The Cancer Care Transformation Playbook

Opportunities to Reduce Unwarranted Care Variation in Oncology

- 1 At the Top of Executives' Agenda
- 2 Reducing Costs and Improving Quality in Cancer Care

3 Q&A

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Market Pressures Creating New Urgency

Reducing Care Variation Key to Executing on System Imperatives

Major

Market Forces



Mounting margin pressure



Continuing transition to risk



Continuing consolidation across the industry



Emerging health care consumerism

Health System Strategic Imperatives

Reliability

Standardize the care delivery model to ensure that clinical quality and service meet and exceed customer expectations

Affordability

Streamline the fixed cost structure to reduce cost per case and total care costs

Accessibility

Diversify access options to meet patients when, where, and how they want

Necessary Lever for Success



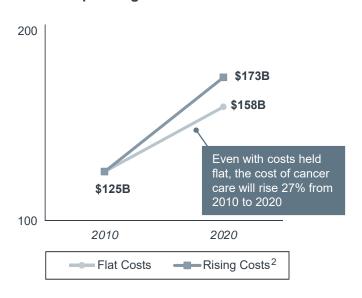
Care Variation Reduction

The primary lever for health systems to provide reliable, affordable care

A Spending Problem in Cancer Care

Reducing Care Variation Critical to Decrease Costs, Improve Outcomes

Annual Spending on Cancer Care¹



46/

The Oncology Care Model as a Way to Reduce Care Variation

"There is tremendous variation in practice quality across the United States, but almost all practices can become higher quality and more patient focused. The [Oncology Care Model] will increase patient-centered care and quality through its practice redesign requirements and its performance-based payments."

Office of Communications, Centers for Medicare and Medicaid Services

Source: Riley SA, "The Oncology Care Model: Interview with the Center for Medicare & Medicaid Innovation," Oncology Practice Management, 6, no. 8 (2016): http://oncology.com/issue-archive/2016-vol-6-no-8ithe-oncology-care-model-interview-with-the-center-for-medicare-medicaid-innovation/; Oncology Roundtable interviews and analysis.

In 2010 dollars.

Assumes a 2% increase in costs in initial and last year phases of treatment.

Making Big Investments in Support Services

Aim to Improve Quality of Care, Reduce Costs

Palliative Care

Symptom Management Phone Triage

Navigation

90%

61%

95%

Of cancer programs have developed or are currently developing palliative care programs Of cancer programs have developed or are currently developing phone-led symptom management triage centers Of cancer programs have developed or are currently developing navigation programs

The Cancer Care Transformation Playbook

Three Goals for Reducing Costs and Improving Quality

1

Integrate Palliative Care into Oncology Practice

- 1. Integrate palliative care early
- 2. Empower patients to start the conversation
- 3. Give the care team the right tools

2

Reduce Avoidable ED and Hospital Use

- 4. Encourage patients to report symptoms
- 5. Dedicate resources to urgent symptom management

3

Maximize the Return on Navigation

- 6. Perform data-driven analysis to understand navigator activities
- 7. Update navigation to meet current goals
- 8. Target navigation to high-risk patients
- 9. Standardize navigation touchpoints

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3



Integrate Palliative Care into Oncology Practice

GOAL

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The Next Wonder Drug?

Landmark Study Makes a Big Splash in 2010

M

Palliative Care for the Treatment of Advanced NSCLC

2.7

\$600

221,000

Months median survival benefit

Approximate cost per treatment course¹

Patients diagnosed with advanced NSCLC annually

Palliative Care Models

Models for Providing Palliative Care in Oncology



Inpatient Consult Service

- Physicians refer patients to inpatient consult as needed
- Team provides consults to patients throughout hospital



Inpatient Palliative Care Unit

- Dedicated palliative staff treat patients in designated wing
- Bed number can remain fixed or be flexible



Embedded Specialist

- Dedicated palliative RN or AP with focused responsibilities
- Directs resources to most pressing patient needs



Outpatient Palliative Care Unit

- Palliative care team located within the cancer clinic
- Services are provided to patients while visiting center



Home-Based Palliative Care

- Palliative AP visits patients in homes regularly
- Addresses needs of complex, "ED frequent flyer" patients



Related Resource

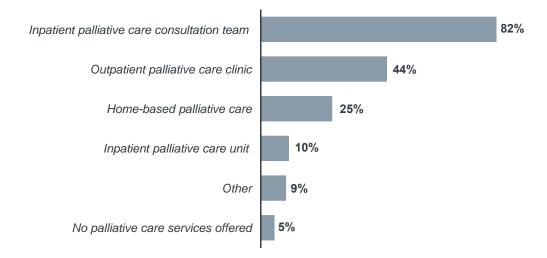
Integrating Palliative
Care Into Oncology
Practice

Source: Oncology Roundtable, Integrating Palliative Care into Oncology Practice, Washington, DC: The Advisory Board Company, 2011; Kapoor M, "Delivering Palliative Care in Patients' Homes," Oncology Rounds, January 4, 2013, http://www.advisory.com/research/oncology-roundtable/oncology-rounds/2013/01/delivering-palliative-care-in-patients-homes; Oncology Roundtable interviews and analysis.

Organizations Making the Investment

Palliative Care Services Offered by Oncology Roundtable Members

Percentage of Respondents, 2016 n=153



Source: Oncology Roundtable Support Services Volumes, Staffing, and Operations Benchmark Generator; Oncology Roundtable interviews and analysis.

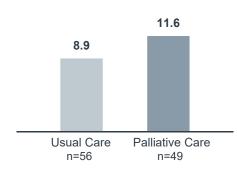
Missing a Big Opportunity

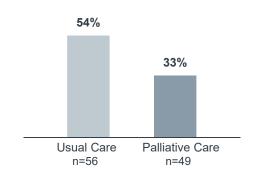
Despite Known Benefits, Many Patients Still Don't Receive It



In months

Percent of Cancer Patients Receiving Aggressive¹ End-of-Life Care







95%

Of Oncology Roundtable member organizations have a palliative care service²

19%

Of cancer patients at Oncology Roundtable member organizations receive palliative care, on average

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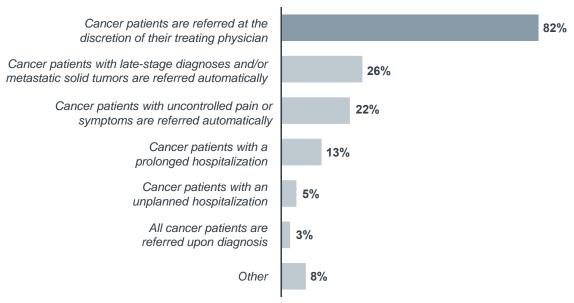
Source: Ternel J, et al,. "Early Palliative Care for Patients with Metastatic Non-Small-Cell Lung Cancer," New England Journal of Medicine, 363: 733-742 (2010); Oncology Roundtable Support Services Volumes, Staffing, and Operations Benchmark Generator; Oncology Roundtable interviews and analysis.

Aggressive care considered as having chemotherapy within 14 days before death, no hospice care, or admission to hospice 3 days or less before death,.
 Most common services provided are dedicated inpatient consult team (82%) and outpatient clinic (44%).

Relying on Physicians to Make the Referral

Palliative Care Referral Points for Cancer Patients

Percentage of Respondents, 2016 n=144



Source: Oncology Roundtable Support Services Volumes, Staffing, and Operations Survey; Oncology Roundtable interviews and analysis.

Hardwiring Referrals to Palliative Care

Mount Sinai Standardizes Palliative Care Criteria, Sees Dramatic Results

Criteria for Palliative Care Consult Advanced solid tumor Active symptoms Hospitalization in the past 30 days Prolonged hospitalization¹





105%

Increase in palliative care referrals

85%

Increase in hospice use

48%

Decrease in hospital readmissions²

60%

Decrease in chemotherapy after discharge

¹⁾ More than seven days.

²⁾ Within 30 days of discharge.

Hardwiring Referrals to Palliative Care (cont.)



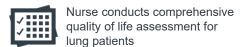
Case in Brief: Mount Sinai Hospital

- 905-bed academic medical center located in New York, New York
- Developed a systematized palliative care referral system in which admitted patients meeting one of four critera are automatically referred to palliative care
- After implementing triggers, researchers at the Icahn School of Medicine at Mount Sinai, Yale University School of Medicine, and Brigham and Women's Hospital observed an increase in palliative care referrals, hospice use, and utilization of support services; hospital readmissions and receipt of chemotherapy after discharge decreased

Creating a Comprehensive Palliative Care Plan

City of Hope Uses Quality of Life Assessments to Prioritize Support

Components of City of Hope's Palliative Care Planning Intervention





Nurse provides education on quality of life domains,¹ creates action steps for patients and caregivers, and schedules referrals

Quality of Life Assessment

Interdisciplinary Case Discussion

Follow-Up



Medical, nursing, palliative, and supportive care professionals discuss cases, prioritize patient needs, and formulate care plan



Related Resources

City of Hope Pain & Palliative Care Resource Center

 Quality of life domains are: physical, psychological, social, and spiritual well-being

Source: Ferrell B, et al., "Interdisciplinary Palliative Care for Patients With Lung Cancer," *Journal of Pain and Symptom Management*, 50.6 (2015); City of Hope National Medical Center, Duarte, CA; Funded by NCI PO1 CA136396, B. Ferrell PI; Oncology Roundtable interviews and analysis.

Creating a Comprehensive Palliative... (cont.)



Case in Brief: City of Hope Medical Center

- 217-bed NCI-designated Comprehensive Cancer Center located in Duarte, California
- NCI-funded five-year "Palliative Care for Quality of Life and Symptom Concerns in Lung Cancer" study to integrate palliative care for lung cancer patients and their caregivers
- · Intervention includes three components:
 - Comprehensive assessment of patient's quality of life, synthesis of results into summary report
 - Interdisciplinary team planning meeting to discuss patient needs and support plan
 - Patient and caregiver education about physical, psychological, social, and spiritual wellbeing quality of life domains
- Planning meetings most helpful for triaging limited palliative care resources to highest need patients and issues, disseminating palliative care strategies to participating clinicians
- Intervention resulted in increased survival, quality of life improvements for patients and caregivers, increased use of advance care directives, reduced hospital admissions, and reduced urgent care visits; early-stage patients derived the most benefit
- NINR¹ funding to implement the intervention in the community setting through partnership with Kaiser systems in Riverside, Fontana, and Anaheim, California

Dramatic Results Through Coordinated Support

Palliative Care Important for Both Early- and Late-Stage Patients

Select Results from City of Hope's Intervention



Lung Cancer Patients

- · Increased survival
- Reduced symptom burden
- Improved symptom management
- · Increased QOL
- · Reduced distress



Caregivers

- Reduced burden
- Increased QOL
- · Increased preparedness



Institution

- · Reduced hospital admissions
- · Reduced urgent care visits
- Increased use of advanced care directives
- Increased communication about preferences
- Increased support care referrals



6 month

Increase in survival among patients receiving palliative care intervention¹

28%

Increase in average FACT-L² score

75%

Decrease in NCCN
Distress Thermometer
scores

¹⁾ Among patients who died.

²⁾ Functional Assessment of Cancer Treatment-Lung Cancer.

Moving the Model to a Community Setting

Nurse Time Constraints Necessitate Prioritization of Tools

City of Hope's Adaptations of Palliative Care Program for the Community Setting

Different Circumstances Faced at Kaiser



Less physician focus on research



• Limited staff and resources



Different patient demographics, including socioeconomic status

Modifications to Palliative Care Program



Prioritized patient assessment tools, reducing number of tools from nine to six



Instituted brief morning huddles to replace formal team meetings to discuss patients and designate appropriate referrals

Source: Ferrell B. et al., "Interdisciplinary Palliative Care for Patients With Lung Cancer," Journal of Pain and Symptom Management, 50.6 (2015); City of Hope National Medical Center, Duarte, CA; Funded by NCI PO1 CA136396, B. Ferrell PI; Oncology Roundtable interviews and analysis.

Starting to Have Meaningful Discussions



The New York Times

"One Man's Quest to Change the Way We Die"



"Being Mortal"

#1 New York Times Bestseller



"How Life Ends: Death Is Inevitable, A Bad Death Is Not"



"Oscar-Nominated 'Extremis' Faces End-of-Life Decisions"

The Boston Globe

"Cancer Patients Keep Getting Aggressive End-of-Life Treatment, Despite Lack of Benefit"



"Doctor Takes Death Education to High School Classrooms"

Patients Not Getting What They Want

Americans Say They Want End-of-Life Conversations and Care at Home

Attitudes About Having End-of-Life Discussions with Physicians

87% of American seniors¹ believe physicians should discuss end-of-life issues with their patients



27% of American seniors actually discuss end-of-life issues with their physicians

Preferred Location for End-of-Life Care

90% of American seniors prefer to receive end-of-life care in their home



33% of Medicare beneficiaries actually die in their homes

A Conversation Starter

UPMC¹ Coaches Patients to Talk to Their Care Team

Components of Social Worker-Patient Meetings

Coaching **Prioritization** · Works with patient to · Coaches patient on identify topics patient is how to ask questions most concerned about · Provides guidance on · Prioritizes two to three how to raise concerns topics for patients to during oncology discuss with care team appointments **Next Steps** Introduction Social worker meets · Provides summary with advanced cancer notes patient and caregivers Outlines follow-up Introduces question steps with patient for prompt list with subsequent suggested end-of-life oncologist visit conversation topics

¹⁾ University of Pittsburgh Medical Canter.

A Conversation Starter (cont.)



Case in Brief: University of Pittsburgh Medical Center

- Twenty-hospital health system based in Pittsburgh, Pennsylvania
- Developed randomized control trial with 24 participating oncology practices in which advanced solid tumor cancer patients in the intervention group received a one-hour coaching session with a social worker
- In session, social worker introduces a question prompt list that contains end-of-life conversation starters, helps patients prioritize concerns, and coaches them on how to voice concerns with physicians
- Compared with patients in the control group, those that met with the social worker were twice as likely to bring up questions at their next oncologist visit

Letting Patients Guide the Conversation

UPMC Demonstrates Significant Improvements



2x

More likely patients will ask end-of-life questions at next oncology visit after meeting with social worker



Oncology Roundtable Related Resource

UPMC Question Prompt List

Topics Most Commonly Raised by Patients

1 Cancer Treatment

- How will I know if the treatments are working?
- What are the pros and cons of further treating my cancer?

2 Current Cancer State

 What is currently happening with my cancer?

3 Concerns About Care at the End of Life

- I don't know what to tell my family
- · I worry that I'm going to suffer
- · I am afraid of dying

Providers Unprepared for the Conversation

Programs Should Find Innovative Ways to Support Them



Not a Focus for Training

2% Of board certification exam for oncologists is focused on end-of-life care



"Physicians and other health professionals—even those with substantial experience caring for the seriously ill—commonly lack skills in eliciting the goals, preferences, and values of their patients and in effectively tuning their care to align with those aims."

> Atul Gawande, MD, MPH "Being Mortal"

Three Strategies to Help the Care Team



1 Identify High-Risk Patients



2 Embed Decision-Support Tools



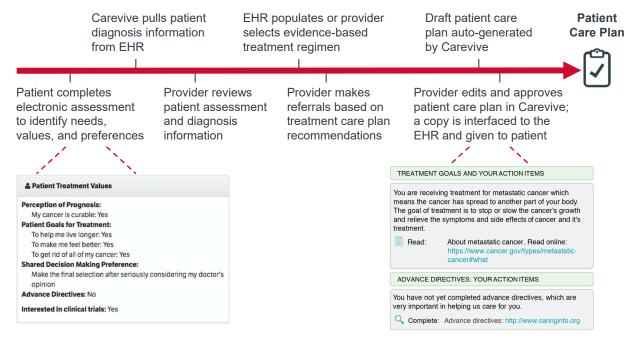
3 Leverage the Full Care Team

Source: "Doctors Are Poorly Trained in End-of-Life Care, but That Can Change," Scientific American, https://www.scientificamerican.com/article/doctors-are-poorly-trained-in-end-of-lifecare-but-that-can-change/; Gawande, A, "Quantity and Quality of Life: Duties of Care in Life-Limiting Illness," *JAMA*, 315, *no.* 3 (2016); Oncology Roundtable interviews and analysis.

Make Advance Care Planning a Critical Component

Embed into Physician Workflow and Patient Care Plan Creation

How UAB, AtlantiCare and USA Mitchell Use Carevive to Support Comprehensive Patient-Centered Treatment Decision Making and Care Planning



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Source: UAB Medicine, Birmingham, AL; USA Mitchell Cancer Institute, Mobile, AL; AtlantiCare Cancer Institute, Egg Harbor Township, NJ; Carevive Systems, Philadelphia, PA; Oncology Roundtable interviews and analysis.

Make Advance Care Planning a Critical... (cont.)



Case in Brief: UAB Medicine

- · NCI-designated Comprehensive Cancer Center based in Birmingham, Alabama
- Partnered with USA Mitchell Cancer Institute (Mobile, Alabama) and AtlantiCare Cancer Institute (Egg Harbor Township, New Jersey) to conduct a study with Carevive Systems
- Uses Carevive's patient care planning platform to provide physicians with a tool that autogenerates a patient care plan and triggers appropriate referrals across the cancer continuum based on clinical data, patient-reported outcomes, and evidence-based guidelines
- Physician adherence to QOPI¹ metrics improved significantly for those physicians using Carevive across all three sites

Make Advance Care Planning a Critical... (cont.)



Technology in Brief: Carevive Systems

- IT company co-located in Philadelphia, Pennsylvania, and Miami, Florida
- Leverages state-of-the-art technology and world-class oncology researchers to deliver a proprietary cancer patient care planning system to provider organizations
- Software platform collects patient-reported and clinical data and evidence-based guidelines to auto-generate comprehensive patient care plans (provides personalized guidance to patients on treatment, symptom management, and survivorship care)
- The real-world experiences of cancer patients collected in the system are evaluated continuously to refine the offering

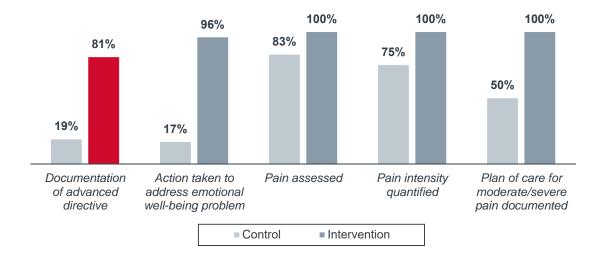
Seeing the Benefits

Use of Carevive Improves Physician Adherence to QOPI¹ Metrics

Adherence to QOPI Metrics for Breast Cancer Patients

At UAB, AtlantiCare, and USA Mitchell Cancer Institute

n=82 physicians in control group; n=72 physicians in intervention group



¹⁾ Quality Oncology Practice Initiative.

Building an Integrated Program

Six Hallmarks

- 1 Physicians trust the palliative care team
- 2 Palliative care team is scrupulous about care coordination
- 3 Advance care planning is routine for all cancer patients
- 4 Palliative care team is highly visible in the cancer center
- 5 Clinicians share responsibility for initiating palliative care consults
- 6 Oncology clinicians are trained to provide palliative care



Reduce Avoidable ED and Hospital Use

GOAL

2

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A Big Problem

ED Visits and Hospitalizations Contribute Greatly to Avoidable Costs



Emergency Department Visits



Prevalence

56%

Of Medicare patients receiving chemotherapy visit the ED each year

Cost

\$800

Average cost for a chemotherapy-related ED visit



Hospital Admissions



Prevalence

63%

Of ED visits by Medicare patients receiving chemotherapy result in a hospitalization

Cost

\$22K

Average cost for chemotherapyrelated hospitalizations

Source: Fitch K, Pyenson B, "Cancer Patients Receiving Chemotherapy: Opportunity for Better Management," March 30, 2010, http://us.milliman.com/uploadedFiles/insight/research/health-rr/cancer-patients-receiving-chemotherapy.pdf Advisory Board, Data and Analytics Group analysis; Oncology Roundtable interviews and analysis

A New Target for CMS

Measure Aims to Reduce Preventable ED Visits and Hospitalizations

OP-35: Admissions and Emergency Department Visits for Patients Receiving Outpatient Chemotherapy

- Tracks cancer patients¹ having an ED visit or inpatient admission for one of ten conditions within 30 days of receiving chemotherapy
- Consists of two scores—one for inpatient admission rates and one for ED visit rates
- Impacts hospitals' outpatient Medicare payments beginning in 2020
- First cancer-specific measure in Outpatient Quality Reporting program



Oncology Roundtable Related Resources for Symptom Management and Urgent Care

- Integrating Palliative Care into Oncology Practice
- Urgent Care for Cancer Patients

Ten Conditions Included

- Anemia
- Nausea
- Dehydration
- Neutropenia
- Diarrhea
- Pain
- Emesis
- Pneumonia
- Fever
- Sepsis

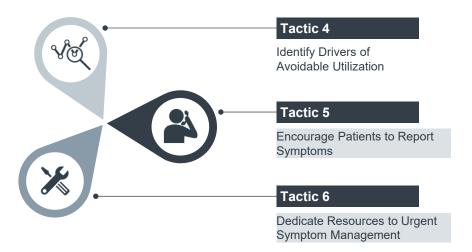
Source: CY 2017 Hospital Outpatient Prospective Payment System Final Rule, CMS; Oncology Roundtable interviews and analysis.

¹⁾ Excludes leukemia patients.

Tackling the Problem

Keeping Patients Out of the ED and Hospital

Three Tactics to Reduce Avoidable ED and Hospital Use



Patients Hesitant to Report Symptoms

Making It Difficult for Programs to Proactively Address Needs



Barriers to Patients Reporting Symptoms to the Cancer Care Team

Unaware of symptoms or don't know which ones are worth reporting



Assume the care team will anticipate and reach out to them about symptoms



Don't believe care team is available to help



Afraid to bother their care team



Not sure who to call

Of active cancer patients do not report symptoms because they do not want to bother their doctor

10%

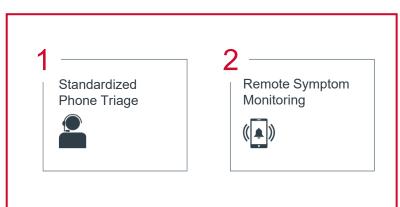
Of symptoms identified by systematic assessment are voluntarily reported to the care team by cancer patients

Source: "2016 Cancer Care Patient Access and Engagement Report," Cancer Care, http://www.cancerace.org/accessengagementreport; Normaker LK, et al., "Symptom Management: An Important Part of Cancer Care," Cleveland Clinic Journal of Medicine, 78, no. 1 (2011): 25-34; Oncology Roundtable interviews and analysis.

Make Symptom Reporting Easier

Put the Right Infrastructure in Place

Three Strategies for Cancer Programs

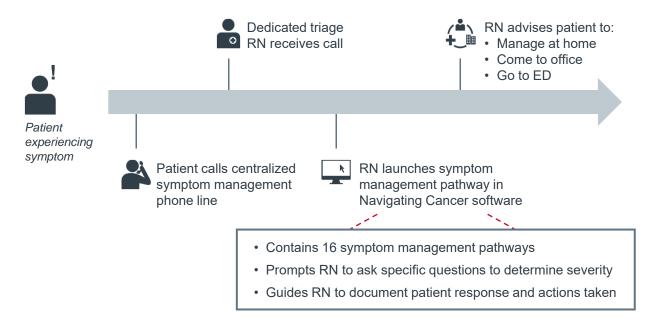




Hardwire Support for Patients

The Center for Cancer and Blood Disorders Maximizes Phone Triage

Phone Triage at The Center for Cancer and Blood Disorders



Hardwire Support for Patients (cont.)



Case in Brief: The Center for Cancer and Blood Disorders

- Community oncology practice with nine locations and 18 oncologists based in Fort Worth, Texas
- Restructured phone triage system to better manage urgent symptoms and keep cancer patients out of the ED
- Two RNs dedicated to phone triage, use standardized pathways to manage 16 common symptoms¹
- Partnered with Navigating Cancer to integrate triage pathways into patient relationship management software platform
- Measured phone triage line call volume, speed of symptom management, and estimated cost savings from same-day appointments scheduled as a result of call; estimated that new phone triage system saved them more than \$400,000 in one month

Body aches, chest pain, constipation, cycle one follow-up, diarrhea, emergency services, fatigue, fever and chills, follow-up, nausea and vomiting, nosebleed, oral problems, pain, respiratory changes, sinus and cold symptoms, transitional care management.

Hardwire Support for Patients (cont.)



Technology in Brief: Navigating Cancer

- Patient relationship management software developed by Navigating Cancer, Inc. headquartered in Seattle, Washington
- Comprised of three components: Care Management (mobile health care tracker, distress assessments, depression screening and follow-up, pain assessment and care plan), Population Care (customizable population segmentation, patient use reporting, OCM reporting, time tracking, insights), and Patient Link (patient education, appointment schedule, intake and registration, patient portal, meaningful use reporting)
- Symptom management pathways in care management component use branching logic to provide clinical decision support for triage RNs; institution-specific standing orders at the end of each pathway empower RNs to work more independently at top of license



Related Resource

For publicly available symptom triage pathways, see <u>COSTaRS' Remote Symptom Practice</u>
Guides for Adults on Cancer Treatments



Oncology Roundtable Related Resource

Urgent Care for Cancer Patients

Source: Stacey D, et al., "Remote Symptom Practice Guides for Adults on Cancer Treatments," Ottawa Hospital Research Institute and University of Ottawa, https://ktcanada.ohri.ca/costars/COSTaRS Practice Guides ENGLISH March2016.pdf; Oncology Roundtable interviews and analysis.

A Measurable Impact

The Center for Cancer and Blood Disorder's Phone Triage Dashboard

One Month of Data	
Number of RNs dedicated to phone triage	2
Number of oncologists in practice	18
Number of phone calls managed	1,216
Number of symptom management calls	317
Number of calls managed immediately	307 (97%)
Number of calls managed without physician intervention	152 (48%)
Number of calls where same-day appointment scheduled	54

\$432,000

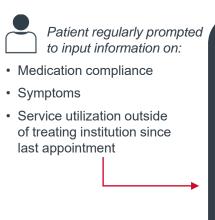
Estimated savings per month from preventing ED visits and subsequent hospitalizations¹

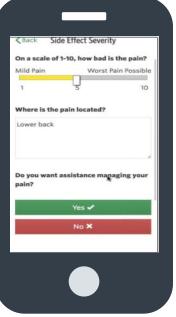
Assumed an average cost of \$8,000 per ED visit and potential subsequent hospital charges.

Put It in Patients' Hands

CCBD¹ Uses an App to Engage Patients in Symptom Monitoring

Health Tracker App





- Triage nurse sees:
- Dashboard with compiled patient-reported data
- Prioritized list of patients to follow up with based on symptom severity
- Links to relevant symptom management pathway for each patient

1) The Center for Cancer and Blood Disorders.

Source: The Center for Cancer and Blood Disorders, Fort Worth, TX; Navigating Cancer, Seattle, WA; Oncology Roundtable interviews and analysis.

Put It in Patients' Hands (cont.)



Case in Brief: The Center for Cancer and Blood Disorders

- Community oncology practice with 9 locations and 18 oncologists based in Fort Worth, Texas
- Partnered with Navigating Cancer to use their patient-facing Patient Link platform component and Health Tracker mobile app for remote monitoring
- Patients receive regular text messages prompting them to complete brief survey on side
 effects and oral medication adherence; patients who indicate side effects are asked
 follow-up questions to assess severity and whether they would like help from the care team
- Patients with an upcoming appointment are also asked if they have received medical care
 for their cancer or other cancer-related issues at another facility, urgent care center, or
 hospital since their last appointment in an effort to improve care coordination
- Navigating Cancer software compiles patient-reported data prioritized based on symptom severity into a dashboard for triage nurses; triage nurses can click on individual patients to view survey responses and launch the relevant symptom management pathway
- Currently in the process of measuring impact of the Health Tracker app for remote symptom monitoring

Put It in Patients' Hands (cont.)



Technology in Brief: Navigating Cancer

- Patient relationship management software developed by Navigating Cancer, Inc. headquartered in Seattle, Washington
- Remote monitoring system allows institutions to customize scheduling of symptom reporting and oral medication reminders to match any patient's treatment regimen
- Places certain patients in elevated alert status to trigger more sensitive alerts to the care team, prompting timely follow-up

Successfully Decreasing Utilization

Memorial Sloan Kettering Documents Impact of Remote Monitoring



Study Design: Advanced solid tumor patients receiving chemotherapy were randomized to regularly report 12 common symptoms using the web-based Symptom Tracking and Reporting (STAR) platform or to receive usual care consisting of symptom management at the discretion of clinicians

STAR Intervention Results

Percentage of Cancer Patients Visiting the ED Across One Year

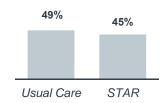
41% 34%

STAR

1/%

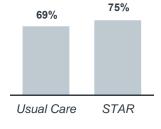
Usual Care

Percentage of Cancer Patients Hospitalized Across One Year



8%
Decrease

Percentage of Cancer
Patients Alive at One Year



9%

Increase

Source: Basch E, et al., "Symptom Monitoring with Patient-Reported Outcomes During Routine Cancer Treatment," Journal of Clinical Oncology, 34, no. 6 (2016): 557-565; Oncology Roundtable interviews and analysis.

Successfully Decreasing Utilization (cont.)



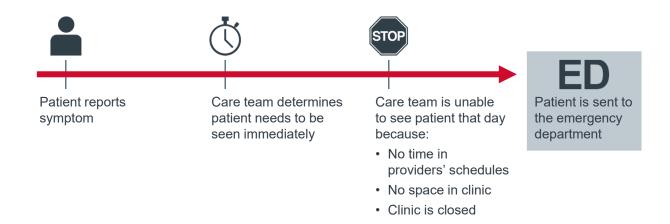
Study in Brief: Symptom Monitoring with Patient-Reported Outcomes

- Randomized control trial of patients receiving routine outpatient chemotherapy for advanced solid tumors at Memorial Sloan Kettering Cancer Center
- Compared remote patient self-reporting of 12 common symptoms using web-based STAR platform to usual care consisting of symptom management at discretion of clinicians; intervention group received weekly email prompts to report symptoms
- Nurses received email alerts when STAR group patients reported severe or worsening symptoms; physicians received symptom printouts at visits
- Observed 17% decrease in ED visits at one year, 8% decrease in hospitalizations at one year, 9% increase in survival at one year, 89% greater increase in health-related quality of life at six months, and 1.9-month increase in time on chemotherapy for STAR participants compared to usual care group

Symptom Reporting Only Half the Battle

Cancer Programs Need Dedicated Resources to Manage Urgent Issues

Traditional Cancer Center Management of Urgent Symptoms



Keeping It in the Cancer Center

Balance Patient Need with Resources Required

Three Models of Urgent Symptom Support Dedicated Center



Ability to Reduce ED Use

Flexible Scheduling

- Block dedicated time for urgent add-on patients for some or all providers
- Ensure flexibility to meet unpredictable demand
- Reassign or add nurse, AP, or physician whose primary responsibility is urgent add-on patients

Dedicated Provider

- Cover normal or extended hours
- Encourage top-oflicense practice
- Develop clear triage criteria and scope of practice guidelines

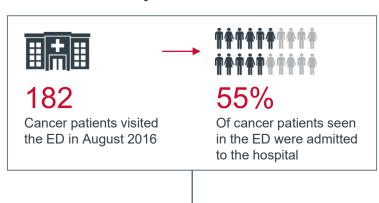
- Repurpose underutilized space
- Consider potential for multipurpose use (e.g., infusion center overflow) to boost ROI
- Evaluate creative use of existing staff
- Outline clear referral protocols
- Open normal or extended hours
- Leverage for market differentiation

Resources Required

Identifying a Bigger Problem

Froedtert Leverages ED Data to Understand Scope

Froedtert's Analysis of Cancer Patient ED Use



Common Reasons for ED Visits

- Fever
- Nausea or vomiting
- Mild shortness of breath
- Pain control

- Bleeding
- Cold or flu-like symptoms
- Dehydration
- Diarrhea

- Fatigue
- Home infusion pump concerns
- Rash

Source: Froedtert and the Medical College of Wisconsin Froedtert Hospital, Milwaukee, WI; Oncology Roundtable interviews and analysis.

Identifying a Bigger Problem (cont.)



Case in Brief: Froedtert and the Medical College of Wisconsin Froedtert Hospital

- 561-bed academic medical center located in Milwaukee, Wisconsin
- Found that many cancer patients were going to the ED and receiving additional services (e.g., imaging, labs, EKGs) for non-emergent symptom management because the cancer center did not have capacity for add-on patients or was closed in the evenings and overnight
- Piloted four-infusion chair, referral-based 24-Hour Cancer Clinic next to inpatient hematology
 unit to treat cancer patients with urgent needs; opened clinic to medical oncology patients first,
 but recently expanded to accommodate radiation and surgical oncology patients
- Staffed by either two RNs, or one RN and one MA or CNA, at any given time with one of the two staff members floating across inpatient and outpatient oncology when not needed in 24-Hour Cancer Clinic; AP working in hematology-oncology unit overnight provides supervision for clinic until outpatient oncology attending team returns the next morning
- Encourage patient referrals by: training answering service staff to remind on-call oncologists to direct patients to 24-Hour Cancer Clinic when appropriate; creating oncologist badge tags with key logistics about the 24-Hour Cancer Clinic (e.g., phone number, symptoms managed); developing triage algorithms for ED staff to identify patients who can be diverted from the ED to the 24-Hour Cancer Clinic on intake; and creating patient education information
- Observed steady increase in clinic volumes since opening in November 2016 and no increase in the total number of ED visits per month despite growing cancer center volumes overall; found lower hospital admission rate from and fewer services used in 24-Hour Cancer Clinic than ED

Dedicating the Staff and Space for Urgent Needs

Froedtert Launches Urgent Care Pilot



Staffing

- · Two RNs or one RN and one technician (MA¹ or CNA²) per shift
- One RN flexes between outpatient and inpatient oncology if not needed in 24-Hour Cancer Clinic
- Pull from oncology float pool of 8-9 RNs and 3-4 technicians

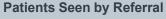
Operations

- Housed in inpatient hematology-oncology unit
- · Four infusion chairs
- Open 24/7
- · Supervision provided by outpatient team and AP nocturnist in hematology-oncology unit



Sample Services Provided

- · Supportive care (e.g., fluids, electrolytes, antibiotics, blood products, IV medications)
- · Basic diagnostics (e.g., EKG, imaging)
- Urgent labs
- Home infusion pump concerns



- · Hematologic oncology
- Medical oncology
- Radiation oncology
- Surgical oncology



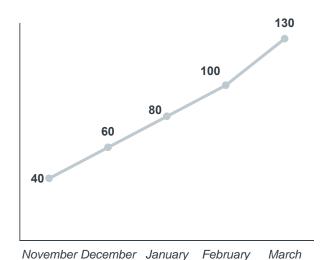
¹⁾ Medical assistant

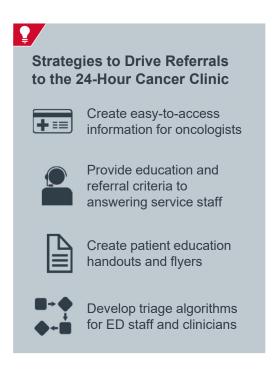
²⁾ Certified nursing assistant.

Getting Patients in the Door

Monthly Patient Volumes in 24-Hour Cancer Clinic

November 2016 to March 2017





Source: Froedtert and the Medical College of Wisconsin Froedtert Hospital, Milwaukee, WI; Oncology Roundtable interviews and analysis.

Already Seeing an Impact

Setting Froedtert Up for Success in the Oncology Care Model



ED and Hospital Use

11%

Decrease in the percentage of patients on active treatment who visited the ED since 24-Hour Cancer Clinic opened in November 2016

60%

Fewer hospital admissions from the 24-Hour Cancer Clinic than the ED



Cost

\$2,269

Decrease in patient diagnostic charge¹ per 24-Hour Cancer Clinic admission compared to ED admission

\$1,554

Decrease in patient diagnostic charge¹ per 24-Hour Cancer Clinic discharge compared to ED discharge



92%

Patient satisfaction for overall rating of care²

"This is way better than having to go to the ER or an urgent care [center]. You know exactly what I need and know what to do and you get it done."

> Cancer Patient, Froedtert Hospital

¹⁾ Median total charge for lab, imaging, and EKG testing prior to disposition

^{2) 99}th percentil

Next Steps: Reduce Avoidable ED and Hospital Use

Resources to Guide Your Strategy

Action Items

Pinpoint the reasons for ED and hospital use

- ☐ Engage key stakeholders across departments to compile data sources, such as ACO or ED data
- ☐ Identify utilization trends and develop targeted upstream and downstream interventions

Empower patients to report symptoms

- ☐ Standardize internal processes for triaging symptom management calls
- Evaluate technology solutions that make it easier for patients to report and clinicians to manage symptoms
- □ Develop a risk-stratification system to identify and proactively manage high ED and hospital utilizers

Develop the infrastructure to manage urgent symptoms in the cancer center

□ Assess models based on existing resources, additional resources needed, potential volumes, and potential to reduce ED and hospital use



Select Oncology Roundtable Resources

- Urgent Care for Cancer Patients
- <u>Coordinating Seamless Transitions</u>
 Across Care Settings
- Oncology Distress Screening and Management
- Avoidable ED Utilization Assessment
- Delivering on the Promise of Patient-Centered Care
- Redesigning Cancer Care for the Era of Accountability



Maximizing the Return on Navigation

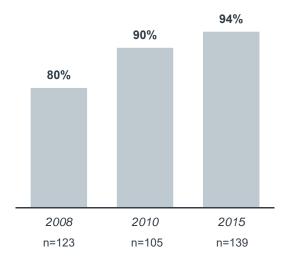
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A Longstanding Priority

Cancer Programs Have Invested Significant Resources in Navigation

Percentage of Cancer Programs Employing at Least One Navigator

Oncology Roundtable Member Surveys



The Oncology Roundtable has approximately 1,300 cancer program members.

\$1.2B

Direct cost of navigators to Oncology Roundtable members since 2008

W

Assumptions in Brief

- On average, 90% of Oncology Roundtable members have employed navigators since 2008¹
- Each program employs an average of two navigators
- Average navigator salary is \$65,000 per year

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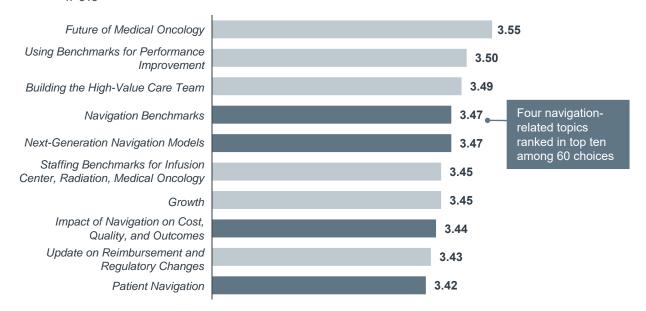
Source: Oncology Roundtable interviews and analysis.

Holding Ourselves to a Higher Standard

Cancer Program Leaders Seek Resources to Optimize Navigation

Results from Oncology Roundtable 2016 Agenda Setting Topic Poll

Average GPA for Proposed Topics and Subtopics n=313



Source: 2016 Oncology Roundtable Agenda Setting Topic Poll; Oncology Roundtable interviews and analysis.

Cancer Programs Need to Ask Tough Questions



Top Five Questions to Advance Navigation

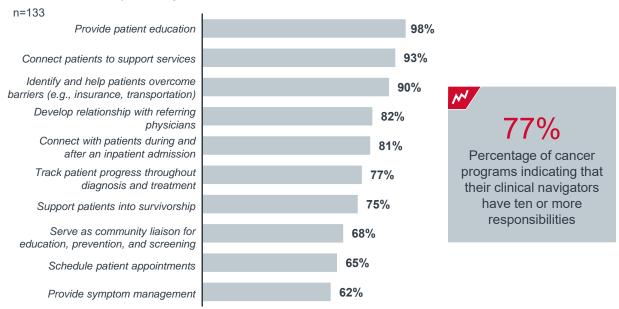
- 1 How do I make sure navigators are adding value to the cancer program?
- 2 How do I help navigators succeed in their role?
- 3 How do I integrate navigators into the broader care team?
- 4 How do I make sure the patients who would benefit the most from navigation receive it?
- 5 How do I measure the value of navigators?

Across the Nation, Putting a Lot on Their Plate

Nurse Navigators Have Many Non-Clinical and Clinical Responsibilities

Top Ten Clinical Navigator Responsibilities

Percentage of Respondents Indicating that Clinical Navigators Regularly Perform Each Responsibility ¹



Respondents were asked to select from a list of 17 tasks all which are regularly performed by their clinical navigators.

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Source: 2015 Cancer Support Services Survey; Oncology Roundtable interviews and analysis.

An Objective Evaluation of the Role

Time Study Helps Evaluate Use of Nurse Navigators

Nurse Navigator Time Study

Data Collection

Total time cancer center process improvement team shadowed nurse navigators

8

Hours in the clinic

4

Hours in the office

Analysis

Process improvement team divided nurse navigators' activities into three categories

- Provider-oriented
- 2 Administrative
- 3 Navigation¹

Findings

Nurse navigator time largely spent on administrative and provider-oriented tasks

Scheduling Paperwork Test orders



Care coordination
Patient education
Symptom management

Time Studies a Good Way to Assess Navigator Work

Six Steps for Running a Time Study





Decide Goals

Clearly articulate the goals of the time study to stakeholders



Define Elements

Decide when and how long activities will be tracked



Choose Tracking Method

Identify data collection method, such as manual collection or online tools (e.g., Toggl)





Assign Responsibility

Determine who is responsible for tracking and reporting data



Analyze Results

Categorize activities and analyze time spent on each compared to ideal allocation



Create Interventions

Implement necessary changes and communicate changes to all internal stakeholders

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Source: Oncology Roundtable interviews and analysis

Redefining the Navigator Role

Program Leaders Use Time Study Data to Educate Physicians

Administrators Use Time Study Results to Reinforce Navigator Role for Physicians



- Cancer program leaders present time study results to physicians to demonstrate inappropriate use of navigators
- Reiterate responsibilities of nurse navigators
- Secure executive support to reinforce message

Tips to Encourage Appropriate Use of Navigators

- Ask physicians to help set goals for navigation program
- Solicit physician input to develop scoped role of navigators
- Involve physicians in navigator resume review and hiring process
- Find regular opportunities to communicate the goals of navigation and navigators' responsibilities



Working Together to Change Physician Behavior

"Leadership and providers are collaborating to define the role and responsibilities of navigators."

Michele Busshart, Nurse Manager of Nurse Navigation

Award Jumpstarts Patient Navigation Program

CMMI¹ Looking for Innovations to Cut Costs and Create Jobs



'UAB Cancer Center Grant Aims to Lower Cost of Cancer Care'

Aims of Health Care Innovation Challenge Grant Award

- Create jobs for people without clinical training
- Find ways to decrease costs of care for Medicare patients

UAB's Goals for Patient Care Connect



Reduce unnecessary utilization



Improve quality of care in community



Foster unity across UAB network

1) Centers for Medicare and Medicaid Innovations.

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Shifting from Reactive to Proactive Navigation

Aiming to Empower Patients to Take an Active Role in Their Care



Old Model

Reactive

Serve as a Band-Aid when failures occur

Passive

Wait for patient or clinician to express an issue or barrier

Program Focus

Help patients overcome logistical barriers, e.g. transportation, lodging, scheduling



New Model

Proactive

Use distress screening to identify potential issues and barriers to care

Anticipatory

Predict common barriers and create processes to address

Program Focus

Empower patients to take ownership of their health and engage in their care

Defining Navigators' Focus at Each Step

Activities Align with Program Goals

Navigator Support Across the Care Continuum

	Evaluation & Treatment Planning	Active Treatment	Post Treatment Follow Up	Survivorship & Surveillance	Palliative & Hospice
Navigator Focus	 Early evaluation Correct diagnosis Treatment plan development 	Treatment adherence Medication adherence	Medication adherenceComorbidity management	Regular surveillance Physical activity, healthy diet	Advanced disease management and planning
Potential Savings	Improving adherence to evidence- based care	Reducing avoidable ED visits and hospital stays	Reducing avoidable ED visits and hospital stays	 Reducing avoidable ED visits and hospital stays Improving compliance with appropriate follow-up care and screenings 	Reducing costs for advanced disease and end-of-life care

Source: UAB Medicine, Birmingham, AL; Gabrielle B. Rocque et al., "The Patient Care Connect Program: Transforming Health Care Through Lay Navigation," Journal of Oncology Practice, (2016), doi: 10.1200/JOP.2015.00896; Oncology Roundtable interviews and analysis.

Target Navigation to Patients Who Will Benefit

High-Need Patients at UAB Receive More Frequent and Intense Support

Characteristics of Navigated Patients at UAB

High-Risk Patients Contacted at least once a week by navigator

- Comorbidities
- Poor prognosis
- Specific medications
- · High distress
- · Lack of support
- · Advanced or complex disease

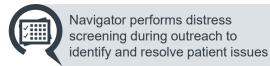
Medium-Risk Patients Contacted at least once a month by navigator

- Accepted navigation
- · Active treatment
- · Distress indicated
- · Socioeconomic need

Low-Risk Patients

Contacted at least every three months by navigator

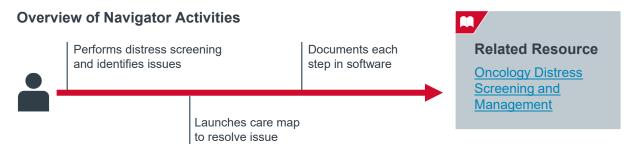
- Refused navigation
- · No or low distress
- · Robust social support · Completed treatment



Source: UAB Medicine, Birmingham, AL; Rocque GB, et al., "The Patient Care Connect Program: Transforming Health Care Through Lay Navigation," Journal of Oncology Practice, 12, no. 6 (2016): e633-e642; Oncology Roundtable interviews and analysis

Regular Distress Screening Is Linchpin

Identify Issues and Follow Care Maps to Ensure Patient Needs Are Met



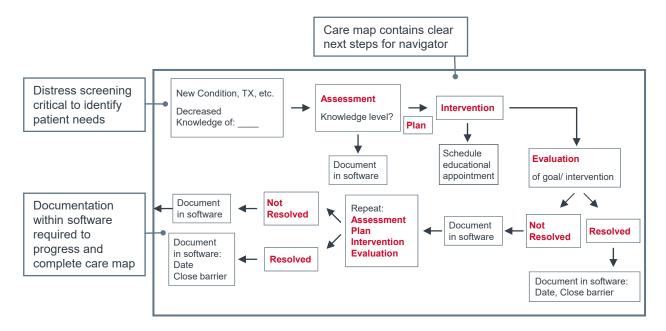
Care Maps for Navigators

- Professor at School of Nursing developed care maps for multiple events and patient needs using literature and clinician input
- Distress screening using modified NCCN¹ Distress Thermometer is the foundation for identifying needs and launching next steps
- Care maps developed to guide patient-navigator interactions and resolve identified issues and barriers to care
- Sample care maps include: patients undergoing chemotherapy, patients discharged from the hospital, and patients with a knowledge deficit or treatment side effect

A Road Map for Navigation

Care Maps Guide Patient Navigators Through the Process

Sample Distress Management Care Map¹ to Address a Knowledge Deficit



Care map recreated by Oncology Roundtable, not exact copy of UAB care map.

Source: UAB Medicine, Birmingham, AL; Gabrielle B. Rocque et al., "The Patient Care Connect Program: Transforming Health Care Through Lay Navigation," Journal of Oncology Practice, (2016), doi: 10.1200/JOP.2015.00896; Oncology Roundtable interviews and analysis.

Worth the Investment

UAB Demonstrated Significant Decrease in Utilization from Navigation

RESOURCE UTILIZATION

6%

Additional decrease in **ED visits** per quarter for
navigated patients¹

8%

Additional decrease in **hospitalizations** per quarter for navigated patients¹

11%

Additional decrease in **ICU** admissions per quarter for navigated patients¹

COST SAVINGS

\$781

Additional reduction in total costs of care for each navigated patient¹ per quarter²

- Compared to non-navigated patients.
- 2) Excludes Part D claims.

\$19M

Approximate **total savings** for all navigated patients across the network in one year

Source: UAB Medicine, Birmingham, AL; Rocque GB, et al., "Resource Use and Medicare Costs During Lay Navigation for Geriatric Patients with Cancer," JAMA Oncology, January 26, 2017, https://www.ncbi.hlm.nih.gov/pubmed/28125760; Oncology Roundtable interviews and navissis.

Making Navigation the Backbone

OhioHealth's Longstanding Process to Ensure Quality Care

Process to Standardize Navigation



- Goal to decrease days to cancer diagnosis and remove barriers to care by navigating patient from point of abnormality detection
- Relevant stakeholders met to map out the patient pathway
- Identified key touch points where patients would benefit from contact with the care team
- Interactions hardwired into the patient pathway as nurse care standards

Timeline of Development of Navigation Care Standards

1999-2001 Breast cancer standards developed over two years by a multidisciplinary team

Multidisciplinary team included:

- Medical oncologists, radiologists, surgeons, radiation oncologists, pathologist
- Front line staff and managers from imaging, surgery, in-patient nursing, ambulatory care, labs, and scheduling
- · Breast cancer patients and survivors
- —2006 Navigation program grows to include additional complex cancers at one hospital site
- 2009 Navigation expands to multiple hospitals
- —2015 Navigation implemented at all OhioHealth hospitals
- 2016 Breast Cancer Survivorship Clinic Program established
- —2017 Ongoing initiative to provide earlier navigation (at time of abnormality)

Making Navigation the Backbone (cont.)



Case in Brief: OhioHealth

- Multi-hospital, not-for-profit system serving 44 counties based in Columbus, Ohio
- Standardized navigation touchpoints in 1999 to ensure that all breast cancer patients are supported from detection of abnormality through survivorship
- To develop standards, stakeholders mapped patient pathway together and identified barriers to care and points where the patient would benefit from contact with the navigator
- Before diagnosis, a diagnostic breast health navigator meets with patients to provide education and assist with scheduling; once diagnosed, patients are assigned to a treatment breast health nurse who provides outreach, education, and guidance across the patient's journey
- Currently expanding navigation to additional care sites, evaluating the potential for earlier navigation, and standardizing the navigation process across the system

Defining Touchpoints at Every Step of Care

Standardized Navigation Touchpoints for Breast Cancer Patients

Breast Health Nurse

Treatment Breast Health Nurse











Diagnosis

Surgery

Chemotherapy

Radiation

Survivorship

- Notifies patient of recommendation for further imaging
- Meets patient at diagnostic imaging appointment
- Communicates with PCP and surgeon
- Schedules followup appointments
- Meets patient and family before surgery to reinforce education and evaluate patient needs for discharge
- Provides teaching prior to discharge
- Contacts patient one to two days after surgery and determines frequency of navigation follow-up

- Contacts patient after first consult
- Calls patient two to three days after first chemotherapy
- Assesses patient for side effects and provides support
- Contacts patient after first consult
- Contacts patient mid-cycle to checkin and assess patient side effects
- Calls patients within six months of treatment to identify patient needs
- Completes, reviews, and mails survivorship care plan and treatment summary to patient and providers

Navigators complete assessments and provide education, support, and resources at each intervention.

Cancer Patient Navigation Toolkit

Six Steps to (Re)Design Your Program

Full Toolkit and Resources Available at advisory.com/or/navigation

- Define the program
 - Sample community needs assessments
 - · Best practices for process mapping
- 3 Secure support
 - · Tactics for engaging physicians
 - Sample business cases and calculator to determine the ROI of a lay navigator
- 5 Track performance
 - Navigation metric selection tool
 - Best practices for measuring the impact of navigators on cost and quality

- Clarify the navigator role
 - · Navigator responsibility picklist
 - · Sample job descriptions
- Integrate navigators with the care team
 - · Care team responsibilities audit
 - Discussion guides and strategies to improve patient transitions
- 6 Optimize the role
 - Staffing and volumes benchmarks
 - Sample acuity scales and training materials

- 1 At the Top of Executives' Agenda
- 2 Reducing Costs and Improving Quality in Cancer Care

3 Q&A

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Thank you!

Please reach out with any questions:

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