

ONCOLOGY CARE MODEL

KEY DRIVERS & CHANGE PACKAGE

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1 Overview and Purpose

The Oncology Care Model (OCM) engages participating practices and payers to improve the quality and experience of oncology care and to lower costs through an episode-based payment model. The two-part payment system includes a Monthly Enhanced Oncology Services (MEOS) payment for the duration of a patient's six-month episode and the potential for a retrospective performance-based payment. The Centers for Medicare & Medicaid Services (CMS) designed the OCM payment model to support the provision of enhanced services representing comprehensive, coordinated cancer care and continuous, data-driven quality improvement. CMS expects that these improvements will result in better care, smarter spending, and healthier people.

Practitioners in OCM will need to make changes in how they organize and deliver care to be successful and achieve the aims of the model, incorporating evidence and best practices in their approach to these changes.

The Key Drivers and Changes provide a framework for change and improvement for OCM and encourages key corridors (or focus areas) of work. It is not intended to be a checklist for what practices or payers must do, but instead is a body of knowledge and a starting point for participants to assess and begin redesigning their approach to care to achieve the OCM aims.

We continually refine the Key Drivers and Changes over time, with the entire change package undergoing an annual revision. **As OCM participants, your feedback on which drivers and changes are effective contributes to future iterations of this document. Collectively, we continue to construct the roadmap for this effort and generate an ever-stronger evidence base for practices inside and outside of OCM.** This second version of the Key Drivers and Changes is intended to align to practice priorities and support practice feedback received during the first performance year of the model. Additional resources and toolkits have been added to this document based on findings from various learning modalities presented over the last year.

We ask OCM participants to carefully review the elements of the Key Drivers and Changes, consider topics that are most relevant for their practices to focus on, and review the relevant resources for those areas. Throughout the model, practices will implement changes in how they organize and deliver care and share their experience and results with fellow OCM participants to facilitate success.

1.1 Version Updates

Updates included in this version are:

- Each section includes updated references.
- Driver Diagram updated to better illustrate multi-payer participation and support of OCM
 - Primary Driver “Strategic Use of Revenue” changed to “Strategic Plan”
 - Primary Driver “OCM Payments” changed to “Management of Appropriate Payment Structure” and includes new secondary driver “Set Benchmarks”
- Access and Continuity
 - Added reference to Case Study #1: Reducing Potentially Avoidable Hospitalizations and Emergency Department Utilization
 - Added five new toolkits/implementation guides
- Care Coordination
 - Added one new toolkit/implementation guide
- Patient and Caregiver Engagement
 - Minor edits to Change Tactics and Evidence for all Change Concepts

- Added new Change Tactic to “Provide non-monetary incentives, tools or technology for health behavior change”
 - Added four new toolkits/implementation guides
- Team-based Care
 - Included additional change tactics for the different change concepts
 - Added three new toolkits/implementation guides
- Data-driven Quality Improvement
 - Included two new change tactics
 - Added three new toolkits/implementation guides
- Evidence-based Medicine
 - Includes one new change tactic
- Strategic Plan
 - Expanded change tactics
- Appendix A includes some additional illustrative resources labeled as (new).

2 Key Drivers and Changes

2.1 Purpose and Use of the Key Drivers and Changes

The Key Drivers and Changes is intended to:

- Suggest the key drivers of success in OCM. 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) that lead to each primary driver. The primary and secondary drivers are outlined in the driver diagram presented in Figure 2.
- Identify a set of changes rooted in evidence and practice that practices and payers may test and implement within each of the drivers. These changes are thought to be necessary to achieve results within a secondary driver and are articulated in broad, conceptual terms (change concepts) as well as specific tactics (change tactics).
- Identify the change concepts that align with required practice redesign activities. The aim in OCM is clear and measurable, and there are broad concepts and specific tactics that all OCM practices have agreed to as a condition of participation in the model to help achieve that aim. There are likely to be additional tactics that practices will find necessary for success. Similarly, partnering OCM payers have agreed to certain principles of payment and model design to support the delivery of this care.
- Provide references and links to tools and resources for each change concept.

The Key Drivers and Changes give an overview of how we expect OCM to work and suggest corridors of work for practices and payers. 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.

2.2 Summary of Key Drivers and Changes

The definitions of important terms in this section are below in Figure 1.

Figure 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) that lead 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.

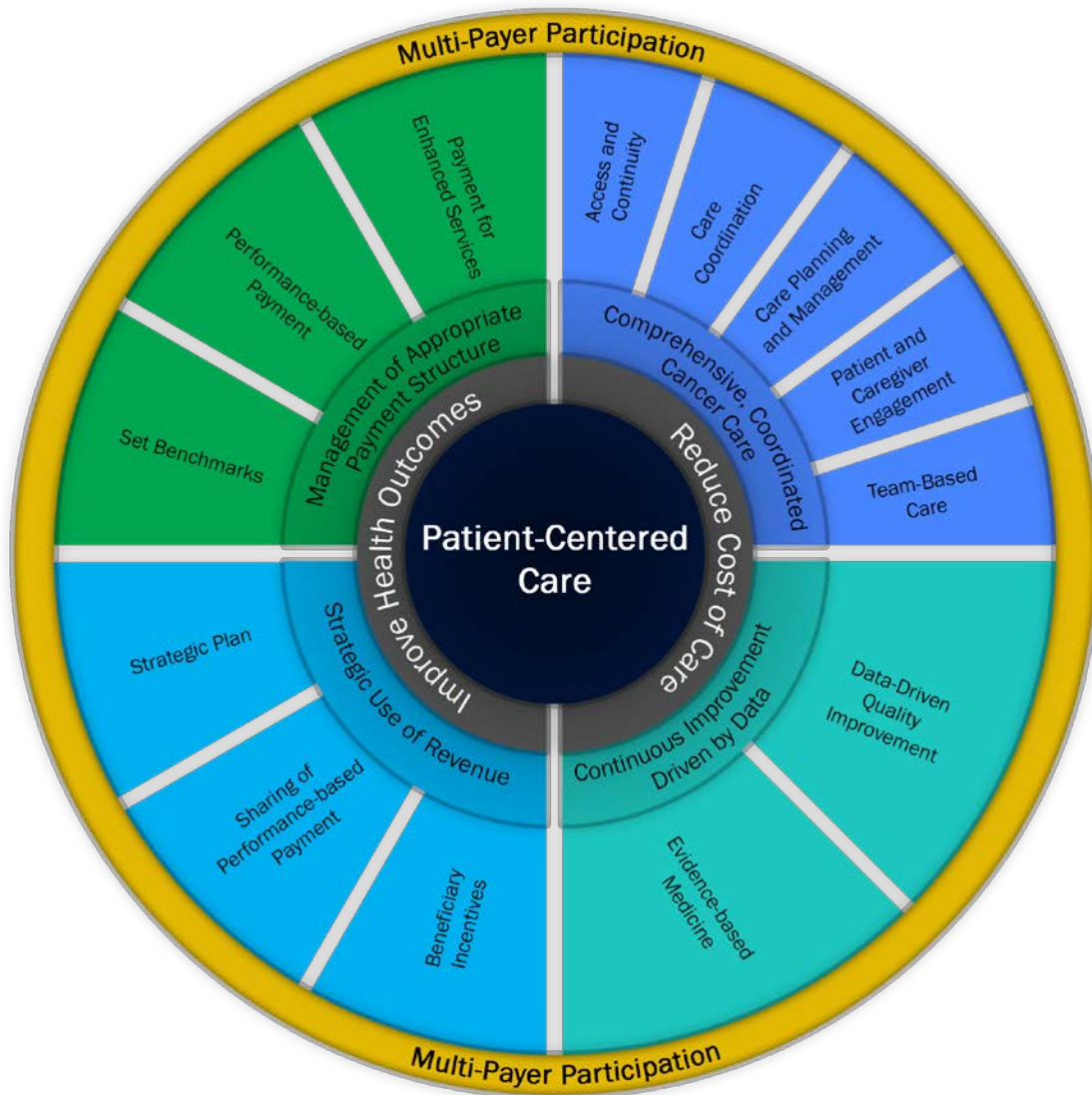
This section also includes the OCM driver diagram, a table with definitions of the secondary drivers, and a table of change concepts for each secondary driver.

2.2.1 Driver Diagram

A driver diagram is a common approach to summarizing the essential areas of action in organizational change or improvement. The driver diagram (Figure 2) 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. Involving other payers in the model offers the opportunity to transform care on a larger scale by creating broader incentives for care transformation at the physician practice level. OCM encourages payer alignment so that their payments can more effectively support practice-related drivers.

Figure 2: Oncology Care Model Driver Diagram



2.2.2 Secondary Driver Definitions

Secondary drivers are critical areas of work for participating OCM practices. Figure 3 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.

Figure 3: Secondary Driver Definitions

Primary Driver	Secondary Driver	Definition
Comprehensive, Coordinated Cancer Care	Access and Continuity	Access is defined by the ability to obtain needed health and health care services in a timely manner in terms of proximity, location, time, and ease of approach. Access is a function of both system and individual characteristics and is influenced by social, cultural, economic, and geographic factors (NOF Glossary). Relationship continuity is defined by an ongoing therapeutic relationship between a patient and one or more clinicians and can be measured in reference to a single clinician or to a care team (CPC Implementation Guide 2016).
	Care Coordination	Care coordination involves deliberately organizing patient care activities and sharing information among all of the participants concerned with a patient's care to achieve safer and more effective care (AHRO).
	Care Planning and Management	A comprehensive plan of evidence-based, integrated clinical care activities that are patient-specific and are agreed upon by the patient, caregivers, and clinician. The care plan is a tool to facilitate communication and shared decision-making. Fundamental to the care plan are the conversations that a patient and clinician have regarding the patient's care (Delivering High-Quality Cancer Care, IOM 2013).
	Patient and Caregiver Engagement	Empowering patients and caregivers to serve as active partners and collaborate in shared decision-making with clinicians and the health care team along the continuum of cancer care to improve quality and safety. Cancer care teams should ensure that sufficient communication methods are instituted and take into account a patient's health literacy, information, language, and emotional needs (Delivering High-Quality Cancer Care, IOM 2013).
	Team-Based Care	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 (Delivering High-Quality Cancer Care, IOM 2013).
Continuous Improvement Driven by Data	Data-Driven Quality Improvement	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 (IHI Science of Improvement).
	Evidence-Based Medicine	The integration of clinical expertise, the patient's preferences or values, and the best research evidence to decide on the option that best suits the patient (Evid Based Med 2002;7:36-38).
Strategic use of Revenue	Strategic Plan	Development of a strategic plan to use the payments for enhanced services and performance-based payments 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	Development of a customized payment distribution plan that allows savings to be shared with care partners for their role in contributing to patient care.
	Beneficiary Incentives	Strategies, tactics, and tools that remove barriers to effective care planning or management, provide non-monetary incentives for behavior change, and enable patients to improve their health.

Primary Driver	Secondary Driver	Definition
Management of Appropriate Payment Structure (Payers, including CMS)	Payment for Enhanced Services	Payment (e.g., advance payment or per beneficiary/enrollee/member per month payment) for services that are aligned with those included in the definition of Enhanced Services and provided to the payer’s patient population by the practices. For Medicare, this is MEOS Payment.
	Performance-Based Payment	Payment for performance (e.g., retrospective lump sum or enhanced monthly payment) 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.
	Set Benchmarks	Projection of what expenditures would have been during the performance period for episodes attributed to the OCM practice or pool in the absence of OCM participation, reduced for the OCM discount and risk-adjusted to each OCM practice.

2.2.3 Change Concepts for Each Secondary Driver

For each secondary driver, there is a set of changes thought to be necessary to achieve results in that driver. 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 that allows practices to test and implement the specific tactics that work best for them. To best guide practices at the start of OCM implementation, a literature review was conducted to identify the evidence base in each of the secondary driver and change concept areas. The methodology for this review is summarized in Appendix B: Methods for Development of Key Drivers.

Figure 4 lists the change concepts aligned to each secondary driver. In some cases, the change concepts are also requirements of OCM participation, and therefore are core elements of model implementation. These are indicated by the bolded “Required Practice Redesign Activity.”

Note that the secondary driver and change concepts identified for payers are indicated in the OCM Payments primary driver.

Figure 4: 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 who has real-time access to patients’ medical records
		Increased access to visits
		Access to care and information outside of visits
	Care Coordination	Required Practice Redesign Activity: Provide core functions of patient navigation
		Conduct coordinated medication management (for IV as well as oral therapies)
		Referral coordination and management (this concept is also one of the core functions of patient navigation)
		Improve transitions between care settings (this concept is also one of the core functions of patient navigation)
		Integrate palliative care
	Care Planning and Management	Required Practice Redesign Activity: Document a care plan that contains the 13 components in the Institute of Medicine (IOM) Care Management Plan
		Risk stratification
		Monitoring and follow-up from visits
		Estimating out of pocket cost
		Engage patients and caregivers in treatment plan conversations and shared decision-making

OCM Key Drivers and Changes

Primary Driver	Secondary Driver	Change Concept	
	Patient and Caregiver Engagement	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 patient review and revision	
		Partner with patients and caregivers to guide practice improvements	
		Provide nonmonetary incentives, tools/technology, or vouchers for health behavior change	
	Team-Based Care	Establishing and providing organizational support for care delivery teams with consistent team members accountable for the patient population/panel	
		Defining roles and distributing tasks among care team members to reflect the skills, abilities, and credentials of team members	
Holding regular team huddles to manage workflow and meet patient needs			
Continuous Improvement Driven By Data	Data-Driven Quality Improvement	Required Practice Redesign Activity: Use of data for continuous quality improvement	
		Required Practice Redesign Activity: Use Certified Electronic Health Record (EHR) Technology	
		Designating regular team meetings to review data and plan/implement improvement cycles	
	Evidence-Based Medicine	Incorporating routine clinical and administrative leadership review of data as part of the management process	
		Required Practice Redesign Activity: Use therapies consistent with nationally recognized clinical guidelines	
		Use clinical decision support systems	
Strategic Use of Revenue	Strategic Plan	Provide patients with appropriate opportunities to participate in clinical trials (this concept is also one of the core functions of patient navigation)	
		Use budgeting and accounting processes effectively to transform care processes and build capability to deliver comprehensive, coordinated cancer care	
	Sharing of Performance-Based Payment	Align practice productivity metrics and compensation strategies with comprehensive, coordinated cancer care	
		Engage various care partners in sharing of performance-based payment	
Management of Appropriate Payment Structure (Payers, including CMS)	Beneficiary Incentives	Provide non-monetary incentives, tools, or technology to promote health behavior change (e.g., recognition and praise for quitting smoking)	
		Payment for Enhanced Services	Offer practices suggested clinical guidelines and expectations for coordination of care to meet performance goals
			Align incentives across clinician teams to meet goals of model
			Engage clinician across the continuum of care to coordinate and manage care
	Manage cost of oncology drugs		
	Performance-Based Payment	Foster partnerships between cancer care clinicians and payers to align incentives to provide high-quality, high-value care	
		Align quality measures used to determine performance-based payment with other quality measure reporting programs	
	Set benchmarks	Address administrative challenges to implementing episode-based payments, such as claims adjudication	
Provide data and feedback to practices. Calculate Target Amounts			

2.3 Tools and Resources for OCM Secondary Drivers and Changes

What This Resource Provides: The following tables are organized by secondary driver. For each secondary driver and change concept, potential change tactics and implementation resources are provided. This section of the document focuses on the Comprehensive, Coordinated Cancer Care; Continuous Improvement Driven by Data; Strategic Use of Revenue; and Management of Appropriate Payment Structure (Payers, including CMS) primary drivers.

Supporting literature provides the evidence base for change concepts with references provided in the footnotes, while implementation tools provide the practical guides to put changes in place. These implementation guides and toolkits provide action-oriented guidance to apply changes in your practice. The most salient and useful resources are presented in this section, and Appendix A: Additional Evidence by Secondary Driver contains additional evidence and resources. Appendix B: Methods for Development of Key Drivers describes the methodology for this review.

Participants are asked to review this section in detail, with special attention to the practice redesign activities that are required for participation in OCM. In addition, OCM participants should assess their practice improvement opportunities in the other secondary driver areas. It is expected that the following tools and resources will continue to expand and evolve based on new evidence from participating practices.

2.3.1 Access and Continuity

OCM Case Study #1: Reducing Potentially Avoidable Hospitalizations and Emergency Department Utilization, released on March 20, 2017, provides OCM practices with an opportunity to understand implementation strategies from other OCM participants with demonstrated results based on evidence in literature and data. The case study also provides a variety of resources and toolkits for practices to use.¹

¹ OCM Case Study #1: Reducing Potentially Avoidable Hospitalizations and Emergency Department Utilization. March 20, 2017. OCM Connect Library 2.0.

OCM Key Drivers and Changes

Change Concept	Change Tactics and Evidence	Toolkits and Implementation Guides
<p><i>Required Practice Redesign Activity.</i> Provide 24/7 access to an appropriate clinician who has real-time access to patients' medical records</p>	<ul style="list-style-type: none"> ○ Provide access to clinician from the OCM practice with access to medical record.^{2,3} ○ Provide cross-coverage from clinicians outside the OCM practice with access to medical record.^{3,4} 	<ul style="list-style-type: none"> ○ Safety Net Medical Home Initiative. Enhanced Access Implementation Guide. www.safetynetmedicalhome.org/sites/default/files/Implementation-Guide-Enhanced-Access.pdf ○ Oncology Nursing Society Oncology 24 Hour Triage Rapid Assessment and Access Toolkit. http://www.ukons.org/downloads/Mi_2355814_01_12_16_v1_2.pdf ○ Pan-Canadian Oncology Symptom Triage and Remote Support Team. Remote Symptom Practice Guides for Adults on Cancer Treatments. https://ktcanada.ohri.ca/costars/COSTaRS_Practice_Guides_ENGLISH_March2016.pdf
<p>Increased access to visits</p>	<ul style="list-style-type: none"> ○ Shared medical appointments—or group visits where multiple patients are seen as a group for similar conditions— have improved health-related quality of life in other settings and may address medical and psychosocial needs while enhancing communication in cancer care.⁴ ○ Extended evening hours, weekend clinics, and same-day appointments have also been successful tactics for increasing access in cancer care.⁵ 	<ul style="list-style-type: none"> ○ Safety Net Medical Home Initiative. Enhanced Access Implementation Guide. http://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/resources/pdf/Patient-Centered-Scheduling.pdf

² CPC Program Year 2016 Implementation and Milestone Reporting Summary Guide. <https://downloads.cms.gov/files/cmml/cpci-implementationguide2016.pdf>

³ Institute of Medicine. Transforming Health Care Scheduling and Access: Getting to Now. Washington, DC: The National Academies Press, 2015. doi:10.17226/20220. <http://nap.edu/20220>

⁴ Reed, S. C., Partridge, A. H., & Nekhlyudov, L. (2014). Shared Medical Appointments in Cancer Survivorship Care: A Review of the Literature. *Journal of Oncology Practice / American Society of Clinical Oncology*, 45–47. Retrieved from <http://jop.ascopubs.org/content/11/1/6.full.pdf+html>

⁵ Sanghavi, D, Patel, K, et al. (2014). *Transforming Cancer Care and the Role of Payment Reform: Lessons from the New Mexico Cancer Center*. Retrieved from the Brookings Institution website: <http://www.brookings.edu/research/papers/2014/08/26-oncology-transforming-cancer-care-payment-reform>

Change Concept	Change Tactics and Evidence	Toolkits and Implementation Guides
<p>Access to care and information outside of visits</p>	<ul style="list-style-type: none"> ○ Studies have shown remote symptom monitoring has high acceptability and success in improving clinical outcomes such as pain, depression, and fatigue.⁶ ○ Patient education for pain and symptom management can decrease unnecessary emergency department (ED) visits as well as lower patient distress levels, leading to higher overall care quality.⁷ ○ Evidence suggests that video consultation is both feasible and effective for use in the clinical care of oncology patients.^{8,9} ○ Secure email, secure text-messaging, call centers, remote monitoring, two-way video visits, and patient portals for access to health information are promising approaches to provide increased access outside of visits. 	<ul style="list-style-type: none"> ○ Safety Net Medical Home Initiative. Enhanced Access Implementation Guide. http://www.safetynetmedicalhome.org/sites/default/files/Implementation-Guide-Enhanced-Access.pdf ○ Children’s Cancer and Leukaemia Group. The Oncology/Haematology Telephone Triage Tool Kit for Children and Young People. http://www.cclg.org.uk/write/MediaUploads/Member%20area/Nursing%20Triage%20Tool/16190a_Telephone_Triage_Toolkit_Manual_EDITABLE.pdf ○ Pan-Canadian Oncology Symptom Triage and Remote Support Team. Remote Symptom Practice Guides for Adults on Cancer Treatments. https://ktcanada.ohri.ca/costars/COSTaRS_Practice_Guides_ENGLISH_March2016.pdf

⁶Kofoed, S., Breen, S., Gough, K., Aranda, S., Maccallum, P., & Centre, C. (2012). Benefits of Remote Real-Time Side-Effect Monitoring Systems for Patients Receiving Cancer Treatment, 6. <http://doi.org/10.4081/oncol.2012.e7>

⁷Delgado-Guay, M. O., Kim, Y. J., Shin, S. H., Chisholm, G., Williams, J., Allo, J., & Bruera, E. (2015). Avoidable and unavoidable visits to the emergency department among patients with advanced cancer receiving outpatient palliative care. *Journal of Pain and Symptom Management*, 49(3), 497-504. <https://dx.doi.org/10.1016/j.jpainsymman.2014.07.007>

⁸ Kitamura, C., Zurawel–Balaura, L., & Wong, R. K. S. (2010). How Effective Is Video Consultation in Clinical Oncology? A Systematic Review. *Current Oncology*, 17(3), 17–27. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2880899>

⁹ Viers, B. R., Lightner, D. J., Rivera, M. E., Tollefson, M. K., Boorjian, S. A., Karnes, R. J., Gettman, M. T. (2015). Efficiency, Satisfaction, and Costs for Remote Video Visits Following Radical Prostatectomy: A Randomized Controlled Trial. *European Urology*, 68(4), 729–735. <http://doi.org/10.1016/j.eururo.2015.04.002>

2.3.2 Care Coordination

Change Concept	Change Tactics and Evidence	Toolkits and Implementation Guides
<p><i>Required Practice Redesign Activity:</i> Provide core functions of patient navigation</p>	<ul style="list-style-type: none"> ○ Patient navigation improves the care experience for patients with newly diagnosed cancer^{10,11} and can reduce problems in care.¹² ○ Patient navigation has been shown to improve timely cancer care, especially for populations with low follow-up rates or with low resources.¹³ ○ Patient navigation can improve access to the cancer care system by addressing community, facility, and literacy barriers as well as monitoring and facilitating quality care. This can lead to a better overall patient experience.¹⁴ ○ Core functions include (per the National Cancer Institute)¹⁵: <ul style="list-style-type: none"> ▪ Coordinating appointments with clinicians to ensure timely delivery of diagnostic and treatment services ▪ Maintaining communication with patients, survivors, families, and health care clinicians to monitor patient satisfaction with the cancer care experience ▪ Ensuring that appropriate medical records are available at scheduled appointments ▪ Arranging language translation or interpretation services ▪ Facilitating connections to follow-up services ▪ Providing access to clinical trials, and ▪ Building partnerships with local agencies and groups (e.g., referrals to other services and/or cancer survivor support groups). 	<ul style="list-style-type: none"> ○ 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 ○ ACCC, Patient Navigation: Resources and Tools for the Multidisciplinary Team. https://www.accc-cancer.org/resources/PatientNavigation-Tools.asp

¹⁰ Hendren, S., & Fiscella, K. (2014, January 1). Patient Navigation Improves the Care Experience for Patients with Newly Diagnosed Cancer. *Journal of Clinical Oncology*, 32(1), 3–4. <http://doi.org/10.1200/JCO.2013.53.2960>

¹¹ Freund, Karen M., et al. Impact of Patient Navigation on Timely Cancer Care: The Patient Navigation Research Program. *Journal of the National Cancer Institute*, 106.6 (2014): dju115. <http://jnci.oxfordjournals.org/content/106/6/dju115.long#ref-27>

¹² Wagner, E. H., Ludman, E. J., Aiello Bowles, E. J., Penfold, R., Reid, R. J., Rutter, C. M., McCorkle, R. (2014). Nurse Navigators in Early Cancer Care: A Randomized, Controlled Trial. *Journal of Clinical Oncology*, 32(1), 12–18. <http://doi.org/10.1200/JCO.2013.51.7359>

¹³ Freund, K. M., Battaglia, T. A., Calhoun, E., Darnell, J. S., Dudley, D. J., Fiscella, K., Writing Group of the Patient Navigation Research Program. (2014). Impact of Patient Navigation on Timely Cancer Care: The Patient Navigation Research Program. *Journal of the National Cancer Institute*, 106(6), dju115. <http://doi.org/10.1093/jnci/dju115>

¹⁴ Riley, S. et al. The Role of Patient Navigation in Improving the Value of Oncology Care. *Journal of Clinical Pathways*. 2016;2(1):41–47. <http://www.journalofclinicalpathways.com/article/role-patient-navigation-improving-value-oncology-care>

¹⁵ National Cancer Institute Center to Reduce Cancer Health Disparities. Patient Navigator Research Program. Available at: <http://www.cancer.gov/aboutnci/organization/crhd/disparities-research/pnpr>

Change Concept	Change Tactics and Evidence	Toolkits and Implementation Guides
Conduct coordinated medication management	<ul style="list-style-type: none"> Medication management and reconciliation can reduce inappropriate prescribing.¹⁶ Medication management approaches, such as patient education and counseling, combined with improved communication with health care professionals can reduce the risk of adverse drug events and hospital readmissions in some cases, but not all.^{17, 18} 	<ul style="list-style-type: none"> How-to Guide: Prevent Adverse Drug Events by Implementing Medication Reconciliation. Cambridge, MA: Institute for Healthcare Improvement; 2011. http://www.ihl.org/resources/pages/tools/howtguidepreventadversedrugevents.aspx
Referral coordination and management¹⁹	<ul style="list-style-type: none"> Specialist collaboration can lower mortality without increased cost among patients with colon cancer.²⁰ Care coordination agreements may help improve quality and care coordination by practices that implement them.²¹ Care coordination programs with a considerable amount of in-person contact improve certain quality-of-life process measures.²² Systematic criteria for referral improves candidate selection and timing.²³ Form written agreements with care partners, referred to as care coordination agreements, care compacts, or referral agreements, to delineate how care responsibilities will be shared and how bidirectional information will flow. 	<ul style="list-style-type: none"> 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

¹⁶ Patterson SM, Cadogan CA, Kerse N, Cardwell CR, Bradley MC, Ryan C, Hughes C. Interventions to Improve the Appropriate Use of Polypharmacy for Older People. *Cochrane Database of Systematic Reviews* 2014, Issue 10. Art. No.: CD008165. <http://dx.doi.org/10.1002/14651858.CD008165.pub3>

¹⁷ Spinewine, A., Claeys, C., Foulon, V., & Chevalier, P. (2013). Approaches for Improving Continuity of Care in Medication Management: A Systematic Review. *International Journal for Quality in Health Care: Journal of the International Society for Quality in Health Care / ISQua*, 25(4), 403–17. <http://doi.org/10.1093/intqhc/mzt032>

¹⁸ Viswanathan M, Kahwati LC, Golin CE, et al. Medication Therapy Management Interventions in Outpatient Settings [Internet]. Rockville (MD): Agency for Healthcare Research and Quality (US); 2014 Nov. (Comparative Effectiveness Reviews, No. 138). Available from: <http://www.ncbi.nlm.nih.gov/books/NBK294489/>

¹⁹ This concept is also one of the core functions of patient navigation (see Section 2.3.2).

²⁰ Hussain, T., Chang, H.-Y., Veenstra, C. M., & Pollack, C. E. (2015). Collaboration Between Surgeons and Medical Oncologists and Outcomes for Patients With Stage III Colon Cancer. *Journal of Oncology Practice*, 11(3), e388–e397. <http://doi.org/10.1200/JOP.2014.003293>

²¹ E. Carrier, M. K. Dowling, and H. H. Pham, Care Coordination Agreements: Barriers, Facilitators, and Lessons Learned, *The American Journal of Managed Care*, Nov. 2012 18(11):e398–e404. <http://www.aimc.com/journals/issue/2012/2012-11-vol18-n11/care-coordination-agreements-barriers-facilitators-and-lessons-learned/P-3#sthash.x3BP9y10.dpuf>

²² Peikes, D., Chen, A., Schore, J., & Brown, R. (2009). Effects of Care Coordination on Hospitalization, Quality of Care, and Health Care Expenditures among Medicare Beneficiaries: 15 Randomized Trials. *JAMA*, 301(6), 603–18. <http://doi.org/10.1001/jama.2009.126>

²³ 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. <http://doi.org/10.1634/theoncologist.2016-0006>

OCM Key Drivers and Changes

Change Concept	Change Tactics and Evidence	Toolkits and Implementation Guides
	<ul style="list-style-type: none"> ○ Provide patients with information that sets their expectations consistently with the care coordination agreements. ○ Track patients referred to specialists through the entire process. ○ Systematically integrate information from referrals into the plan of care. ○ Participate in health information exchange if available. ○ Use structured referral notes. 	
Improve transitions between care settings²⁴	<ul style="list-style-type: none"> ○ Interventions to manage care transitions have been implemented in a variety of settings, resulting in reduced readmission rates and hospitalization costs.²⁵ ○ Formalize lines of communication with local settings in which patients receive care to ensure documented flow of information and seamless transitions in care. ○ Partner with community or hospital-based transitional care services. ○ Routine and timely follow-up to hospitalizations, ED visits, and stays in other institutional settings. 	<ul style="list-style-type: none"> ○ Society of Hospital Medicine. Project BOOST® (Better Outcomes by Optimizing Safe Transitions) Implementation Toolkit. http://www.hospitalmedicine.org/Web/Quality_Innovation/Implementation_Toolkits/Web/Quality_Innovation/Implementation_Toolkit/Landing_Page.aspx?hkey=b0106f27-ec68-421e-8acc-609e1f158919 ○ 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. http://www.aafp.org/dam/AAFP/documents/practice_management/payment/TCM30day.pdf
Integrate palliative care	<ul style="list-style-type: none"> ○ Integrating specialist palliative care into routine cancer care can lead to better patient and caregiver outcomes, including improvement in symptoms, quality of life, satisfaction, caregiver burden, and survival.²⁶ 	<ul style="list-style-type: none"> ○ Defining High-Quality Palliative Care in Oncology Practice: An American Society of Clinical Oncology/American Academy of Hospice and Palliative Medicine Guidance Statement. http://ascopubs.org/doi/full/10.1200/JOP.2016.010686 ○ The Advisory Board Palliative Care Infographic. https://www.advisory.com/research/physician-

²⁴ This concept is also one of the core functions of patient navigation (see Section 2.3.2).

²⁵ Medicare Payment Advisory Commission (MedPAC). Report to Congress: Medicare and the Health Care Delivery System. June 15, 2012. Available from: http://medpac.gov/docs/default-source/reports/jun12_entirereport.pdf?sfvrsn=0

²⁶ Bickel, K.E., McNiff, K., Buss, M., Kamal, A., Lupu, D., et al 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*. 2016 12:9, e828-e838. <http://ascopubs.org/doi/full/10.1200/JOP.2016.010686>

Change Concept	Change Tactics and Evidence	Toolkits and Implementation Guides
	<ul style="list-style-type: none"> Family members of decedents who received care at home with hospice services were more likely to report a favorable dying experience.²⁷ Depression symptoms increased for surviving spouses after bereavement regardless of hospice use.²⁸ 	executive-council/resources/posters/5-characteristics-of-programs-that-capture-the-value-of-palliative-care

2.3.3 Care Planning and Management

Change Concept	Change Tactics and Evidence	Toolkits and Implementation Guides
<p><i>Required Practice Redesign Activity:</i> Document a care plan that contains the 13 components in the Institute of Medicine Care Management Plan</p>	<ul style="list-style-type: none"> Care management programs were the most common function across five pilot oncology medical homes.²⁹ Care management can improve the quality of care.³⁰ Effective care management programs include identifying patients' needs, using specially trained care managers working within a multidisciplinary team, and in-person contact with patients.³¹ Early referrals to outpatient palliative care improve patient outcomes.³² 	<ul style="list-style-type: none"> See the <i>Delivering High Quality Cancer Care</i> IOM Report (2013) for an example care plan: Institute of Medicine. <i>Delivering High-Quality Cancer Care: Charting a New Course for a System in Crisis</i>. Washington, DC: The National Academies Press, 2013. http://www.nap.edu/catalog/18359/delivering-high-quality-cancer-care-charting-a-new-course-for The Commonwealth Fund. Caring for High-Need, High-Cost Patients: What Makes for a Successful Care Management Program? http://www.commonwealthfund.org/~media/files/publications/issue-brief/2014/aug/1764_hong_caring_for_high_need_high_cost_patients_ccm_ib.pdf

²⁷ Teno JM et al (2004). Family Perspectives on End-of-Life Care at the Last Place of Care. *JAMA*. 2004;291:88-93.

<http://jamanetwork.com/journals/jama/fullarticle/197944>

²⁸ Ornstein KA et al (2015). Association Between Hospice Use and Depressive Symptoms in Surviving Spouses. *JAMA Intern Med*. 2015;175(7):1138-1146.

<http://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2296014>

²⁹ Tirodkar, M. A., Acciavatti, N., Roth, L. M., Stovall, E., Nasso, S. F., Sprandio, J., Scholle, S. H. (2015). Lessons From Early Implementation of a Patient-Centered Care Model in Oncology. *Journal of Oncology Practice / American Society of Clinical Oncology*, 11(Sept.), 456–461. <http://doi.org/10.1200/JOP.2015.006072>

³⁰ Bodenheimer, T. S., and R. Berry-Millett. 2009. Care Management of Patients with Complex Health Care Needs. Princeton, N.J.: The Robert Wood Johnson Foundation. The Synthesis Project. Research Synthesis Report 19. <http://www.rwjf.org/en/library/research/2009/12/care-management-of-patients-with-complex-health-care-needs.html>

³¹ *Id.*

³² 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. <http://doi.org/10.1634/theoncologist.2016-0006>

Change Concept	Change Tactics and Evidence	Toolkits and Implementation Guides
<p>Risk stratification</p>	<ul style="list-style-type: none"> ○ Assigning a risk status to each patient (risk stratification) gives a practice a more granular view into the needs of its patients and population and gives it the ability to target care management resources more effectively. ○ Use a consistent method to assign and adjust global risk status for all patients to allow risk stratification into actionable risk cohorts. 	<ul style="list-style-type: none"> ○ 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.pcpcci.org/sites/default/files/resources/Risk-Stratified%20Care%20Management%20and%20Coordination.pdf
<p>Monitoring and follow-up from visits</p>	<ul style="list-style-type: none"> ○ Some studies have shown improved psychological health, satisfaction of clinicians, and process of care measures from interventions to improve follow-up and continuity between visits.³³ ○ Using technology in cancer follow-up, such as telephone follow-up calls, has been shown to be acceptable and safe.³⁴ 	<ul style="list-style-type: none"> ○ American College of Physicians. 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

³³ Aubin M, Giguère A, Martin M, Verreault R, Fitch MI., Kazanjian A, Carmichael P-H. (2012). Interventions to Improve Continuity of Care in the Follow-up of Patients with Cancer. *Cochrane Database of Systematic Reviews* 2012, Issue 7. <http://www.ncbi.nlm.nih.gov/pubmed/22786508>

³⁴ Dickinson, R., Hall, S., Sinclair, J. E., Bond, C., & Murchie, P. (2014). Using Technology to Deliver Cancer Follow-up: A Systematic Review. *BMC Cancer*, 14(1), 311. <http://doi.org/10.1186/1471-2407-14-311>

2.3.4 Patient and Caregiver Engagement

Change Concept	Change Tactics and Evidence	Toolkits and Implementation Guides
<p>Engage patients and caregivers in treatment plan conversations and shared decision making</p>	<ul style="list-style-type: none"> ○ Shared decision making improves patient outcomes and mitigates emotional repercussions of a cancer diagnosis.³⁵ ○ Cancer-related decision aids increase knowledge without adverse impact on decisional conflict or anxiety, and help patients make more informed decisions, have accurate risk perceptions, and make choices that best agree with their values.³⁶ ○ Well-integrated, early treatment discussions improve patient satisfaction and decrease health care spending.³⁷ ○ Training programs for clinical staff on patient-centered communication and shared decision making have been found to be most effective when they are at least one day long, learner-centered, and focused on practices' skills. The best training strategies include role play, feedback, and small group discussions.³⁸ ○ Communication skills training in cancer care have been found to be effective and improve clinician empathy and use of open-ended questions.³⁹ 	<ul style="list-style-type: none"> ○ 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 Shared-Decision Making (Decision Support) Toolkit for Specialty Care. http://med.dartmouth-hitchcock.org/csdm_toolkits/specialty_care_toolkit.html ○ Office of the National Coordinator (ONC) for Health IT Patient Engagement Playbook. https://www.healthit.gov/playbook/pe/ ○ Preference Laboratory (Decision Aids and Tools). http://preferencelaboratory.org/toolbox

³⁵ Shay, L. A., & Lafata, J. E. (2015). Where Is the Evidence? A Systematic Review of Shared Decision Making and Patient Outcomes. *Medical Decision Making : An International Journal of the Society for Medical Decision Making*, 35(1), 114–131. <http://doi.org/10.1177/0272989X14551638>

³⁶ Trikalinos TA, Wieland LS, Adam GP, et al. Decision Aids for Cancer Screening and Treatment. Rockville (MD): Agency for Healthcare Research and Quality (US); 2014 Dec. (Comparative Effectiveness Reviews, No. 145). Available from: <http://www.ncbi.nlm.nih.gov/books/NBK269405/>

³⁷ Parikh RB, Kirch RA, Smith TJ, et al. (2013). Early Specialty Palliative Care: Translating Data in Oncology into Practice. *New England Journal of Medicine* 369:2347-2351, 2013. <http://www.nejm.org/doi/full/10.1056/nejmsb1305469>

³⁸ Berkhof, M., H. J. van Rijssen, A. J. M. Schellart, J. R. Anema, and A. J. van der Beek (2010). Effective Training Strategies for Teaching Communication Skills to Physicians: An Overview of Systematic Reviews. *Patient Education and Counseling* 84(2):152-162. <http://www.sciencedirect.com/science/article/pii/S0738399110003691>

³⁹ Moore, P. M., Rivera Mercado, S., Grez Artigues, M., & Lawrie, T. A. (2013). Communication Skills Training for Healthcare Professionals Working with People Who Have Cancer. In P. M. Moore (Ed.), *Cochrane Database of Systematic Reviews*. Chichester, UK: John Wiley & Sons, Ltd. <http://doi.org/10.1002/14651858.CD003751.pub3>

Change Concept	Change Tactics and Evidence	Toolkits and Implementation Guides
<p>Patient education, coaching, and self-management support</p>	<ul style="list-style-type: none"> ○ Patient education on treatment side effects can empower patients to better care for themselves and improve communication with their providers.⁴⁰ ○ Self-management support, 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.⁴¹ ○ Goal setting with structured follow up, action planning, and motivational interviewing have been found to be effective teaching and coaching methods.⁴² 	<ul style="list-style-type: none"> ○ Patient-Centered Primary Care Collaborative Patient Engagement Resources. https://www.pcpcc.org/resources/1 ○ Robert Wood Johnson Foundation. Aligning Forces for Quality. Patient Engagement Toolkit. http://forces4quality.org/compendium-tools-engaging-patients-your-practice.html ○ Institute for Healthcare Improvement and Robert Wood Johnson Foundation. Partnering in Self-Management Support: A Toolkit for Clinicians. http://www.improvingchroniccare.org/downloads/selfmanagement_support_toolkit_for_clinicians_2012_update.pdf ○ Community Care of North Carolina. Motivational Interviewing Resource Guide. https://www.communitycarenc.org/media/files/mi-guide.pdf ○ Case Western Reserve University Center for Evidence-Based Practices. Motivational Interviewing, overview and resource list. Motivational Interviewing ○ Safety Net Medical Home Initiative. Patient-Centered Interactions Implementation Guide. http://www.safetynetmedicalhome.org/sites/default/files/Implementation-Guide-Patient-Centered-Interactions.pdf

⁴⁰ Tang, H et al (2015). Patient Preparedness for Chemotherapy, an Unmet Need. *Journal of Clinical Oncology* 33, no 15_suppl. http://ascopubs.org/doi/abs/10.1200/jco.2015.33.15_suppl.e20681

⁴¹ Kim, A. R., & Park, H. (2015). Web-based Self-management Support Interventions for Cancer Survivors: A Systematic Review and Meta-analyses. *Studies in Health Technology and Informatics*, 216 (January 2000), 142–147. <http://doi.org/10.3233/978-1-61499-564-7-142>

⁴² Gutnick D et al. (2017) Brief Action Planning to Facilitate Behavior Change and Support Patient Self-Management. *Journal of Clinical Outcomes Management*. <http://www.icomjournal.com/brief-action-planning-to-facilitate-behavior-change-and-support-patient-self-management-3/>

Change Concept	Change Tactics and Evidence	Toolkits and Implementation Guides
<p>Provide patients with modes to track or share experiences</p>	<ul style="list-style-type: none"> ○ Provide patients with journals to track their experience and self-monitor their action plan. ○ Patient emotional disclosure through journals or other resources can significantly lessen pain and increase wellbeing.⁴³ ○ Online tools offer a different way for patients and their health care team to communicate effectively.⁴⁴ ○ Psychological intervention helps patients and families to alleviate distress and address challenges for patients with advanced cancer.⁴⁵ ○ Women with breast cancer who wrote about their thoughts and feelings reported fewer symptoms and had fewer unscheduled visits to their doctors.⁴⁶ 	<ul style="list-style-type: none"> ○ Cancer Care Healing With Words <ul style="list-style-type: none"> ● Fact Sheet. http://www.cancercare.org/publications/263-healing-with-words-journaling-and-reflecting-throughout-treatment ● A Therapeutic Writing Group. http://www.cancercare.org/support-groups/89-healing-with-words-a-therapeutic-writing-group
<p>Open medical records and documents (e.g., care plans) for patient review and revision</p>	<ul style="list-style-type: none"> ○ Patients' outcomes improved when patients were granted access to their record.⁴⁷ ○ Provider endorsement and patient portal usability contribute to patient's ability to engage through and with the patient portal.⁴⁸ 	<ul style="list-style-type: none"> ○ Using Patient Portals in Ambulatory Care Settings Fact Sheet. https://www.healthit.gov/providers-professionals/implementation-resources/using-patient-portals-ambulatory-care-settings-fact-sheet ○ Patient-Centered Primary Care Collaborative Patient Engagement Resources. https://www.pcpcc.org/resources/1

⁴³ Cepeda, M. S., Chapman, C. R., Miranda, N., Sanchez, R., Rodriguez, C. H., Restrepo, A. E., Carr, D. B. (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. <http://doi.org/10.1016/j.jpainsymman.2007.08.011>

⁴⁴ Basch, E., et al (2016). Symptom Monitoring With Patient-Reported Outcomes During Routine Cancer Treatment: A Randomized Controlled Trial. *Journal of Clinical Oncology* 34, no. g (February 2016) 557-565. <http://ascopubs.org/doi/full/10.1200/JCO.2015.63.0830>

⁴⁵ Rodin G et al (2017). Managing cancer and living meaningfully (CALM): A randomized controlled trial of a psychological intervention for patients with advanced cancer. *Journal of Clinical Oncology*. 35.18_suppl. http://ascopubs.org/doi/abs/10.1200/JCO.2017.35.18_suppl.LBA10001

⁴⁶ Milbury, K., Spelman, A., Wood, C., Matin, S. F., Tannir, N., Jonasch, E., Cohen, L. (2014). Randomized Controlled Trial of Expressive Writing for Patients With Renal Cell Carcinoma. *Journal of Clinical Oncology*, 32(7), 663–670. <http://doi.org/10.1200/JCO.2013.50.3532>

⁴⁷ Goldzweig CL, Towfigh AA, Paige NM, et al. Systematic Review: Secure Messaging Between Providers and Patients, and Patients' Access to Their Own Medical Record: Evidence on Health Outcomes, Satisfaction, Efficiency and Attitudes [Internet]. Washington (DC): Department of Veterans Affairs (US); 2012 Jul. RESULTS. Available from: <http://www.ncbi.nlm.nih.gov/books/NBK100363/>

⁴⁸ Irizarry T, DeVito Dabbs A, Curran CR (2015). Patient Portals and Patient Engagement: A State of the Science Review. *Journal of Medical Internet Research* 2015;17(6):e148 DOI: [10.2196/jmir.4255](https://doi.org/10.2196/jmir.4255).

Change Concept	Change Tactics and Evidence	Toolkits and Implementation Guides
<p>Partner with patients and caregivers to guide practice improvement</p>	<ul style="list-style-type: none"> ○ Engaging patients in clinical improvement projects through patient/caregiver surveys, interviews, and focus groups can enhance the project’s quality and impact.⁴⁹ ○ Involving patients in the quality improvement design process in quality improvement teams or committees allows them to bring their experience as an input into the vision for improvement.⁵⁰ ○ Conduct surveys or host meetings with a patient and family advisory council. 	<ul style="list-style-type: none"> ○ Patient-Centered Primary Care Collaborative Patient Engagement Resources: <ul style="list-style-type: none"> ● Worksheet to Support Patient and Families in Care Redesign. https://www.pcpcc.org/resource/partnering-patients-and-families-primary-care-improvement-and-redesign-worksheet-support ● Patient and Family Partners Roles. https://www.pcpcc.org/sites/default/files/Patient%20%26%20Family%20Partner%20Roles.pdf
<p>Provide non-monetary incentives, tools, or technology, for health behavior change</p>	<ul style="list-style-type: none"> ○ Consumer behavior heavily impacts the total cost of health care. Patients with poor medication adherence cost the US health care system \$100 billion annually.⁵¹ ○ Behavior change should be rooted in behavioral psychology. Tactics to improve behavior include remote monitoring and support and reminders. ○ Performance feedback is an important feature in promoting preventive health-related behavior.⁵² ○ Systematic electronic symptom monitoring has been shown to reduce ED visits by seven percent and increase median survival.⁵³ 	<ul style="list-style-type: none"> ○ Changing Patient Behavior: The Next Frontier in Healthcare Value. <i>Health International</i>, Vol 12, 2012. http://healthcare.mckinsey.com/changing-patient-behavior-next-frontier-healthcare-value

⁴⁹ Woolf SH, Zimmerman E, Haley A, Krist AH (2016). Authentic Engagement of Patients and Communities Can Transform Research, Practice, and Policy. *Health Affairs* 2016 April 01;35(4):590-594. <http://content.healthaffairs.org/content/35/4/590.full?ikey=oY.5.YnKSDryk&keytype=ref&siteid=healthaff>

⁵⁰ Pomey, Marie-Pascale; Hihat, Hassiba; Khalifa, May; Lebel, Paule; Néron, André; and Dumez, Vincent (2015). Patient Partnership in Quality Improvement of Healthcare Services: Patients’ Inputs and Challenges Faced. *Patient Experience Journal*: Vol. 2: Iss. 1, Article 6. Available at: <http://pxjournal.org/journal/vol2/iss1/6>

⁵¹ Changing Patient Behavior: The Next Frontier in Healthcare Value. *Health International*, Vol 12, 2012. <http://healthcare.mckinsey.com/changing-patient-behavior-next-frontier-healthcare-value>

⁵² Meredith, SE et al. (2013). *The ABCs of incentive-based treatment in health care: a behavior analytic framework to inform research and practice*. Psychology Research and Behavior Management, Volume 2014:7, pages 103-114. <https://doi.org/10.2147/PRBM.S59792>

⁵³ Basch, E. et al., Symptom Monitoring with Patient-Reported Outcomes During Routine Cancer Treatment: A Randomized Controlled Trial. *Journal of Clinical Oncology*, 34(6); 557-565. Feb 2016. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4872028/>

2.3.5 Team-Based Care

Change Concept	Change Tactics and Evidence	Toolkits and Implementation Guides
<p>Establishing and providing organizational support for care delivery teams with consistent team members accountable for the patient population/panel</p>	<ul style="list-style-type: none"> ○ Teams can improve performance on process measures such as follow-up time, appropriate screening use, and physician satisfaction.⁵⁴ ○ Team-based care should be aligned around a set of shared goals as set by the team, with established roles, effective communication, and measurable processes and outcomes.⁵⁵ ○ Barriers to effective teams include breakdowns in communication, absence of defined roles, and resistance to change.⁵⁶ 	<ul style="list-style-type: none"> ○ 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® (Team Strategies and Tools to Enhance Performance and Patient Safety) for Office-Based Care Version. http://www.ahrq.gov/teamstepps/officebasedcare/index.html ○ Harvard Business School. Measuring Teamwork in Health Care Settings: A Review of Survey Instruments. https://rcrc.brandeis.edu/pdfs/Valentine%20et%20al%202013.pdf ○ American Medical Association. Implementing Team-Based Care. https://www.stepsforward.org/modules/team-based-care

⁵⁴ Taplin, S. H., Weaver, S., Salas, E., Chollette, V., Edwards, H. M., Bruinooge, S. S., & Kosty, M. P. (2015). Reviewing Cancer Care Team Effectiveness. *Journal of Oncology Practice*, 11(3), 239–246. <http://doi.org/10.1200/JOP.2014.003350>

⁵⁵ Core Principles & Values of Effective Team-Based Health Care. Institute of Medicine. October 2012. <https://www.nationalahecc.org/pdfs/vsrt-team-based-care-principles-values.pdf>

⁵⁶ Ibid

Change Concept	Change Tactics and Evidence	Toolkits and Implementation Guides
<p>Defining roles and distributing tasks among care team members to reflect the skills, abilities, and credentials of team members</p>	<ul style="list-style-type: none"> ○ Nurses and oncologists have differing perceptions of the effectiveness of their collaboration in teams, and common communication tactics and shared understanding of team's roles and responsibilities must be fostered for effective teamwork.⁵⁷ ○ Providing non-physician team members with greater roles has been successful in collaborative oncology practice models, increasing productivity and providing high satisfaction for physicians, non-physicians, and patients.^{58,59} ○ The interdependency of work shared within and across teams can be highlighted by defining the team's clear collective goal. Explicitly defining such a shared goal focuses attempts to optimize processes, resources, and effort (e.g., for effectiveness and efficiency).⁶⁰ 	<ul style="list-style-type: none"> ○ 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 ○ Duke Cancer Institute. "Who Does What?" Ensuring High-Quality and Coordinated Palliative Care with Our Oncology Colleagues. http://dx.doi.org/10.1016/j.jpainsymman.2016.08.001
<p>Holding regular team huddles to manage workflow and meet patient needs</p>	<ul style="list-style-type: none"> ○ Briefings or planning sessions at the start of each day and debriefings or post-case discussions can improve teamwork.⁶¹ ○ Team members find multidisciplinary team meetings helpful.⁶² 	<ul style="list-style-type: none"> ○ 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

⁵⁷ Weaver AC, Callaghan M, Cooper AL, et al. (2015). Assessing Interprofessional Teamwork in Inpatient Medical Oncology Units. *Journal of Oncology Practice*, 11:19-22, 2015. <http://ascopubs.org/doi/full/10.1200/JOP.2014.001536>

⁵⁸ Towle, E. L., Barr, T. R., Hanley, A., Kosty, M., Williams, S., & Goldstein, M. a. (2011). Results of the ASCO Study of Collaborative Practice Arrangements. *Journal of Oncology Practice*, 7(5), 278–282. <http://doi.org/10.1200/JOP.2011.000385>

⁵⁹ White, C. N., Borchardt, R. a, Mabry, M. L., Smith, K. M., Mulanovich, V. E., & Rolston, K. V. (2010). Multidisciplinary Cancer Care: Development of an Infectious Diseases Physician Assistant Workforce at a Comprehensive Cancer Center. *Journal of Oncology Practice*, 6(6), e31–e34. <http://doi.org/10.1200/JOP.2010.000100>

⁶⁰ Taplin, S. H., Weaver, S., Salas, E., Chollette, V., Marks, B., Jacobs, A., Schiff, G., Stricker, Carrie., Bruinooge, S. S. (2015). Teams and Teamwork During a Cancer Diagnosis: Interdependency Within and Between Teams. *Journal of Oncology Practice* 2015 11:3, 231-238 <http://ascopubs.org/doi/full/10.1200/JOP.2014.003376>

⁶¹ Taplin, S. H., Weaver, S., Salas, E., Chollette, V., Edwards, H. M., Bruinooge, S. S., & Kosty, M. P. (2015). Reviewing Cancer Care Team Effectiveness. *Journal of Oncology Practice*, 11(3), 239–246. <http://doi.org/10.1200/JOP.2014.003350>

⁶² Lamb, B. W., Jalil, R. T., Sevdalis, N., Vincent, C., Green, J. S. A., Kesson, E., Heaford, 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. <http://doi.org/10.1186/1472-6963-14-377>

2.3.6 Data-Driven Quality Improvement

Change Concept	Change Tactics and Evidence	Illustrative Toolkits and Implementation Guides
<p><i>Required Practice Redesign Activity.</i> Use of data for continuous quality improvement</p>	<ul style="list-style-type: none"> ○ Evidence suggests that building the clinical operations, workflow, and technological infrastructure to deliver relevant, consumable data to clinicians drives quality improvement.⁶³ ○ Adopt a formal model for quality improvement (e.g., Plan-do-study-act [PDSA], Lean, Six Sigma) to create a culture in which all staff actively participate in improvement activities.⁶⁴ ○ PDSA cycles are widely accepted in healthcare improvement and provide a structure for iterative testing of changes.⁶⁵ ○ Track practice performance against selected clinical quality measures. 	<ul style="list-style-type: none"> ○ National Learning Consortium. Continuous Quality Improvement (CQI) Strategies to Optimize your Practice. https://www.healthit.gov/sites/default/files/tools/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
<p><i>Required Practice Redesign Activity.</i> Use Certified Electronic Health Record (EHR) Technology⁶⁶</p>	<ul style="list-style-type: none"> ○ Leverage technology to collect data and report quality measures. ○ Manage medication (e.g., formulary checks, allergy checks, or drug interaction checks). ○ Develop, store, and disseminate patient-specific educational materials and tools. 	<ul style="list-style-type: none"> ○ 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/

⁶³ 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. <http://doi.org/10.1200/JOP.2013.001019>

⁶⁴ US Department of Health and Human Services (2011). Quality Improvement. <https://www.hrsa.gov/quality/toolbox/508pdfs/qualityimprovement.pdf>

⁶⁵ Taylor, M.J. et al., 2013. Systematic Review of the Application of the Plan-Do-Study-Act Method to Improve Quality in Healthcare. *BMJ Quality and Safety*, 0(September), pp.1–9. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/24025320>

⁶⁶ With the passage of the Medicare Access and CHIP Reauthorization Act, meaningful use requirements have been modified and subsumed into the newly-formed Merit-Based Incentive Payment System. This section will be updated as Medicare Access and Children’s Health Insurance Program (CHIP) Reauthorization Act resources become available.

OCM Key Drivers and Changes

Change Concept	Change Tactics and Evidence	Illustrative Toolkits and Implementation Guides
	<ul style="list-style-type: none"> o Enable direct exchange of clinical information (e.g., test results, care summaries) across clinicians. o Use EHR data to identify high-risk patients to allow for better intervention and better follow-through from Health Insurance Portability and Accountability Act (HIPAA)-compliant, data-driven monitoring.⁶⁷ 	
Designating regular team meetings to review data and plan/implement improvement cycles	<ul style="list-style-type: none"> o In other settings, practices that used teams in quality improvement work were more likely to continue quality improvement work.⁶⁸ 	<ul style="list-style-type: none"> o Safety Net Medical Home Initiative. Quality Improvement Strategy Implementation Guide. http://www.safetynetmedicalhome.org/change-concepts/quality-improvement-strategy
Incorporating routine clinical and administrative leadership review of data as part of management process	<ul style="list-style-type: none"> o Organizational culture, relationships between team members, and leadership involvement are mentioned in some systematic reviews as being important to facilitate quality improvement.^{69,70, 71} 	<ul style="list-style-type: none"> o Safety Net Medical Home Initiative. Engaged Leadership Guide. http://www.safetynetmedicalhome.org/change-concepts/engaged-leadership

⁶⁷ Groves, P., Kayyali, B., Knott, D., & Van Kuiken, S. (2013) The Big Data Revolution in Healthcare. <http://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/the-big-data-revolution-in-us-health-care>

⁶⁸ Rantz, M. J., Zwygart-Stauffacher, M., Flesner, M., Hicks, L., Mehr, D., Russell, T., & Minner, D. (2013). The Influence of Teams to Sustain Quality Improvement in Nursing Homes that “Need Improvement.” *Journal of the American Medical Directors Association*, 14(1), 48–52. <http://doi.org/10.1016/j.jamda.2012.09.008>

⁶⁹ Compas, C., Hopkins, K. A., & Townsley, E. (2008). Best Practices in Implementing and Sustaining Quality of Care. A Review of the Quality Improvement Literature. *Research in Gerontological Nursing*, 1(3), 209–216. <http://doi.org/10.3928/00220124-20091301-07>.

⁷⁰ Kaplan, H. C., Brady, P. W., Dritz, M. C., Hooper, D. K., Linam, W. M., Froehle, C. M., & Margolis, P. (2010). The influence of Context on Quality Improvement Success in Health Care: A Systematic Review of the Literature. *The Milbank Quarterly*, 88(4), 500–559. <http://doi.org/10.1111/j.1468-0009.2010.00611.x>

⁷¹ Nadeem, E., Olin, S. S., Hill, L. C., Hoagwood, K. E., & Horwitz, S. M. (2013). Understanding the Components of Quality Improvement Collaboratives: A Systematic Literature Review. *Milbank Quarterly*, 91(2), 354–394. <http://doi.org/10.1111/milq.12016>

2.3.7 Evidence-Based Medicine

Change Concept	Change Tactics and Evidence	Illustrative Toolkits and Implementation Guides
<p><i>Required Practice Redesign Activity:</i> Use therapies consistent with nationally recognized clinical guidelines</p>	<ul style="list-style-type: none"> The most effective clinical guideline implementation strategies include multifaceted interventions, interactive education, and clinical reminder systems.⁷² 	<ul style="list-style-type: none"> National Comprehensive Cancer Network. Clinical Practice Guidelines in Oncology. Tools and Resources. https://www.nccn.org/professionals/physician_gls/f_guidelines.asp American Society of Clinical Oncology. Guidelines, Tools, & Resources. https://www.asco.org/practice-guidelines/quality-guidelines/guidelines
<p>Use clinical decision support systems</p>	<ul style="list-style-type: none"> Clinical decision support systems have been shown to be effective at improving health care process measures across diverse settings.⁷³ Providing clinical decision support advice to patients in addition to clinicians resulted in increased adherence to clinical decision support recommendations.⁷⁴ Success factors for use of clinical decision support include integration with charting or order entry system and automatic provision of recommendations at time of decision making, among others.⁷⁵ Sharing team and provider data with other providers, patients, and/or external clinical stakeholders can offer the opportunity to share rapid feedback on some key information for patient management.⁷⁶ 	<ul style="list-style-type: none"> Health IT.gov. Clinical Decision Support Implementation Guide. https://www.healthit.gov/policy-researchers-implementers/cds-implementation Agency for Healthcare Research and Quality. Clinical Decision Support Resources. https://healthit.ahrq.gov/ahrq-funded-projects/clinical-decision-support-cds

⁷² Prior, M., Guerin, M., & Grimmer-Somers, K. (2008). The Effectiveness of Clinical Guideline Implementation Strategies – A Synthesis of Systematic Review Findings. *Journal of Evaluation in Clinical Practice*, 14(5), 888–897. <http://doi.org/10.1111/j.1365-2753.2008.01014.x>

⁷³ Bright, T. J., Wong, A., Dhurjati, R., Bristow, E., Bastian, L., Coeytaux, R. R., ... Lobach, D. (2012). Effect of Clinical Decision-Support Systems: A Systematic Review. *Annals of Internal Medicine*, 157(1), 29–43. <http://doi.org/10.7326/0003-4819-157-1-201207030-00450>

⁷⁴ Murphy, E. V. (2014). Clinical Decision Support: Effectiveness in Improving Quality Processes and Clinical Outcomes and Factors that May Influence Success. *Yale Journal of Biology and Medicine*, 87(2), 187–197. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4031792/>

⁷⁵ Bright, T. J., Wong, A., Dhurjati, R., Bristow, E., Bastian, L., Coeytaux, R. R., ... Lobach, D. (2012). Effect of clinical decision-support systems: a systematic review. *Annals of Internal Medicine*, 157(1), 29–43. <http://doi.org/10.7326/0003-4819-157-1-201207030-00450>

⁷⁶ Darshak, S., Patel, K., Samuels, K., George, M., McStay, F., Thoumi, A., Hart, R., & McClellan, M. (2014). Transforming Cancer Care and the Role of Payment Reform Lessons from the New Mexico Cancer Center. <https://www.brookings.edu/wp-content/uploads/2016/06/Oncology-Case-Study-August-2014-FINAL-WEB.pdf>

Change Concept	Change Tactics and Evidence	Illustrative Toolkits and Implementation Guides
<p>Provide patients with appropriate opportunities to participate in clinical trials⁷⁷</p>	<ul style="list-style-type: none"> ○ Most patients are unaware of opportunities to participate in clinical trials, and most hear about opportunities from their physicians.⁷⁸ ○ Increasing patients' knowledge and perceived understanding may improve participation rates in clinical trials.⁷⁹ ○ Many factors influence a patient's decision to enter a clinical trial, including perception of doctor's preferences, trial design, and impact on treatment efficacy.^{80,81} 	<ul style="list-style-type: none"> ○ American Cancer Society. Clinical Trials. http://www.cancer.org/treatment/treatmentsandsideeffects/clinicaltrials/clinical-trials-landing ○ 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

2.3.8 Strategic Plan

Change Concept	Change Tactics and Evidence	Illustrative Toolkits and Implementation Guides
<p>Use budgeting and accounting processes effectively to transform care processes and build capability to delivery comprehensive, coordinated cancer care</p>	<ul style="list-style-type: none"> ○ Budgeting tools allow organizations to plan for new staffing models focused on care coordination or allocate funds to new investments such as EHR systems or telehealth capabilities to deliver comprehensive, coordinated cancer care. 	<ul style="list-style-type: none"> ○ American College of Physicians. Financial Management Tools. https://www.acponline.org/practice-resources/business-resources/office-management/financial-management/financial-management-tools

⁷⁷ This concept is also one of the core functions of patient navigation (see Section 2.3.2).

⁷⁸ Fenton, L., Rigney, M., & Herbst, R. S. (2009). Clinical Trial Awareness, Attitudes, and Participation Among Patients with Cancer and Oncologists. *Community Oncology*, 6(5), 207–228. <http://www.lungcanceralliance.org/assets/docs/lco/Fenton.ClinicalTrials.pdf>

⁷⁹ Brandberg, Y., Johansson, H., & Bergenmar, M. (2016). Patients' Knowledge and Perceived Understanding – Associations with Consenting to Participate in Cancer Clinical Trials. *Contemporary Clinical Trials Communications*, 2, 6–11. <http://doi.org/10.1016/j.conctc.2015.12.001>

⁸⁰ Jenkins, V., Farewell, V., Farewell, D., Darmanin, J., Wagstaff, J., Langridge, C., & Fallowfield, L. (2013). Drivers and Barriers to Patient Participation in RCTs. *British Journal of Cancer*, 108(7), 1402–1407. <http://doi.org/10.1038/bjc.2013.113>

⁸¹ Kanarek, N. F., Kanarek, M. S., Olatoye, D., & Carducci, M. A. (2012). Removing Barriers to Participation in Clinical Trials, A Conceptual Framework and Retrospective Chart Review Study. *Trials*, 13, 237. <http://doi.org/10.1186/1745-6215-13-237>

OCM Key Drivers and Changes

<p>Align practice productivity metrics and compensation strategies with comprehensive, coordinated cancer care</p>	<ul style="list-style-type: none"> ○ Aligning an organization's value-based goals (such as Clinical Quality Measures) to compensation ties an individual provider's accountability to the organization's success.⁸² 	<ul style="list-style-type: none"> ○ Medical Group Management Association (MGMA), Physician Compensation Plans: An MGMA Research and Analysis Introduction. http://reliancecg.com/uploads/11_2015_3_Physicians_Comp_Report.pdf ○ Distribution Based on Contribution-- A Merit-based Shared Savings Distribution Model: Toward Accountable Care Consortium. http://www.tac-consortium.org/wp-content/uploads/2013/09/Shared-Savings-Guide_091013_revised_reduced-file.pdf
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2.3.9 Sharing of Performance-Based Payment

Change Concept	Change Tactics and Evidence	Illustrative Toolkits and Implementation Guides
<p>Engage various care partners in sharing of performance-based payment</p>	<ul style="list-style-type: none"> ○ In any incentive-based model, incentives must reward providers fairly for long term sustainability.⁸³ ○ Guiding principles for shared-savings distribution include soliciting input from providers, ensuring the distribution is fair and transparent, iterative, and designed to maximize the incentive for all providers to drive value.⁸⁴ 	<ul style="list-style-type: none"> ○ Distribution Based on Contribution-- A Merit-based Shared Savings Distribution Model: Toward Accountable Care Consortium. http://www.tac-consortium.org/wp-content/uploads/2013/09/Shared-Savings-Guide_091013_revised_reduced-file.pdf

⁸² Medical Group Management Association, Physician Compensation Plans: An MGMA Research and Analysis Introduction.
http://reliancecg.com/uploads/11_2015_3_Physicians_Comp_Report.pdf

⁸³ Distribution Based on Contribution -- A Merit-based Shared Savings Distribution Model: Toward Accountable Care Consortium http://www.tac-consortium.org/wp-content/uploads/2013/09/Shared-Savings-Guide_091013_revised_reduced-file.pdf

⁸⁴ Ibid

3 Appendix A: Additional Evidence by Secondary Driver

These tables in the appendix provide further resources for your practice to explore. Both supporting literature and implementation tools were collected. Literature was graded against the criteria described below, while implementation tools are denoted by “T.” For more information on the level of evidence criteria, see Appendix B: Methods for Development of Key Drivers.

Figure 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
T	Toolkit or Implementation Guide

Access and Continuity

Secondary Driver: Access and Continuity	
Category	Illustrative Resources
Required Practice Redesign Activity: Provide 24/7 access to an appropriate clinician who has real-time access to patients’ medical records	
I	Institute of Medicine. Transforming Health Care Scheduling and Access: Getting to Now. Washington, DC: The National Academies Press, 2015. doi:10.17226/20220. https://www.nap.edu/catalog/20220/transforming-health-care-scheduling-and-access-getting-to-now
IV	COME HOME Model https://am.asco.org/come-home-project-center-cancer-and-blood-disorders-experience
IV (new)	Hickey & S. Newton (2012). <i>Telephone Triage for Oncology Nurses</i> . Oncology Nursing Society, 2 nd Edition. https://www.ons.org/store/books/telephone-triage-oncology-nurses-second-edition
IV	Brookings Oncology TEP Environmental Scan http://www2.mitre.org/public/payment_models/Brookings_Oncology_TEP_Environ_Scan.pdf
IV	Sanghavi, D, Patel, K, et al. (2014). <i>Transforming Cancer Care and the Role of Payment Reform: Lessons from the New Mexico Cancer Center</i> . Retrieved from the Brookings Institution website: https://www.brookings.edu/wp-content/uploads/2016/06/Oncology-Case-Study-August-2014-FINAL-WEB.pdf
Change Concept: Increased access to visits	
I	Offman, J., Wilson, M., Lamont, M., Birke, H., Kutt, E., Marriage, S., ... Duffy, S. W. (2013). A randomised trial of weekend and evening breast screening appointments. <i>British Journal of Cancer</i> , 109(3), 597–602. http://doi.org/10.1038/bjc.2013.377
I	Osborn, J., & Thompson, M. (2014). Management of same-day appointments in primary care. <i>The Lancet</i> . http://doi.org/10.1016/S0140-6736(14)61173-9
I	Reed, S. C., Partridge, A. H., & Nekhlyudov, L. (2014). Shared Medical Appointments in Cancer Survivorship Care: A Review of the Literature. <i>Journal Of Oncology Practice / American Society Of Clinical Oncology</i> , 45–47. Retrieved from http://jop.ascopubs.org/content/11/1/6.full.pdf+html
III	Jerant, A., Bertakis, K. D., Fenton, J. J., & Franks, P. (2012). Extended Office Hours and Health Care Expenditures: A National Study, 388–395. http://www.annfamned.org/content/10/5/388.full
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. <i>Australian Family Physician</i> , 42(4), 238–243. Retrieved from http://www.racgp.org.au/afp/2013/april/managing-same-day-appointments/
IV (new)	Association of Community Cancer Centers: Patient-Centered Scheduling Costs and Benefits of Extending Practice Hours, 2014. https://www.accc-cancer.org/resources/pdf/Patient-Centered-Scheduling.pdf

Secondary Driver: Access and Continuity	
Category	Illustrative Resources
T	Massachusetts General Hospital. A Practical Overview to Preparation, Implementation, and Maintenance of Group Visits at Massachusetts General Hospital. http://www.massgeneral.org/stoecklecenter/assets/pdf/group_visit_guide.pdf
T	Safety Net Medical Home Initiative. Enhanced Access Implementation Guide. http://www.safetynetmedicalhome.org/sites/default/files/Implementation-Guide-Enhanced-Access.pdf
Change Concept: Access to care and information outside of visits	
I	Atherton H, Sawmynaden P, Sheikh A, Majeed A, Car J. Email for clinical communication between patients/caregivers and healthcare professionals. Cochrane Database of Systematic Reviews 2012, Issue 11. Art. No.: CD007978. http://dx.doi.org/10.1002/14651858.CD007978.pub2
I	Goldzweig CL, Towgh AA, Paige NM, Orshansky G, Haggstrom DA, Beroes JM, Miake-Lye IM, Shekelle PG. Systematic Review: Secure Messaging between Providers and Patients, and Patients' Access to Their Own Medical Record. Evidence on Health Outcomes, Satisfaction, Efficiency and Attitudes. VA-ESP Project #05-226, 2012. http://www.ncbi.nlm.nih.gov/books/NBK100363/
I	Irizarry T, DeVito Dabbs A, Curran CR. Patient Portals and Patient Engagement: A State of the Science Review. J Med Internet Res 2015;17(6):e148. DOI: 10.2196/jmir.4255. http://www.jmir.org/2015/6/e148
I	Kofoed, S., Breen, S., Gough, K., Aranda, S., Maccallum, P., & Centre, C. (2012). Benefits of remote real-time side-effect monitoring systems for patients receiving cancer treatment, 6. http://doi.org/10.4081/oncol.2012.e7
I	U.S. Department of Health and Human Services. Health Resources and Services Administration. Using Health Text Messages to Improve Consumer Health Knowledge, Behaviors, and Outcomes: An Environmental Scan. Rockville, Maryland: U.S. Department of Health and Human Services, 2014. https://www.hrsa.gov/archive/healthit/txt4tots/environmentalscan.pdf
I	Viers, B. R., Lightner, D. J., Rivera, M. E., Tollefson, M. K., Boorjian, S. A., Karnes, R. J., ... Gettman, M. T. (2015). Efficiency, satisfaction, and costs for remote video visits following radical prostatectomy: A randomized controlled trial. European Urology, 68(4), 729–735. http://doi.org/10.1016/j.eururo.2015.04.002
I	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. http://doi.org/10.1186/1472-6963-10-233
II	Kitamura, C., Zurawel-Balaura, L., & Wong, R. K. S. (2010). How effective is video consultation in clinical oncology? A systematic review. Current Oncology, 17(3), 17–27. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2880899
IV	Bradbury A, Patrick-Miller L, Harris D, Stevens E, Egleston B, Smith K, Mueller R, Brandt A, Stopfer J, Rauch S, Forman A, Kim R, Fetzer D, Fleisher L, Daly M, Domchek S. Utilizing Remote Real-Time Videoconferencing to Expand Access to Cancer Genetic Services in Community Practices: A Multicenter Feasibility Study. J Med Internet Res 2016;18(2):e23. http://www.jmir.org/2016/2/e23
IV	Hess, R., Fischer, G. S., Sullivan, S. M., Dong, X., Weimer, M., Zeith, C., ... Roberts, M. S. (2014). Patterns of Response to Patient-Centered Decision Support Through a Personal Health Record. Telemedicine and E-Health, 20(11), 984–989. http://doi.org/10.1089/tmj.2013.0332
IV	Torrey B. Getting the Most From Your Phone System. http://www.aafp.org/fpm/2001/0200/p21.html
T	Safety Net Medical Home Initiative. Enhanced Access Implementation Guide. http://www.safetynetmedicalhome.org/sites/default/files/Implementation-Guide-Enhanced-Access.pdf

3.1.1 Care Coordination

Secondary Driver: Care Coordination	
Level of Evidence	Illustrative Resources
Required Practice Redesign Activity: Provide core functions of patient navigation	
I	Hendren, S., Griggs, J. J., Epstein, R., Humiston, S., Jean-Pierre, P., Winters, P., ... Fiscella, K. (2012). Randomized controlled trial of patient navigation for newly diagnosed cancer patients: Effects on quality of life. <i>Cancer Epidemiology, Biomarkers & Prevention</i> , 21(10), 1682–1690. http://doi.org/10.1158/1055-9965.EPI-12-0537
I	Fiscella, K., Whitley, E., Hendren, S., Raich, P., Humiston, S., Winters, P., ... Epstein, R. (2012). Patient Navigation for Breast and Colorectal Cancer Treatment: A Randomized Trial. <i>Cancer Epidemiology Biomarkers & Prevention</i> , 21(10), 1673–1681. http://doi.org/10.1158/1055-9965.EPI-12-0506
I (new)	Zafar, Yousuf S., MD, MHS, et al. (May 2015) Cost-Related Health Literacy: A Key Component of High-Quality Cancer Care. <i>Journal of Oncology Practice</i> http://ascopubs.org/doi/full/10.1200/jop.2015.004408
III	Freund, Karen M., et al. "Impact of patient navigation on timely cancer care: the Patient Navigation Research Program." <i>Journal of the National Cancer Institute</i> 106.6 (2014): dju115. http://inci.oxfordjournals.org/content/106/6/dju115.long#ref-27
IV (new)	Riley, S. et al. The Role of Patient Navigation in Improving the Value of Oncology Care. <i>Journal of Clinical Pathways</i> . 2016;2(1):41–47. http://www.journalofclinicalpathways.com/article/role-patient-navigation-improving-value-oncology-care
IV	Bensink ME, Ramsey SD, Battaglia T, Fiscella K, Hurd TC, McKoy JM, Patierno SR, Raich PC, Seiber EE, Warren-Mears V, Whitley E, Paskett ED, Mandelblatt S; Patient Navigation Research Program. Costs and outcomes evaluation of patient navigation after abnormal cancer screening: evidence from the Patient Navigation Research Program. <i>Cancer</i> . 2014 Feb 15;120(4):570-8. http://www.ncbi.nlm.nih.gov/pubmed/24166217
IV	Jean-Pierre P, Fiscella K, Winters PC, Paskett E, Wells K, Battaglia T; Patient Navigation Research Program Group. Cross-cultural validation of a Patient Satisfaction with Interpersonal Relationship with Navigator measure: a multi-site patient navigation research study. <i>Psychooncology</i> . 2012 Dec;21(12):1309-15 http://www.ncbi.nlm.nih.gov/pubmed/21726018
IV	Fiscella K, Ransom S, Jean-Pierre P, Cella D, Stein K, Bauer JE, Crane-Okada R, Gentry S, Canosa R, Smith T, Sellers J, Jankowski E, Walsh K. Patient-reported outcome measures suitable to assessment of patient navigation. <i>Cancer</i> . 2011 Aug;117(15 Suppl):3603-17. http://www.ncbi.nlm.nih.gov/pubmed/21780095
IV	Wells KJ, Battaglia TA, Dudley DJ, Garcia R, Greene A, Calhoun E, Mandelblatt JS, Paskett ED, Raich PC; Patient Navigation Research Program. Patient navigation: state of the art or is it science? <i>Cancer</i> . 2008 Oct 15;113(8):1999-2010. http://www.ncbi.nlm.nih.gov/pubmed/18780320
IV	Hopkins, J., & Mumber, M. P. (2009). Patient Navigation Through the Cancer Care Continuum: An Overview. <i>Journal of Oncology Practice</i> , 5(4), 150–152. http://doi.org/10.1200/JOP.0943501
T (new)	Cancer Care Patient Navigation: A Practical Guide for Community Cancer Centers, Association of Community Cancer Centers. https://www.accc-cancer.org/resources/pdf/Patient-Navigation-Guide.pdf
T	National Institutes of Health. National Cancer Institute. Patient Navigation Research Program. http://www.cancer.gov/about-nci/organization/crchd/disparities-research/pnpr
Change Concept: Conduct coordinated medication management	
I	Patterson SM, Cadogan CA, Kerse N, Cardwell CR, Bradley MC, Ryan C, Hughes C. Interventions to improve the appropriate use of polypharmacy for older people. <i>Cochrane Database of Systematic Reviews</i> 2014, Issue 10. Art. No.: CD008165. http://dx.doi.org/10.1002/14651858.CD008165.pub3
I	Spinewine, A., Claeys, C., Foulon, V., & Chevalier, P. (2013). Approaches for improving continuity of care in medication management: a systematic review. <i>International Journal for Quality in Health Care : Journal of the International Society for Quality in Health Care / ISQua</i> , 25(4), 403–17. http://doi.org/10.1093/intqhc/mzt032
I	Lehnbom, E. C., Stewart, M. J., Manias, E., & Westbrook, J. I. (2014). Impact of Medication Reconciliation and Review on Clinical Outcomes. <i>Annals of Pharmacotherapy</i> , 48(10), 1298–1312. http://doi.org/10.1177/1060028014543485
I	Viswanathan M, Kahwati LC, Golin CE, Blalock S, Coker-Schwimmer E, Posey R, Lohr KN. Medication Therapy Management Interventions in Outpatient Settings. Comparative Effectiveness Review No. 138. (Prepared by the RTI International–University of North Carolina at Chapel Hill Evidence-based Practice Center under Contract No. 290-2012- 00008-I.) AHRQ Publication No. 14(15)-EHC037-EF. Rockville, MD: Agency for Healthcare Research and Quality; November 2014. https://www.ncbi.nlm.nih.gov/pubmed/26042317

Secondary Driver: Care Coordination	
Level of Evidence	Illustrative Resources
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. <i>Journal of the American Geriatrics Society</i> , 64(2), 401–408. http://doi.org/10.1111/jgs.13922
IV	Johnson, A., Guirguis, E., & Grace, Y. (2015). Preventing medication errors in transitions of care: A patient case approach. <i>Journal of the American Pharmacists Association</i> , 55(2), e264–e276. http://doi.org/10.1331/JAPhA.2015.15509
T	How-to Guide: Prevent Adverse Drug Events by Implementing Medication Reconciliation. Cambridge, MA: Institute for Healthcare Improvement; 2011. http://www.ihl.org/resources/pages/tools/howtoguidepreventadversedrugs.aspx
Change Concept: Referral coordination and management	
IV	Carrier, E., Dowling, M. K., & Pham, H. H. (2012). Care coordination agreements: Barriers, facilitators, and lessons learned. <i>American Journal of Managed Care</i> , 18(11), 398–404. http://www.ajmc.com/journals/issue/2012/2012-11-vol18-n11/Care-Coordination-Agreements-Barriers-Facilitators-and-Lessons-Learned
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. <i>JNCI Monographs</i> , 2010(40), 3–10. http://doi.org/10.1093/jncimonographs/igq006
IV	Wilson, K., Lydon, A., & Amir, Z. (2013). Follow-up care in cancer: Adjusting for referral targets and extending choice. <i>Health Expectations</i> , 16(1), 56–68. http://doi.org/10.1111/j.1369-7625.2011.00691.x
T	The American College of Physicians. Referral Tracking Guide. http://www.improvingchroniccare.org/downloads/3_referral_tracking_guide.pdf
Change Concept: Improve transitions between care settings	
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. <i>BMC Health Services Research</i> , 14(1), 346. http://doi.org/10.1186/1472-6963-14-346
I	Brown, R., Peikes, D., Chen, A., & Schore, J. (2008). 15-site randomized trial of coordinated care in Medicare FFS. <i>Health Care Financing Review</i> , 30(1), 5–25. http://www.ncbi.nlm.nih.gov/pubmed/19040171
I	Coleman EA, Smith JD, Frank JC, Min S, Parry C, Kramer AM. Preparing Patients and Caregivers to Participate in Care Delivered Across Settings: The Care Transitions Intervention. <i>Journal of the American Geriatrics Society</i> . 2004;52(11):1817-1825. http://www.ncbi.nlm.nih.gov/pubmed/15507057
I	Jack BW et al. A reengineered hospital discharge program to decrease rehospitalization: a randomized trial. <i>Ann Intern Med</i> . 2009 Feb 3;150(3):178-87. http://www.ncbi.nlm.nih.gov/pubmed/19189907
IV	Sanghavi, D, Patel, K, et al. (2014). <i>Transforming Cancer Care and the Role of Payment Reform: Lessons from the New Mexico Cancer Center</i> . Retrieved from the Brookings Institution website: https://www.brookings.edu/wp-content/uploads/2016/06/Oncology-Case-Study-August-2014-FINAL-WEB.pdf
T	Society of Hospital Medicine. Project BOOST (Better Outcomes by Optimizing Safe Transitions) Implementation Toolkit. http://www.hospitalmedicine.org/Web/Quality_Innovation/Implementation_Toolkits/Web/Quality_Innovation/Implementation_Toolkit/Landing_Page.aspx?hkey=b0106f27-ec68-421e-8acc-609e1f158919
T	Project Re-Engineered Discharge (RED). The Project RED Toolkit. https://www.bu.edu/fammed/projectred/toolkit.html
T	American College of Physicians. Care Coordination - High Value Care Coordination (HVCC) Toolkit. https://hvc.acponline.org/physres_care_coordination.html
T	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
T	American Association of Family Physicians. Transition of Care Management 30-day checklist. http://www.aafp.org/dam/AAFP/documents/practice_management/payment/TCM30day.pdf

3.1.2 Care Planning and Management

Secondary Driver: Care Planning and Management	
Level of Evidence	Illustrative Resources
Required Practice Redesign Activity: Document a care plan that contains the 13 components in the Institute of Medicine (IOM) Care Management Plan	
I	Coulter A, Entwistle VA, Eccles A, Ryan S, Shepperd S, Perera R. Personalised care planning for adults with chronic or long-term health conditions. <i>Cochrane Database of Systematic Reviews</i> 2015, Issue 3. Art. No.: CD010523. DOI: 10.1002/14651858.CD010523.pub2
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. <i>CA: A Cancer Journal for Clinicians</i> , 63(5), 349–363. http://doi.org/10.3322/caac.21192
I	Howell, D., Hack, T. F., Oliver, T. K., Chulak, T., Mayo, S., Aubin, M., ... Sinclair, S. (2012, December 10). Models of care for post-treatment follow-up of adult cancer survivors: A systematic review and quality appraisal of the evidence. <i>Journal of Cancer Survivorship</i> . Springer US. http://doi.org/10.1007/s11764-012-0232-z
I	Hui, D., Kim, Y. J., Park, J. C., Zhang, Y., Strasser, F., Cherny, N., ... Bruera, E. (2015). Integration of Oncology and Palliative Care: A Systematic Review. <i>The Oncologist</i> , 20(1), 77–83. http://doi.org/10.1634/theoncologist.2014-0312
I	Institute of Medicine. <i>Delivering High-Quality Cancer Care: Charting a New Course for a System in Crisis</i> . Washington, DC: The National Academies Press, 2013. http://www.nap.edu/catalog/18359/delivering-high-quality-cancer-care-charting-a-new-course-for
II	Bodenheimer, T. S., and R. Berry-Millett. 2009. Care Management of Patients with Complex Health Care Needs. Princeton, N.J.: The Robert Wood Johnson Foundation. The synthesis project. Research synthesis report 19. http://www.rwjf.org/en/library/research/2009/12/care-management-of-patients-with-complex-health-care-needs.html
II	Hong S, Siegel AL, et al. (2014). Caring for High-Need, High-Cost Patients: What Makes for a Successful Care Management Program? The Commonwealth Fund. http://www.commonwealthfund.org/~media/files/publications/issue-brief/2014/aug/1764_hong_caring_for_high_need_high_cost_patients_ccm_ib.pdf
Change Concept: Risk stratification	
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. <i>The American Journal of Managed Care</i> , 19(9), 725–32. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/24304255
III	Watson, E. K., Rose, P. W., Neal, R. D., Hulbert-Williams, N., Donnelly, P., Hubbard, G., ... Wilkinson, C. (2012). Personalized cancer follow-up: risk stratification, needs assessment or both? [Editorial]. <i>British Journal of Cancer</i> , 106(1), 1–5. http://doi.org/10.1038/bjc.2011.535
IV (new)	Brown, A., Shen, M., Urbauer, D., Taylor, J., Parker, P., Carmack, C., Prescott, L., Kolawole, E., Rosemore, C., Sun, C., Ramondetta, L., & Bodurka, D. (2016). Room for Improvement: An Examination of Advance Care Planning Documentation Among Gynecologic Oncology Patients. <i>Gynecologic Oncology</i> , Volume 142, Issue 3, 525 – 530. http://dx.doi.org/10.1016/j.ygyno.2016.07.010
Change Concept: Monitoring and follow-up from visits	
I	Dickinson, R., Hall, S., Sinclair, J. E., Bond, C., & Murchie, P. (2014). Using technology to deliver cancer follow-up: a systematic review. <i>BMC Cancer</i> , 14(1), 311. http://doi.org/10.1186/1471-2407-14-311
II	Cusack, M., & Taylor, C. (2010). A literature review of the potential of telephone follow-up in colorectal cancer. <i>Journal of Clinical Nursing</i> , 19(17-18), 2394–405. http://doi.org/10.1111/j.1365-2702.2010.03253.x
IV	Wilson, K., Lydon, A., & Amir, Z. (2013). Follow-up care in cancer: Adjusting for referral targets and extending choice. <i>Health Expectations</i> , 16(1), 56–68. http://doi.org/10.1111/j.1369-7625.2011.00691.x
IV (new)	Zachariah, F., Emanuel, L., Ito-Hammerling, G., Wong-Toh, J., Morse, D., Klein, L., Loscalzo, M., Garcia, N., Buga, S., Lew, M., Horak, D., Banerjee, C., Mooney, S., & Alvarnas, J. (2017). The Effects of Global and Targeted Advance Care Planning Efforts at a National Comprehensive Cancer Center. <i>Journal of Clinical Oncology</i> , 35:5_suppl, 79-79. http://ascopubs.org/doi/abs/10.1200/JCO.2017.35.5_suppl.79

3.1.3 Patient and Caregiver Engagement

Secondary Driver: Patient and Caregiver Engagement	
Level of Evidence	Illustrative Resources
Change Concept: Engage patients and care givers in shared decision making	
I	O'Brien, M. A., Whelan, T. J., Villasis-Keever, M., Gafni, A., Charles, C., Roberts, R., ... Cai, W. (2009). Are Cancer-Related Decision Aids Effective? A Systematic Review and Meta-Analysis. <i>Journal of Clinical Oncology</i> , 27(6), 974–985. http://doi.org/10.1200/JCO.2007.16.0101
I	Stacey D, Légaré F, Col NF, Bennett CL, Barry MJ, Eden KB, Holmes-Rovner M, Llewellyn-Thomas H, Lyddiatt A, Thomson R, Trevena L, Wu JHC. Decision aids for people facing health treatment or screening decisions. <i>Cochrane Database of Systematic Reviews</i> 2014, Issue 1. Art. No.: CD001431. http://doi.org/10.1002/14651858.CD001431.pub4
I	Yun, Y. H., Lee, M. K., Park, S., Lee, J. L., Park, J., Choi, Y. S., ... Hong, Y. S. (2011). Use of a Decision Aid to Help Caregivers Discuss Terminal Disease Status With a Family Member With Cancer: A Randomized Controlled Trial. <i>Journal of Clinical Oncology</i> , 29(36), 4811–4819. http://doi.org/10.1200/JCO.2011.35.3870
I	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. <i>JAMA Intern Med</i> , 175(7), 1213–1221. http://doi.org/10.1001/jamainternmed.2015.1679
I	Berkhof, M., van Rijssen, H. J., Schellart, A. J. M., Anema, J. R., & van der Beek, A. J. (2011). Effective training strategies for teaching communication skills to physicians: an overview of systematic reviews. <i>Patient Education and Counseling</i> , 84(2), 152–62. http://doi.org/10.1016/j.pec.2010.06.010
I	Legare, F, Dawn, S. Interventions for improving the adoption of shared decision making by healthcare professionals. <i>Cochrane Effective Practice and Organisation of Care Group</i> (Sept 2014). http://onlineibrary.wiley.com/doi/10.1002/14651858.CD006732.pub3/abstract
I	Dwamena F, Holmes-Rovner M, Gaudlen CM, Jorgenson S, Sadigh G, Sikorskii A, Lewin S, Smith RC, Coffey J, Olomu A, Beasley M. Interventions for providers to promote a patient-centered approach in clinical consultations. <i>Cochrane Database of Systematic Reviews</i> 2012, Issue 12. Art. No.: CD003267. http://doi.org/10.1002/14651858.CD003267.pub2
IV	De Snoo-Trimp JC, Brom L et al. <i>Oncologist</i> . 2015 Oct;20(10):1182-8. Perspectives of Medical Specialists on Sharing Decisions in Cancer Care: A Qualitative Study Concerning Chemotherapy Decisions With Patients With Recurrent Glioblastoma. http://www.ncbi.nlm.nih.gov/pubmed/26245676
IV (new)	Meera S. Achrekar, Vedang Murthy, Sadhana Kanan, Rani Shetty, Mini Nair, Navin Khattry <i>Asia Pac J Oncol Nurs</i> . 2016 Jan-Mar; 3(1): 45–50. doi: 10.4103/2347-5625.178171: Introduction of Situation, Background, Assessment, Recommendation into Nursing Practice: A Prospective Study . https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5123547/
IV	Elmore, J. G., Ganschow, P. S., & Geller, B. M. (2010). Communication Between Patients and Providers and Informed Decision Making. <i>JNCI Monographs</i> , 2010(41), 204–209. http://doi.org/10.1093/jncimonographs/lgq038
IV (new)	Schapira, L (2002) <i>Critical Reviews in Oncology/Hematology</i> 46 (2003) 25/31. Communication skills training in clinical oncology: the ASCO position reviewed and an optimistic personal perspective. http://www.croh-online.com/article/S1040-8428(03)00003-9/pdf
T (new)	Education Standards for Adults Affected by Cancer: Quick Reference Version http://www.cancercares.ca/site-cc/media/cancercares/CCNS%20Pt%20Edn%20Standards%20Quick%20Reference%20Version.pdf
T	Mayo Clinic Shared Decision Making National Resource Center. http://shareddecisions.mayoclinic.org/
T	Patient-Centered Primary Care Collaborative. Patient Engagement Resources. https://www.pcpcc.org/resources/169
T	Health IT National Learning Consortium. https://www.healthit.gov/sites/default/files/nlc_shared_decision_making_fact_sheet.pdf
Change Concept: Patient education, coaching, and self-management support	
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. <i>Journal of Cancer Education</i> , 26(1), 12–21. http://doi.org/10.1007/s13187-010-0183-x
I	Gao, W. J., & Yuan, C. R. (2011). Self-management programme for cancer patients: A literature review. <i>International Nursing Review</i> , 58(3), 288–295. http://doi.org/10.1111/j.1466-7657.2011.00907.x

Secondary Driver: Patient and Caregiver Engagement	
Level of Evidence	Illustrative Resources
I	Boger, E., Ellis, J., Latter, S., Foster, C., Kennedy, A., Jones, F., ... Demain, S. (2015). Self-management and self-management support outcomes: A systematic review and mixed research synthesis of stakeholder views. PLoS ONE, 10(7), 1-25. http://doi.org/10.1371/journal.pone.0130990
I	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. http://doi.org/10.3322/caac.20093
I	Smith-Turchyn, J., Morgan, A., Richardson, J., Schmitz, K. H., Courneya, K. S., Matthews, C., ... Kokia, E. (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. http://doi.org/10.1016/i.clon.2015.10.003
I	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, 2(April), 214. http://doi.org/10.3389/fpubh.2014.00214
I	Penelope Schofield & Suzanne Chambers (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, http://dx.doi.org/10.3109/0284186X.2015.1010016
I	Kim, A. R., & Park, H. (2015). Web-based Self-management Support Interventions for Cancer Survivors: A Systematic Review and Meta-analyses. Studies in Health Technology and Informatics, 216(January 2000), 142-7. http://doi.org/10.3233/978-1-61499-564-7-142
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. http://doi.org/10.1007/s11764-013-0274-x
IV (new)	Cancer Journey Action Group - The Framework for Achieving Excellence in the Provision of Cancer Patient Education in Canada http://www.iccp-portal.org/sites/default/files/resources/The-Framework-for-Achieving-Excellence-in-the-Provision-of-Cancer-Patient-Education-in-Canada.pdf
IV (new)	Cohn, K. Developing Effective Communication Skills. <i>Journal of Oncology Practice</i> 3, no. 6 (November 2007) 314-317. DOI: 10.1200/JOP.0766501. http://ascopubs.org/doi/full/10.1200/jop.0766501?utm_source=TrendMD&utm_medium=cpc&utm_campaign=J_Oncol_Pract_TrendMD_0
IV	Risendal, B., Dwyer, A., Seidel, R., Lorig, K., Katzenmeyer, C., Coombs, L., ... Ory, M. (2014, December). Adaptation of the Chronic Disease Self-Management Program for Cancer Survivors: Feasibility, Acceptability, and Lessons for Implementation. <i>Journal of Cancer Education</i> , pp. 762-71. http://doi.org/10.1007/s13187-014-0652-8
IV	Harley, C., Pini, S., Bartlett, Y. K., & Velikova, G. (2015). Defining chronic cancer: patient experiences and self-management needs. <i>BMJ Supportive & Palliative Care</i> , 5(4), 343-350. http://doi.org/10.1136/bmjspcare-2012-000200rep
Change Concept: Provide patients with modes to track or share experiences	
I	Cepeda, M. Soledad et al. Emotional Disclosure Through Patient Narrative May Improve Pain and Well-Being: Results of a Randomized Controlled Trial in Patients with Cancer Pain. <i>Journal of Pain and Symptom Management</i> , Volume 35, Issue 6, 623 - 631. http://dx.doi.org/10.1016/j.jpainsymman.2007.08.011
I	Irizarry T, DeVito Dabbs A, Curran CR. Patient Portals and Patient Engagement: A State of the Science Review. <i>J Med Internet Res</i> 2015;17(6):e148. DOI: 10.2196/jmir.4255. http://www.jmir.org/2015/6/e148
III (new)	Hess, V., Grossert, A., Alder, J. Scherer, S. ...Urech, C. Web-based stress management for newly diagnosed cancer patients (STREAM): A randomized, wait-list controlled intervention study. <i>J Clin Oncol</i> 35, 2017 http://ascopubs.org/doi/abs/10.1200/JCO.2017.35.18_suppl.LBA10002
T	CancerCare Healing with Words: Journaling and Reflecting Throughout Treatment. http://www.cancercare.org/publications/263-healing-with-words-journaling-and-reflecting-throughout-treatment
T	MD Anderson Cancer. Journaling Your Way through Cancer. https://www.mdanderson.org/publications/cancerwise/2013/04/practicing-self-care-through-journaling.html
Change Concept: Open medical records and documents (e.g., care plans) for patient review and revision	

Secondary Driver: Patient and Caregiver Engagement	
Level of Evidence	Illustrative Resources
I	Goldzweig CL, Tow gh AA, Paige NM, Orshansky G, Haggstrom DA, Beroes JM, Miake-Lye IM, Shekelle PG. Systematic Review: Secure Messaging between Providers and Patients, and Patients' Access to Their Own Medical Record. Evidence on Health Outcomes, Satisfaction, Efficiency and Attitudes. VA-ESP Project #05-226, 2012. http://www.ncbi.nlm.nih.gov/books/NBK100363/
I	Ross, S. E., & Lin, C. T. (2003). The effects of promoting patient access to medical records: A review. <i>Journal of the American Medical Informatics Association</i> , 10(2), 129–138. http://doi.org/10.1197/jamia.M1147
IV	Martin, D. B. (2015). "Write It Down Like You Told Me": Transparent Records and My Oncology Practice. <i>Journal of Oncology Practice</i> , 11(4), 285–286. http://doi.org/10.1200/JOP.2014.003095
IV	deBronkart, D., & Walker, J. (2015). Open Visit Notes: A Patient's Perspective and Expanding National Experience. <i>Journal of Oncology Practice</i> , 11(4), 287–288. http://doi.org/10.1200/JOP.2015.004366
Change Concept: Partner with patients and caregivers to guide improvement in the system of care	
IV	Woolf SH, Zimmerman E, Haley A, Krist AH. Authentic Engagement Of Patients And Communities Can Transform Research, Practice, And Policy . <i>Health Affairs</i> 2016 April 01;35(4):590-594
IV	Pomey, Marie-Pascale; Hihat, Hassiba; Khalifa, May; Lebel, Paule; Néron, André; and Dumez, Vincent (2015) "Patient partnership in quality improvement of healthcare services: Patients' inputs and challenges faced," <i>Patient Experience Journal</i> : Vol. 2: Iss. 1, Article 6. Available at: http://pxjournal.org/journal/vol2/iss1/6

3.1.4 Team-Based Care

Secondary Driver: Team-Based Care	
Level of Evidence	Illustrative Resources
Change Concept: Establishing and providing organizational support for care delivery teams with consistent team members accountable for the patient population/panel	
IV	Taplin S, Weaver S, Salas E, et al. Teams and Teamwork During a Cancer Diagnosis: Interdependency Within and Between Teams. <i>Journal Of Oncology Practice</i> [serial online]. May 2015;11(3):231-238. http://iop.ascopubs.org/content/11/3/231.full
T	Team Strategies and Tools to Enhance Performance and Patient Safety (TeamSTEPS) for Primary Care, Agency for Healthcare Research and Quality. February 2015. http://www.ahrq.gov/professionals/education/curriculum-tools/teamsteps/primarycare/index.html
IV (new)	Valentine, M., Nembhard, I., Edmondson, A., Measuring Teamwork in Health Care Settings: A Review of Survey Instruments. 2013. https://rcc.brandeis.edu/pdfs/Valentine%20et%20al%202013.pdf
IV (new)	Core Principles & Values of Effective Team-Based Health Care. Institute of Medicine. October 2012. https://www.nationalahec.org/pdfs/vsrt-team-based-care-principles-values.pdf
Change Concept: Defining roles and distributing tasks among care team members to reflect the skills, abilities and credentials of team members, providing team members with consistent roles and workflows	
II	McComb S, Hebdon M. Enhancing Patient Outcomes in Healthcare Systems Through Multidisciplinary Teamwork. (2013) <i>Clinical Journal Of Oncology Nursing</i> . 17(6):669-672. http://europepmc.org/abstract/MED/24305490
IV	Hollis G, McMenamin E. J Integrating Nurse Practitioners Into Radiation Oncology: One Institution's Experience, <i>Journal of the Advanced Practitioner in Oncology</i> . 2014/01/01 00:00; 5(1)42-46 http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4093461
IV	Taplin S, Weaver S, Salas E, et al. Teams and Teamwork During a Cancer Diagnosis: Interdependency Within and Between Teams. <i>Journal Of Oncology Practice</i> [serial online]. May 2015;11(3):231-238. http://iop.ascopubs.org/content/11/3/231.full
IV (new)	Core Principles & Values of Effective Team-Based Health Care. Institute of Medicine. October 2012. https://www.nationalahec.org/pdfs/vsrt-team-based-care-principles-values.pdf
Change Concept: Holding regular team huddles or gatherings to manage workflow and meet patient needs	

Secondary Driver: Team-Based Care

Level of Evidence	Illustrative Resources
II	McComb S, Hebdon M. Enhancing Patient Outcomes in Healthcare Systems Through Multidisciplinary Teamwork. (2013) <i>Clinical Journal Of Oncology Nursing</i> . 17(6):669-672. http://europepmc.org/abstract/MED/24305490
IV	Taplin S, Weaver S, Salas E, et al. Teams and Teamwork During a Cancer Diagnosis: Interdependency Within and Between Teams. <i>Journal Of Oncology Practice</i> [serial online]. May 2015;11(3):231-238. http://jop.ascopubs.org/content/11/3/231.full

3.1.5 Data-Driven Quality Improvement

Secondary Driver: Data-Driven Quality Improvement

Level of Evidence	Illustrative Resources
Required Practice Redesign Activity: Use of data for continuous quality improvement	
IV	Lavelle, J., Schast, A., & Keren, R. (2015). Standardizing Care Processes and Improving Quality Using Pathways and Continuous Quality Improvement. <i>Current Treatment Options in Pediatrics</i> , 1(4), 347–358. http://doi.org/10.1007/s40746-015-0026-4
IV	McNiff, K. K., & Jacobson, J. O. (2014). Aiming for Ideal Care: A Proposed Framework for Cancer Quality Improvement. <i>Journal of Oncology Practice</i> , 10(6), 339–345. http://jop.ascopubs.org/content/10/6/339.full
IV	Sprandio, J. D., Flounders, B. P., Lowry, M., & Tofani, S. (2013). Data-Driven Transformation to an Oncology Patient-Centered Medical Home. <i>Journal of Oncology Practice</i> , 9(3), 130–132. http://doi.org/10.1200/JOP.2013.001019
IV (new)	Healthcare Quality Improvement Partnership: A Guide to Quality Improvement Methods. http://www.hqip.org.uk/public/cms/253/625/19/38/Guide-to-quality-improvement-methods-2015-7-1.pdf?realName=3hoUed.pdf
T	AHRQ Quality Improvement Tools & Resources. http://www.ahrq.gov/professionals/quality-patient-safety/quality-resources/index.html
T	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
T	Institute for Healthcare Improvement. Change Achievement Success Indicator. http://www.ihl.org/resources/Pages/Tools/ChangeAchievementSuccessIndicatorCASI.aspx
T	Langely GJ, Moen RD, Nolan KM, Nolan TW, Norma CL, Provost LP. <i>The Improvement Guide: A Practical Approach to Enhancing Organizational Performance</i> , 2nd Edition. Jossey-Bass, A Wiley Imprint, San Francisco 2011. http://www.ihl.org/resources/Pages/Publications/ImprovementGuidePracticalApproachEnhancingOrganizationalPerformance.aspx
T	The Institute of Healthcare Improvement. “The Science of Improvement: Testing Changes.” PDSA Planning Form PDSA Worksheet
T (new)	ONC Health IT Playbook. https://www.healthit.gov/playbook/
Required Practice Redesign Activity: Use Certified Electronic Health Record (EHR) Technology	
IV	Shen, X., Dicker, A. P., Doyle, L., Showalter, T. N., Harrison, A. S., & DesHarnais, S. I. (2012). Pilot study of meaningful use of electronic health records in radiation oncology. <i>Journal of Oncology practice/American Society of Clinical Oncology</i> , 8(4), 219–223. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3396817/
IV (new)	Groves, P., Kayyali, B., Knott, D., & Van Kuiken, S. (2013) The Big Data Revolution in Healthcare. 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_health_care.ashx
T	HealthIT.gov Meaningful Use Success Stories and Case Studies. https://www.healthit.gov/providers-professionals/meaningful-use-case-studies

Secondary Driver: Data-Driven Quality Improvement	
Level of Evidence	Illustrative Resources
Change Concept: Designating regular team meetings to review data and plan improvement cycles	
II	McComb S, Hebdon M. Enhancing Patient Outcomes in Healthcare Systems Through Multidisciplinary Teamwork. (2013) <i>Clinical Journal Of Oncology Nursing</i> . 17(6):669-672. http://europepmc.org/abstract/MED/24305490
IV	Taplin S, Weaver S, Salas E, et al. Teams and Teamwork During a Cancer Diagnosis: Interdependency Within and Between Teams. <i>Journal Of Oncology Practice</i> [serial online]. May 2015;11(3):231-238. http://jop.ascopubs.org/content/11/3/231.full
Change Concept: Incorporating routine clinical and administrative leadership review data as part of management process	
IV	Sprandio, J. D., Flounders, B. P., Lowry, M., & Tofani, S. (2013). Data-Driven Transformation to an Oncology Patient-Centered Medical Home. <i>Journal of Oncology Practice</i> , 9(3), 130–132. http://doi.org/10.1200/JOP.2013.001019
T	Langely GJ, Moen RD, Nolan KM, Nolan TW, Norma CL, Provost LP. <i>The Improvement Guide: A Practical Approach to Enhancing Organizational Performance</i> , 2nd Edition. Jossey-Bass, A Wiley Imprint, San Francisco 2011.. http://www.ih.org/resources/Pages/Publications/ImprovementGuidePracticalApproachEnhancingOrganizationalPerformance.aspx
T	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

3.1.6 Evidence-Based Medicine

Secondary Driver: Evidence-Based Medicine	
Level of Evidence	Illustrative Resources
Required Practice Redesign Activity: Use therapies consistent with nationally recognized clinical guidelines	
I	Rotter, T., Kinsman, L., James, E., Machotta, A., Gothe, H., Willis, J., ... Kugler, J. (2010). Clinical pathways: effects on professional practice, patient outcomes, length of stay and hospital costs. <i>The Cochrane Database of Systematic Reviews</i> , (3), CD006632. http://doi.org/10.1002/14651858.CD006632.pub2
II	Prior, M., Guerin, M., & Grimmer-Somers, K. (2008). The effectiveness of clinical guideline implementation strategies - a synthesis of systematic review findings. <i>Journal of Evaluation in Clinical Practice</i> , 14(5), 888–897. http://doi.org/10.1111/j.1365-2753.2008.01014.x
III	Hoverman JR, Cartwright TH, Patt DA, et al: Pathways, outcomes and costs in colon cancer: Retrospective evaluations in two distinct databases. <i>J Oncol Pract</i> 7: 52s-59s, 2011 (suppl 3)116. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3092465/
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. <i>International Journal for Quality in Health Care</i> , 28(January), mzv115. http://doi.org/10.1093/intqhc/mzv115
IV (new)	Gesme, DH & Wiseman, M Strategic Use of Clinical Pathways. <i>Journal of Oncology Practice</i> 7, no. 1 (January 2011) 54-56. http://ascopubs.org/doi/full/10.1200/jop.2010.000193
IV	Neubauer MA, Hoverman JR, Kolodziej M, et al: Cost effectiveness of evidence based treatment guidelines for the treatment of non-small-cell lung cancer in the community setting. <i>J Oncol Pract</i> 6:12-18, 2010. http://jop.ascopubs.org/content/6/1/12.long
IV	Schippits, M. G., & Schippits, K. M. (2013). Clinical pathways leading healthcare reform: transformational strategies for oncology and beyond. <i>Journal of Medicine and the Person</i> , 11(2), 62–68. http://doi.org/10.1007/s12682-013-0151-4
Change Concept: Use clinical decision support systems	
I	Bright, T. J., Wong, A., Dhurjati, R., Bristow, E., Bastian, L., Coeytaux, R. R., ... Lobach, D. (2012). Effect of clinical decision-support systems: a systematic review. <i>Annals of Internal Medicine</i> , 157(1), 29–43. http://doi.org/10.7326/0003-4819-157-1-201207030-00450

Secondary Driver: Evidence-Based Medicine	
Level of Evidence	Illustrative Resources
I	Lobach D, Sanders GD, Bright TJ, Wong A, Dhurjati R, Bristow E, et al. Enabling Health Care Decision-making Through Clinical Decision Support and Knowledge Management. <i>Evid Rep Technol Assess</i> (Full Rep). 2012;(203):1-784. http://www.ncbi.nlm.nih.gov/books/NBK97318
I	Murphy, E. V. (2014). Clinical decision support: Effectiveness in improving quality processes and clinical outcomes and factors that may influence success. <i>Yale Journal of Biology and Medicine</i> , 87(2), 187–197. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4031792/
IV (new)	Darshak, S., Patel, K., Samuels, K., George, M., McStay, F., Thoumi, A., Hart, R., & McClellan, M. (2014). Transforming Cancer Care and the Role of Payment Reform Lessons from the New Mexico Cancer Center. https://www.brookings.edu/wp-content/uploads/2016/06/Oncology-Case-Study-August-2014-FINAL-WEB.pdf
Change Concept: Provide patients with appropriate opportunities to participate in clinical trials	
IV	Kanarek, N. F., Kanarek, M. S., Olatoye, D., & Carducci, M. A. (2012). Removing barriers to participation in clinical trials, a conceptual framework and retrospective chart review study. <i>Trials</i> , 13, 1–9. Retrieved from http://dx.doi.org/10.1186/1745-6215-13-237
IV	Jenkins, V., Farewell, V., Farewell, D., Darmanin, J., Wagstaff, J., Langridge, C., & Fallowfield, L. (2013). Drivers and barriers to patient participation in RCTs. <i>British Journal of Cancer</i> , 108(7), 1402–7. http://doi.org/10.1038/bjc.2013.113
IV	Fenton, L., Rigney, M., & Herbst, R. S. (2009). Clinical trial awareness, attitudes, and participation among patients with cancer and oncologists. <i>Community Oncology</i> , 6(5), 207–228. http://www.lungcanceralliance.org/assets/docs/lco/Fenton.ClinicalTrials.pdf
IV	Brandberg, Y., Johansson, H., & Bergenmar, M. (2016). Patients' knowledge and perceived understanding – Associations with consenting to participate in cancer clinical trials. <i>Contemporary Clinical Trials Communications</i> , 2, 6–11. http://doi.org/10.1016/j.conctc.2015.12.001
T	American Cancer Society. Clinical Trials. http://www.cancer.org/treatment/treatmentsandsideeffects/clinicaltrials/clinical-trials-landing
T	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/ENACT5StepsGuide.pdf

3.1.7 Strategic Use of Revenue

Secondary Driver: Strategic Use of Revenue	
Level of Evidence	Illustrative Resources
Change Concept: Use budgeting and accounting processes effectively to transform care processes and build capability to deliver comprehensive, coordinated cancer care	
T	American College of Physicians. Financial Management Tools. https://www.acponline.org/practice-resources/business-resources/office-management/financial-management/financial-management-tools
IV	Massachusetts General Hospital (2011). “Budgeting Basics 101: The Nuts and Bolts of Budget Planning.” http://studylib.net/doc/8298033/budgeting-basics-101--massachusetts-general-hospital
Change Concept: Align practice productivity metrics and compensation strategies with comprehensive, coordinated cancer care	
IV	Stewart, F. M., Wasserman, R. L., Bloomfield, C. D., Petersdorf, S., Witherspoon, R. P., Appelbaum, F. R., ... Waldinger, M. (2007). Benchmarks in Clinical Productivity: A National Comprehensive Cancer Network Survey. <i>Journal of Oncology Practice</i> , 3(1), 2–8. http://doi.org/10.1200/JOP.0712001
IV	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. <i>Journal of Clinical Oncology</i> , 31(5), 530–535. http://doi.org/10.1200/JCO.2012.43.6063
IV	Pickard, T. (2014). Calculating Your Worth: Understanding Productivity and Value. <i>Journal of the Advanced Practitioner in Oncology</i> , 5(2), 128–133. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4093517/

Secondary Driver: Strategic Use of Revenue

Level of Evidence	Illustrative Resources
IV (new)	Medical Group Management Association, Physician Compensation Plans: An MGMA Research and Analysis Introduction. http://reliancecgm.com/uploads/11_2015_3_Physicians_Comp_Report.pdf

3.1.8 Sharing of Performance-Based Payment

Secondary Driver: Sharing of Performance-Based Payment

Level of Evidence	Illustrative Resources
Change Concept: Engage various care partners in sharing of performance-based payment	
IV	Distribution Based on Contribution -- A Merit-based Shared Savings Distribution Model: Toward Accountable Care Consortium http://www.tac-consortium.org/wp-content/uploads/2013/09/Shared-Savings-Guide_091013_revised_reduced-file.pdf
IV	Evaluation of the Medicare Physician Hospital Collaboration Demonstration, RTI International, September 2014: https://downloads.cms.gov/files/cmimi/PHC_FINAL-RPT_September2014.pdf
IV	Toward Accountable Care Consortium. The Bundled Payment Guide for Physicians. http://www.accc-cancer.org/ossn_network/NC/pdf/TAC-Bundled-Payment-Guide.pdf
IV	Bailit, M., & Hughes, C. (2011). Key design elements of shared-savings payment arrangements. New York: Commonwealth Fund. http://www.commonwealthfund.org/~media/Files/Publications/Issue%20Brief/2011/Aug/1539_Bailit_key_design_elements_sharesavings_ib_v2.pdf
IV	United Health Care Value Based Incentive Programs Frequently Asked Questions for self-funded customers: http://www.uhc.com/content/dam/uhcdotcom/en/Employers/PDF/reform-aco-external-faq-ASO-value-based-incentive-programs.pdf
IV	Lazero, R. (2012). Designing effective gainsharing models. The Advisory Board Company. https://www.advisory.com/research/health-care-advisory-board/blogs/toward-accountable-payment/2012/05/designing-effective-gainsharing-models
IV	Lowering medical costs through the sharing of savings by physicians and patients: inclusive shared savings. Schmidt, Harold; Emanuel, Ezekiel J (2014) JAMA internal medicine vol. 174 (12) p. 2009-13 http://www.ncbi.nlm.nih.gov/pubmed/25330283
IV	Effects of Health Care Payment Models on Physician Practices in the United States. Rand Corporation. American Medical Association. (2015) http://www.rand.org/content/dam/rand/pubs/research_reports/RR800/RR869/RAND_RR869.pdf
IV	Bernstein, C., Goodroe, J., & Mathias, W. (2014). Structuring Gainsharing Arrangements and Bundled Payments: Latest Developments. http://media.straffordpub.com/products/structuring-gainsharing-arrangements-and-bundled-payments-latest-developments-2014-04-30/presentation.pdf
IV	Millburn, J., Maurar, M. (2013). Strategies for Value-Based Physician Compensation. http://www.mgma.com/Libraries/Assets/Store/Books/8652-excerpt.pdf

3.1.9 Beneficiary Incentives

Secondary Driver: Beneficiary Incentives

Level of Evidence	Illustrative Resources
Change Concept: Provide nonmonetary incentives, tools/technology, or vouchers for health behavior change	
III	Meredith SE, Jarvis BP, Raiff BR, et al. The ABCs of incentive-based treatment in health care: a behavior analytic framework to inform research and practice. Psychology Research and Behavior Management. 2014;7:103-114. doi:10.2147/PRBM.S59792. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3964160/

Secondary Driver: Beneficiary Incentives	
Level of Evidence	Illustrative Resources
II	Lutge EE, Wiysonge CS, Knight SE, Sinclair D, Volmink J. Incentives and enablers to improve adherence in tuberculosis. Cochrane Database of Systematic Reviews 2015, Issue 9. Art. No.: CD007952. DOI: 10.1002/14651858.CD007952.pub3. http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0033629/
III	Garg, A., Jack, B., & Zuckerman, B. (2013). Addressing the Social Determinants of Health Within the Patient-Centered Medical Home. <i>JAMA</i> , 309(19), 2001. http://doi.org/10.1001/jama.2013.1471
IV	American Cancer Society. Health Insurance and Financial Assistance for the Cancer Patient. http://www.cancer.org/treatment/findingandpayingfortreatment/understandinghealthinsurance/healthinsuranceandfinancialassistanceforthecancerpatient/health-insurance-and-financial-assistance-outside-sources .
IV	American Society of Clinical Oncology. Cancer. Net Mobile App. http://www.asco.org/practice-guidelines/resources-patients
IV (new)	Dixon-Fyle, S., et. al. Changing Patient Behavior: The Next Frontier in Healthcare Value. <i>Health International</i> , Vol 12, 2012. http://healthcare.mckinsey.com/changing-patient-behavior-next-frontier-healthcare-value
I (new)	Basch, E. et al., System Monitoring with Patient-Reported Outcomes During Routine Cancer Treatment: A Randomized Control Trial. <i>Journal of Clinical Oncology</i> , 34(6); 557-565. Feb 2016. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4872028/

3.1.10 Payment for Enhanced Services (Payers, including CMS)

Secondary Driver: Payment for Enhanced Services	
Level of Evidence	Illustrative Resources
Change Concept: Offer practices suggested clinical guidelines and expectations for coordination of care to meet performance goals	
I	Rotter, T., Kinsman, L., James, E., Machotta, A., Gothe, H., Willis, J., ... Kugler, J. (2010). Clinical pathways: effects on professional practice, patient outcomes, length of stay and hospital costs. <i>The Cochrane Database of Systematic Reviews</i> , (3), CD006632. http://doi.org/10.1002/14651858.CD006632.pub2
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. <i>International Journal for Quality in Health Care</i> , 28(January), mzv115. http://doi.org/10.1093/intqhc/mzv115
IV	Steele, J. R., Jones, a. K., Ninan, E. P., Clarke, R. K., Odisio, B. C., Avritscher, R., Mahvash, a. (2015). Why Bundled Payments Could Drive Innovation: An Example From Interventional Oncology. <i>Journal of Oncology Practice</i> , 11(2), e199–e205. http://doi.org/10.1200/JOP.2014.001523
IV	Ellis PG. Development and implementation of oncology care pathways in an integrated care network: the Via Oncology pathways experience. http://ascopubs.org/doi/full/10.1200/JOP.2013.001020
IV	Feinberg, B. a, Lang, J., Grzegorzcyk, J., Stark, D., Rybarczyk, T., Leyden, T. Scott, J. a. (2012). Implementation of cancer clinical care pathways. <i>The American Journal of Managed Care</i> , 18(4 Spec No.), SP159–65. http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=3348604&tool=pmcentrez&rendertype=abstract
IV	Feinberg, B. A., Lang, J., Grzegorzcyk, J., Stark, D., Rybarczyk, T., Leyden, T., ... Scott, J. A. (2012). Implementation of cancer clinical care pathways: a successful model of collaboration between payers and providers. <i>The American Journal of Managed Care</i> , 18(5), e194–9. http://doi.org/10.1200/JOP.2012.000564
Change Concept: Align incentives across clinician teams to meet goals of model	
III	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. <i>Journal of Oncology Practice / American Society of Clinical Oncology</i> , 1–5. http://doi.org/10.1200/JOP.2014.001488
Change Concept: Engage clinicians across the continuum of care to coordinate and manage care	
III	Sanghavi, D., Samuels, K., George, M., Patel, K., Bleiberg, S., McStay, F., Thoumi, A., McClellan, M. (2015). Case study: Transforming cancer care at a community oncology practice. <i>Brookings Institute</i> . https://www.brookings.edu/articles/case-study-transforming-cancer-care-at-a-community-oncology-practice/

Secondary Driver: Payment for Enhanced Services	
Level of Evidence	Illustrative Resources
IV	Greenapple, R. (2012). Emerging trends in cancer care: health plans' and pharmacy benefit managers' perspectives on changing care models. <i>American Health & Drug Benefits</i> , 5(4), 242-53. Retrieved from http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=4046474&tool=pmcentrez&rendertype=abstract
IV	Doyle, C. (2015). Value-Based Healthcare Delivery: The Agenda for Oncology. <i>American Health & Drug Benefits</i> , 8(Spec Issue), 1-27. Retrieved from http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=4570069&tool=pmcentrez&rendertype=abstract

3.1.11 Performance-Based Payment (Payers, including CMS)

Secondary Driver: Performance-Based Payment	
Level of Evidence	Illustrative Resources
Change Concept: Align quality measures used to determine performance-based payment with other quality measure reporting programs	
IV	Altman, S. H. (2012). The lessons of Medicare's prospective payment system show that the bundled payment program faces challenges. <i>Health Affairs (Project Hope)</i> , 31(9), 1923-30. http://doi.org/10.1377/hlthaff.2012.0323
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? <i>Health Policy (Amsterdam, Netherlands)</i> , 110(2-3), 164-71. http://doi.org/10.1016/j.healthpol.2013.01.011
IV	Cutler, D. M., & Ghosh, K. (2012). The Potential for Cost Savings through Bundled Episode Payments. <i>New England Journal of Medicine</i> , 366(12), 1075-1077. http://doi.org/10.1056/NEJMp1113361
IV	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. <i>Health Affairs</i> , 31(2), 426-433. http://doi.org/10.1377/hlthaff.2011.0912
IV	Delisle, D. R. (2013). Big things come in bundled packages: implications of bundled payment systems in health care reimbursement reform. <i>American Journal of Medical Quality: The Official Journal of the American College of Medical Quality</i> , 28(4), 339-44. http://doi.org/10.1177/1062860612462740
IV	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. <i>Journal of Neurointerventional Surgery</i> . http://doi.org/10.1136/neurintsurg-2015-011746
IV	Hussey, P. S., Ridgely, M. S., & Rosenthal, M. B. (2011). The PROMETHEUS bundled payment experiment: Slow start shows problems in implementing new payment models. <i>Health Affairs</i> , 30(11), 2116-2124. http://doi.org/10.1377/hlthaff.2011.0784
IV	Iorio, R. (2015). Strategies and Tactics for Successful Implementation of Bundled Payments: Bundled Payment for Care Improvement at a Large, Urban, Academic Medical Center. <i>The Journal of Arthroplasty</i> , 30(3), 349-350. http://doi.org/10.1016/j.arth.2014.12.031
Change Concept: Address administrative challenges to implementing bundled payment and implementation, such as claims adjudication	
IV	Mechanic, R. E. (2011). Opportunities and challenges for episode-based payment. <i>The New England Journal of Medicine</i> , 365(9), 777-9. http://doi.org/10.1056/NEJMp1105963
IV	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 IHA bundled payment demonstration. <i>Health Affairs</i> , 33, 1345-1352. http://doi.org/10.1377/hlthaff.2014.0114
IV	Mechanic, R., & Tompkins, C. (2012). Lessons Learned Preparing for Medicare Bundled Payments. <i>New England Journal of Medicine</i> , 367(20), 1873-1875. http://doi.org/10.1056/NEJMp1210823
IV	Clough, JD, Kamal, A (2015). Oncology Care Model: Short- and Long-Term Considerations in the Context of Broader Payment Reform. <i>Journal of Oncology Practice</i> , 11(4), 319-322. http://iop.ascopubs.org/content/early/2015/06/09/JOP.2015.005777.full

Secondary Driver: Performance-Based Payment

Level of Evidence	Illustrative Resources
IV	Eijkenaar, F., Emmert, M., Scheppach, M., & Schöffski, O. (2013). Effects of pay for performance in health care: a systematic review of systematic reviews. <i>Health Policy (Amsterdam, Netherlands)</i> , 110(2-3), 115–30. http://doi.org/10.1016/j.healthpol.2013.01.008

3.1.12 Multi-Payer Participation (Payers, including CMS)

Secondary Driver: Multi-Payer Participation

Level of Evidence	Illustrative Resources
Change Concept: Foster partnerships between cancer care clinicians and payers to align incentives to provide high-quality, high-value care	
IV	Shulman, Lawrence N., et al. "Partnership between a cancer center and payer: Opportunities for improved quality of care and cost reduction." <i>Journal of Oncology Practice</i> 9.3 (2013): 133-134. http://jop.ascopubs.org/content/9/3/133.full
IV	Greenapple, R. (2013). Rapid expansion of new oncology care delivery payment models: results from a payer survey. <i>American Health & Drug Benefits</i> , 6(5), 249–56. Retrieved from http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=4031716&tool=pmcentrez&rendertype=abstract
Change Concept: Manage cost of oncology drugs	
IV	Episode Payments for Cancer Therapy, Lee Newcomer, MD and Anthem’s Cancer Care Quality Program, Jennifer Malin, MD, PhD: Presentation LAN Learnings July 2015 https://publish.mitre.org/hcplan/wp-content/uploads/sites/4/2015/08/HCLPLAN-July-21-Webinar_finalcompliant.pdf
IV	Kenney, J. T. (2014). Payers’ management of oncology drugs: opportunities and challenges. <i>American Health & Drug Benefits</i> , 7(3), 123–4. Retrieved from http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=4070630&tool=pmcentrez&rendertype=abstract
IV (new)	McCleery, J (2012). Peter B. Bach, MD, and the Case for Interchangeability in Oncology: A New Model for an Episode-based Payment System. <i>Oncology Business Review</i> . May 2012. http://obroncology.com/documents/OBR_0512_v3_BACH.pdf
IV (new)	Bach, P.B. (2015). New Math on Drug Cost-Effectiveness. <i>The New England Journal of Medicine</i> , November 5, 2015, 373, 1797-1799. http://www.nejm.org/doi/full/10.1056/NEJMp1512750
Change Concept: Provide data and feedback to practices	
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? <i>Health Policy (Amsterdam, Netherlands)</i> , 110(2-3), 164–71. http://doi.org/10.1016/j.healthpol.2013.01.011
IV	Mechanic, R. E. (2011). Opportunities and challenges for episode-based payment. <i>The New England Journal of Medicine</i> , 365(9), 777–9. http://doi.org/10.1056/NEJMp1105963
IV	Klein, I., & Kolodziej, M. (2014). Private payers and cancer care: land of opportunity. <i>Journal of Oncology Practice / American Society of Clinical Oncology</i> , 10(1), 15–9. http://doi.org/10.1200/JOP.2013.000897

4 Appendix B: Methods for Development of Key Drivers

Materials in this change package were developed through a combination of technical discussions and an environmental scan that 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 Center for Medicare and Medicaid Innovation (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 will continue to evolve during the life of the model. This knowledge will be harvested and likely result in improvements to the driver diagram. It is through this iterative process that we refine our understanding of the model and the best approaches to achieve the Model 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 Community contractor conducted the environmental scan through the following process, with the goal of identifying and categorizing the resources that align to the OCM drivers and requirements.

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 in late September to 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.
 - 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. Aligned 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 that 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 Figure 6) adapted for this purpose is based on a schema applied by Melnyk and Overholt,⁸⁵ 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 base 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 of all levels of evidence in planning for improvement.

Figure 6: 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 quality improvement projects

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

⁸⁵ 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>