at readmission (chief complaint as it relates to the admission)
Unit of measurement or analysis	Number of patients
Sampling	Care settings will be compared.
Risk adjustment	None per patient (outer data will be analyzed and omitted if necessary)
Data period	October 15, 2018, through April 15, 2019
Measure results	A lower number indicates better quality; monthly metric data will be compared between each study site and an aggregate benchmark for all participating sites; the benchmark will use rolling 12-month data and display 25th, 50th, and 75th percentiles
Calculation/Measure algorithm	Data will be reported as a percentage of patients.



5 PSYCHOSOCIAL DISTRESS SCREENING	
Measure description	Number of navigated patients and reported types of distress per month that received psychosocial distress screening at a pivotal medical visit with a validated tool
Initial population	Number of cancer patients, regardless of age, who were receiving navigation services during the 6-month measurement period
Denominator	Number of navigated patients (navigator caseload; initial population)
Numerator	Number of navigated patients who received distress screening at a pivotal medical visit per month and reported types of distress
Exclusion and exception	The patient was offered, but refused, distress screening.
Data sources	<ul style="list-style-type: none"> ■ EHR ■ NAVmetrics™ ■ Institutional navigation software
Key terms, data elements, codes	<ul style="list-style-type: none"> ■ Distress screen ■ Pivotal medical visit definition: Period of high distress for the patient when psychosocial assessment should be completed ■ Validated tool examples: ■ Functional Assessment of Cancer Therapy, National Comprehensive Cancer Network Psychosocial Distress Screening Thermometer
Unit of measurement or analysis	Number of patients and types of distress reported
Sampling	Care settings will be compared.
Risk adjustment	None per patient (outer data will be analyzed and omitted if necessary)
Data period	October 15, 2018, through April 15, 2019
Measure results	A higher number equals better quality; monthly metric data will be compared between each study site and an aggregate benchmark for all participating sites; the benchmark will use rolling 12-month data and display 25th, 50th, and 75th percentiles.
Calculation/Measure algorithm	Data will be reported as a percentage of patients.

6 SOCIAL SUPPORT REFERRALS	
Measure description	Number of navigated patients referred to support network per month
Initial population	Number of cancer patients, regardless of age, who were receiving navigation services during the 6-month measurement period
Denominator	Total number of navigated patients per month
Numerator	Number of navigated patients receiving support service referrals per month
Exclusion and exception	None
Data sources	<ul style="list-style-type: none"> ■ EHR ■ NAVmetrics™ ■ Institutional navigation software
Key terms, data elements, codes	<ul style="list-style-type: none"> <li style="width: 50%;">■ Social worker <li style="width: 50%;">■ Hospice <li style="width: 50%;">■ Psychologist <li style="width: 50%;">■ Financial Counselor <li style="width: 50%;">■ Psychiatrist <li style="width: 50%;">■ Patient Support Groups <li style="width: 50%;">■ Chaplain/Pastoral Care <li style="width: 50%;">■ Caregiver Support Group <li style="width: 50%;">■ Counselor (family, couple, individual, children) <li style="width: 50%;">■ Children Support Group <li style="width: 50%;">■ Palliative care <li style="width: 50%;">■ Certified Health Coach
Unit of measurement or analysis	Number of patients
Sampling	Care settings will be compared.
Risk adjustment	None per patient (outer data will be analyzed and omitted if necessary)
Data period	October 15, 2018, through April 15, 2019
Measure results	A higher number equals better quality; monthly metric data will be compared between each study site and an aggregate benchmark for all participating sites; the benchmark will use rolling 12-month data and display 25th, 50th, and 75th percentiles.
Calculation/Measure algorithm	Data will be reported as a percentage of patients.



7 PALLIATIVE CARE REFERRAL

Measure description	Number of navigated patients per month assessed using the Edmonton System Assessment Scale who were referred for palliative care services (for symptom management)
Initial population	Number of cancer patients, regardless of age, who were receiving navigation services during the 6-month measurement period
Denominator	Number of navigated patients
Numerator	Number of navigated patients assessed using the Edmonton System Assessment Scale who received a palliative care referral
Exclusion and exception	Patients who expired that month
Data sources	<ul style="list-style-type: none"> ■ EHR ■ NAVmetrics™ ■ Institutional navigation software
Key terms, data elements, codes	<ul style="list-style-type: none"> ■ Palliative care ■ Referral
Unit of measurement or analysis	Number of patients assessed using the Edmonton System Assessment Scale
Sampling	Care settings will be compared.
Risk adjustment	None per patient (outer data will be analyzed and omitted if necessary)
Data period	October 15, 2018, through April 15, 2019
Measure results	A higher number equals better quality; monthly metric data will be compared between each study site and an aggregate benchmark for all participating sites; the benchmark will use rolling 12-month data and display 25th, 50th, and 75th percentiles.
Calculation/Measure algorithm	Data will be reported as a percentage of patients.

8 IDENTIFYING LEARNING STYLE PREFERENCE	
Measure description	Number of navigated patients per month whose preferred learning style was discussed during the intake process
Initial population	Number of cancer patients, regardless of age, who were receiving navigation services during the 6-month measurement period
Denominator	Number of new navigated patients per month
Numerator	Number of new navigated patients with identified learning styles
Exclusion and exception	None
Data sources	<ul style="list-style-type: none"> ■ EHR ■ NAVmetrics™ ■ Institutional navigation software
Key terms, data elements, codes	<p>Learning styles:</p> <ul style="list-style-type: none"> ■ Visual (spatial): You prefer using pictures, images, and spatial understanding ■ Aural (auditory-musical): You prefer using sound and music ■ Verbal (linguistic): You prefer using words, both in speech and writing ■ Physical (kinesthetic): You prefer using your body, hands, and sense of touch ■ Logical (mathematical): You prefer using logic, reasoning, and systems ■ Social (interpersonal): You prefer to learn in groups or with other people ■ Solitary (intrapersonal): You prefer to work alone and use self-study
Unit of measurement or analysis	Number of patients
Sampling	Care settings will be compared.
Risk adjustment	None per patient (outer data will be analyzed and omitted if necessary)
Data period	October 15, 2018, through April 15, 2019
Measure results	A higher number equals better quality; monthly metric data will be compared between each study site and an aggregate benchmark for all participating sites; the benchmark will use rolling 12-month data and display 25th, 50th, and 75th percentiles.
Calculation/Measure algorithm	Data will be reported as a percentage of patients.



9 NAVIGATION KNOWLEDGE AT TIME OF ORIENTATION

Measure description	Percentage of new hires that have completed institutionally developed navigator core competencies
Initial population	Total number of navigators
Denominator	Number of new hires
Numerator	Number of new hires who completed institutionally developed navigator core competencies
Exclusion and exception	None
Data sources	<ul style="list-style-type: none"> ■ Hospital orientation records through Human Resources ■ Navigation department records ■ NAVmetrics™
Key terms, data elements, codes	Navigator Core Competencies
Unit of measurement or analysis	Number of navigators
Sampling	Care settings will be compared.
Risk adjustment	None
Data period	October 15, 2018, through April 15, 2019
Measure results	A higher number equals better quality; monthly metric data will be compared between each study site and an aggregate benchmark for all participating sites; the benchmark will use rolling 12-month data and display 25th, 50th, and 75th percentiles.
Calculation/Measure algorithm	Data will be reported as a percentage of new hires.

10 PATIENT EXPERIENCE/SATISFACTION WITH CARE

Measure description	Patient experience or patient satisfaction survey results per month (utilizing a study-specific survey)
Initial population	Number of cancer patients, regardless of age, who were receiving navigation services during the 6-month measurement period
Denominator	Number of navigated patients (caseload)
Numerator	Number of navigated patients completing a satisfaction survey
Exclusion and exception	None
Data sources	<ul style="list-style-type: none"> ■ EHR ■ NAVmetrics™ ■ Institutional navigation software
Key terms, data elements, codes	<ul style="list-style-type: none"> ■ Patient engagement ■ Patient satisfaction
Unit of measurement or analysis	Number of patients
Sampling	Care settings will be compared.
Risk adjustment	None
Data period	October 15, 2018, through April 15, 2019
Measure results	A higher number equals better quality; monthly metric data will be compared between each study site and an aggregate benchmark for all participating sites; the benchmark will use rolling 12-month data and display 25th, 50th, and 75th percentiles.
Calculation/Measure algorithm	Data will be reported as a percentage of patients.

Appendix 3

Many of the metrics pilot study sites used the PDSA model to manage their improvement activities

One of the metrics pilot study sites used this PDSA model form below. Their improvement project focused on improving how the navigation team could better incorporate the patient experience survey into the cancer care process. The completed form is offered in the toolkit to illustrate how it can be used.

Model for Improvement

THREE QUESTIONS FOR IMPROVEMENT

1 What are we trying to accomplish (aim)?

The team is trying to identify the correct time to provide the patient experience survey. They also want to create a solid process so that 1) the patients understand the survey; 2) the patients know exactly who the navigators are for responding to the survey; 3) the navigator provides the best modality for the patient receiving the survey, i.e., electronic vs. hardcopy/mail back.

2 How will we know that change is an improvement (measures)?

Surveys will be returned by the patients in a timely manner, and the answers will reflect the encounters the navigator has had with the patient.

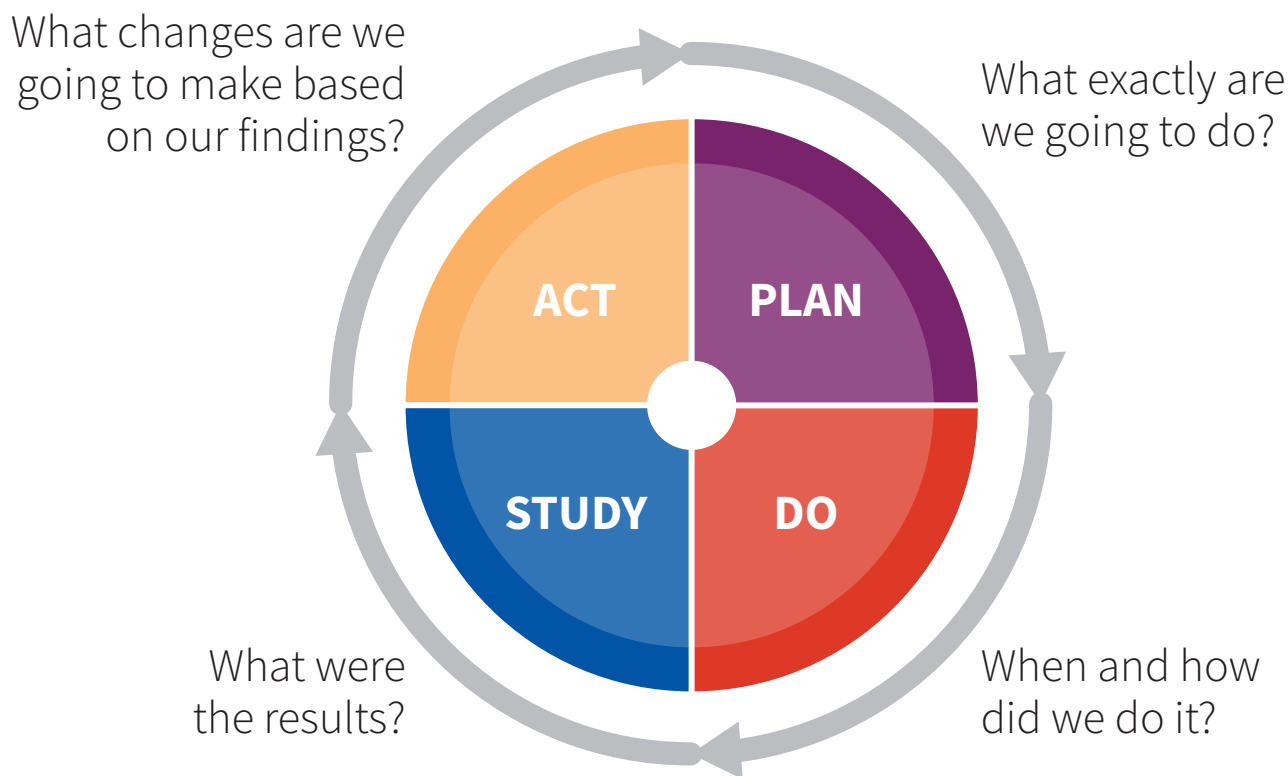
3 What change can we make that will result in an improvement?

The team created a cover letter for the mailed surveys to help patients understand the survey and enable them to better evaluate the navigator/navigators they had. The team also recognized that patients receive several surveys from the healthcare organization, so they will need to coordinate with the other organizational survey efforts so that the patients don't get survey fatigue.

We will be developing our own Patient Satisfaction survey for our patients. As stated, it will include a sheet with a picture of all the navigators and our roles. We will continue to mail the questionnaires to the patients since many do not have access to a computer. The paper-based survey method may help patients feel more comfortable and elicit more truthful responses.

Our hospital is mailing the Press Ganey Questionnaires to all the inpatients, and it has recently started sending Questionnaires to outpatients. Our Patient Satisfaction Committee does not wish for us to have an additional questionnaire for the patients to answer, so we are unable to move forward with a navigation-specific survey.

PDSA Model



1 PLAN

- What change are you testing with the PDSA cycle(s)?
- What do you predict will happen, and why?
- Who will be involved in this PDSA? (e.g., one staff member or resident, one shift?). Whenever feasible, it will be helpful to involve direct-care staff.
- Plan a small test of change.
- How long will the change take to implement?
- What resources will be needed? What data need to be collected?

List your action steps along with the person(s) responsible and the timeline.

- The healthcare organization does not have a navigation-specific patient survey in place.
- As part of the navigation metrics study, patients who were seen by the navigators at the beginning of the study will be sent the Patient Experience Survey provided by the study.
- A cover letter will accompany the survey to help patients understand what is being asked and why they are being asked these questions.



2 DO

Carry out the test on a small scale. Document observations, including any problems and unexpected findings.

Collect data you identified as needed during the “plan” stage.

Describe what happened when you ran the test.

- Many patients do not have access to a computer, so it was decided to mail the questionnaire/cover letter and a return addressed, postage-paid envelope so that it would be anonymous and more convenient to complete and return.
- The navigators have identified patients they have had encounters with and sent the survey to those patients. The cover letter accompanied the survey. The letter also has the Cancer Center director’s name and contact information so that the patient is not influenced in the evaluation of the navigators.

3 STUDY

- Study and analyze the data. Determine if the change resulted in the expected outcome.
- Were there implementation lessons?
- Summarize what was learned. Look for: unintended consequences, surprises, successes, failures.

Describe the measured results and how they compared to the predictions.

- After sending out almost 100 surveys, we have had only 20 surveys returned. Some of the responses on the survey indicate that the patient may have been confused about the navigators and their roles.

4 ACT

Based on what was learned from the test:

- Adapt – modify the changes and repeat the PDSA cycle.
- Adopt – consider expanding the changes in your organization to additional residents, staff, and units.
- Abandon – change your approach and repeat the PDSA cycle.

Describe what modifications to the plan will be made for the next cycle from what you learned.

- Moving forward, we have discussed developing our own navigation survey. The survey will include questions that are more specific to our roles. It would include a picture and description of the roles of the navigators. We feel this will give the patient a better understanding of who we are and our roles.

Appendix 4

Edmonton Symptom Assessment System (ESAS) Screening Tool

NAVmetrics

**Edmonton Symptom Assessment System:
(revised version) (ESAS-R)**

Please circle the number that best describes how you feel NOW:

No Pain	0	1	2	3	4	5	6	7	8	9	10	Worst Possible Pain
No Tiredness <i>(Tiredness = lack of energy)</i>	0	1	2	3	4	5	6	7	8	9	10	Worst Possible Tiredness
No Drowsiness <i>(Drowsiness = feeling sleepy)</i>	0	1	2	3	4	5	6	7	8	9	10	Worst Possible Drowsiness
No Nausea	0	1	2	3	4	5	6	7	8	9	10	Worst Possible Nausea
No Lack of Appetite	0	1	2	3	4	5	6	7	8	9	10	Worst Possible Lack of Appetite
No Shortness of Breath	0	1	2	3	4	5	6	7	8	9	10	Worst Possible Shortness of Breath
No Depression <i>(Depression = feeling sad)</i>	0	1	2	3	4	5	6	7	8	9	10	Worst Possible Depression
No Anxiety <i>(Anxiety = feeling nervous)</i>	0	1	2	3	4	5	6	7	8	9	10	Worst Possible Anxiety
Best Wellbeing <i>(Wellbeing = how you feel overall)</i>	0	1	2	3	4	5	6	7	8	9	10	Worst Possible Wellbeing
No _____ Other Problem <i>(for example constipation)</i>	0	1	2	3	4	5	6	7	8	9	10	Worst Possible _____

Patient's Name _____

Date _____ Time _____

Completed by (check one):

- Patient
- Family caregiver
- Health care professional caregiver
- Caregiver-assisted

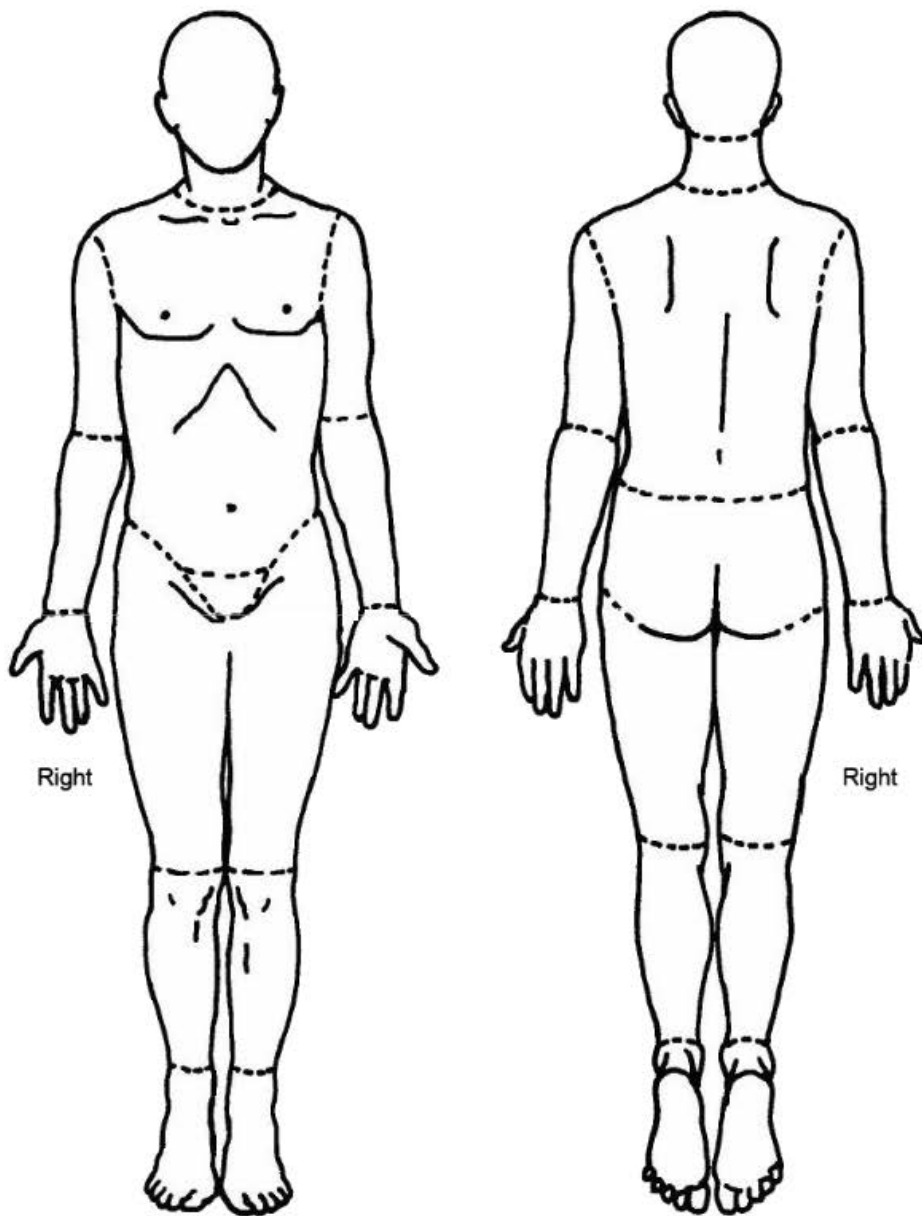
BODY DIAGRAM ON REVERSE SIDE

ESAS-r

Source: <http://www.palliative.org/NewPC/professionals/tools/esas.html>



Please mark on these pictures where it is that you hurt:



Appendix 5

NCCN Distress Tool

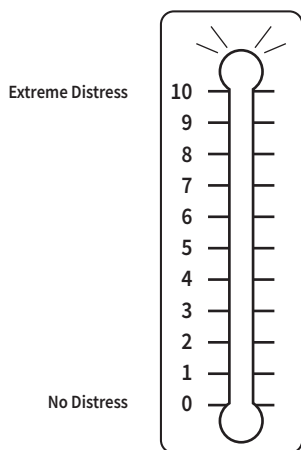


NCCN Distress Thermometer and Problem List for Patients

NCCN DISTRESS THERMOMETER

Distress is an unpleasant experience of a mental, physical, social, or spiritual nature. It can affect the way you think, feel, or act. Distress may make it harder to cope with having cancer, its symptoms, or its treatment.

Instructions: Please circle the number (0-10) that best describes how much distress you have been experiencing in the past week, including today.



PROBLEM LIST

Please indicate if any of the following has been a problem for you in the past week, including today. Be sure to check YES or NO for each.

- | YES | NO | <u>Practical Problems</u> | YES | NO | <u>Physical Problems</u> |
|--------------------------|--------------------------|--------------------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | Child care | <input type="checkbox"/> | <input type="checkbox"/> | Appearance |
| <input type="checkbox"/> | <input type="checkbox"/> | Food | <input type="checkbox"/> | <input type="checkbox"/> | Bathing/dressing |
| <input type="checkbox"/> | <input type="checkbox"/> | Housing | <input type="checkbox"/> | <input type="checkbox"/> | Breathing |
| <input type="checkbox"/> | <input type="checkbox"/> | Insurance/financial | <input type="checkbox"/> | <input type="checkbox"/> | Changes in urination |
| <input type="checkbox"/> | <input type="checkbox"/> | Transportation | <input type="checkbox"/> | <input type="checkbox"/> | Constipation |
| <input type="checkbox"/> | <input type="checkbox"/> | Work/school | <input type="checkbox"/> | <input type="checkbox"/> | Diarrhea |
| <input type="checkbox"/> | <input type="checkbox"/> | Treatment decisions | <input type="checkbox"/> | <input type="checkbox"/> | Eating |
| | | | <input type="checkbox"/> | <input type="checkbox"/> | Fatigue |
| | | | <input type="checkbox"/> | <input type="checkbox"/> | Feeling swollen |
| <input type="checkbox"/> | <input type="checkbox"/> | <u>Family Problems</u> | <input type="checkbox"/> | <input type="checkbox"/> | Fevers |
| <input type="checkbox"/> | <input type="checkbox"/> | Dealing with children | <input type="checkbox"/> | <input type="checkbox"/> | Getting around |
| <input type="checkbox"/> | <input type="checkbox"/> | Dealing with partner | <input type="checkbox"/> | <input type="checkbox"/> | Indigestion |
| <input type="checkbox"/> | <input type="checkbox"/> | Ability to have children | <input type="checkbox"/> | <input type="checkbox"/> | Memory/concentration |
| <input type="checkbox"/> | <input type="checkbox"/> | Family health issues | <input type="checkbox"/> | <input type="checkbox"/> | Mouth sores |
| | | | <input type="checkbox"/> | <input type="checkbox"/> | Nausea |
| | | | <input type="checkbox"/> | <input type="checkbox"/> | Nose dry/congested |
| <input type="checkbox"/> | <input type="checkbox"/> | <u>Emotional Problems</u> | <input type="checkbox"/> | <input type="checkbox"/> | Pain |
| <input type="checkbox"/> | <input type="checkbox"/> | Depression | <input type="checkbox"/> | <input type="checkbox"/> | Sexual |
| <input type="checkbox"/> | <input type="checkbox"/> | Fears | <input type="checkbox"/> | <input type="checkbox"/> | Skin dry/itchy |
| <input type="checkbox"/> | <input type="checkbox"/> | Nervousness | <input type="checkbox"/> | <input type="checkbox"/> | Sleep |
| <input type="checkbox"/> | <input type="checkbox"/> | Sadness | <input type="checkbox"/> | <input type="checkbox"/> | Substance use |
| <input type="checkbox"/> | <input type="checkbox"/> | Worry | <input type="checkbox"/> | <input type="checkbox"/> | Tingling in hands/feet |
| <input type="checkbox"/> | <input type="checkbox"/> | Loss of interest in usual activities | | | |
| <input type="checkbox"/> | <input type="checkbox"/> | <u>Spiritual/Religious Concerns</u> | | | |

Other Problems: _____

Version 2.2020, 03/11/20. The NCCN Clinical Practice Guidelines (NCCN Guidelines®) are a statement of evidence and consensus of the authors regarding their views of currently accepted approaches to treatment. Any clinician seeking to apply or consult the NCCN Guidelines is expected to use independent medical judgment in the context of individual clinical circumstances to determine any patient care or treatment. The National Comprehensive Cancer Network® (NCCN®) makes no representations or warranties of any kind regarding their content, use or application and disclaims any responsibility for their application or use in any way. The NCCN Guidelines are copyrighted by the National Comprehensive Cancer Network®. All rights reserved. The NCCN Guidelines and the illustrations herein may not be reproduced in any form without the express written permission of NCCN. ©2020.

Appendix 6

Sample Patient Experience Survey

Development of the **CAHPS Cancer Care Survey**. The content was last reviewed in March 2017. Agency for Healthcare Research and Quality, Rockville, MD.

PATIENT CANCER EXPERIENCE SURVEY WITH NAVIGATION SERVICES*

1. Since you were told your cancer diagnosis and had your initial visit with your oncology specialist about treatment options, how often has your clinical nurse navigator or patient navigator recap and review with you about those treatment options?
 - A lot
 - Some
 - A little
 - Not at all
2. Since you were told your cancer diagnosis and had the initial visit with the oncology specialist about treatment options, did a clinical nurse navigator or patient navigator encourage you to participate in the decisions about your cancer treatment?
 - Yes, definitely
 - Yes, somewhat
 - No
3. Since you were told your cancer diagnosis, did a clinical nurse navigator or patient navigator ask for you about your goals for treatment?
 - Yes, definitely
 - Yes, somewhat
 - No
4. In the last three months, how often did your clinical nurse navigator or patient navigator listen carefully to you regarding your needs?
 - Never
 - Sometimes
 - Usually
 - Always
5. In the last three months, how often did your clinical nurse navigator or patient navigator spend time with you regarding your needs?
 - Never
 - Sometimes
 - Usually
 - Always

PATIENT CANCER EXPERIENCE SURVEY WITH NAVIGATION SERVICES*

6. In the last three months, did you and your clinical nurse navigator or patient navigator talk about any emotional concerns you have been having, such as anxiety or depression?

- Yes
- No

7. In the last three months, did you discuss the need for additional services with your clinical nurse navigator or patient navigator to manage your cancer care such as social work, dietician, genetic counseling, pastoral care, financial counselor, other?

- Yes
- No

8. Using any number from 0 to 10, where 0 is the worst and 10 is best, what number would you use to rate your clinical nurse navigator or patient navigator actions with you over the last three months?

- 0 Worst possible
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 Best possible

Comments:

Patient Name(optional): _____

Contact Number: _____

*What's is Available for the CAHPS Cancer Care Survey. Consumer Assessment of Healthcare Providers and Systems. Document No. 51. 2017.

Appendix 8

Additional Reading Resources

AONN+ Metrics Webpage

The creation of the standardized national metrics to measure programmatic success is vital to coordinating high-quality, team-based care and demonstrating the sustainability of navigation programs. It is imperative that oncology nurses and patient navigators understand that active participation in data collection, analytics, and reporting outcomes are not added responsibilities but are already a part of the professional role. The implications for navigation practices using quality navigation measures are that they are transformative, evaluate professional practice and care delivery, define oncology navigation practice and outcomes, and are necessary for the sustainability of navigation.

- **[Standardized Evidence-Based Oncology Navigation Metrics for All Models: A Powerful Tool in Assessing the Value and Impact of Navigation Programs](#)**
- **[AONN+ Evidence-Based Oncology Navigation Metrics Crosswalk with National Oncology Standards and Indicators](#)**
- **[AONN+ Standardized Metrics Source Document](#)**



Oncology Disease-Site Process Mapping: Coordinating Care Across the Continuum



Oncology Disease-Site Process Mapping Coordinating care across the continuum

Coordinating care across the continuum for the oncology patient is extremely complicated, often including many sites of service and numerous providers. In today's oncology setting, physicians and support staff must work smarter—not harder—by decreasing duplication for both staff and patients. Efficiency is paramount as the industry transitions to value-based models. Most important, patients deserve a smooth transition with warm handoffs during the process. Through our work with cancer programs across the U.S., we have found disease site process mapping to be one of the most effective tools to understand current patient flow and identify opportunities for improving patient experience. In this article, we will walk through the “how-to’s” of process mapping that can be successfully applied to any cancer program.

Getting Started

Getting healthcare professionals to work as a team to map and potentially reconfigure the patients' journey can provide clinical benefits across a variety of specialties. In fact, streamlining the process of patient care solves multiple purposes in that it seeks to:

- Provide the best experience for the patient
- Decrease duplication of effort for the patient
- Utilize staff appropriately and efficiently
- Increase (and improve) communication among the cancer care team.

Disease-site-specific process mapping also allows a thorough review of the continuum of care specific to patients with that disease (e.g., colorectal cancer) and assists staff in visualizing the entire care continuum with all its interdependencies.

Who Should Participate?

First, it is essential to include key individuals and stakeholders involved in the disease-specific continuum of care. Mapping-team participants should represent the clinics, departments, and/or offices that touch patients during their journey. In our experience, frontline staff members best understand the details of the patient flow, operations, and any barriers or gaps encountered most often; however, this does not preclude managers or administrators from also participating. The list below details individuals and/or departments that should be represented during the process mapping exercise, including:

- Surgery
- Medical oncology
- Radiation oncology
- Primary care
- Radiology
- Registration and insurance verification staff
- Admitting department
- Pre-anesthesia testing department
- Inpatient RN
- Inpatient unit case manager and/or discharge planner
- Navigator
- Social worker
- Registered dietitian
- Financial counselor
- Tumor conference coordinator
- Tumor registrar
- Genetic counselor
- Clinical research
- Behavioral health
- Rehabilitation/Prehabilitation
- Others deemed necessary.

“Process mapping is an aid to plan changes more effectively and re-evaluate what changes were implemented at what point. Understanding transitions in care from a patient perspective helps the healthcare team provide a better patient experience with increased efficiency and less duplication.”

AMY POOLE, DIRECTOR, CANCER CARE SERVICES,
PARKVIEW CANCER INSTITUTE, FORT WAYNE, IND.

The Process Mapping Experience

The first process mapping session should last between 90 minutes to 2 hours. Blocking off this amount of time with the representatives listed above may be challenging, but it can be done and the results are more than worth the effort. Using a large roll of paper (e.g., 15 ft. long x 4 ft. wide), the group should outline the current state continuum of care, step-by-step, starting at the earliest point of entry for the patient. Each detail must be discussed, including the length of time from one episode of care to another, delays, gaps, duplication of services, and opportunities for improvement. Participants are encouraged to share their goals of what a future-state process might look like during this discussion. As straight forward as the exercise sounds, it requires a planned approach as there are many

Table 1. Benefits of Process Mapping

- | |
|--|
| • Team members review roles and responsibilities. |
| • Team members understand, reinforce, and support each other's job functions. |
| • Enhanced coordination of patients' needs across the continuum. |
| • Team identifies opportunities for performance improvement. |
| • Team identifies common gaps and delays in care. |
| • Team coordinates care with the patient and/or caregiver at the center of the discussion. |
| • Physicians gain an increased understanding of the roles and responsibilities of the support staff. |

CASE STUDY

In 2015, a cancer program in the Midwest initiated a multidisciplinary colorectal clinical performance group that included representation from surgery, medical oncology, radiation oncology, pathology, radiology, primary care, and other ancillary and support staff. During the group's second meeting, the team began the process of mapping out its current-state continuum of care team and identifying barriers and opportunities for improvement. Below are some of the positive outcomes that came from the group's efforts.

Reduced Colonoscopy Outmigration

Based on the process mapping exercise, the group immediately identified delays in care leading to outmigration for colonoscopies. The primary care physician (PCP) on the team revealed that delays in care had forced her to refer outside for urgent colonoscopies, which usually resulted in patients receiving their entire course of treatment at another facility. The PCP also communicated that routine colonoscopy patients would often independently schedule their procedures outside of the system due to delays in care.

Within two weeks of identifying this issue, the group implemented a revised intake process, which included the introduction of high-risk screening, the revision of intake forms, and the establishment of blocked time for urgent colonoscopies. Immediate results were realized, with patient outmigration for colonoscopy procedures decreasing significantly in the first quarter of 2016.

Improved Patient Experience Scores Following Expedited Pathology Process

Critical points of entry in the continuum were identified for support staff, navigators, social workers, the registered dietitian, and the financial counselor. The group decided that the navigators

should receive positive pathology reports from the tumor registrar within one day of pathology results being available. The navigator would then contact the patient and provide a comprehensive assessment of the patient's needs, coordinating with appropriate disciplines as needed. Feedback collected through surveys showed that patient experience improved directly following the introduction of this policy.

Expedited Follow-up for Distressed Patients

Although the group identified that psychosocial distress screenings were being performed, follow-up from the screening was often delayed for a few days to a several weeks. The team identified inconsistencies in the screening process as the primary driver of poor follow-up times, and implemented a process where the screening was to be completed at the first chemotherapy visit and the first radiation oncology visit. This process helped the center meet the Commission on Cancer's Standard 3.2, which requires psychosocial distress screening to be provided at 'pivotal medical visits,' and helped reduce the average follow-up time by several days.

Reduced Duplication of Services

An additional need identified from the process mapping exercise was clarification on the roles and responsibilities of support staff. Using job descriptions and best practices, the support staff met with the group to document their specific roles and responsibilities and identified several situations where multiple staff were reaching out to the patient to complete the same task. The group came to an agreement on who would be responsible for specific tasks at a given time, leading to an immediate reduction in duplication of services.

complex and interdependent steps that are revealed as the discuss progresses.

Process mapping exercises are not completed during a single session. It can take several meetings to review and revise the process map and arrive at a final version, signed off by all participants. If key individuals or a sub process appears to have been missed in a prior session, make note of it and include the individual(s) and/or information in a follow-up session. The facilitator, usually an administrator or third-party participant,

plays an important role in keeping the team on task and the discussion moving.


Once the entire disease-site process is complete, overlay this with when the team would like a navigator and support staff to intervene. Remember, the goal is to provide patient-experience interventions as soon as possible in a proactive manner, "staying one step ahead of the patient." Also incorporate when the team would like to initiate the distress screening process by identifying periods of highest distress for the patient and/or family. The

administrator or team should review the process map on an annual or semi-annual basis.

During the process mapping exercise, the team will inevitably identify unexpected findings, for example, duplication in patient education. These additional findings lead to smaller workgroups that can focus on decreasing redundancies and increasing overall efficiency. There has not been a single time in our experience where a physician or staff member walked away without exclaiming, “I had no idea that was happening.” Small changes can have large effects on the patient experience, and learning where opportunities exist in the current-state process can aid in increasing care efficiency and clinical outcomes.

Reaping the Benefits

Process mapping results in clearly defined transitions of care from a patient’s initial diagnosis to his or her survivorship or end of life. By better understanding the overall process and how each person’s role fits into that process, the team is positioned for enhanced collaboration and better support for the patient. The final map can be used as a tool when onboarding a new staff member, for succession planning, and to plan future process changes. Further, the map helps to establish a baseline for evaluating when changes are implemented, and assessing how those changes impacted the continuum of care. Table 1, page XX, illustrates the many benefits process mapping can bring to cancer programs.

Having all healthcare providers clearly understand the transitions in care from a patient perspective provides a better patient experience with increased efficiency and less duplication. This process is not only a learning experience for staff, it is also a team building exercise that highlights how individual roles work contribute toward a common goal. 

Tricia Strusowski, RN, MS, is manager, Oncology Solutions and Matthew Shoemaker, is senior consultant, Oncology Solutions, Decatur, Ga.

“Provides support staff and clinicians a “blue-print” of the standard of care and when and what people are doing along the continuum. It helps all levels in each service line understand the process of patients entering the system and moving through the various combinations of treatments. With process mapping, you are able to create a priority list and color-code your easy fixes, critical fixes, and fixes that may involve larger teams and timelines.”

ALYSSIA CREWS, DIRECTOR SUPPORT SERVICES,
MIAMI CANCER INSTITUTE, MIAMI, FLA.



REFERENCES BY CHAPTER

Executive Summary

1. Strusowski T, Stapp J. Patient navigation metrics: measuring the impact of your patient navigation services. *Oncol Issues*. 2016;31(1):56-63. Published online: August 10, 2017:62-69.
2. Strusowski T., Sein, E., et al. Standardized Evidence-Based Oncology Navigation Metrics for All Models. *JONS-Online*, May 2017.
3. Johnston D, Watson L, Strusowski T, et al. National evidence-based oncology navigation metrics: multisite exploratory study to demonstrate value and sustainability of navigation programs. *Journal of Oncology & Navigation Survivorship*. 2019;10(11):481.

Chapter 1

1. Simone JV, Hewitt M, eds. *Ensuring Quality Cancer Care*. Washington, DC: National Academies Press; 1999:218.
2. Johnston D, Sein E, Strusowski T. Academy of Oncology Nurse & Patient Navigators announces standardized navigation metrics. . <https://aonnonline.org/education/articles/10-aonn-announces-standardized-navigation-metrics>. March 10, 2017.
3. Academy of Oncology Nurse & Patient Navigators. Helpful definitions. <https://aonnonline.org/education/helpful-definitions>.
4. Wagner EH, Ludman EJ, Aiello Bowles EJ, et al. Nurse navigators in early cancer care: a randomized, controlled trial. *J Clin Oncol*. 2014;32(1):12-18. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3867643/pdf/zlj12.pdf>
5. Bellomo C. The effects of navigator intervention on the community of care and patient satisfaction of patients with cancer. *Journal of Oncology & Navigation Survivorship*. 2014;5(6):14-20. <http://www.jons-online.com/issues/2014/december-2014-vol-5-no-6/1291-the-effect-of-navigator-intervention-on-the-continuity-of-care-and-patient-satisfaction-of-patients-with-cancer>.
6. Strusowski T, Johnston D. AONN+ evidence-based oncology navigation metrics crosswalk with national oncology standards and indicators. *Journal of Oncology & Navigation Survivorship*. 2018;9(6). <http://www.jons-online.com/issues/2018/june-2018-vol-9-no-6/1852-aonn-evidence-based-oncology-navigation-metrics-crosswalk-with-national-jons-oncology-standards-and-indicators>.
7. Esparza A, Calhoun E. Measuring the impact and potential of patient navigation: proposed common metrics and beyond. *Cancer*. 2011;117(suppl 15):3537-3538. <https://acsjournals.onlinelibrary.wiley.com/doi/pdf/10.1002/cncr.26265>
8. Strusowski T, Johnston D. Barriers to administrative engagement in navigation programs. *Journal of Oncology & Navigation Survivorship*. 2018;9(3):112-119. <http://www.jons-online.com/issues/2018/march-2018-vol-9-no-3/1810-barriers-to-administrative-engagement-in-navigation-programs>.
9. Jojola CE, Cheng H, Wong LJ, et al. Efficacy of patient navigation in cancer treatment: a systematic review. *Journal of Oncology & Navigation Survivorship*. 2017;8(3):106-115.

Chapter 2

1. Drucker PF. *Managing for Results*. New York: Harper & Row Publishers Inc; 1964:15.
2. The Drucker Institute. <https://www.drucker.institute/thedx/measurement-myopia/>
3. Commission on Cancer. *Optimal Resources for Cancer Care (2020 Standards)*. https://www.facs.org/-/media/files/quality-programs/cancer/coc/optimal_resources_for_cancer_care_2020_standards.ashx.
4. Hewitt M, Simone JV, editors. *Ensuring quality cancer care*. Washington, DC: National Academy Press; 1999. Pg 79.
5. Johnston D, Strusowski T. AONN+ Evidence-based oncology navigation metrics crosswalk with national oncology standards and indicators. *Journal of Oncology & Navigation Survivorship*. 2018;9(6):214-221.
6. Rocque GB, Partridge EE, MD, Pisu M, et al. The Patient Care Connect Program: transforming health care through lay navigation. *J Oncol Pract*. 2016;12:e633-e642. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5702802/>.
7. Barnsteiner JH, Reeder VC, Palma WH, et al. Promoting evidence-based practice and translational research. *Nurs Admin Q*. 2010;34(3):217-225. doi: 10.1097/NAQ.0b013e3181e702f4.

Chapter 3

1. Bellomo C. The effects of navigator intervention on the community of care and patient satisfaction of patients with cancer. *Journal of Oncology & Navigation Survivorship*. 2014;5(6):16-20.
2. Esparza A, Calhoun E. Measuring the impact and potential of patient navigation: proposed common metrics and beyond. *Cancer*. 2011;117(suppl 15):3537-3538.
3. Battaglia TA, Burhansstipanov L, Murrell SS, et al. . Assessing the impact of patient navigation: prevention and early detection metrics. *Cancer*.2011;117(suppl 15):3553-3564.
4. Byers T. Assessing the value of patient navigation for completing cancer screening. *Cancer, Epidemiology Biomarkers &Prevention*, October 2012, p. 1618.
5. Strusowski T, Stapp J. Patient navigation metrics: measuring the impact of your patient navigation services. *Oncol Issues*. 2016;31(1):56-63. Published online: August 10, 2017:62-69.
6. Academy of Oncology Nurse & Patient Navigators. *Standardized Metrics Source Document*. 2017. <https://www.aonnonline.org/metrics-source-document>.https://aonnonline.org/images/articles/standardized_metrics/Metrics-Source-Document.pdf
7. Strusowski T., Sein, E., et al. *Standardized Evidence-Based Oncology Navigation Metrics for All Models*. JONS-Online, May 2017.
8. NavMetrics PPT Slide 5
9. Barnsteiner J, Reeder VC, Palma WH, et al. Promoting evidence-based practice and translational research. *Nurs Adm Q*. 2010;34:217-225.
10. Crane-Okada R. Evaluation and outcome measure in patient navigation. *Semin Oncol Nurs*. 2013;29:128-140.

11. Guadagnolo BA, Dohan D, Raich P. Metrics for evaluating patient navigation during cancer diagnosis and treatment: crafting a policy-relevant research agenda for patient navigation in cancer care. *Cancer*. 2011;117(suppl 15):3565-3574.
12. Clinical Navigator: <https://www.aonnonline.org/certification/nurse-navigator-certification>
13. Non-Licenses Patient Navigator: <https://www.aonnonline.org/certification/patient-navigator-certification>
14. Academy of Oncology Nurse & Patient Navigators. NAVmetrics pilot study seeks to identify barriers to navigation metrics implementation. *Journal of Oncology & Navigation Survivorship*. 2019;10(2):59-60. <http://www.jons-online.com/issues/2019/february-2019-vol-10-no-2/2248-navmetrics-pilot-study-seeks-to-identify-barriers-to-navigation-metrics-implementation>
15. Presentation at AONN+ 9th Annual National Conference in Dallas Texas November 2018.

Chapter 4 – None

Chapter 5

1. Rowe M, Gentry E. Supporting the value proposition of patient navigation. *Journal of Oncology & Navigation Survivorship*. 2019;10(2). <http://www.jons-online.com/issues/2019/february-2019-vol-10-no-2/2245-supporting-the-value-proposition-of-patient-navigation>

Chapter 6

1. Shalkowski L, O’Leary K, Demko L. Designed for success: developing and implementing a pilot breast navigation program using the Six Sigma methodology. *Oncol Issues*. 2009; 24(1):24-33. Published online: August 1, 2017.

Chapter 7 – None

Chapter 8 – None

Chapter 9

1. Define, Measure, Analyze, Improve, Control. *Wiley Encyclopedia of Management*. 3rd ed. Cooper CL, ed. Chichester, UK: John Wiley & Sons, Ltd; 2014.
2. The Joint Commission. Performance Measurement FAQs. <https://manual.jointcommission.org/Manual/Questions/UserQuestionId03Sub0015>.
3. Balderson D, Safavi K. How Patient Navigation Can Cut Costs and Save Lives. *Harvard Business Review*. March 19, 2013.
4. Drucker, P.F. *Managing for Results*. New York: Harper & Row Publishers Inc; 1964:15.