ONCOLOGY CARE MODEL

KEY DRIVERS AND CHANGE PACKAGE

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Revision History

Version	Date	Description of Changes
1.0	8/4/2016	Initial version
2.0	9/6/2017	• Included updated references for each section • Updated Driver Diagram to better illustrate multi-payer participation and support of the Oncology Care Model (OCM) o Primary Driver "Strategic Use of Revenue" changed to "Strategic Plan" o Primary Driver "OCM Payments" changed to "Management of Appropriate Payment Structure," and includes new secondary driver "Set Benchmarks" • Updated the Access and Continuity secondary driver: o Added reference to Case Study #1: Reducing Potentially Avoidable Hospitalizations and Emergency Department Utilization o Added five new toolkits/implementation guides • Updated the Care Coordination secondary driver to include one new toolkit/implementation guide • Updated the Patient and Caregiver Engagement secondary driver: o Made minor edits to the change tactics and evidence for all change concepts o Added a new change tactic to "Provide non-monetary incentives, tools or technology for health behavior change" o Added four new toolkits/implementation guides • Updated the Team-Based Care secondary driver: o Included additional change tactics for the different change concepts o Added three new toolkits/implementation guides • Updated the Data-driven Quality Improvement secondary driver: o Included two new change tactics o Added three new toolkits/implementation guides • Updated the Evidence-based Medicine secondary driver to include one new change tactic • Updated the Strategic Plan secondary driver to include expanded change tactics • Included additional illustrative resources labeled as (new) in Appendix A

Version	Date	Description of Changes
3.0	5/14/2018	• Included updated references for each section o Moved the full list of references used throughout the document to endnotes • Updated the Driver Diagram: o Removed Beneficiary Incentives as a secondary driver under the Strategic Use of Revenue primary driver, and made it a change concept under the Strategic Plan secondary driver o Revised the secondary drivers under Management of Appropriate Multi-Payer Structure • Restructured the information for each change concept to include: a business case, specific change tactics, OCM performance measure alignment, OCM learning system resources, and other non-CMS publicly available tools and resources • Included additional/revised existing change tactics for the change concepts under each secondary driver • Updated the Team-Based Care secondary driver: o Modified and streamlined change concepts • Updated the Data-Driven Quality Improvement secondary driver: o Modified and streamlined change concepts • Updated the Strategic Use of Revenue primary driver: o Removed Beneficiary Incentives as a secondary driver and incorporated as a change concept/tactic under the Patient and Caregiver Engagement and Strategic Plan secondary drivers • Updated the Management of Appropriate Multi-Payer Structure primary driver: o Revised the secondary drivers and associated definitions o Revised the change concepts to better align with payer requirements under OCM o Added change tactics to align to each change concept • Included additional illustrative resources labeled as (NEW) in Appendix B
4.0	6/3/2019	• Refreshed change concept business cases and included updated references to reflect emerging evidence and literature
5.0	6/1/2020	• Refreshed change concept business cases and included updated references to reflect emerging evidence and literature • Added the “Sustaining Care Transformation” section • Added a new change concept to “address health-related social needs (HRSN)” under the Care Planning and Management Secondary Driver

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Introduction

The Center for Medicare and Medicaid Innovation (CMMI) Oncology Care Model (OCM) was established to improve the effectiveness and efficiency of oncology care for Medicare beneficiaries. The OCM payment model aligns financial incentives to support improvement efforts in care coordination, appropriateness of care, and access for those undergoing chemotherapy. In pursuit of these goals, OCM encourages and measures practices' ability to identify and implement practice redesign strategies to improve the quality and experience of oncology care. Practitioners participating in OCM need to consider changing how they organize and deliver care to be successful and achieve the aims of the model, incorporating evidence and best practices in their approach.

This OCM Key Drivers and Change Package (hereafter referred to as the KDCP) provides a framework for practice redesign, summarizing the essential areas of organizational change—specifically related to structures and processes to drive outcomes and improvement—and suggesting areas of focus for OCM participants. The KDCP is intended to:

- **Suggest key drivers of success** in OCM, presenting the OCM Driver Diagram as a framework (Figure 1).
- **Identify a set of change concepts rooted in evidence** participants may test and implement within each of the drivers (Table 3). While there are requirements and specific changes all participants agreed to as a condition of participation in the model, there are additional strategies practices have found necessary for success.
- **Present specific tactics OCM practices can implement** to meet the aims of OCM.
- **Provide references and links** to relevant literature and implementation tools and resources, which are hyperlinked directly in the text to allow for immediate access.

The KDCP is not intended to be a checklist for what participants must do, but instead is an evolving body of knowledge for participants to assess when redesigning their approach to care to achieve the OCM aims.

The OCM Learning System continually refines the KDCP, with the entire change package undergoing a comprehensive annual revision. Throughout the model, participants implement changes in how they organize and deliver care and share their experiences and results with fellow OCM participants to facilitate ongoing success. This fifth version of the KDCP is intended to align to practice and payer priorities and support feedback received during the course of the model. Additional resources and toolkits have been added to this document based on findings from OCM Learning System activities.

OCM participants should carefully review the elements of this KDCP, consider those topics most relevant to their practice, and review applicable resources to help drive organizational change. **As OCM participants, your feedback on which drivers and changes are effective contributes to future iterations of this document.***

* Please reach out to the Learning System team at OCMSupport@cms.hhs.gov to share feedback on the KDCP.

OCM Driver Diagram Overview

This section provides an overview of the driver diagram approach and associated definitions. Additionally, it includes a discussion of how practices can work to sustain their care transformation efforts.

To skip to a list of the OCM drivers and associated change concepts/tactics, see Table 3 on pages 6–7. Change concepts are a set of changes thought to be necessary to achieve results for each secondary driver and are expressed in broad, conceptual terms. Change tactics are specific strategies through which the change concepts are implemented.

Purpose and Use of the OCM Driver Diagram

A driver diagram is a common approach to summarizing the essential areas of action in organizational change or improvement. Key drivers are broken into two levels: primary and secondary. Primary drivers identify the major areas of action necessary to achieve the desired aim. Secondary drivers drill down further into the areas of action (or focus areas for improvement) leading to each primary driver. Supporting each driver is a set of changes rooted in evidence, which practice participants may test and implement within their organizations. Definitions of important terms in this section are below in Table 1.

Table 1: Primary Driver, Secondary Driver, and Changes Definitions

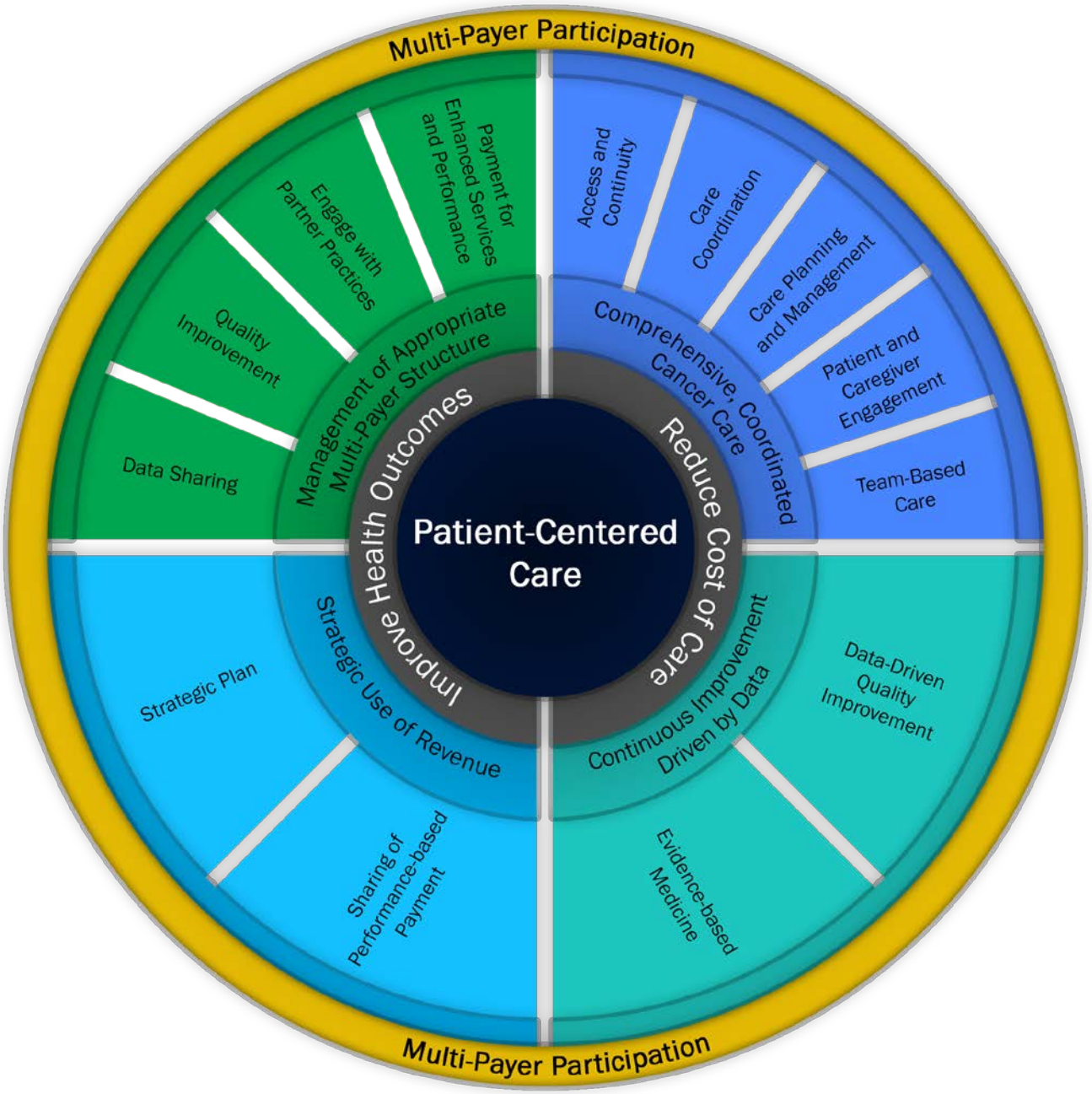
Primary Driver	Secondary Driver	Changes
Primary drivers identify the major areas of action necessary to achieve the desired aim.	Secondary drivers drill down further into the areas of action (or focus areas for improvement) leading to the primary driver.	The changes thought to be necessary to achieve the results from a secondary driver are expressed in broad, conceptual terms (change concepts) and as specific tactics (change tactics) through which the change concepts are implemented.

OCM Driver Diagram

The OCM Driver Diagram is a tool that suggests practice transformation activities as areas of focus for practices and payers. The Driver Diagram illustrates a hypothesis for those care delivery transformations that may lead to the success of OCM participants in the model. As the model progresses, changes to this document will reflect how practices and payers improve the quality and experience of care and reduce costs in OCM.

The Driver Diagram (Figure 1) provides a snapshot of the overall OCM aim and the primary and secondary drivers hypothesized to be necessary to achieve the aim. All subsequent sections of this document tie back to this overarching approach.

Figure 1: Oncology Care Model Driver Diagram



Secondary Driver Definitions

Secondary drivers are critical areas of work for participating OCM practices. Table 2 provides operational definitions for each secondary driver, which are grouped by primary driver. Some definitions come from an external source, while others were developed specific to the purposes of OCM.

Table 2: Secondary Driver Definitions

Primary Driver	Secondary Driver	Definition
Comprehensive, Coordinated Cancer Care	Access and Continuity	Access refers to the ability of patients to obtain health care services in a timely manner, and includes the perceptions and experiences of people regarding their ease of reaching health services or health facilities in terms of proximity, location, time, and ease of approach.[1] Access is a function of both system and individual characteristics and is influenced by social, cultural, economic, and geographic factors. Continuity refers to the development of long-term, trusting relationships between patients and their providers to enable effective and efficient care. Continuity in relationships and in knowledge of patients and their caregivers provides perspective and context throughout all stages of cancer care, including survivorship and end-of-life care.
	Care Coordination	Care coordination involves deliberately organizing care activities and sharing information among all participants concerned with a patient's care to ensure the safe, appropriate, and effective delivery of health care services.[2]
	Care Planning and Management	Care plans are comprehensive plans of evidence-based, integrated clinical care activities specific to the patient and are agreed upon by the patient, caregivers, and clinician. The care plan is a tool used to facilitate communication and shared decision-making. Fundamental to the care plan are the conversations a patient and clinician have regarding the patient's care.[3]
	Patient and Caregiver Engagement	Patient and caregiver engagement is focused on empowering patients and caregivers to serve as active partners and collaborate in shared decision-making with clinicians and the health care team, with the ultimate goal of improving quality and safety. Cancer care teams should confirm sufficient communication methods are instituted and take into account a patient's health literacy, information, language, and emotional needs.[3]
	Team-Based Care	Team-based care is defined by the provision of comprehensive health services to individuals, families, and/or their communities by health professionals who work collaboratively with patients, family caregivers, and community service providers on shared goals within and across settings to achieve coordinated, high-quality care.[3]
Continuous Improvement Driven by Data	Data-Driven Quality Improvement	Data-driven quality improvement (QI) employs the use of a balanced set of measures with a strong evidence base to inform change and practice transformation, identify and understand practice variation, provide clinical decision support, and monitor and sustain successful practices.[4]
	Evidence-Based Medicine	Evidence-based medicine focuses on the integration of clinical expertise, the patient's preferences or values, and the best research evidence to decide on the option best suited to the patient.[5]

Primary Driver	Secondary Driver	Definition
Strategic Use of Revenue	Strategic Plan	Strategic planning is focused on the development of a plan to use payments for enhanced services and performance-based payments (PBP) to maintain the infrastructure and resources to support enhanced care including, but not limited to, additional staff, increased health information technology (IT) and analytics capabilities, and extended care capabilities.
	Sharing of Performance-Based Payment	Sharing of PBP requires the development of a customized payment distribution plan allowing savings to be shared with care partners for their role in contributing to patient care.
Management of Appropriate Multi-Payer Structure (Payers, including the Centers for Medicare & Medicaid Services [CMS])	Payment for Enhanced Services and Performance	Payment for enhanced services and performance requires implementing a payment methodology that incorporates a two-pronged approach for providing enhanced financial support to partner practices including: (1) payment for services is aligned with those included in the definition of enhanced services (e.g., advance payment or per beneficiary/enrollee/ member per month payment) and (2) payment for performance using a methodology designed to assess practices' performance on measures of utilization, cost of care, and/or quality of care for an episode of care (e.g., retrospective lump sum or enhanced monthly payment).
	Engage with Partner Practices	Engage with partner practices includes identifying payer-specific participation requirements and practice redesign activities, providing operational support to practices, supporting the interpretation of data for opportunity analysis, and appropriately aligning incentives to drive high-quality, high-value care.
	Quality Improvement	QI for OCM payers includes aligning practice quality and performance measures to those used by CMS as part of OCM (OCM 1, OCM 2, OCM 3 at a minimum) or other quality measure reporting programs to reduce the administrative burden for practices by limiting the total number of measures reported across all payers.
	Data Sharing	Data sharing involves providing participating practices with practice- and patient-level data about cost and utilization for their attributed patients at regular intervals (at least quarterly) through reports or other data sharing methods.

Change Concepts

Supporting each secondary driver is a set of operational changes necessary to achieve results. These changes are expressed in broad, conceptual terms (change concepts) and as specific tactics (change tactics) through which the change concepts are implemented. This is intended to provide a roadmap for action, allowing practices to test and implement the best tactics for them. To best guide practices at the start of OCM implementation, a literature review was conducted to identify the evidence base in each secondary driver and change concept area. The methodology for this review is summarized in Appendix A: Methods for Development of Key Drivers.

Table 3 lists the change concepts aligned to each secondary driver. In some cases, the change concepts are also operational requirements for OCM participation, and therefore core elements of model implementation. These are indicated by the bolded "Required Practice Redesign Activity" label.

Note that the secondary driver and change concepts identified for payers are indicated in the Management of Appropriate Multi-Payer Structure primary driver.

Table 3: Alignment of Key Drivers and Change Concepts

Primary Driver	Secondary Driver	Change Concept
Comprehensive, Coordinated Cancer Care	Access and Continuity	• Required Practice Redesign Activity: Provide 24/7 access to an appropriate clinician with real-time access to patients' medical records • Increase access to visits • Provide access to care and information outside of visits
	Care Coordination	• Required Practice Redesign Activity: Provide core functions of patient navigation (PN) • Conduct coordinated medication management (for IV and oral therapies) • Support referral coordination and management (core function of PN) • Improve transitions between care settings (core function of PN) • Integrate palliative care
	Care Planning and Management	• Required Practice Redesign Activity: Document a care plan containing the 13 components in the Institute of Medicine (IOM) Care Management Plan • Perform risk stratification • Conduct monitoring and follow-up from visits • Estimate out-of-pocket cost • Address health-related social needs (HRSN)
	Patient and Caregiver Engagement	• Engage patients and caregivers in treatment plan conversations and shared decision-making • Conduct patient education, coaching, and self-management support • Provide patients with modes to track or share experiences • Open medical records and documents (e.g., care plans) for patients to review and revise • Partner with patients and caregivers to guide practice improvements
	Team-Based Care	• Establish and provide organizational support for care delivery teams • Implement collaborative team functions
Continuous Improvement Driven by Data	Data-Driven Quality Improvement	• Required Practice Redesign Activity: Use data for continuous QI • Required Practice Redesign Activity: Use certified electronic health record (EHR) technology • Designate regular team meetings to review data and plan/implement improvement cycles
	Evidence-Based Medicine	• Required Practice Redesign Activity: Use therapies consistent with nationally recognized clinical guidelines • Use clinical decision support systems • Provide patients with appropriate opportunities to participate in clinical trials (core function of PN)

Primary Driver	Secondary Driver	Change Concept
Strategic Use of Revenue	Strategic Plan	• Use budgeting and accounting processes effectively to transform care processes and build capability to deliver comprehensive, coordinated cancer care • Align practice productivity metrics and compensation strategies with comprehensive, coordinated cancer care • Provide nonmonetary incentives, tools/technology, or vouchers for health behavior change
	Sharing of Performance-Based Payment	• Engage various care partners in sharing of PBP
Management of Appropriate Multi-Payer Structure (Payers, including CMS)	Payment for Enhanced Services and Performance	• Required Activity: Implement a methodology for payment for enhanced services • Required Activity: Implement a methodology for payment for performance
	Engage with Partner Practices	• Required Activity: Identify practice redesign activities • Provide operational support to partner practices
	Quality Improvement	• Required Activity: Align quality measures
	Data Sharing	• Required Activity: Share data and feedback with practices and CMS

Sustaining Care Transformation

Since implementing OCM, participants have focused on QI projects and initiatives to improve the delivery of care that are aligned to OCM measures and their practice's broader priorities—making iterative changes to and expanding the scope of these initiatives by tracking results received in OCM feedback and reconciliation reports and/or based on analysis of related claims data. As practices continue to implement new QI projects and modify existing projects, many are looking to take the next steps to identify improvement strategies that "stick." With the movement to align multiple payers and payment models with consistent measures aimed at improving patient care, practices who have identified ways to sustain key activities have the advantage of improved readiness based on their experience in OCM, as successful strategies can be leveraged in future alternative payment models. Thus, practices are assessing care transformation activities that have become ingrained in their teams' daily processes and analyzing the impact of these activities over the long term. Care transformation activities become sustainable when teams recognize the value in their new processes and when those processes have been integrated into day-to-day activities and are no longer viewed as "added on" or additional steps.[6,7] For OCM practices, this may include expanding practice redesign activities beyond their OCM patients to the practice's entire patient population.

Similar to implementing improvement projects, sustaining improvement requires ongoing commitment from team members.[7,8] To avoid reverting back to former processes and old behaviors, known as the improvement evaporation effect,[7,9] sustainability should be considered as practices continually assess their QI projects.[6,7,8,10] Clinicians, frontline managers, and project leads who are intimately involved in the day-to-day work should be included in sustainment efforts,

including data review and sharing with team members, leadership, and stakeholders.[6,10] Sharing data during improvement huddles should continue after a QI project has met its goal to ensure the change is sustained.[8] Additionally, teams should aim to identify threats to sustainability as soon as possible.[8] For example, a QI project that relies on temporary financial support (e.g., implementing a third-party application) may be in jeopardy of sustainment if permanent funding is needed and not secured. One strategy OCM practices can employ to increase the sustainability of a care transformation activity is to look to infrastructure, technologies, and environmental factors that "hardwire" the change, thus making it difficult or impossible to revert back to previous processes and workflows.[6] This could include electronic health record (EHR) enhancements creating "hard stops" or alerts. In addition, tools are available to identify a QI project's strengths, weaknesses, and likelihood of sustainability. Two examples are the Clinical Sustainability Assessment Tool developed by the Washington University in St. Louis and the National Health Service's Sustainability Model and Guide.

As sustainment is ongoing, so too should be the recognition of a practice's journey from OCM implementation to the present day. Celebrating change by marking long-term milestones is one way to avoid the improvement evaporation effect,[7] keep enthusiasm up and recognize ongoing commitment to care transformation.

While all OCM practice redesign resources (webinars, case studies and resource guides, affinity and action group resources, spotlights, etc.) highlight how practices have implemented care transformation activities, many also include examples of sustainment. These examples include regular reviews of workflows and processes by governance committees, systematic surveying of patients, holding monthly meetings where data is shared with leadership and long-range planning around pilot projects.

Primary Driver: Comprehensive Coordinated Cancer Care

The Comprehensive Coordinated Cancer Care primary driver includes five secondary drivers:

- Access and Continuity
- Care Coordination
- Care Planning and Management
- Patient and Caregiver Engagement
- Team-Based Care

The following sections provide an overview of each secondary driver and describe the specific change concepts and tactics OCM participants can implement at their practice in support of these drivers.

Secondary Driver: Access and Continuity

Through OCM, practices continue to focus on a core element of comprehensive coordinated cancer care by providing both timely access and continuity of care for patients. *Access* refers to the ability of patients to obtain health care services in a timely manner, and includes the perceptions and experiences of people regarding their ease of reaching health services or health facilities in terms of proximity, location, time, and ease of approach.[1] Access is a function of both system and individual characteristics and is influenced by social, cultural, economic, and geographic factors. *Continuity* refers to the development of long-term, trusting relationships between patients and their providers to enable effective and efficient care. Continuity in relationships and in knowledge of patients and their caregivers provides perspective and context throughout all stages of cancer care, including survivorship and end-of-life care. Relationship continuity can be measured in reference to a single clinician or to a care team. Evidence suggests improving access and continuity increases the likelihood patients receive the right care at the right time to achieve the best health outcomes, while potentially avoiding costly urgent and emergent care.[11]

To accomplish the goals of access and continuity and achieve highest levels of patient-centered, high-quality, cost-effective care for patients and families, OCM practices should focus on the following change concepts, which are described in more detail below:

- **Required Practice Redesign Activity:** Provide 24/7 access to an appropriate clinician who has real-time access to patients' medical records
- Increase access to visits
- Ensure access to care and information outside of visits

Change Concept (Required): Provide 24/7 access to an appropriate clinician who has real-time access to patients' medical records	
Defining the Change	
The Business Case for Change	Often, patients have medical needs arise outside of traditional clinic hours. As such, practices should provide patients with access to a licensed clinician who has real-time access to their medical record, 24 hours a day and seven days a week. Ensuring this level of access may help to decrease over-utilization of emergency department (ED) services and duplicative testing, while improving patient satisfaction.[12] While this approach can be implemented in a number of ways, a key element is ensuring patients are educated about how to contact the practice after hours in case of emergency medical needs.
Change Tactics	• Provide access to a clinician from the OCM practice who has access to patients' medical records (e.g., internal provider on call outside of practice hours).[12] • Provide cross-coverage from clinicians outside the OCM practice with access to patients' medical records (e.g., grant access to the practice's EHR). • Use protocol-driven nurse triage lines to provide patients with after-hours support and access to clinicians.[13] • Provide education to patients around what symptoms are considered emergent and how to contact the practice after hours before presenting to the ED.[14]
OCM Performance Measure Alignment	The following measure(s) are useful in tracking progress and performance on a QI initiative relating to this change concept: • OCM 1: Risk-adjusted proportion of patients with all-cause hospital admission within the 6-month period (retired after PP4). • OCM 2: Risk-adjusted proportion of patients with all-cause ED visits or observation stays that did not result in a hospital admission within the 6-month episode.
Resources to Support Implementation	
Other Tools, Resources, and Implementation Guides	• Safety Net Medical Home Initiative. Enhanced Access: Implementation Guide. www.safetynetmedicalhome.org/sites/default/files/Implementation-Guide-Enhanced-Access.pdf • COME HOME Model. http://www.comehomeprogram.com/ • Office-Hours Telephone Triage Protocols User's Guide 2016. http://www.cleartriage.com/wp-content/uploads/STCC-OH-Users-Guide.pdf • Gippsland Region Palliative Care Consortium. Tools to Assist After-Hours Telephone Triage or Community Palliative Care Patients. http://www.grpcc.com.au/wp-content/uploads/2015/03/GRPCC-Nurse-Triage-Tool-Kit-WEBa.pdf

Change Concept: Increase access to visits	
Defining the Change	
The Business Case for Change	Increasing access to visits can be accomplished in many ways. This driver focuses on enhancing patients' ability to obtain needed health care services in a timely manner. Increasing access by extending clinic hours and offering same-day appointments has been shown to make care more convenient for patients, lead to high levels of patient satisfaction,[15] improve clinical outcomes, decrease the utilization of ED services, and reduce overall health care expenditures.[16,17] Shared medical appointments, where multiple patients are seen as a group for similar conditions, may improve health-related quality of life and address medical and psychosocial needs while enhancing communication in cancer care.[18] A recent study measured the effectiveness of telemedicine and demonstrated a decrease in assessment and diagnosis wait times and an increase in patient satisfaction.[19] Additionally, evidence suggests video consultation is both feasible and effective for use in the clinical care of oncology patients and may result in reduced costs.[20]
Change Tactics	• Offer extended clinic hours (e.g., evening hours, weekend hours).[17,21,22] • Provide access to same-day appointments and/or urgent care visits, considering the use of advanced practice providers.[23,24,25] • Offer shared appointments or group visits.[18,26] • Offer alternatives for care outside of traditional office visits (e.g., telemedicine, eVisits using secure email and sharing photos via the patient portal, telephone visits, two-way video visits).[20,27,28]
OCM Performance Measure Alignment	The following measure(s) are useful in tracking progress and performance on a QI initiative relating to this change concept: • OCM 1: Risk-adjusted proportion of patients with all-cause hospital admission within the 6-month period (retired after PP4). • OCM 2: Risk-adjusted proportion of patients with all-cause ED visits or observation stays that did not result in a hospital admission within the 6-month episode.
Resources to Support Implementation	
Other Tools, Resources, and Implementation Guides	• Safety Net Medical Home Initiative. Enhanced Access: Implementation Guide. www.safetynetmedicalhome.org/sites/default/files/Implementation-Guide-Enhanced-Access.pdf • Association of Community Cancer Centers (ACCC). Patient-Centered Scheduling: Costs & Benefits of Extending Practice Hours. https://www.accc-cancer.org/docs/docs-imported/resources/pdf/patient-centered-scheduling • Agency for Healthcare Research and Quality. The CAHPS Ambulatory Care Improvement Guide. https://www.ahrq.gov/sites/default/files/wysiwyg/cahps/quality-improvement/improvement-guide/cahps-ambulatory-care-guide-full.pdf • (NEW) U.S. Department of Health and Human Services. Telehealth Models for Increasing Access to Specialty Care. https://www.ruralhealthinfo.org/toolkits/telehealth/2/care-delivery/specialty-care

Change Concept: Provide access to care and information outside of visits	
Defining the Change	
The Business Case for Change	OCM practices are encouraged to provide access to care outside of traditional office visits and sustain continuity of care for their patients. This goal can be accomplished in several ways, including providing secure messaging capabilities, implementing call center triage programs, and utilizing remote technology, each of which provides patients with care team touchpoints between traditional office visits. Evidence has shown patient education for pain and symptom management can decrease unnecessary ED visits as well as lower patient distress levels, leading to higher overall care quality.[29] Additionally, studies have shown remote symptom monitoring has high acceptability and success in improving clinical outcomes such as pain, depression,[30] and fatigue; improving patient safety; and decreasing health care costs through early detection and intervention.[31,32] Furthermore, a recent study demonstrated two OCM practices avoided 222 ED events and associated hospitalizations with an estimated combined net annualized savings of $3.85 million after implementing a symptom management and triage pathway system.[33]
Change Tactics	• Provide patients with a secure email and/or text-messaging option.[34,35,36,37] • Offer use of a patient portal for access to health information.[36,38,39] • Use protocol-driven nurse triage lines to support patients between clinic visits with symptom management.[13,40] • Employ patient-reported outcomes for symptom management (e.g., remote monitoring technology).[35,36]
OCM Performance Measure Alignment	The following measure(s) are useful in tracking progress and performance on a QI initiative relating to this change concept • OCM 1: Risk-adjusted proportion of patients with all-cause hospital admission within the 6-month period (retired after PP4). • OCM 2: Risk-adjusted proportion of patients with all-cause ED visits or observation stays that did not result in a hospital admission within the 6-month episode. • OCM 5: Preventive Care and Screening: Screening for Depression and Follow-Up Plan.
Resources to Support Implementation	
Other Tools, Resources, and Implementation Guides	• Safety Net Medical Home Initiative. Enhanced Access: Implementation Guide. www.safetynetmedicalhome.org/sites/default/files/Implementation-Guide-Enhanced-Access.pdf • Gippsland Region Palliative Care Consortium. Tools to Assist After-Hours Telephone Triage or Community Palliative Care Patients. http://www.grpcc.com.au/wp-content/uploads/2015/03/GRPCC-Nurse-Triage-Tool-Kit-WEBa.pdf • Office-Hours Telephone Triage Protocols User's Guide 2016. http://www.cleartriage.com/wp-content/uploads/STCC-OH-Users-Guide.pdf

Secondary Driver: Care Coordination

Through OCM, practices provide patients with the core elements of care coordination, with the primary goal being to ensure each patient's needs and preferences are met and bridge gaps between different systems of care. According to the Agency for Healthcare Research and Quality (AHRQ), care coordination involves deliberately organizing care activities and sharing information among all participants concerned with a patient's care to ensure the safe, appropriate, and effective delivery of health care services.[2] Care coordination was identified by the Institute of Medicine (IOM) as one of several priority focus areas for advancing health care quality, and IOM suggests improving care coordination can result in better outcomes for patients, providers, and payers.[41]

To accomplish the goals of care coordination and achieve more patient-centered, high-quality, cost-effective care for patients and families, OCM practices should focus on the following change concepts, which are described in more detail below:

- **Required Practice Redesign Activity:** Provide core functions of patient navigation
- Conduct coordinated medication management (for IV and oral therapies)
- Support referral coordination and management (core function of patient navigation)
- Improve transitions between care settings (core function of patient navigation)
- Integrate palliative care

Change Concept (Required): Provide core functions of patient navigation	
Defining the Change	
The Business Case for Change	Patient Navigation (PN) is a patient-centered intervention which addresses barriers to care by providing individualized assistance to patients, families, and caregivers throughout the cancer continuum.[42,43] Practices can configure their PN program in a variety of ways, ranging from models with one or more designated navigators to those where multiple health care providers share the role of navigation. Additionally, the professional background of staff serving in these roles may vary and include registered nurses, non-clinical professions, volunteers, and social workers. The Association of Community Cancer Centers recommends organizations consider implementing disease-site-specific navigators, where navigators are assigned based on the patient's specific cancer diagnosis so they can better serve the unique needs of each patient population.[44] Regardless of its construct, studies have shown successful implementation of oncology PN programs may result in improved adherence to treatment guidelines,[45,46] decreased impact of health system barriers,[47] enhanced patient quality of life and satisfaction and improved patient outcomes.[48,49,50] PN programs have also shown a reduction in missed appointments,[51] fewer treatment interruptions,[52] recouped potential lost revenue,[53] improved timeliness of treatment,[54,55] and better patient understanding of information,[54] as well as enhanced clinical trial recruitment, enrollment, and retention rates.[56] While the responsibilities of oncology patient navigators may vary depending on specific program needs, a consensus exists regarding the common fundamentals of navigator roles, which include focus on identification and resolution of barriers to care, coordination of efficient evidence-based and patient-centered care, facilitating communication and transitions between multidisciplinary care teams, and provision of guidance, education and emotional support.[57]
Change Tactics	The National Cancer Institute Patient Navigator Research Program† identifies the following as the core functions of PN: [58] • Coordinate appointments with clinicians inside and outside the practice to ensure timely delivery of diagnosis and treatment services. • Maintain communication with patients and families across the care continuum. • Ensure appropriate medical records are available at scheduled appointments. • Arrange language translation or interpretation services. • Facilitate connections to follow-up services. • Provide access to clinical trials. • Build partnerships with local agencies and groups (e.g., cancer survivor support groups); maintain a list of community and social services available to patients.
OCM Performance Measure Alignment	The following measure(s) are useful in tracking progress and performance on a QI initiative relating to this change concept: • OCM 1: Risk-adjusted proportion of patients with all-cause hospital admission within the 6-month period (retired after PP4). • OCM 2: Risk-adjusted proportion of patients with all-cause ED visits or observation stays that did not result in a hospital admission within the 6-month episode.
Resources to Support Implementation	
Other Tools, Resources, and Implementation Guides	• George Washington Cancer Center. Advancing the Field of Cancer Patient Navigation: A Toolkit for Comprehensive Cancer Control Professionals. https://smhs.gwu.edu/cancercontroltap/sites/cancercontroltap/files/PN%20Toolkit%20FINAL.pdf

† Although the NCI Patient Navigator Research Program ended in 2010, the study found positive outcomes on patient care when compared to non-navigated patients, and therefore the core functions used in that study were adopted for use by OCM practices.

	• Association of Community Cancer Centers. Cancer Care Patient Navigation: A practical guide for community cancer centers. https://www.accc-cancer.org/docs/docs-imported/resources/pdf/patient-navigation-guide • Association of Community Cancer Centers. Patient Navigation Guide. https://www.accc-cancer.org/projects/patient-navigation-project/practical-guide • The Boston Medical Center. Patient Navigation Toolkit. http://sites.bu.edu/coeinwomenshealth/files/2016/12/BMC-Patient-Navigation-Toolkit-Vol-1.pdf • American Society of Clinical Oncology (ASCO) Cancer.net. Financial Resources. https://www.cancer.net/navigating-cancer-care/financial-considerations/financial-resources • Health Leads. Social Needs Screening Toolkit. https://healthleadsusa.org/resources/the-health-leads-screening-toolkit/ • ACCC. Financial Advocacy Service Guidelines. https://accc.informz.net/ACCC/pages/FAN_Guidelines • Patient Navigator Training Collaborative. How are we doing? How to evaluate your Patient Navigation Program. http://patientnavigatortraining.org/wp-content/uploads/2014/07/PN-Evaluation-Toolkit.pdf • (NEW) American Cancer Society (ACS). Patient Navigation in Cancer Care: National Navigation Roundtable. https://www.chlpi.org/wp-content/uploads/2013/12/Patient-Navigation-in-Cancer-Care-Review-of-Payment-Models_FINAL.pdf • (NEW) George Washington Cancer Center. Patient Navigation Barriers and Outcomes Tool (PN-BOT). https://smhs.gwu.edu/gwci/BarriersTool • (NEW) Journal of Clinical Pathways. Preparing a Community Practice for Value-Based Care by Targeting ED Use. https://www.journalofclinicalpathways.com/news/preparing-community-practice-value-based-care-targeting-ed-use

Change Concept: Conduct coordinated medication management (for IV and oral therapies)	
Defining the Change	
The Business Case for Change	Taking the right medications at the right times is a critical component of cancer care. Medication management is a strategy for engaging with patients and caregivers to create a complete and accurate medication list, reconciling any discrepancies, and providing correct medications at all care transition points.[59,60] Medication management and reconciliation have demonstrated a significant impact in the reduction of inappropriate prescribing and adverse drug events, as well as strengthening pharmacist-patient interactions within the oncology clinic.[61,62,63] Additionally, evidence has shown approaches such as patient education, patient counseling, and improved communication with health care professionals can reduce the risk of adverse events and hospital readmissions, which in turn can mitigate costs to the system.[64,65]
Change Tactics	• Perform medication reconciliation systematically with patients and other members of the care team, including referring and primary care physicians, during care transitions.[63,59] • Conduct comprehensive medication reviews with patients to include action plans, individualized therapy goals, and planned follow-up for high-risk patients.[66,67] • Provide medication self-management support and conduct individualized education with patients on their prescribed and over-the-counter medications to improve adherence.[43, 66] • Integrate a pharmacist into the care team to coordinate and provide medication management services.[59,68]
OCM Performance Measure Alignment	The following measure(s) are useful in tracking progress and performance on a QI initiative relating to this change concept: • OCM 12: Documentation of Current Medications in the Medical Record (retired after PP4).
Resources to Support Implementation	
Other Tools, Resources, and Implementation Guides	• Institute for Healthcare Improvement (IHI). How-to Guide: Prevent Adverse Drug Events by Implementing Medication Reconciliation. http://www.ihi.org/resources/pages/tools/howtoguidepreventadversedrugevents.aspx • Agency for Healthcare Research and Quality. Medications at Transitions and Clinical Handoffs (MATCH) Toolkit for Medication Reconciliation. https://www.ahrq.gov/sites/default/files/publications/files/match.pdf • Patient-Centered Primary Care Collaborative. The Patient-Centered Medical Home: Integrating Comprehensive Medication Management to Optimize Patient Outcomes. https://www.pcpcc.org/sites/default/files/media/medmanagement.pdf • American Society of Clinical Oncology (ASCO) Prior Authorization Toolkit. http://nnecos.org/resources/Documents/ASCO%20Prior%20Authorization%20Toolkit.pdf • Oncology Nursing Society. Oral Adherence Toolkit. https://www.ons.org/sites/default/files/ONS_Toolkit_ONLINE.pdf

Change Concept: Support referral coordination and management	
Defining the Change	
The Business Case for Change	Referral coordination and management is a key change concept that can elicit improvement in the coordination of care for cancer patients. This concept is also one of the core functions of PN. Care coordination agreements, which delineate how care responsibilities will be shared across providers and how bidirectional information will flow, may help enhance the efficiency of specialist collaboration and improve access and quality of care for patients.[69,70] Additionally, using systematic criteria for referrals to outpatient palliative care has demonstrated improvements in candidate selection and timing.[71]
Change Tactics	• Maintain written agreements with care partners (i.e., care coordination agreements, care compacts, or referral agreements).[69] • Use systematic criteria for referrals (e.g., refer patients for psychological support services who screen positive for depression).[30,71,72] • Prepare patients for referral or specialty consultation and set expectations for the referral.[69] • Track patients referred to specialists through the entire referral process.[73] • Systematically integrate information from referrals into the plan of care. • Use structured referral notes.
OCM Performance Measure Alignment	The following measure(s) are useful in tracking progress and performance on a QI initiative relating to this change concept: • OCM 1: Risk-adjusted proportion of patients with all-cause hospital admission within the 6-month period (retired after PP4). • OCM 5: Preventive Care and Screening: Screening for Depression and Follow-Up Plan.
Resources to Support Implementation	
Other Tools, Resources, and Implementation Guides	• American College of Physicians. Care Coordination - High Value Care Coordination (HVCC) Toolkit. https://hvc.acponline.org/physres_care_coordination.html • The Commonwealth Fund. Reducing Care Fragmentation: A Toolkit for Coordinating Care. http://www.lpfch.org/sites/default/files/reducing_care_fragmentation_a_toolkit_for_coordinating_care.pdf • The American College of Physicians. Referral Tracking Guide. http://www.improvingchroniccare.org/downloads/3_referral_tracking_guide.pdf • Rural Health Information Hub. Rural Care Coordination Toolkit. https://www.ruralhealthinfo.org/community-health/care-coordination • Agency for Healthcare Research and Quality. Health Literacy Universal Precautions Toolkit, 2nd Edition: Make Referrals Easy Tool #21. https://www.ahrq.gov/sites/default/files/wysiwyg/professionals/quality-patient-safety/quality-resources/tools/literacy-toolkit/healthlittoolkit2_tool21.pdf

Change Concept: Improve transitions between care settings	
Defining the Change	
The Business Case for Change	"Transitions of care" refers to the movement of patients between health care practitioners, care settings, and home as their condition and care needs evolve.[74] Improving transitions between care settings is an important aspect of care coordination and one of the core functions of PN. Evidence has shown poor care transitions from the hospital to other care settings can cost an estimated $12 billion to $44 billion per year and result in poor health outcomes and adverse effects such as injuries due to medication errors, complications from procedures, infections, and falls.[75] A study has estimated 80% of serious medical errors involve miscommunication during the hand-off between medical providers.[76] Implementing interventions to manage care transitions can result in reduced readmission rates and hospitalization costs when implemented in a variety of settings.[59,77]
Change Tactics	• Use structured communications (e.g., forms, standard reports) to communicate across care settings and enable information flow and seamless transitions.[52,77] • Partner with community or hospital-based transitional care services (e.g., Area Agency on Aging).[78,79] • Participate in health information exchange (e.g., exchanging Consolidated-Clinical Document Architecture [C-CDA] documents with other practices). • Follow a structured process for routine and timely follow-up on hospitalizations, ED visits, and stays in other institutional settings.[80,81] • Work with targeted hospitals where most patients receive services to develop partnerships and achieve timely notification and transfer of information following hospital discharge and ED visits.
OCM Performance Measure Alignment	The following measure(s) are useful in tracking progress and performance on a QI initiative relating to this change concept: • OCM 1: Risk-adjusted proportion of patients with all-cause hospital admission within the 6-month period (retired after PP4). • OCM 2: Risk-adjusted proportion of patients with all-cause ED visits or observation stays that did not result in a hospital admission within the 6-month episode. • OCM 5: Preventive Care and Screening: Screening for Depression and Follow-Up Plan.
Resources to Support Implementation	
Other Tools, Resources, and Implementation Guides	• Society of Hospital Medicine. Project BOOST® (Better Outcomes by Optimizing Safe Transitions) Implementation Toolkit. http://tools.hospitalmedicine.org/Implementation/Workbook_for_Improvement.pdf • Project Re-Engineered Discharge (RED). The Project RED Toolkit. https://www.bu.edu/fammed/projectred/toolkit.html • American Association of Family Physicians. Transitional Care Management 30-Day Worksheet. https://familymedicine.med.uky.edu/sites/default/files/TCM30day.pdf • American College of Physicians. Care Coordination – High Value Care Coordination (HVCC) Toolkit. https://hvc.acponline.org/physres_care_coordination.html • The Commonwealth Fund. Reducing Care Fragmentation: A Toolkit for Coordinating Care. http://www.lpfch.org/sites/default/files/reducing_care_fragmentation_a_toolkit_for_coordinating_care.pdf • The Joint Commission Center for Transforming Healthcare. Targeted Solutions Tool for Hand-off Communications. https://www.centerfortransforminghealthcare.org/what-we-offer/targeted-solutions-tool/hand-off-communications-tst

Change Concept: Integrate palliative care	
Defining the Change	
The Business Case for Change	Per the Electronic Code of Federal Regulations, palliative care is defined as patient and family-centered care that optimizes quality of life by anticipating, preventing, and treating suffering. Palliative care throughout the continuum of illness involves addressing physical, intellectual, emotional, social, and spiritual needs and facilitating patient autonomy, access to information, and choice.[82] Studies have shown cancer care is becoming more aggressive during the end-of-life stage.[82,83] The National Consensus Project's Clinical Practice Guidelines for Quality Palliative Care noted optimized care outcomes when palliative care begins early after the diagnosis of a serious illness and is delivered at the same time as curative or disease-modifying treatments.[84,85] Integration of palliative and hospice services into routine patient care has demonstrated positive patient and caregiver outcomes,[86] including improvement in symptoms, quality of life, patient and caregiver satisfaction, caregiver burden, survival, mood, and survival.[87,88] Another study conducted by the National Institutes of Health found early palliative care patients, when compared to patients receiving late palliative care interventions, had lower rates of inpatient utilization by 33%, intensive care unit visits by 15%, and ED utilization by 20% in the last month of life. In the last six months of life, costs decreased by $6,687 per patient for those with early palliative care.[89] Additionally, improved patient outcomes are reported when palliative care clinicians focus on coping, treatment decisions, and advance care planning during consultation.[90]
Change Tactics	• Integrate palliative care into routine cancer care (e.g., via referral to specialist, hiring dedicated staff for palliative care within the practice, automatic referrals within the care pathway). [91,86,84,87] • Provide access and/or referral to home hospice services.[86,92] • Educate staff and patients around the purpose and benefits of palliative care.[86] • Coordinate with home health agencies. • Provide psychosocial and rehabilitation support for patients and family members. [93,94]
OCM Performance Measure Alignment	The following measure(s) are useful in tracking progress and performance on a QI initiative relating to this change concept: • OCM 1: Risk-adjusted proportion of patients with all-cause hospital admission within the 6-month period (retired after PP4). • OCM 2: Risk-adjusted proportion of patients with all-cause ED visits or observation stays that did not result in a hospital admission within the 6-month episode. • OCM 3: Proportion of patients who died who were admitted to hospice for 3 days or more. • OCM 4a: Oncology: Medical and Radiation – Pain Intensity Quantified. • OCM 4b: Oncology: Medical and Radiation – Plan of Care for Pain.
Resources to Support Implementation	
Other Tools, Resources, and Implementation Guides	• The Advisory Board. How to capture the value of palliative care: an infographic. https://www.advisory.com/research/physician-executive-council/resources/posters/5-characteristics-of-programs-that-capture-the-value-of-palliative-care • The Center to Advance Palliative Care. Palliative Care Featured Resources. https://www.capc.org/ • Ariadne Labs. Serious Illness Conversation Guide. https://www.ariadnelabs.org/areas-of-work/serious-illness-care/resources/#Downloads& • George Washington University Cancer Center. Palliative Care Awareness Social Media Toolkit. https://smhs.gwu.edu/cancercontroltap/sites/cancercontroltap/files/Palliative%20Care%20Social%20MediaToolkit%202018%20FINAL.pdf

	• American Society of Clinical Oncology (ASCO). Palliative Care in Oncology: Resources. https://www.asco.org/practice-policy/cancer-care-initiatives/palliative-care-oncology • NHS England. Enhanced Supportive Care. https://www.england.nhs.uk/wp-content/uploads/2016/03/ca1-enhncd-supprtv-care-guid.pdf • (NEW) Society of Hospital Medicine's (SHM's) Center for Quality Improvement and The Hastings Center. Improving Communication about Serious Illness-Implementation Guide. https://www.hospitalmedicine.org/globalassets/clinical-topics/clinical-pdf/ctr-17-0031-serious-illness-toolkit-m1.pdf • (NEW) Grand Valley State University. Evidence Based Toolkit to Improve Oncology Referrals to Palliative Care. https://scholarworks.gvsu.edu/cgi/viewcontent.cgi?article=1039&context=kcon_doctoralprojects

Secondary Driver: Care Planning and Management

Through OCM, practices enhance a core element of comprehensive coordinated cancer care by providing care planning and management functions. According to IOM, care plans are comprehensive plans of evidence-based, integrated clinical care activities which are patient specific and agreed upon by the patient, caregivers, and clinician.[3] The care plan is a tool used to facilitate communication and shared decision-making. Fundamental to the care plan are the conversations a patient and clinician have regarding the patient's care. Care planning is central to the delivery of high-quality cancer care as it promotes shared decision-making and ensures patients are well informed and understand their diagnosis and options for care.

To accomplish the goals of care planning and management, and achieve more patient-centered, high-quality, cost-effective care for patients and families, OCM practices should focus on the following change concepts, which are described in more detail below:

- **Required Practice Redesign Activity:** Document a care plan containing the 13 components in the Institute of Medicine (IOM) Care Management Plan
- Perform risk stratification
- Conduct monitoring and follow-up from visits
- Estimate out-of-pocket cost
- Address health-related social needs (HRSN)

Change Concept: (Required) Document a care plan containing the 13 components in the Institute of Medicine (IOM) Care Management Plan	
Defining the Change	
The Business Case for Change	In an effort to improve care for patients with cancer, IOM released a report in 2013 entitled "Delivering High Quality Cancer Care," which calls for the documentation of a comprehensive care plan to facilitate communication and shared decision-making among patients, caregivers, and clinicians.[3,95] Literature has shown care management programs can improve the quality of patient care,[96] and the use of care plans can encourage patient participation in decisions about their care and help patients retain important information.[3] The IOM report recommends the cancer care team should provide patients and their families with understandable information on cancer, prognosis, treatment benefits and harms, palliative care, psychosocial support, and an estimate of the total and out-of-pocket costs of cancer care as a means to keep patients engaged in their care and decision-making.[97]
Change Tactics	• Document the 13 components of the IOM Care Management Plan (patient information, diagnosis, prognosis, treatment goals, treatment plan, expected response, treatment benefits and harms, quality of life, responsible care team, advance care plan, estimated out-of-pocket costs, psychosocial needs, and survivorship plan) and explore options to integrate the components into health IT systems.[3,98] • Update the care plan regularly.[3] • Share the care plan with clinicians outside the practice (e.g., fax, hard copy, phone, email).[99] • Share the care plan with patients to facilitate shared decision-making.[3] *Please refer to the most recent version of the OCM Frequently Asked Questions document on OCM Connect for additional guidance in implementing these change tactics.*
OCM Performance Measure Alignment	The following measure(s) are useful in tracking progress and performance on a QI initiative relating to this change concept: • OCM 2: Risk-adjusted proportion of patients with all-cause ED visits or observation stays that did not result in a hospital admission within the 6-month episode. • OCM 3: Proportion of patients who died who were admitted to hospice for 3 days or more. • OCM 4a: Oncology: Medical and Radiation – Pain Intensity Quantified. • OCM 4b: Oncology: Medical and Radiation – Plan of Care for Pain. • OCM 24: Care Plan (MIPS 47, NQF 0326) (retired after PP4).
Resources to Support Implementation	
Other Tools, Resources, and Implementation Guides	• The Commonwealth Fund. Caring for High-Need, High-Cost Patients: What Makes for a Successful Care Management Program? https://www.commonwealthfund.org/publications/issue-briefs/2014/aug/caring-high-need-high-cost-patients-what-makes-successful-care • Nous Foundation, Inc. Advance Care Planning Decisions Checklist. http://www.hadassah-med.com/media/2797107/advanced_care_planning_decisions_checklist.pdf • George Washington Cancer Center. Cancer Survivorship Care Plans Fact Sheets and Toolkit. https://smhs.gwu.edu/cancercontroltap/resources/cancer-survivorship-care-plans-fact-sheets-and-toolkit • National Cancer Survivorship Resource Center (NCSRC) Toolkit. https://smhs.gwu.edu/gwci/sites/gwci/files/NCSRC%20Toolkit%20FINAL.pdf?src=GWCIwebsite • Ariadne Labs. Serious Illness Conversation Guide. https://www.ariadnelabs.org/areas-of-work/serious-illness-care/resources/#Downloads&

	• (NEW) Society of Hospital Medicine's (SHM's) Center for Quality Improvement and The Hastings Center. Improving Communication about Serious Illness-Implementation Guide. https://www.hospitalmedicine.org/globalassets/clinical-topics/clinical-pdf/ctr-17-0031-serious-illness-toolkit-m1.pdf • (NEW) American Society of Clinical Oncology (ASCO). Survivorship Care Planning Tools. https://www.asco.org/practice-policy/cancer-care-initiatives/prevention-survivorship/survivorship-compendium • (NEW) California Department of Public Health & Comprehensive Cancer Control Program. Cancer Survivorship Care Plans: A Toolkit for Health Care Professionals. https://triagecancer.org/wp-content/uploads/2016/02/CDOC-Cancer-Survivorship-Care-Plan-Toolkit-Final-2016.pdf

Change Concept: Perform risk stratification	
Defining the Change	
The Business Case for Change	Risk stratification is the process of identifying patients who may be at higher risk for poor outcomes as a result of various internal and external factors such as demographic characteristics, socioeconomic status, genetic makeup, medical treatments, etc.[100] Assigning a risk status to patients (risk stratification) is an effective tool for personalizing cancer care and providing patients with targeted interventions and resources. The use of a predictive model to proactively identify patients who are at risk of poor health outcomes and likely to benefit from targeted intervention is a solution believed to improve care management for providers transitioning to value-based payment.[101] Additionally, assigning a risk category to each patient allows the medical team to develop a customized treatment plan[102] and has been shown to help coordinators understand what strategic interventions may be useful for each individual patient.[103,104] Risk stratification and risk assessment can also be used as predictors of future ED utilization, thus guiding proper allocation of resources and identification of patients who may require targeted interventions.[105] A population-based cohort study of older patients with breast cancer noted identification of certain predictors and risk factors could help prevent postoperative ED visits.[106]
Change Tactics	• Assign a risk status to each patient (e.g., assign a risk level from 1 to 4), which could be determined in a number of different ways (e.g., clinical intuition, aggressiveness of treatment/known complications, disease stage, social determinants, age, data-based algorithms).[103,107] • Assign patients to a risk cohort (e.g., elderly patients, patients with certain comorbid conditions, risk of depression).[108] • Use the risk stratification process to identify and target care management services to patients whom the team believes to be at high risk (e.g., multiple comorbidities, complex condition).[109,107]
OCM Performance Measure Alignment	The following measure(s) are useful in tracking progress and performance on a QI initiative relating to this change concept: • OCM 1: Risk-adjusted proportion of patients with all-cause hospital admission within the 6-month period (retired after PP4). • OCM 2: Risk-adjusted proportion of patients with all-cause ED visits or observation stays that did not result in a hospital admission within the 6-month episode. • OCM 4a: Oncology: Medical and Radiation – Pain Intensity Quantified. • OCM 4b: Oncology: Medical and Radiation – Plan of Care for Pain. • OCM 5: Preventive Care and Screening: Screening for Depression and Follow-Up Plan. • OCM 30: Closing the Referral Loop: Receipt of Specialist Report (CMS 50v5) (retired after PP4).
Resources to Support Implementation	
Other Tools, Resources, and Implementation Guides	• California Health Care Foundation. Finding a Match: How Successful Complex Care Programs Identify Patients. http://www.chcf.org/publications/2015/03/finding-match-complex-care • American Academy of Family Physicians. Risk-Stratified Care Management and Coordination Fact Sheet. http://www.pcpci.org/sites/default/files/resources/Risk-Stratified%20Care%20Management%20and%20Coordination.pdf • Stratis Health: Population Risk Stratification and Patient Cohort Identification. https://www.stratishealth.org/documents/HITToolkitcoordination/3-Population-Risk-Stratification-and-Patient-Cohort-Identification.pdf

	• National Comprehensive Cancer Network (NCCN). NCCN Clinical Practice Guidelines in Oncology: Older Adult Oncology (refer to section on Assessment of Risk Factors). https://www.nccn.org/professionals/physician_gls/pdf/senior.pdf • CMMI. CPC+ Care Delivery Requirements (refer to Section 2, Care Management and two-step risk stratification process). https://innovation.cms.gov/Files/x/cpcplus-practicecaredlvreqs.pdf • Care Transitions Network for People with Serious Mental Illness. User Guide: Risk Stratification Tool and Chronic Conditions Financial Calculator. https://www.thenationalcouncil.org/wp-content/uploads/2018/03/Risk-Stratification-Tool-User-Guide.pdf • CalOptima. Complex Care Management Toolkit. http://www.calquality.org/storage/documents/Meteor/1.1.2CalOptima_RiskStratificationLevelsofCare.pdf • The Jackson Laboratory. Risk Assessment and Screening Toolkit for Early Onset Colorectal Cancer. https://www.jax.org/education-and-learning/clinical-and-continuing-education/cancer-resources/crc-toolkit • Living with and beyond Cancer Programme. Prostate Cancer Risk Stratification Guideline. https://www.healthandcaretogethersyb.co.uk/application/files/2515/3062/9822/LWABC_-_Prostate_Risk_Stratification_Guideline_vFinal_20_06_2018.pdf • (NEW) Cancer Research. Risk Assessment Tool (RAT). https://www.cancerresearchuk.org/health-professional/diagnosis/suspected-cancer-referral-best-practice/risk-assessment-tool-rat • (NEW) National Association of Community Health Centers. Population Health Management Risk Stratification. http://www.nachc.org/wp-content/uploads/2019/03/Risk-Stratification-Action-Guide-Mar-2019.pdf

Change Concept: Conduct monitoring and follow-up from visits	
Defining the Change	
The Business Case for Change	Monitoring and frequent follow-up from visits is a key strategy for successful care planning and management. It is important for practices to follow up with patients at key times during their course of treatment, including following: their initial IV chemotherapy visit, the start of a new oral chemotherapy medication, an ED visit, a hospital discharge, and an urgent care or same-day visit. Several studies demonstrate improved follow-up and continuity can lead to increased patient satisfaction, improved management of treatment side effects, and improved identification of complications before they become costly for patients and the system (e.g., resulting in ED utilization).[109] Additionally, a study published in the Journal of Clinical Oncology showed a positive association between patient-reported symptoms at and in between visits via a web-based patient-reported outcome (PRO) questionnaire platform and reduction in ED visits (34% vs. 41%) and inpatient hospitalizations (45% vs. 49%).[110]
Change Tactics	• Monitor and conduct personal outreach (via phone or home visit) to patients following initial treatments (or when symptoms are anticipated), sick patient visits (e.g., urgent care, same-day visit, ED visit, hospitalization), and/or if a patient is high risk.[140] • Use technology in conducting follow-up (e.g., eVisits, two-way video visits, remote monitoring).[110,111,140]
OCM Performance Measure Alignment	The following measure(s) are useful in tracking progress and performance on a QI initiative relating to this change concept: • OCM 1: Risk-adjusted proportion of patients with all-cause hospital admission within the 6-month period (retired after PP4). • OCM 2: Risk-adjusted proportion of patients with all-cause ED visits or observation stays that did not result in a hospital admission within the 6-month episode. • OCM 4a: Oncology: Medical and Radiation – Pain Intensity Quantified. • OCM 4b: Oncology: Medical and Radiation – Plan of Care for Pain.
Resources to Support Implementation	
Other Tools, Resources, and Implementation Guides	• ASCO Cancer.Net. The Importance of Follow-up Care. https://www.cancer.net/survivorship/follow-care-after-cancer-treatment/importance-follow-care

Change Concept: Estimate out-of-pocket (OOP) cost	
Defining the Change	
The Business Case for Change	While costs vary depending on the type and extent of treatment, recent data demonstrates costs associated with cancer care are rising more rapidly than costs in other medical specialties.[112,113] The "financial toxicity" resulting from costs being passed on to patients can lead to an unwillingness to pay for care which may save their lives,[112] a lack of adherence to prescribed medications and dose adjustments, and missed appointments.[114] Increased OOP expenses have also led to poorer financial well-being, quality of life, and psychological health.[115] To combat this, it is recommended that patients be clearly informed of costs as part of delivering high-quality cancer care.[114] Most patients desire and are comfortable discussing OOP costs,[116] though patients would prefer to have these conversations at the point of care with their providers, instead of insurance representatives.[117] Transparency about cost burdens related to treatment allows patients to make informed choices about their care[118] and may ultimately reduce overall expenses.[119]
Change Tactics	• Conduct a distress screening and assess for financial distress.[120] • Provide patients with a financial consultation outlining potential OOP costs related to the total cost of cancer care, re-evaluating and recalculating with any changes in treatment. • Provide patients with financial support resources, as needed (e.g., grant applications from local foundations, support from pharmaceutical companies). *Please refer to the most recent version of the OCM Frequently Asked Questions document on OCM Connect for additional guidance in implementing these change tactics.*
OCM Performance Measure Alignment	The following measure(s) are useful in tracking progress and performance on a QI initiative relating to this change concept: • OCM 6: Patient-Reported Experience of Care.
Resources to Support Implementation	
Other Tools, Resources, and Implementation Guides	• American Cancer Society. The Costs of Cancer: Addressing Patient Costs. https://www.acscan.org/sites/default/files/Costs%20of%20Cancer%20-%20Final%20Web.pdf • ASCO Cancer.net. Financial Resources. https://www.cancer.net/navigating-cancer-care/financial-considerations/financial-resources • ACCC. Distress Screening for Oncology Patients: Practical steps for developing and implementing a comprehensive distress screening program. https://www.accc-cancer.org/docs/Documents/oncology-issues/articles/JF14/jf14-distress-screening-for-oncology-patients • NCCN. NCCN Distress Thermometer and Problem List for Patients. https://www.nccn.org/patients/resources/life_with_cancer/pdf/nccn_distress_thermometer.pdf • ACCC. Financial Advocacy Service Guidelines. https://accc.informz.net/ACCC/pages/FAN_Guidelines • Drug Pricing Lab at Memorial Sloan Kettering Cancer Center. https://drugpricinglab.org/

(NEW) Change Concept: Address health-related social needs (HRSN)	
Defining the Change	
The Business Case for Change	According to the Office of Disease Prevention and Health Promotion, social determinants of health are identified as "conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks."[121] Within health care, providers have recognized the growing need to proactively address social needs such as food insecurity, economic and housing instability, transportation, and/or interpersonal safety.[122] Findings have demonstrated about 40% of patient health outcomes are directly related to socioeconomic factors.[123] Failure to address HRSN has been correlated to a decrease in quality of life[124] and increased health care expenditures and utilization.[125] Barriers to health care access and poor care management can also lead to rescheduled or missed appointments and/or missed or delayed medication use.[126]
Change Tactics	• Assess and screen for social needs through the use of a standardized assessment tool (e.g., Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences [PRAPARE] Assessment Tool, Accountable Health Communities [AHC] Health-Related Social Needs [HRSN] Screening Tool, National Comprehensive Cancer Network [NCCN] Distress Thermometer)[123] • Connect patients with appropriate support services and follow-up visits as needed (e.g., patient navigators, financial counselors, social workers, transportation services), and close the loop with those patients to confirm barriers and challenges were adequately addressed. • Identify, partner with, and utilize local community resources (e.g., local ride sharing group to assist with patient transportation) and/or national agencies to assist in addressing HRSN. [123] • Measure the impact of interventions on patient outcomes and refine social need programs, as needed (e.g., measure the impact of financial toxicity on patient outcomes by looking at treatment adherence and whether the patient was linked with a financial counselor). [123]
OCM Performance Measure Alignment	The following measure(s) are useful in tracking progress and performance on a QI initiative relating to this change concept: • OCM 5: Preventive Care and Screening: Screening for Depression and Follow-Up Plan. • OCM 6: Patient-Reported Experience of Care. • OCM 12: Documentation of Current Medications in the Medical Record (CMS 68v7.1, NQF 0419) (retired after PP4).
Resources to Support Implementation	
Other Tools, Resources, and Implementation Guides	• Accountable Health Communities (AHC). The Accountable Health Communities Health-Related Social Needs Screening Tool. https://innovation.cms.gov/Files/worksheets/ahcm-screeningtool.pdf • NCCN. NCCN Distress Thermometer and Problem List for Patients. https://www.nccn.org/patients/resources/life_with_cancer/pdf/nccn_distress_thermometer.pdf • National Association of Community Health Centers. Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences (PRAPARE) Assessment Tool. http://nachc.org/research-and-data/prapare/ • The Commonwealth Fund. Review of Evidence for Health-Related Social Needs Interventions.https://www.commonwealthfund.org/sites/default/files/2019-07/COMBINED_ROI_EVIDENCE_REVIEW_7.15.19.pdf

	• Practical Playbook. Identifying and Addressing Patients' Social Needs in Health Care Delivery Settings. https://www.practicalplaybook.org/page/identifying-and-addressing-patients%E2%80%99-social-needs-health-care-delivery-settings • Health Care Transformation Task Force (HCTTF). Value Partnership Evaluation Tool. https://hcttf.org/wp-content/uploads/2019/09/10.30.2019-SDOH-Social-risk-factors-social-needs-Webinar-slides.pdf

Secondary Driver: Patient and Caregiver Engagement

Through OCM, practices continue to focus on a core element of comprehensive coordinated cancer care by actively engaging patients and caregivers. According to IOM, patient and caregiver engagement is focused on empowering patients and caregivers to serve as active partners and collaborate in shared decision-making with clinicians and the health care team with the ultimate goal of improving quality and safety.[3] In order to be most effective, cancer care teams should confirm use of sufficient communication methods and take into account a patient's health literacy, language, emotional needs, and the information being presented.[3] When done effectively, patient and caregiver engagement can improve the quality of care while contributing to better health outcomes and lower costs.[127,128]

To accomplish the goals of patient and caregiver engagement and achieve more patient-centered, high-quality, cost-effective care for patients and families, OCM practices should focus on the following change concepts, which are described in more detail below:

- Engage patients and caregivers in treatment plan conversations and shared decision-making
- Conduct patient education, coaching, and self-management support
- Provide patients with modes to track or share experiences
- Open medical records and documents (e.g., care plans) for patients to review and revise
- Partner with patients and caregivers to guide practice improvements

Change Concept: Engage patients and caregivers in treatment plan conversations and shared decision-making	
Defining the Change	
The Business Case for Change	Patient and caregiver engagement is a concept that recognizes and utilizes patients and their families as necessary partners in all levels of the care process. Shared decision-making is an element of patient and caregiver engagement occurring at specific clinical decision points that involves taking patient values and preferences into account when making care choices.[129,130,131] Engaging patients and caregivers in early treatment plan conversations may lead to improved patient satisfaction and health outcomes, decreased health care spending, and the mitigation of the emotional repercussions of a cancer diagnosis.[132, 133]
Change Tactics	• Use patient decision aids (e.g., option grids, video decision aids) or other educational materials to supplement conversations with patients and/or caregivers and encourage shared decision-making.[134,135] • Discuss treatment options, including palliative care, early in the course of care.[132,136] • Train clinical staff on shared decision-making and communication (e.g., role play; feedback; small group discussions; situation, background, assessment and recommendation (SBAR) technique; teach-back methods[137]; motivational interviewing).[138,139.131]
OCM Performance Measure Alignment	The following measure(s) are useful in tracking progress and performance on a QI initiative relating to this change concept: • OCM 3: Proportion of patients who died who were admitted to hospice for 3 days or more. • OCM 4a: Oncology: Medical and Radiation – Pain Intensity Quantified. • OCM 4b: Oncology: Medical and Radiation – Plan of Care for Pain.
Resources to Support Implementation	
Other Tools, Resources, and Implementation Guides	• Health IT National Learning Consortium. Shared Decision-Making Fact Sheet. https://www.healthit.gov/sites/default/files/nlc_shared_decision_making_fact_sheet.pdf • Mayo Clinic. Shared Decision Making National Resource Center. http://shareddecisions.mayoclinic.org/ • Dartmouth-Hitchcock. Decision Support Toolkit for Specialty Care. http://med.dartmouth-hitchcock.org/csdm_toolkits/specialty_care_toolkit.html • Office of the National Coordinator for Health Information Technology (ONC) for Health IT. Patient Engagement Playbook. https://www.healthit.gov/playbook/pe/ • Patient-Centered Primary Care Collaborative. Patient Engagement Ressources. https://www.pcpcc.org/resources/169 • AHRQ. The SHARE Approach. https:/www.ahrq.gov/professionals/education/curriculum-tools/shareddecisionmaking/index.html. • AHRQ. Guide to Patient and Family Engagement in Hospital Quality and Safety. https://www.ahrq.gov/professionals/systems/hospital/engagingfamilies/index.html • CancerCare. 2016 Patient Access and Engagement Report. https://media.cancercare.org/accessengagementreport/FINAL-CancerCare-CAPER-10May2016-hsp.pdf • Ariadne Labs. Serious Illness Conversation Guide. https://www.ariadnelabs.org/areas-of-work/serious-illness-care/resources/#Downloads& • Cancer Care. 2018 Decision Making at the Point of Care: Voices of Oncology Providers. A Patient Values Initiative Issue Brief. https://media.cancercare.org/publications/original/378-pvi_ii.pdf • Fraser Health. Patient Engagement Heard and Valued. https://www.cfhi-fcass.ca/sf-docs/default-source/patient-engagement/awesome_handbook-fraserhealth.pdf?sfvrsn=2 • (NEW) University of Wisconsin System and University of Wisconsin School of Medicine and Public Health. Shared Decision Making Clinician Training For Cancer Screening. https://www.fammed.wisc.edu/sdm-cancer-screening/

Change Concept: Conduct patient education, coaching, and self-management support	
Defining the Change	
The Business Case for Change	Education, coaching, and self-management support are all tools for engaging patients in their care.[140] Most clinical guidelines recommend the use of patient education as a core component of managing patients with cancer pain, as it can empower patients to self-manage, better coordinate and care for themselves, and improve communication with their providers.[141,142] Effective teaching and coaching methods may include goal setting with structured follow-up, action planning, and motivational interviewing.[143] Finally, self-management, with support from the care team, can enhance positive outcomes for cancer patients and survivors, including improved quality of life, reduced pain, and reduced symptom severity.[144]
Change Tactics	• Provide web-based (virtual) self-management support.[145] • Conduct treatment goal setting with structured follow-up.[146] • Conduct action planning to clarify steps to be taken to achieve treatment goals.[147,140] • Conduct dedicated "chemo teach" billable visits. • Practice motivational interviewing as a coaching technique.[141] • Provide educational materials at an appropriate literacy level and in the appropriate language.[148]
OCM Performance Measure Alignment	The following measure(s) are useful in tracking progress and performance on a QI initiative relating to this change concept: • OCM 1: Risk-adjusted proportion of patients with all-cause hospital admission within the 6-month period (retired after PP4). • OCM 2: Risk-adjusted proportion of patients with all-cause ED visits or observation stays that did not result in a hospital admission within the 6-month episode. • OCM 3: Proportion of patients who died who were admitted to hospice for 3 days or more. • OCM 4a: Oncology: Medical and Radiation – Pain Intensity Quantified. • OCM 4b: Oncology: Medical and Radiation – Plan of Care for Pain.
Resources to Support Implementation	
Other Tools, Resources, and Implementation Guides	• Patient-Centered Primary Care Collaborative Resource List. Person & Family Centered. https://www.pcpcc.org/resources/1 • Community Care of North Carolina. Motivational Interviewing Resource Guide. https://www.communitycarenc.org/media/files/mi-guide.pdf • Safety Net Medical Home Initiative. Patient-Centered Interactions Implementation Guide. http://www.safetynetmedicalhome.org/sites/default/files/Implementation-Guide-Patient-Centered-Interactions.pdf • IHI. Partnering in Self-Management Support: A Toolkit for Clinicians. http://www.ihi.org/resources/Pages/Tools/SelfManagementToolkitforClinicians.aspx AHRQ. Health Literacy Universal Precautions Toolkit. https://www.ahrq.gov/professionals/quality-patient-safety/quality-resources/tools/literacy-toolkit/index.html • Cancer.net. Navigating Cancer Care. https://www.cancer.net/navigating-cancer-care • The Ottawa Hospital. Patient Decision Aids Implementation Toolkit. https://decisionaid.ohri.ca/implement.html

Change Concept: Provide patients with modes to track or share experiences	
Defining the Change	
The Business Case for Change	Supporting patients in emotional disclosure through journals or other resources can significantly lessen pain and increase wellbeing.[149] Expressive writing, such as keeping a journal, helps patients cognitively and emotionally process the cancer experience and monitor their action plans. Through integration of thoughts and feelings, patients may develop a coherent narrative of the cancer treatment experience, create meaning, and eventually derive benefit from the experience. For instance, women with breast cancer who wrote about their thoughts and feelings reported fewer symptoms and had fewer unscheduled visits to their doctors.[150] Additionally, psychological interventions help patients and families to alleviate distress and address challenges for those patients with advanced cancer.[151]
Change Tactics	• Offer journals (digital or paper-based) to patients to track their experiences and conversations over the course of treatment and self-monitor their action plans.[152,153] • Provide online media for sharing experiences or communicating with family and friends (e.g., *CaringBridge*). • Offer psychological services to patients and their families.[154,155] • Provide alternative forms of expression/support for patients (e.g., art therapy, massage therapy, yoga, music therapy, acupuncture).[156,157]
OCM Performance Measure Alignment	The following measure(s) are useful in tracking progress and performance on a QI initiative relating to this change concept: • OCM 6: Patient-Reported Experience of Care.
Resources to Support Implementation	
Other Tools, Resources, and Implementation Guides	• OCM Practice Resource: Renewal Nook Services: Learn about the holistic services one OCM practice offers to patients. • CancerCare. Healing with Words: Journaling and Reflecting Throughout Treatment. http://www.cancercare.org/publications/263-healing_with_words_journaling_and_reflecting_throughout_treatment • CancerCare. Healing with Words: A Therapeutic Writing Group. http://www.cancercare.org/support_groups/89-healing_with_words_a_therapeutic_writing_group • MD Anderson Cancer Center. Journaling your way through cancer. https://www.mdanderson.org/publications/cancerwise/2013/04/practicing-self-care-through-journaling.html • Center for Community Health and Development at the University of Kansas. The Community Tool Box: Creating and Facilitating Peer Support Groups. https://ctb.ku.edu/en/table-of-contents/implement/enhancing-support/peer-support-groups/main • American Art Therapy Association. Art Therapist Locator. https://arttherapy.org/art-therapist-locator/

Change Concept: Open medical records and documents (e.g., care plans) for patients to review and revise	
Defining the Change	
The Business Case for Change	Open medical records are recognized as a promising strategy to support greater patient engagement and self-management through increased comprehension of their prognosis and treatment,[158,159] and initial evidence has shown outcomes improve when patients are granted access to their records.[160] One way providers can offer patients access to their medical information and documents is through the use of a patient portal. Evidence indicates patient portals not only encourage patients to be actively engaged, but also increase their competency to appropriately make health-related decisions.[161] However, it is important to note provider endorsement and patient portal usability contribute to the likelihood of the patient being able to become more engaged and involved in their own care.[161]
Change Tactics	• Offer patients access to their full EHR (e.g., Open Notes).[159,162,163] • Provide secure email of medical information and documents. • Provide patient portal with access to medical information and documents.[161]
OCM Performance Measure Alignment	The following measure(s) are useful in tracking progress and performance on a QI initiative relating to this change concept: • OCM 6: Patient-Reported Experience of Care. • OCM 12: Documentation of Current Medications in the Medical Record (CMS 68v7.1, NQF 0419) (retired after PP4).
Resources to Support Implementation	
Other Tools, Resources, and Implementation Guides	• Health IT.gov. Using Patient Portals in Ambulatory Care Settings Fact Sheet. https://www.healthit.gov/resource/using-patient-portals-ambulatory-care-settings-fact-sheet • Health IT.gov. Patient Engagement Playbook https://www.healthit.gov/playbook/pe/introduction/

Change Concept: Partner with patients and caregivers to guide practice improvements	
Defining the Change	
The Business Case for Change	Involving patients in the QI design process and/or in QI teams and committees allows them to offer their experiences as an input to the vision for improvement and helps to increase the overall quality of care.[164] Additionally, engaging patients and caregivers in clinical improvement projects through patient/caregiver surveys, interviews, and focus groups can enhance the project's quality and impact.[165] One way to actively partner with patients and caregivers is by forming a patient and family advisory council (PFAC), which can improve patient engagement and help increase communication for better outcomes.[166,167]
Change Tactics	• Regularly assess the patient care experience by engaging patients through self-management support, patient/caregiver surveys, interviews, and/or focus groups.[168] • Include patients in QI teams or committees.[164,165] • Establish a PFAC.[169] • Communicate to patients and caregivers about the changes being implemented by the practice.
OCM Performance Measure Alignment	The following measure(s) are useful in tracking progress and performance on a QI initiative relating to this change concept: • OCM 6: Patient-Reported Experience of Care.
Resources to Support Implementation	
Other Tools, Resources, and Implementation Guides	• Institute for Patient and Family-Centered Care. Patient and Family Partners Roles. https://www.pcpcc.org/sites/default/files/Patient%20%26%20Family%20Partner%20Roles.pdf • Institute for Patient and Family-Centered Care. Worksheet to Support Progress. https://www.pcpcc.org/resource/partnering-patients-and-families-primary-care-improvement-and-redesign-worksheet-support • Patient-Centered Primary Care Collaborative. How to Identify Strong Patient and Family Partners to Help Drive Practice Transformation. https://www.pcpcc.org/sites/default/files/1-30-2016%20Final%20Combined%20Slides-Getting%20started%20ag%20edits.pdf • Healthcare Quality Improvement Partnership. Patient and Public Involvement in Quality Improvement. https://www.hqip.org.uk/resource/a-guide-to-patient-and-public-involvement-in-quality-improvement/#.WvWNwqrfNMs • Robert Wood Johnson Foundation. Aligning Forces for Quality. Patient Engagement Toolkit. http://forces4quality.org/compendium-tools-engaging-patients-your-practice.html • American Medical Association. Forming a Patient and Family Advisory Council. https://edhub.ama-assn.org/steps-forward/module/2702594 • IHI. How Do You Involve Patients in Improvement? http://www.ihi.org/education/IHIOpenSchool/resources/Pages/Activities/Balik-IntegratingPatientsInDesign.aspx • (NEW) Agency for Healthcare Research and Quality (AHRQ). CAHPS Cancer Care Survey. https://www.ahrq.gov/cahps/surveys-guidance/cancer/index.html

Secondary Driver: Team-Based Care

Through OCM, practices enhance a core element of comprehensive coordinated cancer care by supporting team-based care. According to IOM, team-based care is defined by the provision of comprehensive health services to individuals, families, and/or their communities by health professionals who work collaboratively along with patients, family caregivers, and community service providers on shared goals within and across settings to achieve coordinated, high-quality care.[3] Benefits of team-based care may include improved patient safety and quality of care; increased communication and engagement between caregivers, providers, and patients; positive perceptions of teamwork; and strong collaborative thinking.[170]

To accomplish the goals of team-based care and achieve more patient-centered, high-quality, cost-effective care for patients and families, OCM practices should focus on the following change concepts, which are described in more detail below:

- Establish and provide organizational support for care delivery teams
- Implement collaborative team functions

Change Concept: Establish and provide organizational support for care delivery teams	
Defining the Change	
The Business Case for Change	Well-implemented team-based care has the potential to improve comprehensiveness, coordination, quality, access, and patient satisfaction and outcomes.[166,171] With a patient-centered, team-based care approach, evidence has shown improved performance on process measures such as follow-up time, appropriate screening use, and physician satisfaction.[172] Team-based care offers many potential advantages, such as increased access to care (e.g., more hours of coverage, shorter wait times), more effective and efficient delivery of additional services essential to providing high-quality care (e.g., patient education, behavioral health, self-management support, and care coordination), and an environment in which all medical and nonmedical professionals are encouraged to perform work matched to their abilities.[166]
Change Tactics	• Establish consistent team members responsible for patient population/panel (e.g., assign responsibility for the entire population, linking each patient to a practitioner/care team).[148,173] • Define and communicate clear roles and responsibilities among care team members to reflect the skills, abilities, and credentials of team members.[174,175] • Support providers in practicing at the top of their license. • Cross-train staff so skills overlap sufficiently and work can be shared when necessary (e.g., infusion nurses rotate as triage nurses).[176] • Develop a multidisciplinary team and augment staff (e.g., health coach, nutritionist, pharmacist, physical therapist, patient navigator, etc.) as appropriate to meet patient needs.[177] • Provide ongoing educational courses/trainings, peer support groups, panel discussions, etc. to support staff in managing stress/fatigue.[178]
OCM Performance Measure Alignment	The following measure(s) are useful in tracking progress and performance on a QI initiative relating to this change concept: • OCM 1: Risk-adjusted proportion of patients with all-cause hospital admission within the 6-month period (retired after PP4). • OCM 2: Risk-adjusted proportion of patients with all-cause ED visits or observation stays that did not result in a hospital admission within the 6-month episode.
Resources to Support Implementation	
Other Tools, Resources, and Implementation Guides	• Safety Net Medical Home Initiative. Continuous & Team-Based Healing Relationships Implementation Guide. http://www.safetynetmedicalhome.org/change-concepts/continuous-team-based-healing-relationships • Agency for Healthcare Research and Quality (AHRQ). TeamSTEPPS for Office-Based Care Version. http://www.ahrq.gov/teamstepps/officebasedcare/index.html • American Medical Association (AMA). Implementing Team-Based Care. https://www.stepsforward.org/modules/team-based-care • Cambridge Health Alliance. Model of Team-Based Care Implementation Guide and Toolkit. http://www.safetynetmedicalhome.org/sites/default/files/CHA-Teams-Guide.pdf • (NEW) National Academy of Medicine (NAM). Implementing Optimal Team-Based Care to Reduce Clinician Burnout. https://nam.edu/implementing-optimal-team-based-care-to-reduce-clinician-burnout/

Change Concept: Implement collaborative team functions	
Defining the Change	
The Business Case for Change	The provision of safe, effective health care is dependent on the presence of high-functioning collaborative teams.[179] Evidence suggests communication barriers among health care teams can lead to adverse clinical outcomes.[179] Practices should implement team-focused communication tools, such as shared goals and huddles.[180] Team huddles are brief meetings between physicians and the care team prior to or in between patient care sessions to enhance communication, teamwork, efficiency, and patient safety.[181] Evidence has shown by regularly participating in huddles, care team members will gain practical skills in pre-visit planning, a more global understanding of practice logistics, a better understanding of patient care core competencies, interpersonal and communication skills, and professionalism.[181] According to AHRQ, daily huddles encourage the care team to discuss safety performance measures, recognize issues from the previous day, increase communication, and anticipate future issues in advance.[182]
Change Tactics	• Set shared team goals to optimize processes, resources, and efforts.[175,180,183] • Hold regular (daily, weekly) team huddles to manage workflow and meet patient needs.[181,182] • Schedule ad hoc meetings for the management of complex patients.[184] • Use specific evidence-based tools or strategies to ensure timely communication of critical clinical information to all team members (e.g., TeamSTEPPS®).[185, 186, 187] • Establish protocols and standard operating procedures to create workflows to improve efficiencies in care.[188]
OCM Performance Measure Alignment	The following measure(s) are useful in tracking progress and performance on a QI initiative relating to this change concept: • OCM 1: Risk-adjusted proportion of patients with all-cause hospital admission within the 6-month period (retired after PP4). • OCM 2: Risk-adjusted proportion of patients with all-cause ED visits or observation stays that did not result in a hospital admission within the 6-month episode. • OCM 12: Documentation of Current Medications in the Medical Record (retired after PP4). • OCM 30: Closing the Referral Loop: Receipt of Specialist Report (CMS 50v5) (retired after PP4).
Resources to Support Implementation	
Other Tools, Resources, and Implementation Guides	• Safety Net Medical Home Initiative. Continuous & Team-Based Healing Relationships Implementation Guide. http://www.safetynetmedicalhome.org/change-concepts/continuous-team-based-healing-relationships • Agency for Healthcare Research and Quality. TeamSTEPPS for Office-Based Care Version. http://www.ahrq.gov/teamstepps/officebasedcare/index.html • IHI. Huddles. http://www.ihi.org/resources/Pages/Tools/Huddles.aspx • American Medical Association. Implementing a Daily Huddle. https://www.stepsforward.org/modules/team-huddles • American Society of Clinical Oncology (ASCO). Team-Based Care in Oncology. https://www.asco.org/practice-policy/cancer-care-initiatives/team-based-care-oncology • (NEW) National Academy of Medicine. Implementing Optimal Team-Based Care to Reduce Clinician Burnout. https://nam.edu/implementing-optimal-team-based-care-to-reduce-clinician-burnout/

Primary Driver: Continuous Improvement Driven by Data

The Continuous Improvement Driven by Data primary driver includes two secondary drivers:

- Data-Driven Quality Improvement
- Evidence-Based Medicine

The following sections provide an overview of each secondary driver and describe the specific change concepts and tactics OCM participants can implement in support of these drivers.

Secondary Driver: Data-Driven Quality Improvement

Through OCM, practices focus on data-driven QI by using a balanced set of measures with a strong evidence base to inform change and practice transformation, identify and understand practice variation, provide clinical decision support, and monitor and sustain successful practices.[4] Fair, accurate, and robust data is essential to drive continuous QI and helps to measure the effects of improvement interventions.[189]

To accomplish the goals of data-driven QI and achieve more patient-centered, high-quality, cost-effective care for patients and families, OCM practices should focus on the following change concepts, which are described in more detail below:

- **Required Practice Redesign Activity:** Use data for continuous quality improvement
- **Required Practice Redesign Activity:** Use certified electronic health record (EHR) technology
- Designate regular team meetings to review data and plan/implement improvement cycles

Change Concept: (Required) Use data for continuous quality improvement (CQI)	
Defining the Change	
The Business Case for Change	As part of participation in OCM, practices are expected to track performance against selected clinical quality measures using their quarterly feedback reports to demonstrate current performance, set future goals, and monitor the effects of changes made. Evidence-based research demonstrates that building clinical operations, workflow, and technological infrastructure in order to deliver relevant, consumable data to clinicians helps to drive QI.[190] Aggregated, real-time data provides the tools to rapidly identify opportunities for improvement and conduct QI projects to enhance the quality and value of delivered services.[190] Additionally, adoption of a formal model for QI such as plan-do-study-act (PDSA) or Lean Six Sigma has been shown to create a culture in which staff actively participate in improvement activities.[191,192] PDSA cycles are widely accepted for health care improvement—PDSA cycles are also frequently regarded as the "cornerstone" of the model of improvement due to their various advantages when put into practice.[193] PDSA cycles have advantages such as such as providing a structure for iterative tests of change, while their small scale allows for scientific tests of change with minimal resource implications or negative impacts to the system.[191,194] Lean implementation in health care can be used to quickly identify issues and institute rapid-cycle improvements, and is associated with improved patient outcomes, increased patient satisfaction, reduced operating costs, stronger financial performance, and greater employee engagement.[195,196]
Change Tactics	• Regularly review feedback (quarterly) and reconciliation report (semi-annual) data and identify opportunities for improvement. • Create a dashboard to track OCM quality measures (or other quality metrics).[197,198] • Employ a formal model of QI in your practice (e.g., PDSA, Lean Six Sigma).[193,196,199] • Engage providers, care teams, and patients in QI and practice transformation.[207,200]
OCM Performance Measure Alignment	Practices who choose to focus on using data for continuous QI can track their progress and performance against any of the currently available OCM measures.
Resources to Support Implementation	
Other Tools, Resources, and Implementation Guides	• National Learning Consortium. CQI Strategies to Optimize your Practice. https://www.healthit.gov/sites/default/files/nlc_continuousqualityimprovementprimer.pdf • Safety Net Medical Home Initiative. Quality Improvement Strategy Implementation Guide. http://www.safetynetmedicalhome.org/change-concepts/quality-improvement-strategy • GoLeanSixSigma.com. The Five Phases of Lean Six Sigma. https://goleansixsigma.com/dmaic-five-basic-phases-of-lean-six-sigma/ • Quality Enhancement Research Initiative (QUERI). Quality Improvement Methods. https://www.queri.research.va.gov/implementation/quality_improvement/all_methods.cfm • AHRQ. Quality Improvement Tools and Resources. http://www.ahrq.gov/professionals/quality-patient-safety/quality-resources/index.html • IHI. Change Achievement Success Indicator. http://www.ihi.org/resources/Pages/Tools/ChangeAchievementSuccessIndicatorCASI.aspx • IHI. The Improvement Guide: A Practical Approach to Enhancing Organizational Performance. http://www.ihi.org/resources/Pages/Publications/ImprovementGuidePracticalApproachEnhancingOrganizationalPerformance.aspx • Health Quality Ontario. Measurement for Quality Improvement. http://www.hqontario.ca/Portals/0/Documents/qi/qi-measurement-primer-en.pdf • ACT Academy. Plan, Do, Study, Act (PDSA) cycles and the model for improvement. https://improvement.nhs.uk/documents/2142/plan-do-study-act.pdf

	• Underwriter's Laboratories. Applying Lean Principles to Improve Healthcare Quality and Safety. https://library.ul.com/wp-content/uploads/sites/40/2015/02/UL_WP_Final_Applying-Lean-Principles-to-Improve-Healthcare-Quality-and-Safety_v11_HR.pdf • IHI. Quality Improvement Essentials Toolkit. http://www.ihi.org/resources/Pages/Tools/Quality-Improvement-Essentials-Toolkit.aspx • IHI. Sustaining Improvement: White Paper. http://www.ihi.org/resources/Pages/IHIWhitePapers/Sustaining-Improvement.aspx • (NEW) HealthCatalyst. Lean Principles in Healthcare: 2 Important Tools Organizations Must have. https://www.healthcatalyst.com/lean-principles-in-healthcare-2-key-tools • (NEW) AHRQ. Fillable Plan Do Study Act (PDSA) Tool for Health Care Quality Improvement (QI). https://www.ahrq.gov/evidencenow/tools/pdsa-form.html • (NEW) IHI. How Do You Involve Patients in Improvement? http://www.ihi.org/education/IHIOpenSchool/resources/Pages/Activities/Balik-IntegratingPatientsInDesign.aspx

Change Concept: (Required) Use certified electronic health record (EHR) technology	
Defining the Change	
The Business Case for Change	The Office of the National Coordinator for Health Information Technology (ONC) Health IT Certification Program provides assurance that a system meets the technological capability, functionality, and security requirements adopted the department of Health and Human Services (HHS).[201] The Quality Payment Program (QPP) requires providers to use a 2015 Edition Certified EHR technology (CEHRT) to avoid a downward payment adjustment for the Promoting Interoperability measure.[202] In alignment with the QPP, OCM requires the use of 2015 Edition CEHRT for oncology practices, which has benefits for patients, providers, and the practice overall. The use of EHR technology creates opportunities for patient support and empowerment in complex medical situations, as the tool can be used to create and implement comprehensive cancer survivorship care plans and provide a channel for education, communication, and information seeking.[203] EHR technology can also be used to collect data and report quality measures, manage medications, identify high-risk patients, [204] and provide prompts and reminders for supporting improvements in the quality of care.[205] Direct exchange of clinical information across clinicians has been shown to improve processes of care and, in some cases, sharing diagnostic information with hospitals within the same health system is linked with improved patient outcomes and significantly lower mortality rates.[205]
Change Tactics	• Implement certified EHR technology.[203] • Leverage EHR technology (or other health information technology) to collect data and report quality measures. [204] • Manage medication via the EHR (e.g., formulary checks, allergy checks, or drug interaction checks). [204] • Develop, store, and disseminate patient-specific educational materials and tools.
OCM Performance Measure Alignment	The following measure(s) are useful in tracking progress and performance on a QI initiative relating to this change concept: • OCM 12: Documentation of Current Medications in the Medical Record (retired after PP4).
Resources to Support Implementation	
Other Tools, Resources, and Implementation Guides	• The Medicare and Medicaid EHR Incentive Programs: Stage 2 Toolkit. https://www.cms.gov/regulations-and-guidance/legislation/ehrincentiveprograms/downloads/stage2_toolkit_ehr_0313.pdf • ONC. Health IT Playbook. https://www.healthit.gov/playbook/ • HealthIT.gov. Meaningful Use Success Stories. https://www.healthit.gov/success-stories • HealthIT.gov. Meaningful Use Case Studies. https://www.healthit.gov/case-studies

Change Concept: Designate regular team meetings to review data and plan/implement improvement cycles	
Defining the Change	
The Business Case for Change	Researchers have concluded a commitment to continuous improvement with an organizational structure emphasizing teams is important to foster effective performance.[158] Teams are an important component in the quality improvement process as they harness the knowledge, skills, experiences, and perspectives of a diverse group of individuals to ensure lasting improvements.[206] Regular team meetings play a role in the facilitation of sharing information and data, along with planning and implementation of improvement cycles.[158] In other health care settings such as nursing homes, practices using QI teams were more likely to continue QI work[207] while the Institute for Healthcare Improvement (IHI) notes daily huddles including a diverse group of staff (front line, managers, executives) are fundamental to achieving quality control and centering attention on QI goals.[208] Organizational culture, relationships between team members, patient engagement,[209] and multidisciplinary and leadership involvement are factors mentioned in systematic reviews as being important to facilitating QI.[210,211,212]
Change Tactics	• Establish a dedicated QI committee and governing body to meet regularly to approve and monitor QI activities (review data, plan improvement cycles to redesign care processes, etc.). [213,214] Include representation from clinical leadership, technical expertise, day-to-day leadership, and project sponsorship. • Share team/provider-identified data across other teams/providers within the practice (e.g., in team meetings or via practice-wide dashboards). • Share quality measure data with patients and incorporate patients in QI teams.[209] • Share data with clinical stakeholders outside the practice (e.g., referring physicians, labs, etc.) to engage them in efforts to improve care and patient experience and reduce cost.[215]
OCM Performance Measure Alignment	Practices may choose to track their progress and performance against any of the currently available OCM measures.
Resources to Support Implementation	
Other Tools, Resources, and Implementation Guides	• Safety Net Medical Home Initiative. Quality Improvement Strategy Implementation Guide. http://www.safetynetmedicalhome.org/change-concepts/quality-improvement-strategy • Langely GJ, Moen RD, Nolan KM, Nolan TW, Norma CL, Provost LP. The Improvement Guide: A Practical Approach to Enhancing Organizational Performance, 2nd Edition. Jossey-Bass, A Wiley Imprint, San Francisco 2011. http://www.ihi.org/resources/Pages/Publications/ImprovementGuidePracticalApproachEnhancingOrganizationalPerformance.aspx • Health IT National Learning Consortium. Continuous Quality Improvement (CQI) Strategies to Optimize Your Practice. https://www.healthit.gov/sites/default/files/tools/nlc_continuousqualityimprovementprimer.pdf • Institute for Healthcare Improvement. Sustaining Improvement: White Paper. http://www.ihi.org/resources/Pages/IHIWhitePapers/Sustaining-Improvement.aspx • (NEW) Health Quality Ontario. Engagement with Patients and Caregivers about Quality Improvement: A Guide for Health Care Providers. http://www.hqontario.ca/portals/0/documents/qi/qip/patient-engagement-guide-1611-en.pdf • (NEW) Institute for Patient and Family Centered Care. Framework for Patient and Family Involvement in Quality Improvement. http://forces4quality.org/af4q/download-document/6623/Resource-1-ipfcc_framework_for_patient_and_family_involvement_in_quality_improvement.pdf

Secondary Driver: Evidence-Based Medicine

Through OCM, practices focus on leveraging evidence-based medicine in delivering care to their patients. Evidence-based medicine focuses on the integration of clinical expertise, the patient's preferences or values, and the best research evidence to decide on the option best suited to the patient.[5] Studies have shown the use of evidence-based practice is associated with reduced hospital complications and improved patient documentation.[216] One way for OCM practices to use evidence-based medicine is to follow clinical guidelines, such as those from the National Comprehensive Cancer Network (NCCN) or the American Society of Clinical Oncology (ASCO).

To accomplish the goals of evidence-based medicine and achieve more patient-centered, high-quality, cost-effective care for patients and families, OCM practices should focus on the following change concepts, which are described in more detail below:

- **Required Practice Redesign Activity:** Use therapies consistent with nationally recognized clinical guidelines
- Use clinical decision support systems
- Provide patients with appropriate opportunities to participate in clinical trials (core function of patient navigation)

Change Concept: (Required) Use therapies consistent with nationally recognized clinical guidelines	
Defining the Change	
The Business Case for Change	The use of therapies consistent with nationally recognized clinical guidelines is a required practice redesign activity in OCM to further promote the use of evidence-based medicine.[217] Clinical guidelines are important tools in evidence-based practice to reduce health care variation, improve patient outcomes, and improve documentation.[218,216] Additionally, a study of non-small cell lung cancer patients concluded that treatment in accordance with clinical pathways incurred lower outpatient costs, suggesting treatment of patients according to evidence-based clinical practice guidelines is a cost-effective strategy for delivering care.[219,220] The most effective clinical guideline implementation activities include multifaceted interventions, interactive education, and clinical reminder systems.[221] Additionally, clinical pathways may play a role in standardizing high-value care across large health networks, provide point-of-care clinical decision support, support patient-centered care, increase efficiencies, and provide easy access to evidence reviews.[222,223]
Change Tactics	• Use therapies consistent with NCCN or ASCO guidelines.[224,225] • Hold multidisciplinary treatment-planning conferences or workshops (e.g., tumor boards) to apply guidelines to patient care.[226] • Integrate clinical decision support in documentation workflow (e.g., charting, order entry).[227] • Offer clinical staff continuing medical education (CME) credits for expanding and keeping current with oncology care guidelines.[228] • (NEW) Incorporate treatment guidelines into clinical pathways[222,229,230,231]
OCM Performance Measure Alignment	The following measure(s) are useful in tracking progress and performance on a QI initiative relating to this change concept: • OCM 3: Proportion of patients who died who were admitted to hospice for 3 days or more. • OCM 4a: Oncology: Medical and Radiation – Pain Intensity Quantified. • OCM 8: Adjuvant chemotherapy is recommended or administered within 4 months (120 days) of diagnosis to patients under the age of 80 with AJCC III (lymph node positive) colon cancer (retired after PP3). • OCM 9: Combination chemotherapy is recommended or administered within 4 months (120 days) of diagnosis for women under 70 with AJCC T1cN0M0, or Stage IB - III hormone receptor negative breast cancer (retired after PP3). • OCM 10: Trastuzumab administered to patients with AJCC stage I (T1c) - III and human epidermal growth factor receptor 2 (HER2) positive breast cancer who receive adjuvant chemotherapy (retired after PP3). • OCM 11: Breast Cancer: Hormonal Therapy for Stage I (T1b)-IIIC Estrogen Receptor/Progesterone Receptor (ER/PR) Positive Breast Cancer (retired after PP3).
Resources to Support Implementation	
Other Tools, Resources, and Implementation Guides	• National Comprehensive Cancer Network. Clinical Practice Guidelines in Oncology. Tools and Resources. https://www.nccn.org/professionals/physician_gls/default.aspx • ASCO. Guidelines, Tools, & Resources. https://www.asco.org/research-guidelines/quality-guidelines/guidelines • AHRQ. National Guideline Clearinghouse. https://www.guideline.gov/ • (NEW) American Society of Clinical Oncology. Checklist: Evaluating Oncology Clinical Pathway Programs. https://www.asco.org/sites/new-www.asco.org/files/content-files/ASCO-Clinical-Pathways-Checklist.pdf

Change Concept: Use clinical decision support systems	
Defining the Change	
The Business Case for Change	Clinical decision support systems (CDSS) are a component of health IT encompassing a variety of tools to enhance decision-making in the clinical workflow by providing computerized alerts, reminders, clinical guidelines, condition-specific order sets, and focused patient data reports and summaries, among other tools.[232] CDSS are essential for improving clinician efficiency, enhancing the patient experience, minimizing human error, and alerting providers/clinicians to the correct treatment decisions for their patients.[233] CDSS have shown effectiveness in improving health care process measures across diverse settings, and they support the delivery of evidence-based medicine.[227,233] A meta-analysis of the effectiveness of CDSS noted increased provider adherence to appropriate medical care and clinical practice guidelines, while a systematic review of currently available data and research suggests CDSS can have a positive impact on cancer care delivery, improve efficiencies, provide access to medical data, enhance communication, and potentially reduce costs.[234,235] Furthermore, patients who were cared for using CDSS had enhanced quality of life with increased management of depression, fatigue and anxiety. Palliative care consults for pain also increased for this patient population.[236]
Change Tactics	• Integrate CDSS with the EHR and/or chemotherapy electronic order management system.[227] • Create a structured field for symptom index or functional index supporting patient-reported outcomes (e.g., depression or pain scale) for the purposes of informing treatment decisions.[233]
OCM Performance Measure Alignment	The following measure(s) are useful in tracking progress and performance on a QI initiative relating to this change concept: • OCM 4a: Oncology: Medical and Radiation – Pain Intensity Quantified. • OCM 4b: Oncology: Medical and Radiation – Plan of Care for Pain. • OCM 5: Preventive Care and Screening: Screening for Depression and Follow-Up Plan. • OCM 8: Adjuvant chemotherapy is recommended or administered within 4 months (120 days) of diagnosis to patients under the age of 80 with AJCC III (lymph node positive) colon cancer (retired after PP3). • OCM 9: Combination chemotherapy is recommended or administered within 4 months (120 days) of diagnosis for women under 70 with AJCC T1cN0M0, or Stage IB - III hormone receptor negative breast cancer (retired after PP3). • OCM 10: Trastuzumab administered to patients with AJCC stage I (T1c) - III and human epidermal growth factor receptor 2 (HER2) positive breast cancer who receive adjuvant chemotherapy (retired after PP3). • OCM 11: Breast Cancer: Hormonal Therapy for Stage I (T1b)-IIIC Estrogen Receptor/Progesterone Receptor (ER/PR) Positive Breast Cancer (retired after PP3).
Resources to Support Implementation	
Other Tools, Resources, and Implementation Guides	• Agency for Healthcare Research and Quality. Clinical Decision Support Resources. https://healthit.ahrq.gov/ahrq-funded-projects/clinical-decision-support-cds • Health IT.gov. Clinical Decision Support. https://www.healthit.gov/topic/safety/clinical-decision-support

Change Concept: Provide patients with appropriate opportunities to participate in clinical trials

Defining the Change

The Business Case for Change	OCM practices should provide patients with appropriate opportunities to participate in clinical trials; providing those opportunities is also a core function of patient navigation (PN). When practices support patients by increasing their knowledge and perceived understanding of clinical trials, it may improve participation rates.[237,240] Research shows while up to 20% of adults may be eligible for disease-specific clinical trial participation, less than 5% of adult cancer patients enroll.[238] This low accrual rate may be due to patients being unaware and uninformed of opportunities to participate in clinical trials.[239,240] Another study demonstrates most patients are unaware of opportunities to participate in clinical trials and are informed of potential trials by their physicians.[241] Many factors can influence a patient's decision to enter a clinical trial, including perception of doctor's preferences, trial design, and impact on treatment efficacy.[242,243] Additionally, factors like financial barriers, logistical concerns and lack of resources for patients and clinicians may contribute to low rates of trial participation.[56] While many factors may influence a patient's decision to enter a clinical trial, including perception of oncologist engagement in trials and preferences, trial design, and impact on treatment efficacy,[244,245] oncologist engagement in clinical trials has the potential to increase patient recruitment and in turn potentially impact the success of the trial.[246] In adolescents and young adult cancer patients, both survival prolongation and mortality reduction are correlated with clinical trial activity.[247] Additionally, evidence suggests increased accrual to trials is important to patients, since they provide an opportunity to receive the newest treatments.[247]
Change Tactics	• Employ dedicated staff to support clinical trial education, enrollment, and management (e.g., patient navigators).[56,240] • Hold practice meetings to discuss open clinical trials and accrual. • Actively evaluate patients for eligibility to enter a clinical trial.[242,248] • Incorporate patient education on clinical trial enrollment and opportunities (e.g., make patients aware of the database for clinical trials (ClinicalTrials.gov).[56,248] • Track the number of patients enrolled in clinical trials. [248]

Resources to Support Implementation

Other Tools, Resources, and Implementation Guides	• American Cancer Society. Clinical Trials. https://www.cancer.org/treatment/treatments-and-side-effects/clinical-trials.html • Education Network to Advance Cancer Clinical Trials. Five Steps to Enhance Patient Participation in Cancer Clinical Trials Guide and Workbook. http://www.swedish.org/~/media/Images/Swedish/e/ENACCT5StepsGuide.pdf • ClinicalTrials.gov. Learn About Clinical Trials: https://clinicaltrials.gov/ct2/about-studies/learn

Primary Driver: Strategic Use of Revenue

The Strategic Use of Revenue primary driver includes two secondary drivers:

- Strategic Plan
- Sharing of Performance-Based Payment

The following sections provide an overview of each secondary driver and describe the specific change concepts and tactics OCM participants can implement in support of these drivers.

Secondary Driver: Strategic Plan

Through OCM, practices continue to focus on ways to strategically use their revenue to support ongoing practice transformation. Specifically, they are developing a strategic plan to use the Monthly Enhanced Oncology Services (MEOS) payments (payments for enhanced services) and the PBP to maintain the infrastructure and resources to support enhanced care, including, but not limited to, additional staff, increased health IT and analytics capabilities, and extended care capabilities.

To develop an effective strategic plan and achieve more patient-centered, high-quality, cost-effective care for patients and families, OCM practices should focus on the following change concepts, which are described in more detail below:

- Use budgeting and accounting processes effectively to transform care processes and build capability to deliver comprehensive, coordinated cancer care
- Align practice productivity metrics and compensation strategies with comprehensive, coordinated cancer care
- Provide nonmonetary incentives, tools/technology, or vouchers for health behavior change

Change Concept: Use budgeting and accounting processes effectively to transform care processes and build capability to deliver comprehensive, coordinated cancer care	
Defining the Change	
The Business Case for Change	OCM incorporates a two-part payment system for participating practices, creating incentives to improve the quality of care and furnish enhanced services for beneficiaries who undergo chemotherapy treatment for a cancer diagnosis. The two forms of payment include a per-beneficiary MEOS payment for the duration of the episode and the potential for a PBP for episodes of chemotherapy care. The MEOS payment assists participating practices in effectively managing and coordinating care for oncology patients during episodes of care, while the potential for PBP incentivizes practices to lower the total cost of care and improve care for beneficiaries during treatment episodes. Overall, the enhanced payment structure helps support practices' efforts to change how care is delivered and improve patient outcomes.[249] Practices need to track, budget for, and strategically use these alternative payments to build or increase capabilities to deliver comprehensive, coordinated cancer care.
Change Tactics	• Integrate MEOS payments and PBP into practice accounting and budgeting tools to allocate revenue. • Invest revenue in priority areas for practice transformation under OCM (e.g., hire additional staff, such as a patient navigator or data analyst; invest in health IT; contract with consultants; provide beneficiary incentives).
Resources to Support Implementation	
Other Tools, Resources, and Implementation Guides	• American College of Physicians. Financial Management Tools. https://www.acponline.org/practice-resources/business-resources/office-management/financial-management/financial-management-tools • (NEW) Academy Health (2017). Elements that Support Health Payment Reform for Population Health: Payment and Financing Models. https://www.academyhealth.org/sites/default/files/P4PH_Payment_FinancingFinal.pdf

Change Concept: Align practice productivity metrics and compensation strategies with comprehensive, coordinated cancer care	
Defining the Change	
The Business Case for Change	With the passage of the Patient Protection and Affordable Care Act in 2010, health care reimbursement programs are moving from volume-based fee for service reimbursement to value-based care models rewarding performance and improved quality of care outcomes. Aligning an organization's value-based goals to compensation ties an individual provider's accountability to the organization's success and can encourage change.[250,251] Additionally, aligning practice productivity metrics and compensation strategies may lead to the achievement of the "triple aim" of improved population health, better patient engagement, and lower per capita costs.[252]
Change Tactics	• Use productivity measures including non-visit-based care (e.g., time spent on asynchronous communication via email or patient portal). • Develop compensation strategies for care team members which align incentives to OCM practice transformation activities and quality metrics.[250] • Develop compensation strategies which reward value and team-based care.[249,252]
Resources to Support Implementation	
Other Tools, Resources, and Implementation Guides	• Toward Accountable Care Consortium. Distribution Based on Contribution: A Merit-Based Shared Savings Distribution Model. http://www.tac-consortium.org/wp-content/uploads/2013/09/Shared-Savings-Guide_091013_revised_reduced-file.pdf • Hutchins Center on Fiscal & Monetary Policy at Brookings. Measuring Productivity in Healthcare: An Analysis of The Literature. https://www.brookings.edu/wp-content/uploads/2016/08/hp-lit-review_final.pdf

Change Concept: Provide nonmonetary incentives, tools/technology, or vouchers for health behavior change	
Defining the Change	
The Business Case for Change	Consumer behavior heavily impacts the total cost of health care. For example, patients with poor medication adherence cost the United States health care system $100 billion annually.[253] To mitigate these risks, practices can utilize various tools and technology, such as remote monitoring and incentives, to reinforce behavior change in cancer patients. Studies have shown systematic electronic symptom monitoring has the ability to reduce ED visits by seven percent and increase median survival.[254] A key element of success is performance feedback, which is an important feature in promoting preventive health-related behaviors such as exercising, healthy dieting, and/or medication adherence.[255]
Change Tactics	• Use remote monitoring technology data to promote active changes in patient health.[31,32] • Provide non-monetary incentives to patients for behavior change (e.g., recognition and praise for quitting smoking).
OCM Performance Measure Alignment	The following measure(s) are useful in tracking progress and performance on a QI initiative relating to this change concept: • OCM 6: Patient-Reported Experience of Care.
Resources to Support Implementation	
Other Tools, Resources, and Implementation Guides	Changing Patient Behavior: The Next Frontier in Healthcare Value. http://healthcare.mckinsey.com/changing-patient-behavior-next-frontier-healthcare-value

Secondary Driver: Sharing of Performance-Based Payment

Through OCM, practices continue to focus on ways to strategically use their revenue to support ongoing practice transformation. As such, practices need to develop a customized payment distribution plan, allowing savings to be shared with care partners for their role in contributing to patient care.

To accomplish the goals of sharing of PBP and achieving more person-centered, high-quality, cost-effective care for patients and families, OCM practices should focus on the following change concept, which is described in more detail below:

Engage various care partners in sharing of performance-based payment

Change Concept: Engage various care partners in sharing of performance-based payment	
Defining the Change	
The Business Case for Change	Shared savings is a payment strategy used in health care to align incentives to providers by rewarding efforts in reducing health care spending for a specific patient population and offering a percentage of the net savings realized.[256] In OCM, practices may choose to engage various care partners in the sharing of PBP to incentivize value-based care and cost savings. The goal is for providers participating in the shared savings arrangement to have a financial stake in controlling costs and therefore be motivated to drive value-based care.[251] Shared-savings distribution should ultimately be fair and transparent, iterative, and designed to maximize the incentive for all providers to drive value.[257]
Change Tactics	• Develop a shared savings methodology considering a variety of factors (e.g., provider/organization eligibility, patient population, services offered, quality measures and thresholds, and payment structure and frequency).[256,258] • Develop formal partnerships with outside organizations to support patient care and cost savings (e.g., behavioral health services, pharmacy).[249]
Resources to Support Implementation	
Other Tools, Resources, and Implementation Guides	• Toward Accountable Care Consortium. Distribution Based on Contribution: A Merit-Based Shared Savings Distribution Model. http://www.tac-consortium.org/wp-content/uploads/2013/09/Shared-Savings-Guide_091013_revised_reduced-file.pdf

Primary Driver: Management of Appropriate Multi-Payer Structure

OCM is a multi-payer model, through which Medicare and selected third-party payers partner in the shared aim of improving the quality of oncology care and reducing cost. Multi-payer partnership is an important goal of OCM, as it reduces provider burden and creates consistencies across the industry for oncology care. Public and private payers working together also makes full practice-level transformation of care delivery possible through standardization across quality measures, data sharing, and payment structure. Recognizing the impact of any one payer alone may be limited. OCM participating payers have committed to establishing an approach aligned with CMS to transform the way in which cancer care is delivered and financially supported in practices participating in the model.

The Management of Appropriate Multi-Payer Structure primary driver includes four secondary drivers, which reflect the required areas for participating payers to align their model with the CMS approach:

- Payment for Enhanced Services and Performance
- Engage with Partner Practices
- Quality Improvement
- Data Sharing

The following sections provide an overview of each secondary driver and describe the specific change concepts and tactics OCM participants can implement in support of these drivers.

Secondary Driver: Payment for Enhanced Services and Performance	
Defining the Driver	
Overview	OCM Payers are required to implement a payment methodology which incorporates a two-pronged approach for providing enhanced financial support to partner practices, including: (1) payment for services aligned with those included in the definition of enhanced services (e.g., advance payment or per beneficiary/enrollee/member per month payment) and (2) payment for performance using a methodology designed to assess practices' performance on measures of utilization, cost of care, and/or quality of care for an episode of care (e.g., retrospective lump sum or enhanced monthly payment).
Change Concept: (Required) Implement a methodology for payment for enhanced services	
Change Tactics	• Implement a methodology for payment for enhanced services (e.g., advanced payment or per beneficiary per month payment). • Define an episode of care for the purposes of assigning beneficiaries and evaluating and making payments for performance, and share the methodology with partner practices. • Address administrative challenges to implementing episode-based payments (e.g., claims adjudication).
Change Concept: (Required) Implement a methodology for payment for performance	
Change Tactics	• Define an episode of care for the purposes of assigning beneficiaries and evaluating and making payments for performance. Share the episode definition and attribution methodology with partner practices. • Implement a methodology for payment for performance (e.g., retrospective lump sum or enhanced monthly payment). • Calculate performance rates.

Secondary Driver: Engage with Partner Practices	
Defining the Driver	
Overview	OCM payers engage with their partner practices by identifying payer-specific participation requirements, supporting the interpretation of data for opportunity analysis, and appropriately aligning incentives to drive high-quality, high-value care.
Change Concept: (Required) Identify practice redesign activities	
Change Tactics	• Require partner practices to implement practice redesign activities which align with those required by CMS. • Offer practices suggested clinical guidelines and expectations for coordination of care to meet performance goals. • Hold practices accountable for the implementation of required activities by aligning incentives to providing high-quality, high-value care. • (NEW) Hold meetings to share information and partner with providers to understand their data so providers can make informed decisions on any practice transformation efforts. • (NEW) Actively engage with provider practices on a regular basis to share information and discuss ways to support one another in member engagement activities.
Change Concept: Provide operational support to partner practices	
Change Tactics	• Foster partnerships between cancer care clinicians and payers. • Engage clinicians across the continuum of care to coordinate and manage care. • Align incentives to providing high-quality, high-value care.

Secondary Driver: Quality Improvement (QI)	
Defining the Driver	
Overview	OCM payers focus on QI by aligning practice quality and performance measures to reduce the administrative burden for practices by limiting the total number of measures reported across all payers. In an effort to encourage ongoing quality improvement, payers should consider continuously monitoring data and refining their quality frameworks to phase out low-impact measures that are less meaningful.[259] In turn, this provides an opportunity to introduce high-impact measures, allowing payers to maximize alignment and reduce provider burden while also driving better health outcomes in oncology.[259]
Change Concept: (Required) Align quality measures	
Change Tactics	• Align quality measures to those used by CMS, including, but not limited to, the OCM Other Payer Core Measure Set (OCM 1, OCM 2, and OCM 3), and other quality measure reporting programs chosen by the payer.

Secondary Driver: Data Sharing	
Defining the Driver	
Overview	Data sharing for OCM payers involves providing participating practices with practice- and patient-level data about cost and utilization for their attributed patients at regular intervals (at least quarterly) through reports or other data sharing methods. Making data available to practices allows providers and practice staff to have a 360-degree view of their patients, enabling them to more effectively manage their patient population.[260] Through payer data, including cost, quality, patient experience, and outcomes, providers can adjust and improve work flows to deliver better care to oncology patients.
Change Concept: (Required) Share data and feedback with practices and CMS	
Change Tactics	• Make data available regarding cost of care and utilization of services to practices on at least a quarterly basis. • Share aggregate-level data with CMS on an annual basis to inform the model's ongoing evaluation.

Appendix A: Methods for Development of Key Drivers

Materials in this change package were developed through a combination of technical discussions and an environmental scan built upon the technical and programmatic foundation of OCM. Updates to this document were based on lessons learned from the first year of OCM and an updated environmental scan of key drivers.

Methods for Development of the Driver Diagram

The driver diagram framework was initially developed by the CMMI OCM leadership team and technical experts, was disseminated as part of the OCM Request for Applications in Spring 2015, and has been further revised since then by the OCM Learning Community contractor in consultation with CMMI OCM leadership. Definitions and aligned change concepts were developed for each secondary driver and reviewed with CMMI. OCM participation requirements were also mapped to each of the secondary drivers and change concepts.

Given the innovative nature of the model, the evidence base has continued to evolve during the life of the model. This knowledge is harvested and leveraged to make improvements to the driver diagram over time. It is through this iterative process that we refine our understanding of the model and the best approaches to achieve the model's aim.

Methods for the Environmental Scan

A change package provides the evidence base and actionable tools to assist participants with planning for and implementing improvements. Using the driver diagram as a guide, the OCM Learning System contractor conducted the environmental scan through the following process, with the goal of identifying and categorizing the resources which align to the OCM drivers and changes.

Planning the Environmental Scan

1. Reviewed recent environmental scan products and change packages prepared for CMS and CMMI programs to inform the format and process for the OCM Learning Community scan.
2. Reviewed OCM Driver Diagram provided by CMMI.
3. Defined each secondary driver.
4. Aligned change concepts to each secondary driver.
5. Developed key search terms aligned to the primary drivers, secondary drivers, and change concepts, which were informed by the definitions.
6. Identified key sites, sources, and organizations for research.
7. Employed common reference manager Mendeley to track citations and sources, save sources, categorize themes, and ensure common citation format (https://www.mendeley.com/features/reference-manager/).
8. Developed Level of Evidence criteria for categorizing resources identified via the environmental scan.

9. Prepared and maintained a structured documentation tool and process to capture research and citations for each secondary driver and change concept.
10. Established an online documentation site to house the research content and maintain integrity of document versions.
11. Developed a report outline and approach for the change package to be developed as a result of the environmental scan.
12. Gathered formative information and input from CMMI and OCM Learning Community Team subject matter experts. Prepared various iterations of briefing materials to gain input.

Execution of the Environmental Scan

The environmental scan was planned for and conducted between late September and early November 2015. The scan included peer-reviewed and grey literature, as well as relevant tools and interventions from prominent organizations in relevant fields. In total, more than 200 resources were reviewed and evaluated. The following steps were implemented to carry out the OCM Key Driver Environmental Scan after the planning phase:

I. The team scanned the medical and social science peer-reviewed literature—including both qualitative and quantitative studies—using PubMed, PsycInfo, Google Scholar, EBSCOhost, and the Cochrane databases using the following steps.
   a. Search databases using identified keyword search terms.
   b. Review abstract to determine whether the article is relevant.
   c. Retrieve full text for those articles identified as relevant.
   d. Review article in its entirety for specific information according to the abstraction form.
   e. Conduct an internet scan or contact authors for any missing information or tools/training materials used.
   f. Review citation list for relevant articles.
   g. Apply Level of Evidence criteria.
   h. Align the citation to the appropriate secondary driver(s) and change concept(s) (note that some apply across several such categories).
   i. Document citation along with relevant information in tracking tool.

II. Steps to scan the grey literature included:
   a. Collect recommendations, documents, and other information from project team members and subject matter experts.
   b. Search websites of organizations identified by CMMI and partners for relevant research, resources, and tools.

c. Search databases to target trade publications—such as Health Business (for hospital administrators) and PAIS (social sciences)—using keyword search terms.

d. Apply Level of Evidence criteria.

e. Aligned the citation to the appropriate secondary driver(s) and change concept(s) (note that some apply across several such categories).

f. Document citation along with relevant information in tracking tool.

III. Other sources: In addition, the team conducted a more targeted search of more than 50 websites for non-peer-reviewed literature and potential tools, such as sites for relevant government agencies, professional associations, and advocacy groups.

IV. In all areas:

a. Held multiple team internal reviews and discussions.

b. Applied updates to searches per changes and improvements in the key drivers, secondary drivers, and definitions.

The Level of Evidence Criteria (see Table 4) adapted for this purpose is based on a schema applied by Melnyk and Overholt‡ and used by the AHRQ National Guidelines Clearinghouse, Johns Hopkins Nursing Evidence-Based Practice, and the Oxford Centre for Evidence-Based Medicine. The purpose is to rate the strength of the evidence for each resource and/or tool. Given the intent to collect case studies throughout OCM implementation and the experimental nature of OCM, participants are encouraged to consider resources in all levels of evidence in planning for improvement.

Table 4: Level of Evidence Criteria

Category	Description
I	Level 1 and 2 Studies (experimental)
II	Level 3 Studies (quasi-experimental)
III	Level 4 Studies (non-experimental study)
IV	Level 5, 6, and 7 Studies (qualitative study or expert opinion)

Level 1: Systematic review of relevant randomized control trials

Level 2: At least one well-designed randomized control trial

Level 3: Well-designed control trials without randomization (quasi-experimental)

Level 4: Evidence from well-designed case-control and cohort studies

Level 5: Evidence from systematic reviews of descriptive and qualitative studies

Level 6: Evidence from descriptive or qualitative studies or QI projects

Level 7: Evidence from the opinion of authorities or reports of expert committees

‡ Melnyk, B. M., & Fineout-Overholt, E. (Eds.). (2011). Evidence-based practice in nursing & healthcare: A guide to best practice. Lippincott Williams & Wilkins. http://www.worldcat.org/title/evidence-based-practice-in-nursing-healthcare-a-guide-to-best-practice/oclc/539086897

Appendix B: Additional Evidence by Secondary Driver

The tables in this appendix provide further resources for your practice to explore. Both supporting literature and implementation tools were collected. Literature was graded against the criteria described in Table 5 below. For more information on the level of evidence criteria, see Appendix A: Methods for Development of Key Drivers.

Table 5: Change Package Resource Categories

Category	Description
I	Experimental
II	Quasi-experimental
III	Non-experimental case-control or cohort study
IV	Qualitative study or expert opinion

Comprehensive, Coordinated Cancer Care

Secondary Driver: Access and Continuity	
Required Practice Redesign Activity: Provide 24/7 access to an appropriate clinician who has real-time access to patients' medical records	**Category IV:** • Hickey, M. & Newton, S. (2019). Telephone triage for oncology nurses. Oncology Nursing Society, 3rd Edition. Retrieved from https://www.ons.org/books/telephone-triage-oncology-nurses-third-edition • McClellan, M., Patel, K., O'Shea, J., Nadel, J., Thoumi, A., & Tobin, J. (2013). Summary of the technical expert panel for oncology. Retrieved from http://www2.mitre.org/public/payment_models/Brookings_Oncology_TEP_Summary.pdf • Sanghavi, D., et al. (2014). Transforming cancer care and the role of payment reform: Lessons from the New Mexico Cancer Center. The Merkin Family Foundation. Retrieved from https://www.brookings.edu/wp-content/uploads/2016/06/Oncology-Case-Study-August-2014-FINAL-WEB.pdf
Increase access to visits	**Category I:** • Offman, J., et al. (2013). A randomised trial of weekend and evening breast screening appointments. *British Journal* of Cancer, *109*(3), 597–602. Retrieved from http://doi.org/10.1038/bjc.2013.377 • Osborn, J., & Thompson, M. (2014). Management of same-day appointments in primary care. *The Lancet*, *384*(9957), 1828-1829. Retrieved from http://doi.org/10.1016/S0140-6736(14)61173-9 • Wade, V. A., Karnon, J., Elshaug, A. G., & Hiller, J. E. (2010). A systematic review of economic analyses of telehealth services using real time video communication. *BMC Health Services Research*, *10*(1), 233. Retrieved from http://doi.org/10.1186/1472-6963-10-233 **Category IV:** • Garth, B., Temple-Smith, M., Clark, M., Hutton, C., Deveny, E., Biezen, R., & Pirotta, M. (2013). Managing same day appointments: A qualitative study in Australian general practice. *Australian Family Physician*, *42*(4), 238–243. Retrieved from http://www.racgp.org.au/afp/2013/april/managing-same-day-appointments/ • Bradbury, A., et al. (2016). Utilizing remote real-time videoconferencing to expand access to cancer genetic services in community practices: A multicenter feasibility study. *Journal of Medical Internet Research*, *18*(2), 23. Retrieved from http://www.jmir.org/2016/2/e23 • Hui, D., Hannon, B. L., Zimmermann, C., & Bruera, E. (2018). Improving patient and caregiver outcomes in oncology: Team-based, timely, and targeted palliative care. *A Cancer Journal for Clinicians, 68*(356-376). Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/30277572

Provide access to care and information outside of visits	**Category I:** • Goldzweig, C. L., et al. (2012). Systematic review: Secure messaging between providers and patients, and patients' access to their own medical record. Evidence on health outcomes, satisfaction, efficiency and attitudes. Department of Veterans Affairs, 05-226, Retrieved from http://www.ncbi.nlm.nih.gov/books/NBK100363/ • U.S. Department of Health and Human Services. (2014). Using health text messages to improve consumer health knowledge, behaviors, and outcomes: An environmental scan. Retrieved from https://www.hrsa.gov/archive/healthit/txt4tots/environmentalscan.pdf **Category IV:** • Hess, R., et al. (2014). Patterns of response to patient-centered decision support through a personal health record. *Telemedicine and E-Health*, *20*(11), 984–989. Retrieved from http://doi.org/10.1089/tmj.2013.0332 • Torrey, B. (2001). Getting the most from your phone system. *American Academy of Family Physicians*, *8*(2), 21-36. Retrieved from http://www.aafp.org/fpm/2001/0200/p21.html

Secondary Driver: Care Coordination

Required Practice Redesign Activity: Provide the core functions of patient navigation	**Category I:** • Zafar, Y. S., Ubel, P. A., Tulsky, J. A., & Pollak, K. I. (2015). Cost-related health literacy: A key component of high-quality cancer care. *Journal of Oncology Practice*, *11*(3), 171-173. Retrieved from http://ascopubs.org/doi/full/10.1200/jop.2015.004408 **Category III:** • Freund, K. M., et al. (2014). Impact of patient navigation on timely cancer care: The Patient Navigation Research Program. *Journal of the National Cancer Institute,* 106(6). Retrieved from http://jnci.oxfordjournals.org/content/106/6/dju115.long#ref-27 • (NEW) Meade C, et al. (2014). Lay navigator model for impacting cancer health disparities. *Journal of Cancer Education. 29*(3), 449-457. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4133280/ **Category IV:** • Bensink, M. E., et al. (2014). Costs and outcomes evaluation of patient navigation after abnormal cancer screening: Evidence from the Patient Navigation Research Program. *Cancer*. *120*(4), 570-578. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/24166217 • Jean-Pierre, P., Fiscella, K., Winters, P. C., Paskett, E., Wells, K., Battaglia, T. &, Patient Navigation Research Program Group. (2012). Cross-cultural validation of a patient satisfaction with interpersonal relationship with navigator measure: A multi-site patient navigation research study. *Psychooncology*. *21*(12): 1309-1315. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/21726018 • Fiscella, K., et al. (2011). Patient-reported outcome measures suitable to assessment of patient navigation. *Cancer*. *117*(15), 3603-3617. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/21780095 • Rousseau, S., et al. (2014). Patient navigation moderates emotion and information demands on cancer treatment: A qualitative analysis. *Support Care Cancer*, *22*(12), 3143–3151. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4221546/
Conduct coordinated medication management	**Category IV:** • Naples, J. G., Hanlon, J. T., Schmader, K. E., & Semla, T. P. (2016). Recent literature on medication errors and adverse drug events in older adults. *Journal of the American Geriatrics Society*, *64*(2), 401–408. Retrieved from http://doi.org/10.1111/jgs.13922 • Johnson, A., Guirguis, E., & Grace, Y. (2015). Preventing medication errors in transitions of care: A patient case approach. *Journal of the American Pharmacists Association*, *55*(2), 264–276. Retrieved from http://doi.org/10.1331/JAPhA.2015.15509

Support referral coordination and management	**Category IV:** • Taplin, S. H., & Rodgers, A. B. (2010). Toward improving the quality of cancer care: Addressing the interfaces of primary and oncology-related subspecialty care. *Journal of National Cancer Institute Monographs*, *2010*(40), 3–10. Retrieved from http://doi.org/10.1093/jncimonographs/lgq006 • Wilson, K., Lydon, A., & Amir, Z. (2013). Follow-up care in cancer: Adjusting for referral targets and extending choice. *Health Expectations*, *16*(1), 56–68. Retrieved from http://doi.org/10.1111/j.1369-7625.2011.00691.x
Improve transitions between care settings	**Category I:** • Allen, J., Hutchinson, A. M., Brown, R., & Livingston, P. M. (2014). Quality care outcomes following transitional care interventions for older people from hospital to home: A systematic review. *BMC Health Services Research*, *14*(1), 346. Retrieved from http://doi.org/10.1186/1472-6963-14-346 • Brown, R., Peikes, D., Chen, A., & Schore, J. (2008). 15-site randomized trial of coordinated care in Medicare FFS. *Health Care Financing Review*, *30*(1), 5–25. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/19040171 • Coleman, E. A., Smith, J. D., Frank, J.C., Min, S. J., Parry, C., & Kramer, A.M. (2004). Preparing patients and caregivers to participate in care delivered across settings: The care transitions intervention. *Journal of the American Geriatrics Society*. *52*(11), 1817-1825. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/15507057 • Jack, B. W., et al. (2009). A reengineered hospital discharge program to decrease rehospitalization: A randomized trial. *Annals of Internal Medicine*. *150*(3): 178-187. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/19189907 **Category IV:** • Sanghavi, D., et al. (2014). Transforming cancer care and the role of payment reform: Lessons from the New Mexico Cancer Center. The Merkin Family Foundation. Retrieved from https://www.brookings.edu/wp-content/uploads/2016/06/Oncology-Case-Study-August-2014-FINAL-WEB.pdf
Integrate palliative care	**Category I:** • Greer, J. A., Jackson, V. A., Meier, D. E., & Temel, J. S. (2013). Early integration of palliative care services with standard oncology care for patients with advanced cancer. *CA: A Cancer Journal for Clinicians*, *63*(5), 349–363. Retrieved from http://doi.org/10.3322/caac.21192 • Hui, D., Meng, Y.-C., Bruera, S., Geng, Y., Hutchins, R., Mori, M., Bruera, E. (2016). Referral criteria for outpatient palliative cancer care: A systematic review. *The Oncologist*, 1–7. Retrieved from http://doi.org/10.1634/theoncologist.2016-0006 • Hui, D., et al. (2015). Integration of oncology and palliative care: A systematic review. *The Oncologist, 20*(1), 77–83. Retrieved from http://doi.org/10.1634/theoncologist.2014-0312 • Vanbutsele, G., et al. (2018). Effect of early and systematic integration of palliative care in patients with advanced cancer: A randomised controlled trial. *The Lancet Oncology, 19*(3), 394-404. Retrieved from https://www.sciencedirect.com/science/article/pii/S1470204518300603 • Rozman, L. M., Campolina, A. G., Lopez, R. V. M., Kobayashi, S. T., Chiba, T., & de Soarez, P.C. (2018). Early palliative care and its impact on end of life care for cancer patients in Brazil. *Journal Palliative Medicine.* Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/29368987 • Yoong J, et al. (2013). Early palliative care in advanced lung cancer: A qualitative study. JAMA Internal Medicine. *173*(4), 283-290. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/23358690 • Langton, J.M., Blanch, B., Drew, A. K., Haas, M., Ingham, J.M., & Pearson, S. A. (2014). Retrospective studies of end of-life resource utilization and costs in cancer care using health administrative data: a systematic review. *Palliative Medicine*, *28*(10). 1167-1196. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/24866758

	• Hui, D., et al. (2014). Impact of timing and setting of palliative care referral on quality of end-of-life care in cancer patients. *Cancer. 120*(11), 1743-1749. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4073257 **Category IV:** • Bickel, K. E., et al. (2016). Defining high-quality palliative care in oncology practice: An American Society of Clinical Oncology/American Academy of Hospice and Palliative Medicine guidance statement. *Journal of Oncology Practice, 12*(9), 828-838. Retrieved from http://ascopubs.org/doi/full/10.1200/JOP.2016.010686

Secondary Driver: Care Planning and Management	
Required Practice Redesign Activity: Document a care plan containing the 13 components of the IOM Care Management Plan	**Category I:** • Coulter, A., Entwistle, V. A., Eccles, A., Ryan, S., Shepperd, S., & Perera, R. (2015). Personalised care planning for adults with chronic or long-term health conditions. *Cochrane Database of Systematic Reviews*, 1-130. Retrieved from doi 10.1002/14651858.CD010523.pub2 **Category II:** • Bodenheimer, T. S., & Berry-Millett, R. (2009). Care management of patients with complex health care needs. The Robert Wood Johnson Foundation. Retrieved from http://www.rwjf.org/en/library/research/2009/12/care-management-of-patients-with-complex-health-care-needs.html • Hong, C. S., Siegel, A. L., & Ferris, T. (2014). Caring for high-need, high-cost patients: What makes for a successful care management program? The Commonwealth Fund. Retrieved from http://www.commonwealthfund.org/~/media/files/publications/issue-brief/2014/aug/1764_hong_caring_for_high_need_high_cost_patients_ccm_ib.pdf
Perform risk stratification	**Category III:** • Haas, L. R., Takahashi, P. Y., Shah, N. D., Stroebel, R. J., Bernard, M. E., Finnie, D. M., & Naessens, J. M. (2013). Risk-stratification methods for identifying patients for care coordination. *The American Journal of Managed Care*, *19*(9), 725–732. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/24304255 • Watson, E. K., et al. (2012). Personalized cancer follow-up: Risk stratification, needs assessment or both? *British Journal of Cancer*, *106*(1), 1–5. Retrieved from http://doi.org/10.1038/bjc.2011.535 **Category IV:** • Brown, A., et al. (2016). Room for improvement: an examination of advance care planning documentation among gynecologic oncology patients. *Gynecologic Oncology*, *142*(3), 525–530. Retrieved from http://dx.doi.org/10.1016/j.ygyno.2016.07.010
Conduct monitoring and follow-up from visits	**Category II:** • Cusack, M., & Taylor, C. (2010). A literature review of the potential of telephone follow-up in colorectal cancer. *Journal of Clinical Nursing, 19*(17-18), 2394–2405. Retrieved from http://doi.org/10.1111/j.1365-2702.2010.03253.x **Category IV:** • Wilson, K., Lydon, A., & Amir, Z. (2013). Follow-up care in cancer: Adjusting for referral targets and extending choice. *Health Expectations*, *16*(1), 56–68. Retrieved from http://doi.org/10.1111/j.1369-7625.2011.00691.x • Zachariah, F., et al. (2017). The effects of global and targeted advance care planning efforts at a national comprehensive cancer center. *Journal of Clinical Oncology*, *35*(5), 79. Retrieved from http://ascopubs.org/doi/abs/10.1200/JCO.2017.35.5_suppl.79

Estimate out-of-pocket cost	**Category I:** • Berlinger, N. (2013). Why clinical oncologists should talk about the price of cancer drugs. *AMA Journal of Ethics, 13*(8): 677-680. Retrieved from http://journalofethics.ama-assn.org/2013/08/jdsc1-1308.html • Bullock, A., et. al. (2012). Understanding patients' attitudes toward communication about the cost of cancer care. *Journal of Oncology Practice*, *8*(4): e50-e58. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3396830/ • Demko, P. (2015). Health care spending again accelerating. Retrieved from https://www.politico.com/story/2015/07/health-care-spending-hike-prediction-120740 • Henrikson, N., et al. (2014). Patient and oncologist discussions about cancer care costs. *Support Care Cancer, 22*(4): 961–967. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3943697/ • Yousuf, Z. and Wollins, D. A. (2016). Touchy subject: Can physicians improve value by discussing costs and clinical benefits with patients? *The Oncologist, 21*(10): 1157-1160. Retrieved from http://theoncologist.alphamedpress.org/content/21/10/1157.full • Yousuf, Z., et al. (2015). The utility of cost discussions between patients with cancer and oncologists. *American Journal of Managed Care*, *21*(9): 607-615. Retrieved from http://www.ajmc.com/journals/issue/2015/2015-vol21-n9/the-utility-of-cost-discussions-between-patients-with-cancer-and-oncologists
(NEW) Addressing HRSN	**Category IV:** • Gottlieb, L.M. et al. (2016). Effects of social needs screening and in-person service navigation on child health. *JAMA Pediatrics,* 170(11): e162521. Retrieved from https://jamanetwork.com/journals/jamapediatrics/article-abstract/2548441 • Synder, C. F., et al. (2007). Asking the right questions: investigating needs assessments and health-related quality-of-life questionnaires for use in oncology clinical practice. *Support Care Cancer,* 15: 1075–1085. Retrieved from https://link.springer.com/article/10.1007/s00520-007-0223-1 • Gottlieb, L., Sandel, M., and Adler, N. E. (2013). Collecting and applying data on social determinants of health in health care settings. *JAMA Internal Medicine, 173(11): 1017-1020.* Retrieved from https://jamanetwork.com/journals/jamainternalmedicine/article-abstract/1682357 • Mayer, D., Nasso, S. F., & Earp, J. (2017). Defining cancer survivors, their needs, and perspectives on survivorship health care in the USA. *The Lancet*, 18(1): e11-e18. Retrieved from https://www.sciencedirect.com/science/article/abs/pii/S1470204516305733 • Zebrack, B., et al. (2006). Assessing the health care needs of adolescent and young adult cancer patients and survivors. *Cancer,* 107(12). Retrieved from https://acsjournals.onlinelibrary.wiley.com/doi/full/10.1002/cncr.22338

Secondary Driver: Patient and Caregiver Engagement

Engage patients and caregivers in treatment plan conversations and shared decision-making	**Category I:** • Stacey D., et al. (2017). Decision aids for people facing health treatment or screening decisions. Cochrane Database of Systematic Reviews. Retrieved from http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD001431.pub5/full • Yun, Y. H., et al. (2011). Use of a decision aid to help caregivers discuss terminal disease status with a family member with cancer: A randomized controlled trial. *Journal of Clinical Oncology*, *29*(36), 4811–4819. Retrieved from http://doi.org/10.1200/JCO.2011.35.3870 • Austin, C. A., Mohottige, D., Sudore, R. L., Smith, A. K., & Hanson, L. C. (2015). Tools to promote shared decision making in serious illness: A systematic review. *JAMA Internal Medicine*, *175*(7), 1213–1221. Retrieved from http://doi.org/10.1001/jamainternmed.2015.1679

	• Legare, F., et al. (2014). Interventions for improving the adoption of shared decision making by healthcare professionals. Cochrane Effective Practice and Organization of Care Group. Retrieved from http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD006732.pub3/abstract • Dwamena, F., et al. (2012). Interventions for providers to promote a patient-centered approach in clinical consultations. Cochrane Database of Systematic Reviews. Retrieved from http://doi.org/10.1002/14651858.CD003267.pub2 **Category IV:** • De Snoo-Trimp, J. C., Brom, L., Pasman, H. R., Onwuteaka-Philipsen, B. D., & Widdershoven, G. A. (2015). Perspectives of medical specialists on sharing decisions in cancer care: A qualitative study concerning chemotherapy decisions with patients with recurrent glioblastoma. *Oncologist, 20*(10), 1182-1188. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/26245676 • Meera, S., et al. (2016). Introduction of situation, background, assessment, recommendation into nursing practice: A prospective study. *Asia-Pacific Journal of Oncology* Nursing, *3*(1), 45–50. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5123547/ • Elmore, J. G., Ganschow, P. S., & Geller, B. M. (2010). Communication between patients and providers and informed decision making. *JNCI Monographs*, *2010*(41), 204–209. Retrieved from http://doi.org/10.1093/jncimonographs/lgq038 • Tamirisa, N., et al. (2017). Patient and physician views of shared decision making in cancer. *Health Expectations*, *20*(6), 1248-1253. Retrieved from http://onlinelibrary.wiley.com/doi/10.1111/hex.12564/abstract • Schaeffer, C. (2016). Talk to me: Improve patient engagement; improve your cancer program. Retrieved from https://www.accc-cancer.org/docs/Documents/oncology-issues/articles/JF16/jf16-talk-to-me
Provide patient education, coaching, and self-management support	**Category I:** • Friedman, A. J., Cosby, R., Boyko, S., Hatton-Bauer, J., & Turnbull, G. (2011). Effective teaching strategies and methods of delivery for patient education: A systematic review and practice guideline recommendations. *Journal of Cancer Education*, *26*(1), 12–21. Retrieved from http://doi.org/10.1007/s13187-010-0183-x • Gao, W. J., & Yuan, C. R. (2011). Self-management programme for cancer patients: A literature review. *International Nursing Review*, *58*(3), 288–295. Retrieved from https://doi.org/10.1111/j.1466-7657.2011.00907.x • Boger, E., et al. (2015). Self-management and self-management support outcomes: A systematic review and mixed research synthesis of stakeholder views. *PLOS ONE*, *10*(7), 1–25. Retrieved from https://doi.org/10.1371/journal.pone.0130990 • McCorkle, R., Ercolano, E., Lazenby, M., Schulman-Green, D., Schilling, L. S., Lorig, K., & Wagner, E. H. (2011). Self-management: Enabling and empowering patients living with cancer as a chronic illness. *CA: A Cancer Journal for Clinicians*, *61*(1), 50–62. Retrieved from https://doi.org/10.3322/caac.20093 • Smith-Turchyn, J., Morgan, A., & Richardson, J. (2016). The effectiveness of group-based self-management programmes to improve physical and psychological outcomes in patients with cancer: A systematic review and meta-analysis of randomised controlled trials. *Clinical Oncology*, *28*(5), 292–305. Retrieved from https://doi.org/10.1016/j.clon.2015.10.003 • Risendal, B. C., Dwyer, A., Seidel, R. W., Lorig, K., Coombs, L., & Ory, M. G. (2014). Meeting the challenge of cancer survivorship in public health: Results from the evaluation of the chronic disease self-management program for cancer survivors. *Frontiers in Public Health*. Retrieved from https://doi.org/10.3389/fpubh.2014.00214

	• Schofield, P., & Chambers, S. (2015). Effective, clinically feasible and sustainable: Key design features of psycho-educational and supportive care interventions to promote individualised self-management in cancer care, *Acta Oncologica*, *54*(5), 805-812. Retrieved from https://doi.org/10.3109/0284186X.2015.1010016 • Oldenmenger, W. et al. (2018). A systematic review of the effectiveness of patient-based educational interventions to improve cancer-related pain. *Cancer Treatment Reviews*. *63*, 96-103. Retrieved from https://doi.org/10.1016/j.ctrv.2017.12.005 **Category II:** • Loh, S. Y., Packer, T., Chinna, K., & Quek, K. F. (2013). Effectiveness of a patient self-management programme for breast cancer as a chronic illness: A non-randomised controlled clinical trial. *Journal of Cancer Survivorship*, *7*(3), 331–342. Retrieved from http://doi.org/10.1007/s11764-013-0274-x **Category IV:** • Cancer Journey Action Group. (2009). The framework for achieving excellence in the provision of cancer patient education in Canada. Retrieved from http://www.iccp-portal.org/sites/default/files/resources/The-Framework-for-Achieving-Excellence-in-the-Provision-of-Cancer-Patient-Education-in-Canada.pdf • American Society of Clinical Oncology. (2007). Developing effective communication skills. *Journal of Oncology Practice*. *3*(6), 314-317. Retrieved from http://ascopubs.org/doi/abs/10.1200/JOP.0766501 • Risendal, B., et al. (2014). Adaptation of the chronic disease self-management program for cancer survivors: Feasibility, acceptability, and lessons for implementation. *Journal of Cancer Education*, *29*(4), 762–771. Retrieved from https://doi.org/10.1007/s13187-014-0652-8 • Harley, C., Pini, S., Bartlett, Y. K., & Velikova, G. (2015). Defining chronic cancer: Patient experiences and self-management needs. *BMJ Supportive & Palliative Care*, *5*(4), 343–350. Retrieved from http://dx.doi.org/10.1136/bmjspcare-2012-000200rep
Provide patients with modes to track or share experiences	**Category I:** • Cepeda, M. S., et al. (2008). Emotional disclosure through patient narrative may improve pain and well-being: Results of a randomized controlled trial in patients with cancer pain. *Journal of Pain and Symptom Management*, *35*(6), 623–631. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/18359604 • Irizarry T, Dabbs, A. D., Curran, C. R. (2015). Patient portals and patient engagement: A state of the science review. *Journal of Medical Internet Research*, *17*(6), 148. Retrieved from http://www.jmir.org/2015/6/e148 **Category III:** • Hess, V., et al. (2017). Web-based stress management for newly diagnosed cancer patients (STREAM): A randomized, wait-list controlled intervention study. *Journal of Clinical Oncology*, *35*(18). Retrieved from http://ascopubs.org/doi/abs/10.1200/JCO.2017.35.18_suppl.LBA10002
Open medical records and documents (e.g., care plans) for patients to review and revise	**Category II:** • Ryu, B. et al. (2017). Impact of an electronic health record-integrated personal health record on patient participation in health care: Development and randomized controlled trial of MyHealthKeeper. *Journal of Medical Internet Research*. *19*(12). Retrieved from http://www.jmir.org/2017/12/e401/ **Category III:** • Mendel, A., & Chow, S. (2017). Impact of health portal enrolment with email reminders at an academic rheumatology clinic. *BMJ Journals*, *6*(1). Retrieved from http://bmjopenquality.bmj.com/content/6/1/u214811.w5926

	• Ryu, B., et al. (2017). US experience with doctors and patients sharing clinical notes. *Journal of Medical Research*, *19*(12). Retrieved from http://www.bmj.com/content/350/bmj.g7785.long **Category IV:** • Martin, D. B. (2015). "Write It Down Like You Told Me": Transparent records and my oncology practice. *Journal of Oncology Practice*, *11*(4), 285–286. Retrieved from http://doi.org/10.1200/JOP.2014.003095 • deBronkart, D., & Walker, J. (2015). Open visit notes: A patient's perspective and expanding national experience. *Journal of Oncology Practice, 11*(4), 287–288. Retrieved from http://doi.org/10.1200/JOP.2015.004366
Provide non-monetary incentives, tools, or technology for health behavior change	**Category II:** • Lutge, E. E., Wiysonge, C. S., Knight, S. E., Sinclair, D., & Volmink, J. (2015). Incentives and enablers to improve adherence in tuberculosis. Cochrane Database of Systematic Review. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/26333525 **Category III:** • Garg, A., Jack, B., & Zuckerman, B. (2013). Addressing the social determinants of health within the patient-centered medical home. *JAMA*, *309*(19), 2001-2002. Retrieved from http://doi.org/10.1001/jama.2013.1471 **Category IV:** • American Cancer Society. (2018). Health insurance and financial assistance for the cancer patient. Retrieved from http://www.cancer.org/treatment/findingandpayingfortreatment/understandinghealthinsurance/healthinsuranceandfinancialassistanceforthecancerpatient/health-insurance-and-financial-assistance-outside-sources. • Dixon-Fyle, S., Gandhi, S., Pellathy, T. & Spatharous, A. (2012). Changing patient behavior: The next frontier in healthcare value. *Health International*. Retrieved from http://healthcare.mckinsey.com/changing-patient-behavior-next-frontier-healthcare-value

Secondary Driver: Team-Based Care	
Establish and provide organizational support for care delivery teams	**Category IV:** • Institute of Medicine. (2012). Core principles & values of effective team-based health care. Retrieved from https://nam.edu/wp-content/uploads/2015/06/VSRT-Team-Based-Care-Principles-Values.pdf • Hui, D., Hannon, B. L., Zimmermann, C., & Bruera, E. (2018). Improving patient and caregiver outcomes in oncology: Team-based, timely, and targeted palliative care. *A Cancer Journal for Clinicians, 68*: 356-376. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/30277572
Implement collaborative team functions	**Category II:** • McComb, S., & Hebdon, M. (2013). Enhancing patient outcomes in healthcare systems through multidisciplinary teamwork. *Clinical Journal of Oncology Nursing*. *17*(6), 669-672. Retrieved from http://europepmc.org/abstract/MED/24305490 **Category III:** • Lamb, B. W., Jalil, R. T., Sevdalis, N., Vincent, C., & Green, J. S. A. (2014). Strategies to improve the efficiency and utility of multidisciplinary team meetings in urology cancer care: A survey study. *BMC Health Services Research*, *14*(1), 377. Retrieved from http://doi.org/10.1186/1472-6963-14-377

	Category IV: • Taplin, S., et al. (2015). Teams and teamwork during a cancer diagnosis: Interdependency within and between teams. *Journal of Oncology Practice*, *11*(3), 231-238. Retrieved from http://jop.ascopubs.org/content/11/3/231.full • Hollis, G., & McMenamin, E. (2014). Integrating Nurse Practitioners into radiation oncology: One institution's experience, *Journal of the Advanced Practitioner in Oncology*, *5*(1), 42-46. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4093461 • Institute of Medicine. (2012). Core principles & values of effective team-based health care. Retrieved from https://nam.edu/wp-content/uploads/2015/06/VSRT-Team-Based-Care-Principles-Values.pdf

Continuous Improvement Driven by Data

Secondary Driver: Data-Driven Quality Improvement	
Required Practice Redesign Activity: Use data for continuous quality improvement	**Category IV:** • Lavelle, J., Schast, A., & Keren, R. (2015). Standardizing care processes and improving quality using pathways and continuous quality improvement. *Current Treatment Options in Pediatrics, 1*(4), 347–358. Retrieved from http://doi.org/10.1007/s40746-015-0026-4 • McNiff, K. K., & Jacobson, J. O. (2014). Aiming for ideal care: A proposed framework for cancer quality improvement. *Journal of Oncology Practice*, *10*(6), 339–345. Retrieved from http://jop.ascopubs.org/content/10/6/339.full • Sprandio, J. D., Flounders, B. P., Lowry, M., & Tofani, S. (2013). Data-driven transformation to an oncology patient-centered medical home. *Journal of Oncology Practice*, *9*(3), 130–132. Retrieved from http://doi.org/10.1200/JOP.2013.001019 • Healthcare Quality Improvement Partnership: Guide to Quality Improvement Methods. Retrieved from https://www.hqip.org.uk/resource/guide-to-quality-improvement-methods/#.WvWPh6rfNMs
Required Practice Redesign Activity: Use certified electronic health record technology	**Category I:** • Strekalova, Y. (2017). Electronic heath record use among cancer patients: Insights from the Health Information National Trends Survey. *Health Informatics Journal*, 1-8. Retrieved from http://journals.sagepub.com/doi/pdf/10.1177/1460458217704246 **Category IV:** • Groves, P., Kayyali, B., Knott, D., & Van Kuiken, S. (2013). The big data revolution in healthcare. Retrieved from http://www.mckinsey.com/~/media/mckinsey/industries/healthcare%20systems%20and%20services/our%20insights/the%20big%20data%20revolution%20in%20us%20health%20care/the_big_data_revolution_in_healthcare.ashx • Shen, X., et al. (2012). Pilot study of meaningful use of electronic health records in radiation oncology. *Journal of* Oncology *Practice*, *8*(4), 219–223. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3396817/
Designate regular team meetings to review data and plan/implement improvement cycles	**Category II:** • McComb S, & Hebdon M. (2013). Enhancing patient outcomes in healthcare systems through multidisciplinary teamwork. *Clinical Journal of Oncology Nursing*. *17*(6), 669-672. Retrieved from http://europepmc.org/abstract/MED/24305490 **Category IV:** • Taplin, S., et al. (2015). Teams and teamwork during a cancer diagnosis: Interdependency within and between teams. *Journal of Oncology Practice*, *11*(3), 231-238. Retrieved from http://ascopubs.org/doi/full/10.1200/jop.2014.003376

Secondary Driver: Evidence-Based Medicine	
Required Practice Redesign Activity: Use therapies consistent with nationally recognized clinical guidelines	**Category I:** • Graham, I., & Harrison, M. (2005). Evaluation and adaptation of clinical practice guidelines. *BMJ Journals*, *8*, 68-72. Retrieved from http://ebn.bmj.com/content/8/3/68.info • Mazrou, S. H. A. (2013). Expected benefits of clinical practice guidelines: Factors affective their adherence and methods of implementation and dissemination. *Journal of Health Specialties, 1*(3), 141:147. Retrieved from http://www.thejhs.org/article.asp?issn=2468-6360;year=2013;volume=1;issue=3;spage=141;epage=147;aulast=Almazrou **Category IV:** • Kredo, T., Bernhardsson, S., Machingaidze, S., Young, T., Louw, Q., Ochodo, E., & Grimmer, K. (2016). Guide to clinical practice guidelines: The current state of play. *International Journal for Quality in Health Care*, *28*(1), 122-128. Retrieved from http://doi.org/10.1093/intqhc/mzv115 • Schippits, M. G., & Schippits, K. M. (2013). Clinical pathways leading healthcare reform: Transformational strategies for oncology and beyond. *Journal of Medicine and the Person*, *11*(2), 62–68. Retrieved from http://doi.org/10.1007/s12682-013-0151-4
Use clinical decision support systems	**Category I:** • Lobach, D., et al. (2012). Enabling health care decision-making through clinical decision support and knowledge management. *Agency for Healthcare Research and Quality, (*203), 1-784. Retrieved from http://www.ncbi.nlm.nih.gov/books/NBK97318 • Murphy, E. V. (2014). Clinical decision support: Effectiveness in improving quality processes and clinical outcomes and factors may influence success. *Yale Journal of Biology and Medicine*, *87*(2), 187–197.Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4031792/ • Yu, P. P. (2015). Knowledge bases, clinical decision support systems and rapid learning in oncology. *Journal of Oncology Practice. 11*(2), 206-211. Retrieved from http://ascopubs.org/doi/abs/10.1200/JOP.2014.000620 • Wilfong, L. (2017). Managing the Complexities of Cancer Care with Information Technology. *Oncology Times. 39*(16). 10- 33. Retrieved from https://journals.lww.com/oncology-times/Fulltext/2017/08250/Managing_the_Complexities_of_Cancer_Care_With.7.aspx • Cooley M, et al. (2014). Point-of-care clinical decision support for cancer symptom management: Results of a group randomized trial. *Journal of Clinical Oncology. 32*(31). Retrieved from http://ascopubs.org/doi/abs/10.1200/jco.2014.32.31_suppl.1
Provide patients with appropriate opportunities to participate in clinical trials	**Category I:** • The Center for Information and Study on Clinical Research Participation (CISCRP). Perceptions and insights studies. Retrieved from https://www.ciscrp.org/services/research-services/perceptions-and-insights-study/ • Unger J, et al., (2016). Role of clinical trial participation in cancer research: Barriers, evidence and strategies. *American Society of Clinical Oncology Education Book*, *35*, 185-198. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5495113/

Strategic Use of Revenue

Secondary Driver: Strategic Plan	
Use budgeting and accounting processes effectively to transform care processes and build capability to deliver comprehensive, coordinated cancer care	**Category IV:** • Massachusetts General Hospital. (2011). Budgeting basics 101: The nuts and bolts of budget planning. Retrieved from http://studylib.net/doc/8298033/budgeting-basics-101---massachusetts-general-hospital
Align practice productivity metrics and compensation strategies with comprehensive, coordinated cancer care	**Category IV:** • Stewart, F. M., et al. (2007). Benchmarks in clinical productivity: A National Comprehensive Cancer Network survey. *Journal of Oncology Practice*, *3*(1), 2–8. Retrieved from http://doi.org/10.1200/JOP.0712001 • Malin, J. L., Weeks, J. C., Potosky, A. L., Hornbrook, M. C., & Keating, N. L. (2013). Medical oncologists' perceptions of financial incentives in cancer care. *Journal of Clinical Oncology*, *31*(5), 530–535. Retrieved from http://doi.org/10.1200/JCO.2012.43.6063 • Pickard, T. (2014). Calculating your worth: Understanding productivity and value. *Journal of the Advanced Practitioner in Oncology, 5*(2), 128–133. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4093517/

Secondary Driver: Sharing of Performance-Based Payment	
Engage various care partners in sharing of performance-based payment	**Category IV:** • RTI International. (2014). Evaluation of the Medicare physician hospital collaboration demonstration. Retrieved from https://downloads.cms.gov/files/cmmi/PHC_FINAL-RPT_September2014.pdf • Schmidt, H., & Emanuel, E. J. (2014). Lowering medical costs through the sharing of savings by physicians and patients: Inclusive shared savings. *JAMA Internal Medicine*, *174*(12), 2009-2013. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/25330283 • Friedberg, M. W., et al. (2015). Effects of health care payment models on physician practices in the United States. Rand Corporation. American Medical Association. Retrieved from https://www.rand.org/pubs/periodicals/health-quarterly/issues/v5/n1/08.html • Bernstein, C., Goodroe, J., & Mathias, W. (2014). Structuring gainsharing arrangements and bundled payments: latest developments. Strafford. Retrieved from http://media.straffordpub.com/products/structuring-gainsharing-arrangements-and-bundled-payments-latest-developments-2014-04-30/presentation.pdf

Management of Appropriate Multi-Payer Structure (Payers, including CMS)

Secondary Driver: Payment for Enhanced Services and Performance	
Implement a methodology for payment for advanced services	**Category IV:** • Mechanic, R. E. (2011). Opportunities and challenges for episode-based payment. *The New England Journal of Medicine*, *365*(9), 777–779. Retrieved from http://doi.org/10.1056/NEJMp1105963 • Ridgely, M. S., de Vries, D., Bozic, K. J., & Hussey, P. S. (2014). Bundled payment fails to gain a foothold in California: The experience of the Integrated Healthcare Association (IHA) bundled payment demonstration. *Health Affairs*, *33*(8), 1345–1352. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/25092835 • Mechanic, R., & Tompkins, C. (2012). Lessons learned preparing for Medicare bundled payments. *New England Journal of Medicine*, *367*(20), 1873–1875. Retrieved from http://doi.org/10.1056/NEJMp1210823 • Clough, J. D., & Kamal, A. (2015). Oncology Care Model: Short- and long-term considerations in the context of broader payment reform. *Journal of Oncology Practice*, *11*(4), 319–322. Retrieved from http://jop.ascopubs.org/content/early/2015/06/09/JOP.2015.005777.full • Wener, R. M., Kolstad, J. T., Stuart, E. A., and Polsky, D. (2011). The effect of pay-for-performance in hospitals: Lessons for quality improvement. *Health Affairs, 30*(4): 690-698. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/21471490 • Kline, R. M., Bazell, C., Smith, E., Schumacher, H., Rajkumar, R., & Conway, P. H. (2015). Centers for Medicare and Medicaid Services: Using an episode-based payment model to improve oncology care. *Journal of Oncology Practice*, *11*(2), 114–117. Retrieved from http://ascopubs.org/doi/abs/10.1200/jop.2014.002337 • Mitchell A. P., Rotter J.S., Patel E., et al. (2019). Association between reimbursement incentives and physician practice in oncology: A systematic review. *JAMA Oncol.* Retrieved from https://jamanetwork.com/journals/jamaoncology/article-abstract/2719759 • Newcomer, L. N., Gould, B., Page, R. D., Donelan, S. A., & Perkins, M. (2014). Changing physician incentives for affordable, quality cancer care: Results of an episode payment model. *Journal of Oncology Practice*, *10*(5), 322–326. Retrieved from http://ascopubs.org/doi/abs/10.1200/jop.2014.001488 • Kline, R. M., Muldoon, L. D., Schumacher, H. K., Strawbridge, L. M., York, A. W., Mortimer, L. K., … Conway, P. H. (2017). Design challenges of an episode-based payment model in oncology: The Centers for Medicare & Medicaid Services Oncology Care Model. *Journal of Oncology Practice*, *13*(7), e632–e645. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/28535101 • Hoverman, J. R., Neubauer, M. A., Jameson, M., Hayes, J. E., Eagye, K. J., Abdullahpour, M., … Verrilli, D. K. (2018). Three-year results of a Medicare Advantage cancer management program. *Journal of Oncology Practice*, *14*(4), e229–e237. Retrieved from http://ascopubs.org/doi/abs/10.1200/JOP.17.00091 • Robinson, J. C. (2017). Value-based physician payment in oncology: Public and private insurer initiatives. *Milbank Quarterly*, *95*(1), 184–203. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5339382/
Implement a methodology for payment for performance	**Category IV:** • Clough, J. D., & Kamal, A. (2015). Oncology Care Model: Short- and long-term considerations in the context of broader payment reform. *Journal of Oncology Practice*, *11*(4), 319–322. Retrieved from http://jop.ascopubs.org/content/early/2015/06/09/JOP.2015.005777.full • Eijkenaar, F., Emmert, M., Scheppach, M., & Schöffski, O. (2013). Effects of pay for performance in health care: A systematic review of systematic reviews. *Health Policy, 110*(2-3), 115–130. Retrieved from http://doi.org/10.1016/j.healthpol.2013.01.008 • Sura, A. and Shah, N. R. (2010). Pay-for-performance initiatives: Modest benefits for improving healthcare quality. *American Health and Drug Benefits, 3*(2): 135-142. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4106521/

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Secondary Driver: Engage with Partner Practices

Identify practice redesign activities	**Category I:** • Rotter, T., et al. (2010). Clinical pathways: Effects on professional practice, patient outcomes, length of stay and hospital costs. *The Cochrane Database of Systematic Reviews*. Retrieved from http://doi.org/10.1002/14651858.CD006632.pub2 **Category IV:** • Kredo, T., Bernhardsson, S., Machingaidze, S., Young, T., Louw, Q., Ochodo, E., & Grimmer, K. (2016). Guide to clinical practice guidelines: The current state of play. *International Journal for Quality in Health Care*, *28*(1), 122-128. Retrieved from http://doi.org/10.1093/intqhc/mzv115 • Steele, J. R., et al. (2015). Why bundled payments could drive innovation: An example from interventional oncology. *Journal of Oncology Practice*, *11*(2), 199–205. Retrieved from http://doi.org/10.1200/JOP.2014.001523 • Ellis, P. G. (2013). Development and implementation of oncology care pathways in an integrated care network: The via oncology pathways experience. *Journal of Oncology Practice, 9*(3), 171-173. Retrieved from http://ascopubs.org/doi/full/10.1200/JOP.2013.001020 • Feinberg, B. A., et al. (2012). Implementation of cancer clinical care pathways: A successful model of collaboration between payers and providers. *Journal of Oncology Practices, 8*(3), e38s-e43s. Retrieved from http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=3348604&tool=pmcentrez&rendertype=abstract • Kuznar, W. (2016). Practice Transformation Essential to the Oncology Care Model. *American Health & Drug Benefits*, *9*, 18–19. Retrieved from http://www.ahdbonline.com/issues/2016/december-2016-vol-9-special-issue/2288-practice-transformation-essential-to-the-oncology-care-model • Zimlich, R. (2016). New cancer care approach: Highmark's cancer collaborative. *Managed Healthcare Executive*, *26*(11), 27–28. Retrieved from http://www.managedhealthcareexecutive.com/business-strategy/new-cancer-care-approach-highmarks-cancer-collaborative • (NEW) Levit, L. A., Schenkel, C., Schilsky, R. L., Kim, E. S., McAneny, B. L., Nadauld, L. D., & Levit, K. (2019). Implementing Precision Medicine in Community-Based Oncology Programs: Three Models. *Journal of Oncology Practice, 15*(6), 325–329. Retrieved from https://ascopubs.org/doi/full/10.1200/JOP.18.00661
Provide operational support to partner practices	**Category III:** • Sanghavi, D., et al. (2014). Case study: transforming cancer care at a community oncology practice. Brookings Institute. Retrieved from https://www.brookings.edu/articles/case-study-transforming-cancer-care-at-a-community-oncology-practice/

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Category IV:

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Secondary Driver: Quality Improvement	
Align quality measures	**Category IV:** • Altman, S. H. (2012). The lessons of Medicare's prospective payment system show that the bundled payment program faces challenges. *Health Affairs (Project Hope)*, *31*(9), 1923–1930. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/22949439 • Chambers, J. D., Weiner, D. E., Bliss, S. K., & Neumann, P. J. (2013). What can we learn from the U.S. expanded end-stage renal disease bundle? *Health Policy, 110*(2-3), 164–171. Retrieved from http://doi.org/10.1016/j.healthpol.2013.01.011 • Cutler, D. M., & Ghosh, K. (2012). The potential for cost savings through bundled episode payments. *New England Journal of Medicine*, *366*(12), 1075–1077. Retrieved from http://doi.org/10.1056/NEJMp1113361 • de Bakker, D. H., Struijs, J. N., Baan, C. B., Raams, J., de Wildt, J. E., Vrijhoef, H. J. M., & Schut, F. T. (2012). Early results from adoption of bundled payment for diabetes care in the Netherlands show improvement in care coordination. *Health Affairs*, *31*(2), 426–433. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/22323174 • Delisle, D. R. (2013). Big things come in bundled packages: Implications of bundled payment systems in health care reimbursement reform. *American Journal of Medical Quality: The Official Journal of the American College of Medical Quality*, *28*(4), 339–44. Retrieved from http://doi.org/10.1177/1062860612462740 • Hirsch, J. A., Leslie-Mazwi, T. M., Barr, R. M., McGinty, G., Nicola, G. N., Silva, E., & Manchikanti, L. (2015). The Bundled Payments for Care Improvement Initiative. *Journal of Neurointerventional Surgery*, *8*(5). Retrieved from http://doi.org/10.1136/neurintsurg-2015-011746 • Hussey, P. S., Ridgely, M. S., & Rosenthal, M. B. (2011). The PROMETHEUS bundled payment experiment: Slow start shows problems in implementing new payment models. *Health Affairs*, *30*(11), 2116–2124. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/22068404 • Iorio, R. (2015). Strategies and tactics for successful implementation of bundled payments: Bundled payment for care improvement at a large, urban, academic medical center. *The Journal of Arthroplasty*, *30*(3), 349–350. Retrieved from http://doi.org/10.1016/j.arth.2014.12.031 • Kolodziej, M. (2013). The changing Face of cancer care: evolution to a collaborative model. *American Health & Drug Benefits*, *6*(5), 227–228. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4031718/ • Klein, I., & Kolodziej, M. (2014). Private payers and cancer care: Land of opportunity. *Journal of Oncology Practice*, *10*(1), 15–19. Retrieved from http://ascopubs.org/doi/full/10.1200/jop.2013.000897 • (NEW) Hlavka, J.P., Lin, P., & Neumann, P.J. (2019). Outcome Measures for Oncology Alternative Payment Models: Practical Considerations and Recommendations. *The American Journal of Managed Care, 25*. Retrieved from https://www.ajmc.com/journals/issue/2019/2019-vol25-n12/outcome-measures-for-oncology-alternative-payment-models-practical-considerations-and-recommendations?p=3 • (NEW) Daly, B., Zon, R. T., Page, R. D., Edge, S. B., Lyman, G. H., Green, S. R., … Bosserman, L. D. (2018). Oncology Clinical Pathways: Charting the Landscape of Pathway Providers. *Journal of Oncology Practice, 14*(3), e194–e200. Retrieved from https://ascopubs.org/doi/10.1200/JOP.17.00033

Secondary Driver: Data Sharing	
Share data and feedback with practices and CMS	**Category IV:** • Chambers, J. D., Weiner, D. E., Bliss, S. K., & Neumann, P. J. (2013). What can we learn from the U.S. expanded end-stage renal disease bundle? *Health Policy*, *110*(2-3), 164–171. Retrieved from http://doi.org/10.1016/j.healthpol.2013.01.011 • Mechanic, R. E. (2011). Opportunities and challenges for episode-based payment. *The New England Journal of Medicine*, *365*(9), 777–9. Retrieved from http://doi.org/10.1056/NEJMp1105963 • Klein, I., & Kolodziej, M. (2014). Private payers and cancer care: Land of opportunity. *Journal of Oncology Practice/American Society of Clinical Oncology*, *10*(1), 15–19. Retrieved from http://doi.org/10.1200/JOP.2013.000897 • Ramos Hegwer, L. (2013). Collaborating with payers to deliver value. *HFM (Healthcare Financial Management)*, *67*(10), 80. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/24244997 • The MITRE Corporation. (2016). Accelerating and aligning population-based payment models: Data sharing. *Health Care Payment Learning & Action Network*. Retrieved from https://hcp-lan.org/ds-whitepaper/

Appendix C: OCM Quality Measures and Change Concept Alignment

Table 6 outlines quality measure and quality scoring per performance period, including when the reporting of certain measures becomes optional/not required.

Table 6: OCM Quality Measures and Quality Scoring by Performance Period[261]

Measure	Definitions	PP1	PP2	PP3	PP4	PP5	PP6+
OCM-1	Risk-adjusted proportion of patients with all-cause hospital admission within the 6-month period	P	P	P	P	-	-
OCM-2	Risk-adjusted proportion of patients with all-cause ED visits or observation stays that did not result in a hospital admission within the 6-month episode	P	P	P	P	P	P
OCM-3	Proportion of patients who died who were admitted to hospice for 3 days or more	P	P	P	P	P	P
OCM-4	4a: Oncology: Medical and Radiation – Pain Intensity Quantified 4b: Oncology: Medical and Radiation – Plan of Care for Pain	-	R	R	R	R	P
OCM-5	Preventive Care and Screening: Screening for Depression and Follow-Up Plan	-	R	R	R	R	P
OCM-6	Patient-Reported Experience of Care	-	-	P	P	P	P
OCM-7	Prostate Cancer: Adjuvant Hormonal Therapy for High or Very High Risk Prostate Cancer (PQRS 104, NQF 0390)	R	-	-	-	-	-
OCM-8	Adjuvant chemotherapy is recommended or administered within 4 months (120 days) of diagnosis to patients under the age of 80 with AJCC III (lymph node positive) colon cancer	R	R	R*	-	-	-
OCM-9	Combination chemotherapy is recommended or administered within 4 months (120 days) of diagnosis for women under 70 with AJCC T1cN0M0, or Stage IB - III hormone receptor negative breast cancer	R	R	R*	-	-	-
OCM-10	Trastuzumab administered to patients with AJCC stage I (T1c) - III and human epidermal growth factor receptor 2 (HER2) positive breast cancer who receive adjuvant chemotherapy	R	R	R*	-	-	-
OCM-11	Breast Cancer: Hormonal Therapy for Stage I (T1b)-IIIC Estrogen Receptor/Progesterone Receptor (ER/PR) Positive Breast Cancer	R	R	R*	-	-	-
OCM-12	Documentation of Current Medications in the Medical Record	-	R	R	R*	-	-
OCM-24	Care Plan (MIPS 47, NQF 0326)	-	-	-	R*	-	-
OCM-30	Closing the Referral Loop: Receipt of Specialist Report (CMS 50v5)	-	-	-	R*	-	-

Key: P = Performance; R = Reporting Only; * = Reporting is Optional

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