Evaluation of the Oncology Care Model

Participants' Perspectives

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The statements contained in this report are solely those of the authors and do not necessarily reflect the views or policies of the Centers for Medicare & Medicaid Services. Abt Associates assumes responsibility for the accuracy and completeness of the information contained in this report.

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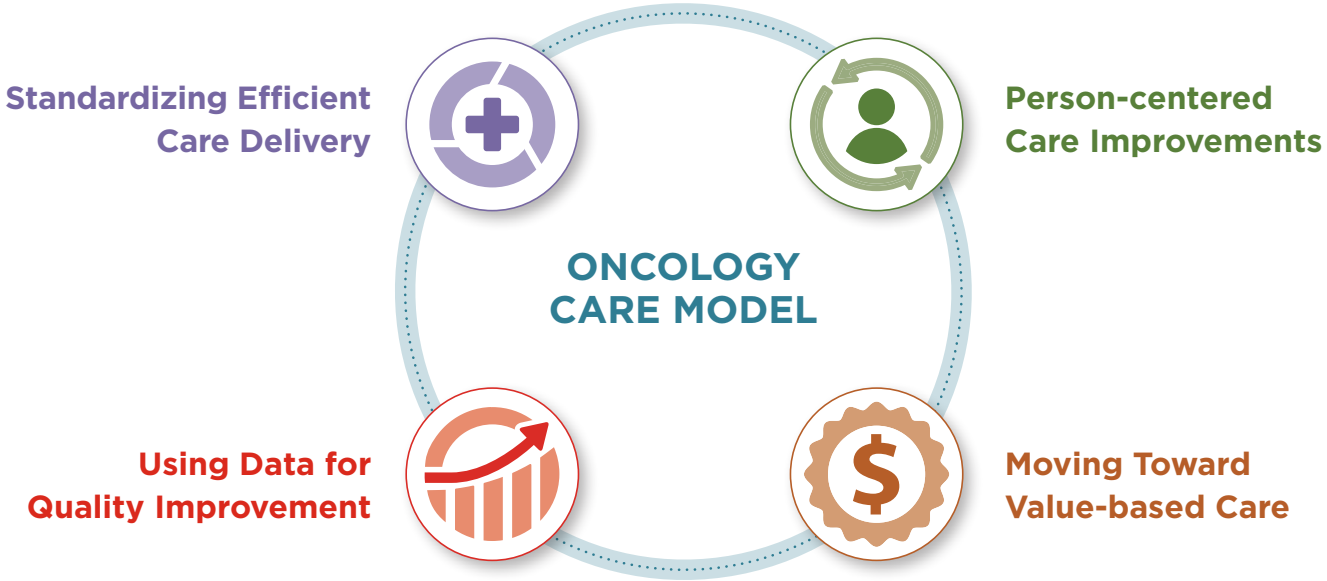
Executive Summary

Previous Annual Evaluation Reports focused on Oncology Care Model (OCM) impacts on payments and service use, with insights from surveys and qualitative data to aid in interpreting those impacts. The fourth evaluation report contains two companion pieces. The first focuses on OCM impacts on Medicare payments through the first six performance periods of the model, before the COVID-19 public health emergency began. The second—this report—focuses on **participants' reasons for participating in OCM, and what they learned through the first four model years** about making care more person-centered, incorporating value-based payment in treatment decisions and care delivery, using data/analytics to inform quality improvement, and standardizing care across oncologists and clinics.

The insights in this **Participants' Perspectives** report were collected during the first four years of OCM, during case studies with 47 participating practices and interviews with over 900 practice staff, including administrators, physicians, nurse navigators and care coordinators, data specialists, and many other clinical and administrative personnel. Throughout these chapters, we highlight how the cultural context that patients and families bring to their cancer experience affects all aspects of their care, from understanding prognosis and treatment options, to managing pain and other symptoms, to end-of-life care. We also suggest how the culture within physician practices can foster (or constrain) shared decision making with patients.



Chapter 1

Person-centered Care Improvements

Chapter 1 explores how participants redesigned care delivery to focus on individual patients' needs. Person-centered care improvements included:

- Faster phone triage
- Expanded same-day and after-hours supportive care
- Navigating patients through confusing treatment protocols
- Attention to psychosocial needs
- Better access to palliative care
- More complete information about treatment plans and out-of-pocket costs

The greatest challenge was creating out-of-pocket estimates for individual patients, and staff worried that these estimates were inaccurate or would become obsolete as a patient's cancer treatment changed over time. Another challenge—for oncologists and for patients—was fostering earlier discussions about transition to end-of-life care.

Chapter 2

Moving Toward Value-based Care

Many OCM participants view fee-for-service payment as unsustainable, especially in cancer care. Chapter 2 explores their efforts to incorporate cost and value considerations in treatment decisions and care delivery. Participating practices focused on things they could directly impact, especially:

- Better supportive care to reduce emergency department visits
- Using higher-value biosimilar and generic supportive care drugs

Very few were willing to constrain oncologists' treatment choices, for example by discouraging use of high-cost chemotherapy drugs that may have little marginal benefit over lower-cost options.

Chapter 3

Using Data for Quality Improvement

CMS provided performance Feedback Reports and extensive claims data to participants; many also used internal clinical data from their electronic health records to inform quality improvement. Chapter 3 explores challenges participants faced in using these reports and data, and the actionable insights they derived.

- Most found the claims data difficult and costly to analyze, and few gained insights that led to care delivery changes
- Long lags in the claims data (up to 18 months) limited usefulness for measuring impact of quality improvement initiatives
- Feedback Reports were somewhat timelier, and the national performance benchmarks offered compelling evidence about areas for improvement

Chapter 4

Standardizing Efficient Care Delivery

Chapter 4 addresses participants' efforts to standardize care delivery across all their oncologists and clinics.

- Standardizing improvements benefits all patients, regardless of payer (a positive spillover from OCM)
- Improved care delivery and focus on value were also useful when practices negotiated contracts with commercial payers
- An important impediment to standardization was legacy information systems across a practice's multiple clinics

OCM Background and Evaluation

This report focuses on participants' experiences and **their** perspectives about the Oncology Care Model (OCM): why oncology physician group practices volunteered for OCM, the changes they implemented in response to OCM requirements and incentives, what they believe was most worthwhile for their practice and patients, challenges they faced, and creative solutions. These insights reflect case studies with 47 practices participating in OCM that we visited in years 1–4 of the Model. This report augments and complements evaluation impact reports available on the CMS website.

Oncology Care Model background

The Centers for Medicare & Medicaid Services (CMS) is operating OCM in the attempt to reduce Medicare payments, improve the quality of care that beneficiaries receive, and reduce Medicare expenditures, by fostering coordinated, high-quality, cost-effective cancer care. OCM focuses on Medicare fee-for-service (FFS) beneficiaries with cancer who are undergoing chemotherapy treatment.[1] OCM combines attributes of medical homes,[2,3] (person-centeredness, accessibility, evidence-based guidelines,[4] and continuous monitoring for improvement opportunities) with financial incentives for providing these services efficiently and with high quality.

OCM features a two-pronged financial incentive strategy. First, practices may bill for additional payments to support care improvements. A participating practice may bill Medicare up to six $160 Monthly Enhanced Oncology Service (MEOS) fees for each FFS Medicare beneficiary with a chemotherapy episode that is attributed to the practice.

These payments are intended to support enhanced oncology services, including the following:

- Core functions of patient navigation.[5]
- 24/7 patient access to an appropriate clinician who has real-time access to the practice's medical records.
- A documented Care Plan for every OCM patient containing 13 components recommended by the Institute of Medicine:[6]
  1. Patient information including medications and allergies;
  2. cancer diagnosis;
  3. prognosis;

4. treatment goals;
5. treatment plan and duration;
6. expected response to treatment;
7. treatment benefits and harms;
8. anticipated experience with treatment;
9. who is responsible for aspects of patient's care;
10. Advanced Care Plans;
11. estimated out of pocket costs;
12. plan for addressing psychosocial needs; and
13. survivorship plan (if relevant).

Second, practices can receive money in the form of retrospective performance-based payments (PBP) if they can meet Model cost and quality goals. Participating OCM practices are paid under Medicare's FFS billing rules, then CMS combines all Medicare-covered services that their chemotherapy patients receive into six-month episodes. Practices that meet performance quality and savings goals can receive a PBP. CMS calculates PBP by comparing all expenditures during an episode (including MEOS payments) to risk-adjusted historical benchmarks, minus a discount that CMS retains. These payments are adjusted to reflect performance on five specific quality measures. Although the five quality measures do not encompass all important aspects of quality, they are one mechanism to ensure that efficiency efforts undertaken by participating practices are consistent with maintaining care quality.

The six-year OCM began with six-month episodes starting on July 1, 2016, and will operate for 11 consecutive performance periods (PPs). The last episodes will end on June 30, 2022. Additional details about OCM, including previous evaluation reports, are available on the CMS website.

OCM evaluation

The OCM evaluation uses data from many sources to measure impacts of the Model and the underlying changes driving these impacts. Data sources include Medicare administrative data; case studies and interviews; and surveys completed by patients, families, and practice leaders. The evaluation also incorporates inputs and data submitted by participating practices. Previous evaluation reports focused on the impact of OCM on payments, service utilization, treatment patterns, and patient and clinician experiences. Previous reports included insights from case studies that provide context and help readers interpret important impacts of the OCM.

DATA HIGHLIGHTED IN THIS REPORT

The evaluation research team, led by Abt Associates, conducted in-depth case studies with 47 practices participating in OCM, approximately one each month during the first four years of the Model. Each in-person case study included a senior health services researcher, a clinician researcher (physician or nurse) with oncology expertise, and a research assistant. In years 1–2 we selected and visited practices with a variety of size, ownership, geography, and patient population characteristics; in years 3–4 we also selected practices based on whether they received performance-based payments (a measure of success).

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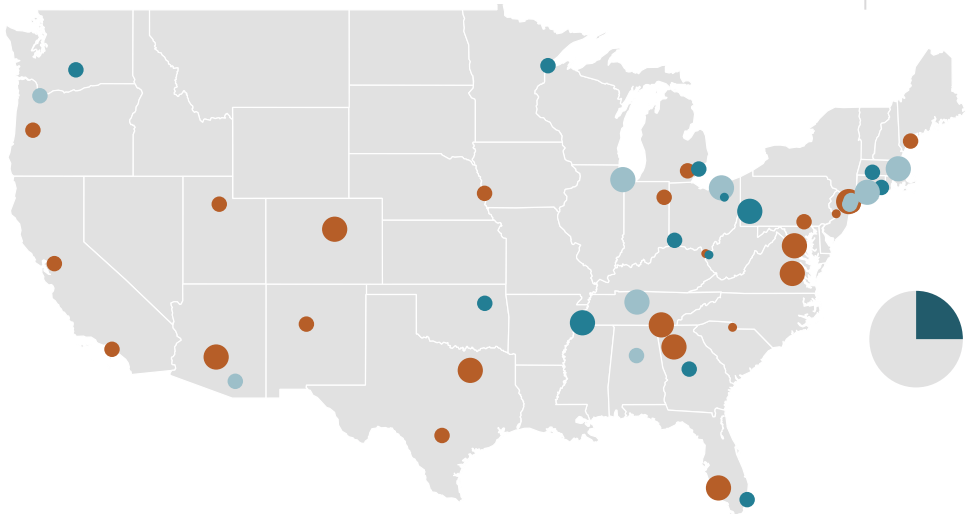
47 OCM EVALUATION CASE STUDIES REPRESENT A WIDE VARIETY OF PRACTICES BASED ON SIZE AND OWNERSHIP



Roughly ¼ **of practices** served high minority and/or low-income population

Ownership type and academic affiliation

- Health system-owned, non-ACM
- Health system-owned, ACM
- Independent, non-ACM

ACM: Academic medical center

Size (Episodes per performance period)

- Small (<245 episodes)
- Medium (<246–820 episodes)
- Large(>281 episodes)

During the 47 case studies we used semi-structured protocols to interview over 900 individuals working in OCM practices. This table shows the roles and numbers of people we interviewed.

Interviews were audio-recorded with participants' permission, as approved by the Abt Associates Institutional Review Board. After each case study we coded key themes using NVivo® software. In years 3 and 4 we followed up by phone with 13 of the practices we visited in years 1 and 2 to understand their subsequent experiences with OCM; themes from those calls were also coded using NVivo.

DIVERSE VIEWPOINTS GATHERED FROM OVER 900 PRACTICE STAFF

# Staff Interviewed	
152	Medical oncologists (including physician-leader)
88	Nurse navigators or lay navigators
75	Nurses/care coordinators (RNs)
73	Corporate and health system level leaders
73	Business and finance leaders/revenue cycle
68	Quality improvement staff (data and IT analysts; tumor registrars)
63	Nurse practitioners/physician assistants
53	Billing staff/financial counselors
52	Pharmacists
37	Social workers
35	Practice administrators
31	Medical assistants/LPNs
31	Palliative care staff
30	Nurse managers
24	Oncology/OCM managers
19	Radiation oncologists
13	External data analytic consultants/advisors
11	Other physicians (e.g., primary care)
9	Psychiatrists/psychologists
6	HER IT team (Epic, Via, Flatiron, etc.)
6	
918	**Total**

OCM PRACTICES DESCRIBED FOUR MAIN REASONS FOR PARTICIPATING

Many mentioned more than one. This report is organized by these four main themes that motivated OCM participation.

Person-centered Care Improvements

> The return on investment [from OCM] is not necessarily monetary; it's the satisfaction of high-quality care and sense of pride that we have an organization that can provide for patients in every way.
>
> —Oncologist

Twenty-Eight of the 47 practices we visited (60%) described OCM as an opportunity and impetus to make care more person-centered. Clinicians and other staff in OCM practices expressed professional satisfaction and pride in improving services that make a difference for patients and families. This chapter explores the care delivery changes participating practices made as they focused on making cancer care more person-centered, less confusing and unpleasant, and more respectful of individual patients' cultures and preferences.

Throughout OCM, we survey patients about five dimensions or composites of care experience—access, affective communication, exchange of information, shared decision making, and self-management—as well as an overall rating of the cancer care team. Both OCM and comparison respondents rate most survey items quite highly and there is little room to improve. This makes it difficult to detect changes over time or differences between the two groups. The dimension with the most room to improve was self-management, especially helping patients manage emotional problems.

Our survey shows that cancer patients rated care very highly before OCM began.

This did not change throughout the first four years of OCM.

For most survey items there was little room to improve.

In this context of highly rated patient experiences, this chapter explores the most common person-centered improvements the practices implemented as part of OCM:

1. Better and faster access to clinicians, especially for supportive care (e.g., pain, nausea, other side effects).
2. Reorganized care teams, workflows, and communication to support patients more holistically.
3. Patient navigation.
4. More complete information to support shared decision making.
5. Attention to psychosocial needs, pain, and depression.
6. Person-centered end-of-life care.

1. Better and faster access

IMPROVED PHONE TRIAGE TO QUICKLY ANSWER PATIENTS' CALLS

OCM practices generally instruct patients to "call us first" before going to an emergency department (ED). Thirty-four of the 47 practices we visited (72%) started or invigorated this patient-focused messaging for OCM. Many practices gave patients refrigerator magnets, wrist

bracelets, brochures, or other reminders with the practice phone number in bold print. As call volumes increased, practices also created new approaches for triaging incoming patient calls.

Before OCM, patients who called during business hours for help with symptoms such as nausea or pain, were usually asked to leave a message with the front desk staff (or via voicemail) and a nurse called them back. The nurses making return calls also worked in the clinic seeing patients, or in the infusion room administering chemotherapy, and often could not immediately return patients' calls.

Several OCM practices wanted to improve prompt response to patient calls and aimed for a 1- to 2-hour call response time. A few staffed their triage phone line to be sure that calls were always answered by a nurse and patients would never need to leave a message and wait for a call back. They expected this would reduce ED visits for symptom management. Nurses told us that a phone call or prescription is often enough to help a patient manage symptoms at home, and other needs can be met with a brief clinic visit (e.g., intravenous [IV] fluids for dehydration).

Most OCM practices we visited made no changes in how they handled night and weekend calls. Patients who call after hours or on weekends generally reach a main switchboard (for hospital-based practices) or an answering service (for independent practices) and their messages are forwarded to an on-call oncologist who calls the patient back. Several oncologists told us that although they have remote access to patients' electronic records, when they are on call and talking with a patient they do not know.

> "Better safe than sorry—I usually send them to the ED.
>
> —Oncologist

STRATEGIES TO IMPROVE PHONE TRIAGE AND TIMELY CALL-BACKS

13%

Dedicated triage phone lines.

Gave patients a **single call-in phone number.** Assigned nurses to staff the phone line; no need for patients to leave messages. Often required hiring more nurses.

9%

Phone triage software systems.

Front desk staff answer phones, flag urgent calls, and **route calls to phone triage nurses.**

9%

Phone triage decision support software.

Software-based protocols or scripts used by nurses to elicit symptoms from patients and **assess whether the patient needs an ED visit**, a clinic visit, or additional telephonic support.

Practice Transformation Spotlight

CREATING A DEDICATED PHONE LINE TO IMPROVE RESPONSE TIME

Before OCM, an urban safety net health system gave cancer patients the main hospital number, and each oncologist's nurse gave patients a separate number; there was no single phone triage line for the oncology practice. The main hospital operators forwarded calls to an oncologist's nurse; if the nurse did not answer, the call would go to the main hospital voicemail. From there it could take 24–48 hours for the oncologist's nurse to finally receive the voicemail message.

The oncology group believed that most of their patients' ED visits happened at night and on weekends. They were surprised when internal data showed that 70 percent of cancer patients' ED visits were during weekday business hours. When they asked patients why they went to the ED, patients said they were unable to get through to the oncology practice by phone (they left voicemail messages but received no call back). The oncology group recognized that their phone triage system was not meeting cancer patients' needs. The practice established their own phone line, answered by a dedicated triage nurse during weekday business hours, and told their patients not to call the main hospital number except on nights and weekends. They expected this would enable them to return most patients' calls much more quickly and improve symptom management.

STRATEGIES FOR EXPANDING URGENT CARE AND EXTENDING HOURS

42%

added **evening and/or weekend hours,** specifically to provide timely supportive care.

38%

hired **more nurse practitioners and physicians' assistants and revised schedules** to set aside "unbooked" openings every day for urgent care.

8%

opened new walk-in clinics dedicated entirely to symptom management (IV fluids, antibiotics, blood products, pain meds).

8%

contracted with freestanding urgent care centers to give IV fluids on evenings/weekends. *(Caveat: staff in freestanding urgent care centers may not be trained to access indwelling ports for IV hydration.)*

EXPANDED SAME-DAY URGENT CARE AND EVENING/WEEKEND HOURS

Many OCM practices expanded urgent care access by extending clinic hours and opening new walk-in clinics, which required hiring more providers. A few also worked with local urgent care centers to offer uncomplicated supportive care (e.g., IV fluids) after hours.

Staff in the 47 OCM practices described four expected benefits from expanding clinic hours and access:

Expert care: It is generally best for patients to receive supportive care in the oncology clinic where staff know each person's medical history and chemotherapy treatments, and are adept at managing chemotherapy side effects.

Faster symptom relief: OCM clinicians told us that cancer patients can spend uncomfortable (and unpredictable) hours in an ED waiting to be seen; same-day care in the clinic is almost always faster.

Safety: Clinicians explained that EDs can be unsafe places for patients whose immune systems are compromised by chemotherapy, and where providers are less familiar with managing treatment side effects.

AVOIDING UNNECESSARY HOSPITALIZATION

Since most ED staff are inexperienced in managing chemotherapy side effects, they have a low threshold to admit patients with cancer to the inpatient hospital, sometimes unnecessarily. One practice told us that *all* of their cancer patients who visit the ED for IV fluids (to correct dehydration) are admitted to the hospital.

Some OCM practices found that patients did not take advantage of evening and weekend hours:

- Two practices offered weekend hours for symptom management, but patients preferred waiting until Monday morning.
- Patients who live farther from the clinic continued using EDs closer to home, rather than traveling to the clinic for urgent care.

STAFFING AND SPACE POSE CHALLENGES FOR EXPANDING URGENT CARE

One OCM practice

tried to require their nurses to rotate weekend shifts but stopped when several nurses resigned rather than work weekends.

Two OCM practices

wanted to offer weekend hours but their communities have nursing shortages and they could not hire nurses for weekend shifts.

One county health system practice

lacks space at their large urban clinic for an urgent care center, and decided against opening an urgent care center at their suburban location which cannot be accessed by public transportation.

Three OCM practices

located on large medical campuses told us they cannot offer same-day care for symptom management because every chair in their infusion center is filled with patients receiving chemotherapy infusions, and they do not control space allocation elsewhere on the campus.

SCHEDULING

Several OCM practices reorganized scheduling to more flexibly meet patient needs and address unusual circumstances. Many improved scheduling by combining multiple functions in a single visit, to reduce transportation burden for patients.

- A large urban practice serves many patients who rely on public transportation. The practice assigned schedulers to work with departments across the medical center to arrange all of a patient's lab tests, scans, physical or speech therapy, social work, radiation treatments, etc., on the same day.
- In at least two OCM practices, social workers and counselors meet with patients during their chemotherapy infusions—at the bedside, in the infusion center—to avoid a separate visit.
- Two OCM practices noticed a pattern of patients on a specific chemotherapy regimen visiting the ED on weekends for IV fluids. They now bring those patients into the clinic on the Friday after a chemotherapy infusion for "preemptive" IV fluids, to prevent dehydration over the weekend.
- Transportation can create hardship for some patients. On a large tribal reservation that lacks Indian Health Service (IHS) oncologists, patients travel long distances to reach a practice's clinic; many rely on family or friends for what could be an all-day round trip. Extra trips for lab tests or infusions cancelled at the clinic due to low white blood cell counts impose substantial burden. To avoid futile trips, the practice worked with IHS clinicians to perform lab tests the day before a scheduled chemotherapy treatment, and send the result to the oncology practice to decide whether the patient should travel the next day for their infusion.
- Many OCM practices leave "unbooked" blocks of time in the Advanced Practice Providers' (e.g., Nurse Practitioner) schedules, to provide same-day supportive care. Most say nearly all of these open appointments are used.
  - In contrast, two practices found that many openings were not used. They no longer leave these appointments unbooked but can usually accommodate patients who require same-day care. Reorganized teams, workflows and communication

> **The OCM huddles are the highlight of my week.** They bring us together as a team and clarify what tasks each team member is responsible for, for each patient.
>
> —Oncologist

> Some doctors say they're all care-coordinated-out and think the meetings are redundant, but others have become very gung-ho about care coordination.
>
> —Nurse Navigator

> The camaraderie of sitting at the table with other disciplines **improves patients' experiences.** I told a patient that OCM means the whole staff discussing each Medicare patient's needs, and she said: 'I feel so cared for.
>
> —Social Worker

2. Reorganized teams, workflows and communication

OCM practices made three common improvements in their internal care delivery processes, aimed at making care more person-centered: team coordination meetings, focusing on high-risk patients, and prioritizing medication adherence.

TEAM COORDINATION HUDDLES

Many practices instituted daily or weekly team 'huddles'—also called care coordination meetings—to focus holistically on the needs of new cancer patients, those with complex or highly toxic treatments, and those with psychosocial needs. Generally the oncologists, nurse practitioners or physician assistants, nurses, care coordinators/navigators, and social workers attend team meetings. In some practices, pharmacists, psychologists, palliative care specialists, schedulers, and radiation oncologists also attend. For example, breast cancer team huddles generally include a radiation oncologist, and huddles for patients with advanced (e.g., stage IV) disease generally include a palliative care specialist. Some teams meet every Monday morning to review all the patients with visits scheduled that week; others meet each morning to review patients coming in that day. We visited one practice where each oncologist holds a weekly team meeting to discuss his/her panel of patients, and other staff (social workers, schedulers, pharmacists, etc.) attend all of these separate oncologist panel meetings.

Patient navigators, care coordinators, and social workers were especially enthusiastic about team coordination huddles and offered numerous examples of more person-centered care arising from information shared during these meetings. The following scenarios describe three specific examples when interdisciplinary team huddles surfaced important care barriers that the team was able to address.

IDENTIFYING AND SUPPORTING HIGH-RISK PATIENTS

Some cancer patients are at higher risk than others, due to their cancer and treatments. For example, patients with head and neck cancer may need oral surgery, chemotherapy and radiation treatments, feeding tubes and nutrition services; and they are at high risk for complications and hospitalizations. At the other extreme, patients undergoing long-term hormonal therapy to prevent a recurrence of breast cancer generally have few severe side effects and are otherwise healthy, needing little from their care team beyond periodic monitoring and prescription refills.

TEAM HUDDLES ADDRESS CARE BARRIERS: PATIENT SCENARIOS

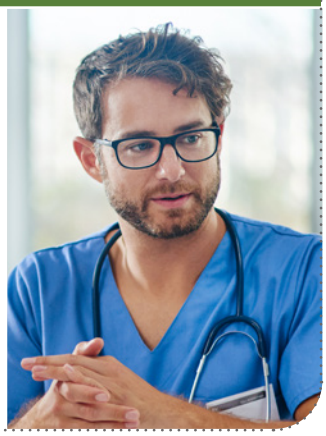
1 | **Issue:** A patient missed several appointments and was hospitalized several times.

Root Cause:

A **social worker** learned that he had no car, lived alone, and had trouble paying for taxi rides to the cancer clinic, 30 miles from his home. He relied on his closest hospital ED when his nausea led to dehydration, and ED staff often admitted him to the hospital.

Identifying Solutions:

- The **team** discsused his transporation challenges.
- The **oncologist** described a more potent, but more costly, anti-nausea drug.
- The **financial counselor** located foundation support to cover the higher drug copays



2 | **Issue:** A patient failed to refill his prescription for a new oral chemotherapy drug.

Root Cause:

A **pharmacy technician** called to find out why. She told the team that although the patient had a Part D plan, he could not afford the copayments for his cancer drugs.

Identifying Solutions:

- A **financial counselor** tried to find additional financial resources, without success.
- The **oncologist** revised the treatment plan to use an older infused (Part B) chemotherapy drug, for which patient had no out-of-pocket copay.

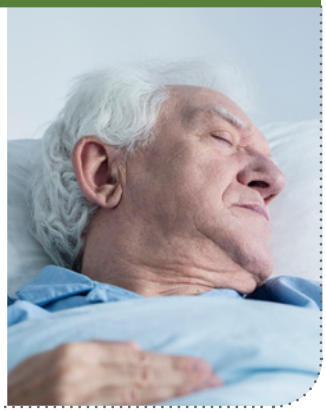
3 | **Issue:** A patient with advanced cancer had been in treatment for more than six months and was scheduled to begin a third-line of chemotherapy.

Root Cause:

A **nurse navigator** placed a routine call to check-in, and spoke with the patient's spouse who said the patient was "completely wiped out" from all the chemotherapy and "at the end of his rope."

Identifying Solutions:

- The navigator reported this to the **team** and a **palliative care specialist** asked if the time had come to discuss hospice.
- The **oncologist** agreed the **navigator** called the **spouse** back to schedule a **family** meeting with the **palliative care specialist**.



Person-centered care requires distinguishing patients at high risk or with complex needs from those with few risks and needs, and tailoring services accordingly. Some OCM practices use standardized tools to identify patients at high risk and flag them in the electronic health records (EHRs) for additional outreach; others rely on the insight and intuition of individual clinicians. Only two practices had no concept of risk assessment or flagging patients at high risk for extra attention.

Several practices told us that they implemented more systematic and standardized approaches for risk assessment due to OCM, and some used the Medicare data provided under OCM to develop algorithms to identify patients at high risk. For example, a few academic practices used claims-based predictive analytics to develop predictive tools that flag patients likely to have high service needs or poor outcomes.

Regardless of the tools or mechanisms used to assess risk, the 47 OCM practices approach risk mitigation similarly. Patients at risk due to social factors receive frequent outreach calls from care coordinators, navigators, and social workers. Those at risk due to clinical factors (e.g., chemotherapy toxicity) have additional office visits for monitoring and more outreach calls from care coordinators. At least three practices try to call high-risk patients on Thursday or Friday each week, to identify and address any emerging issues and prevent weekend ED visits.

RISK ASSESSMENT STRATEGIES

49%

use standardized risk assessment tools.

Patient-reported factors: family support, transportation, other psychosocial needs health.

Factors from EHR/claims: disease and stage, treatment toxicity, prior ED/hospital utilization, multi-modal treatment, polypharmacy.

47%

assess risk based on clinician insight.

No standard factors, but flag those at high risk based on clinician insight and experience.

4%

do not try to identify high-risk patients.

No special/different attention for patients based on risk.

Practice Transformation Spotlight

PREDICTIVE ANALYTICS TO IDENTIFY PATIENTS AT HIGH RISK

A researcher in an academic health system practice created a predictive model that identifies patients at high risk for new or worsening sepsis, based on practice EHR/billing data. With the more complete Medicare claims data available through OCM, the researcher planned to create predictive models for risk of ED use, central line-associated bloodstream infection, and high pharmacy or imaging costs. Using these predictive models, the practice plans to flag patients at high risk for proactive outreach and closer monitoring.

MEDICATION ADHERENCE

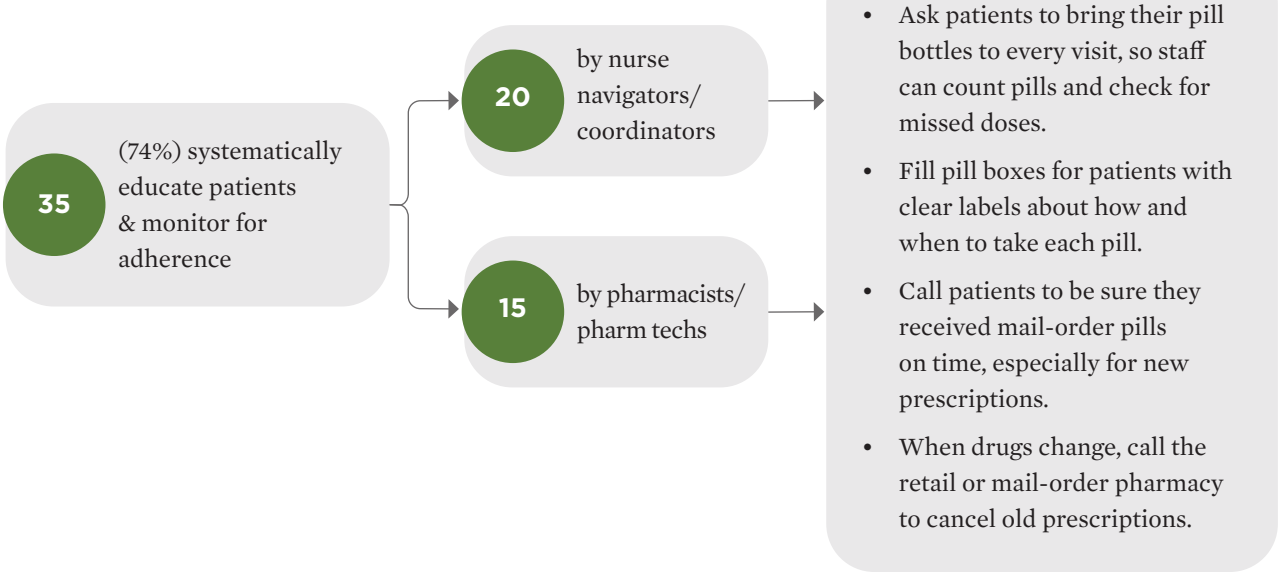
Advances in the pharmaceutical industry are leading to many new oral cancer treatments. While medication adherence is essential for effective treatment, oral cancer treatment regimens are often complicated. Unlike patients whose cancer drugs are infused in the clinic, those who take oral drugs must manage these complexities at home. Some protocols require patients to take medications for a few weeks followed by a break, and then repeat the protocol. Some drugs must be taken with food or on at strict schedule, and patients may be taking several drugs for cancer and other medical conditions. Managing complicated medications and maintaining adherence can be difficult for many patients.

Many Part D plans have lower copays when patients use retail or mail-order pharmacies in the plan's network. Practice staff told us that retail and mail-order pharmacists are not as familiar with cancer drugs, and do not carefully monitor patients for side effects or non-adherence. In addition, retail and mail-order pharmacies rarely share data with physician practices, making it hard to identify patients who are not filling prescriptions on time and address any barriers.

> If they're taking an oral drug for five years, I call them every month for five years.
>
> —Nurse

Most OCM practices reorganized staff assignments or hired additional staff to improve adherence for patients taking oral treatments. Thirty-five of the 47 OCM practices we visited (74%) have systematic programs for educating patients and monitoring adherence; several mentioned that these programs coincided with OCM or were expanded due to OCM Improved adherence could also lead to additional episodes that qualifying as OCM (triggered by Part D prescription refills), and hence additional MEOS revenue.

SYSTEMATIC ADHERENCE MONITORING



Practice Transformation Spotlight

ADHERENCE MONITORING FOR PATIENT SAFETY

An OCM practice conducted a study and found that 20% of their cancer patients did not know how to safely take their oral medications, and 30% did not know what their medications were for. The practice focused on patient education and adherence monitoring to be sure patients fill prescriptions on time and understand how to take their pills correctly.

For a previous evaluation report, we examined adherence to oral drugs for cancers where long-term treatment and adherence are especially important for preventing or delaying disease progression. Our research shows that OCM is influencing medication adherence in some patient subgroups.

3. Patient navigation

All of the 47 practices we visited offer patient navigation. Navigation can include helping patients with specialist appointments and paperwork, ensuring that the oncologist receives a timely report back from the specialist, helping patients understand their schedule (e.g., radiation, infusions, lab tests, imaging), addressing barriers to attending appointments or adhering to medications, monitoring oral medication adherence, and generally being available to answer patient questions.

Most OCM practices we visited (85%) offer patient navigation to all their cancer patients, not only patients whose episodes are in OCM. Many hired new navigators (usually nurses, and not always called "navigators"), and others gave existing staff new navigation responsibilities. Navigators are assigned to patients based on risk status, cancer type, or the oncologist the patient sees. Most navigators meet with new patients, see them during clinic appointments, and follow up with them by telephone. A few OCM practices centralize navigators who work telephonically—rarely or never meeting with patients in person.

Overall adherence to oral treatment regimens did not improve for chronic myelogenous leukemia (CML), high-intensity prostate cancer, or low-risk breast cancer.

Adherence did improve for Black beneficiaries with prostate cancer or CML, who had lower adherence than White beneficiaries before OCM began.

VIRTUAL CARE COORDINATION FOR EFFICIENCY AND CONSISTENCY

One large OCM practice has many clinics (some quite small) and practice leaders determined that virtual care coordination would be more efficient than in-person. The RN care coordinators work from home and each supports about 200 patients. Every morning, a care coordinator reviews the latest oncologist's notes about her patients, and a schedule of when she last spoke with each patient, and puts together her call plan for the day (paying careful attention to patient preferences about time of day for calls). Care coordinators have access to patients' medical records, and can send secure texts/emails to oncologists and nurses in the clinics. During our year 1 case study, some oncologists told us they did not know what the (remote) care coordinators were doing, or how they added value. During follow-up interviews in years 3 and 4, the same physicians told us that care coordinators frequently raise important issues the physicians would not otherwise know about.

OCM practices often rely on a combination of navigators employed by their affiliated hospital and navigators employed by the practice. Many patients whose cancer treatment begins with surgery are assigned a navigator by the hospital where the surgery is performed. For example, hospitals often employ breast cancer navigators, because breast cancer treatment usually involves surgery followed by chemotherapy or radiation treatment, or both. The hospital-employed breast cancer navigator may stay with the patient throughout the sequential treatments, or may pass responsibility to a practice-employed navigator when only chemotherapy treatments remain.

> Our lay navigator helps close referral loops, address transportation or lodging needs, and conduct well-check calls to lower-risk patients.
>
> —Nurse Practitioner

NAVIGATOR EMPLOYMENT

34% **had no dedicated navigators**; tasks are spread across multiple practice staff.

31% **employed navigators**; most are nurses.

26% **use navigators employed by the hospital or health system.** Nurses begin navigation services before patients have surgery at the hospital.

28% **employ lay navigators**, sometimes in addition to nurse navigators.

EMPLOYED NAVIGATOR ASSIGNMENTS

13 assign navigators to patients at high risk; risk is defined based on treatment complexity (e.g., multi-modal, stem cell transplantation), advanced disease stage, psychosocial factors.

9 assign navigators by cancer type, most commonly: breast, lung, gastrointestinal, gynecological cancers and leukemia/lymphoma.

2 assign navigators based on the patient's primary oncologist.

7 assign navigators based on who is available; often navigators are centralized and/or work entirely by telephone.

Twelve OCM practices employed lay navigators, and three others were considering this. Often lay navigators are in addition to nurse-navigators/coordinators, for patients who could benefit from an advocate to help with things that do not require a nurse or social worker. For example, lay navigators help patients sign up for transportation services or Meals-on-Wheels, recommend support groups and spiritual services, and offer information about complementary medicine (nutrition services, cannabis clinics, etc.).

Many practices with a large central clinic have a resource room set aside for a representative (usually a social worker) from the American Cancer Society, offering support groups for patients and families, and recommendations about community resources (e.g., transportation, prosthetics, wigs).

Practice Transformation Spotlight

NAVIGATORS IMPROVING PATIENT EXPERIENCES

Prior to OCM, a practice scheduled nurse navigators to meet with each patient immediately after the patient's first visit with the oncologist—minutes after the patient first learned about the treatment plan—and give the patient a packet of print materials. When the practice surveyed patients, communication was rated as "poor." Practice leaders surmised that the initial visit was overwhelming for patients, with too much information and no time to read materials and formulate questions.

The practice added a separate education visit with the navigator, a few days after the initial oncologist visit and before the first chemotherapy treatment. At this visit the navigator spends 45 minutes reviewing and explaining the print materials, answering questions, and discussing how to manage side effects at home, when to call the clinic, urgent care, etc. As part of that visit, a social worker and nutritionist also meet with the patient to explain their services. The practice surveyed patients again and received higher ratings on communication.

4. More complete information to support shared decision making

Shared decision making applies when a patient first decides whether and how to begin treatment. It applies again if the initial treatment is not successful and a patient must decide whether to try a second (or third, or fourth) line of chemotherapy. OCM practices are required to document key information in the EHR that is essential for shared decision making (prognosis, treatment goals, likely side effects, out-of-pocket costs, etc.), but the documentation may not be in plain, understandable language, and at least 19 of the 47 practices do not give patients a printed copy to take home (7 of these said they will do this when their EHRs are updated to generate Care Plans). Treatment often begins no more than a week (sometimes just a day or two) after the oncologist explains the treatment plan. Nurses in every practice we visited said that patients need time to absorb information, talk with their loved ones, ask questions, and consider treatment options. Clear information, in writing and with an opportunity to ask follow-up questions, could potentially improve patient experiences of shared decision making.

13 CARE PLAN ELEMENTS

1. Patient information (including medications and allergies
2. Cancer diagnosis
3. Prognosis
4. Treatment goals
5. Treatment plan and duration
6. Expected response to treatment
7. Treatment benefits and harms
8. Anticipated experience with treatment
9. Who is responsible for aspects of the patient's care
10. Advanced Care Plans
11. Estimated out of pocket costs
12. Plan for addressing psychosocial needs
13. Survivorship plan (if relevant)

To date, the patient survey has not found changes in patient-reported experiences with shared decision making, even though in this area there was room for improvement. The OCM patient survey was adapted from CancerCAHPS and asked about "Since your cancer was diagnosed..." and "Since it was decided that you would have chemotherapy..." which could have been months or years in the past, possibly at a different cancer practice, and potentially difficult to recall. The structure of these survey questions may make it difficult to detect changes.

All 47 practices we visited completed Care Plans that addressed many, but in some cases not all, 13 elements recommended by the Institute of Medicine to improve information sharing with patients and support decision making about cancer treatment. Many practices treated these Care Plans as a key tool for patient education, to enhance shared decision making and improve the overall patient care experience. The amount of detail in Care Plans varied greatly: in one practice, the information is presented on a single page; in others, separate sections of a binder address each Care Plan component.

Prior to OCM, practices recorded many of the 13 Care Plan elements in EHR notes but not in a standard manner, making this information difficult to access and utilize. Practices reported that due to OCM they improved standardized documentation. Some practices created a separate document that summarizes all elements of the Care Plan; other practices developed strategies to document the elements wherever they felt it made the most sense in the EHR, but not in a single place. Sixteen of the 47 practices (34%) always give Medicare patients a paper copy of their Care Plan, and 12 others do so for some patients (based on the oncologist's judgment about the potential benefit for an individual patient). Most revise elements (e.g., the treatment plan) when there are important changes. Regardless of whether or not they give patients a paper copy, clinical staff verbally review Care Plan elements with patients.

Prior to OCM, all 47 practices previously shared information with patients about their diagnosis and treatment plan, and what to expect from treatment. This was usually in the consent documents that patients sign before treatment begins (which can be difficult to understand), and often accompanied by materials explaining the purpose of specific drugs and common side effects. The OCM Care Plan requirements compel practices to go beyond discussing the patient's diagnosis, treatment plan and potential side effects, and have direct conversations about prognosis, any psychosocial barriers to treatment, out-of-pocket costs, Advanced Care planning, and what to expect after treatment is complete.

PROGNOSIS AND TREATMENT GOALS

OCM specifies that practices document the 13 Care Plan elements recommended by the IOM; one of these is prognosis, and another is treatment goals/intent. The Institute of Medicine recommends these topics because several studies have found that when a physician discusses prognosis with patients who have advanced disease, patients are less likely to want aggressive measures. With clear information about prognosis and whether treatment is curative or palliative, patients can make fully-informed decisions.

The Care Plan element least often conveyed to patients in writing was prognosis. Nearly all the oncologists we interviewed expressed ambivalence about stating an explicit prognosis for a patient in writing, and most opted not to include an estimate of life expectancy. They also emphasized the importance of tailoring terminology/language to convey prognosis in a way that a specific patient will understand. Several oncologists and practice administrators expressed that mean or median life expectancy is not directly relevant for an individual patient because each person's cancer and their response to treatment is different, and population statistics can be difficult for patients to understand. Oncologists also emphasized that prognosis changes over time, and patients who begin treatment with a good prognosis may not respond well to treatment and eventually their prognosis becomes poor. For this reason, most oncologists prefer to discuss prognosis with patients who have advanced disease, or after their disease has progressed (patients with stage III or IV disease), not at the start of treatment. One oncologist discusses prognosis as a changing target during the course of treatment, based on how the patient responds to treatment, which he feels sets a tone of **realistic optimism**. Some practices document prognosis in the EHR but do not put it in writing to share with patients. They allow each oncologist to decide when to discuss this difficult topic with a patient,

> That first visit with the oncologist is so overwhelming for patients—they shut down and just don't process a lot of what the doctor says. **Having it in writing gives them time to reread it and come back with questions.**
>
> —Oncology Nurse

> There is a drop-down menu in the EHR for prognosis (e.g., less than 6 months, 1 year, 1–2 years, greater than 5 years), but oncologists don't generally complete it until they know how a patient will respond to treatment.
>
> —Director of Performance Improvement

PROMOTING DISCUSSIONS ABOUT PROGNOSIS

An OCM practice encouraged oncologists to discuss prognosis with patients early, especially with those who have advanced disease, but faced push-back from the oncologists. The practice leaders added prognosis to the printed Care Plan that every patient receives, using cancer stage statistics published by the American Cancer Society. Oncologists, knowing that patients will see this in their Care Plans, said they now feel compelled to address it at the start of treatment.

and how to express what the prognosis (especially a poor prognosis) means, in language that the patient and family will understand. Some oncologists interpreted the requirement to provide information about prognosis as informing patients if their treatment was likely to be curative or palliative. A few practices present patients with survival statistics, but most who put prognosis in writing use other categories or terminology to explain prognosis. Oncologists in practices that serve a diverse patient population were especially mindful of explaining a poor prognosis in a way that is culturally sensitive and respectful of the patient's unique heritage, culture, religious beliefs, and personal/family circumstances. (Please see Section 6 below on culturally sensitive end-of-life care.)

> Patients are more optimistic about a slim 5-year survival chance than to a median survival time, even though both framings are supported by the same data.
>
> —Oncologist

In nearly all 47 practices, oncologists document whether the goal of therapy is curative or palliative, in plain language, as part of each patient's informed consent form. As with prognosis, terminology/language is very important, and is often tailored by oncologists for individual patients. For example, due to potential stigma some patients associate with the term "palliative" treatment, this is sometimes presented as "live longer with my disease." Other practices use terminology such as "likely curative, cure not likely, palliative."

PROGNOSIS DOCUMENTATION*

Qualitative Categories:

- good
- fair
- poor

Life Expectancy Categories:

- <3 months
- 3–12 months
- 1–2 years
- >2 years

Quantified Survival Expectancy:

6 median survival (e.g., 6 months)

or

% expressed as percentages (e.g., half of patients live >6 months)

16 practices **discuss and document prognosis at the start of care**, but not in a standard way; each oncologist decides what terms/categories to use.

8 practices **discuss and document prognosis at the start of care, using standard categories:** Qualitative categories, life expectancy, or quantified survival expectancy.

8 practices **let oncologists decide** when and how to discuss prognosis; no documentation required.

4 practices practices discuss treatment goals **without explicit mention of prognosis** at the start of care. Oncologists may discuss prognosis later if/when cancer advances; no documentation required.

*Missing for 11 practices because we didn't ask about prognosis documentation in year 1 case studies.

While most oncologists told us they do not want to put prognosis in writing at the start of treatment, they seemed more comfortable expressing goals of therapy at the start, and revising periodically as the disease and treatment progress. A palliative care physician explained that patients sometimes misunderstand the goals of treatment and think that if they are being "treated" with chemotherapy a cure is possible, even when the chemotherapy is intended for palliation (to control cancer symptoms or prolong life). In subsequent appointments he now asks each patient what they understand about their prognosis and treatment goals, to identify and correct any misunderstandings.

OUT-OF-POCKET COST ESTIMATES

The costs of cancer drugs and other treatments have increased dramatically in recent years, as have patient out-of-pocket (OOP) costs and resulting financial hardship.[7] Providing OOP cost estimates to patients is a required element of OCM Care Plans, to help patients and care teams address financial issues before treatment begins and support informed decisions about proceeding with treatment.

All 47 OCM practices now provide OOP estimates for patients. Several were doing this before OCM, but this was new for most practices due to OCM. Several financial counselors told us that before OCM they provided OOP estimates for patients who asked, and helped find additional support when patients expressed difficulty paying OOP costs—the onus was on the patient to ask for help, which was embarrassing for many people. Sometimes the financial counselors only learned about financial barriers when a patient stopped filling prescriptions or began missing appointments. They said that discussing OOP costs with every patient before treatment begins helps them identify and address financial barriers, without waiting for patients to ask.

> "Ten years ago, $500–2,000 was considered high; now, patients face out-of-pocket costs of $10,000 15,000.
>
> —Financial Counselor

VALUE OF OOP ESTIMATES FOR PATIENTS

Over the generations of providers, many of us treated patients in an era where no one cared who would pay for it. **If you're doing an estimation of prognosis and financial impact, they [the patient] can make an educated decision if they want to proceed with treatment.**

—Oncologist

I had a patient who selected a lower cost regimen, even though his out-of-pocket costs were nearly zero in both options, because he felt it was a more responsible choice.

—Oncologist who tells patients total and OOP cost

We always present OOP estimates in tandem with offering assistance like applying for Medicaid, so patients don't get overwhelmed.

—Financial Counselor

Knowing [OOP] alleviates fears that patients and families have about the financial impact of cancer.

—Social Worker

The [OOP] information helps patients be more informed and plan for expenses.

—Financial Counselor

OCM allows for more communication with patients about finances. We find out about [patients'] financial needs we never knew about before.

—Financial Counselor

Several practices also described OOP estimates as the most challenging OCM requirement because such information is not always readily available to them, before treatment begins.

- Twenty practices (42%) share OOP estimates only with OCM patients; the rest do so for all their patients, regardless of payer, a spillover from OCM that benefits all patients.
- Three practices do not provide OOP estimates for patients who will have little or no copay (e.g., those on infused treatments who have secondary insurance to cover their Part B copays).
- Forty-six practices put the OOP estimate in writing for Medicare patients.

At the beginning of OCM, CMS required practices to provide a total cost estimate for all their expected cancer treatment during an episode. Practices found this difficult to do, and after the first year, CMS revised the requirement to offer patients just OOP estimates. Among the 47 practices we visited, five practices tell patients the estimated total cost of treatment—most of which is covered by insurance—as well as the estimated OOP cost. They began sharing the total cost estimate in year 1, as CMS required, but continued to do so in the interest of full disclosure, and because some patients may make different treatment decisions if they understand the full costs of alternative treatment plans. The other 42 practices do not tell patients the total treatment cost because it can be difficult to estimate for care (e.g., surgery, radiation therapy) provided outside of the practice. In addition, they believe this information may be confusing for patients, and the OOP amount a patient will actually pay is more pertinent.

Staff in six practices raised concerns that patients dismayed by high OOP estimates might refuse treatment—although none cited instances where this actually happened. They are careful to explain OOP costs at the same time that they explain available financial assistance.

Practice Transformation Spotlight

DECISION MAKING THAT BALANCES EFFICACY, TOXICITY, AND COST

An academic OCM practice developed a shared decision making tool that shows the total cost and OOP cost for alternative treatment regimens that have similar efficacy and toxicity, along with expected survival and impacts on quality of life; it includes an option of no treatment or palliative care. They started with two treatment regimens for advanced colorectal cancer and tested the tool with patients. They found that most patients were interested in the total and OOP cost information and were able to decide between the two regimens based on the information presented.

The Study Lead acknowledged that oncologists are not trained to balance cost considerations with efficacy and toxicity, and lack information to weigh these factors in collaboration with patients. He also acknowledged that shared decision making can be time consuming: it often took more than one conversation/appointment for an oncologist and patient to talk through the options and arrive at a decision.

The practice plans to tailor the tool for other cancers/regimens. The Study Lead described how analytically intensive it will be to create the cost and quality measures, and keep the tool up-to-date as treatments, toxicities, and costs change. He anticipates that about half of the oncologists in the practice will be willing to discuss costs with patients, along with efficacy and toxicity.

Every practice we visited described how they assist patients who have unaffordable OOP costs. Although each patient's financial situation and OOP costs are different, financial counselors commonly offer the following:

- Helping eligible patients enroll in Medicaid.
- Helping patients arrange secondary/supplemental insurance to cover Part B copays (which can be very high for infused drugs).
- Helping patients identify Part D plans that will cover their drugs.
- Helping patients apply for support from drug company foundations or from charitable foundations.
- Sending patients to an affiliated/nearby hospital outpatient department for chemotherapy infusions, or to buy drugs at the hospital pharmacy, to take advantage of the hospital's "charity" program (often more available at hospitals eligible for discounted 340B drug prices).
- Finding support for other costs of living (e.g., rent, utilities) so patients have cash for OOP treatment costs.
- Several practices explicitly noted that treatment does not begin until adequate financial arrangements have been made. A financial counselor in one of these practices said that this can delay treatment by days or weeks, for some patients, **"but this is better than running up bills the patient can't afford."**
- In a few practices, oncologists and financial counselors said when necessary, they will consider a lower-cost treatment option that has reasonable efficacy.

Every practice we visited described challenges and accuracy concerns about OOP estimates, and staff in most practices said that pre-treatment estimates are unavoidably incomplete or inaccurate in important respects. Most practices include only the services they provide when estimating OOP costs, because they lack information about the costs of services provided elsewhere, and other providers (e.g., hospitals, imaging centers, surgeons) do not provide OOP estimates before treatment begins. Practices have difficulty estimating OOP costs for Part D drugs that patients purchase from other pharmacies (or that are shipped by pharmacies under Part D contracts) because the discounts negotiated by pharmacy chains and Part D plans are unknown to the practice. In addition, a practice rarely knows which phase of the Part D benefit a patient is in, or how far along treatment will be on January 1 when the benefit phases begin again.

COMPLEX PART D BENEFIT MAKES IT DIFFICULT TO ESTIMATE OOP COSTS

> We can't know when a patient will be in the [Part D] donut hole, and when they'll be in the catastrophic phase. Part D resets every year, and we can't know in advance how far along a patient will be in treatment when the new year begins.
>
> —Financial Counselor

Practices also stated that the price of a drug can change several times in a year and a practice may not know a drug's average sale price (the amount Medicare reimburses) until after they've purchased the drug for a patient. Moreover, the price of the drug could change during the months of the patient's active treatment. A few practices told us they tried online OOP "calculator" tools, including one provided by CMS starting in the third Model year. However, these tools do not incorporate a patient's secondary insurance and therefore yield an OOP estimate that is at least 20% too high for Part B services for patients with full supplemental coverage of chemotherapy, including drugs that are infused or injected at the clinic—the largest component of episode costs. Finally, many oncologists pointed out that it is impossible to know up-front how a patient will respond to treatment, or whether a second or third line of treatment will be necessary. For this reason, some practices estimate OOP costs for the first line of treatment only, and others create new OOP estimates each time treatment changes.

CHALLENGES ESTIMATING OUT-OF-POCKET COSTS

Hard to estimate OOP for services provided elsewhere.

Few practices can estimate OOP costs for services they do not provide (e.g., imaging, radiation treatment, surgery).

Hard to estimate OOP costs for drugs purchased at outside pharmacies.

When patients use a retail or mail-order pharmacy (as often required by Part D plans) the practice lacks drug price information.

Part D benefit phase may be unclear.

Patients may have previous non-cancer drug costs that put them into the catastrophic benefit phase. Treatment may continue past December 31, resetting the annual benefit.

Online "calculator" tools are inaccurate or incomplete.

Calculator tools do not incorporate a patient's secondary insurance, which is confusing and stressful for patients.

Drug prices (Average Sale Price) change often and unpredictably.

Drug average sale price (and OOP) can be uncertain until after a drug is purchased for a patient, rendering pre-treatment estimates inaccurate.

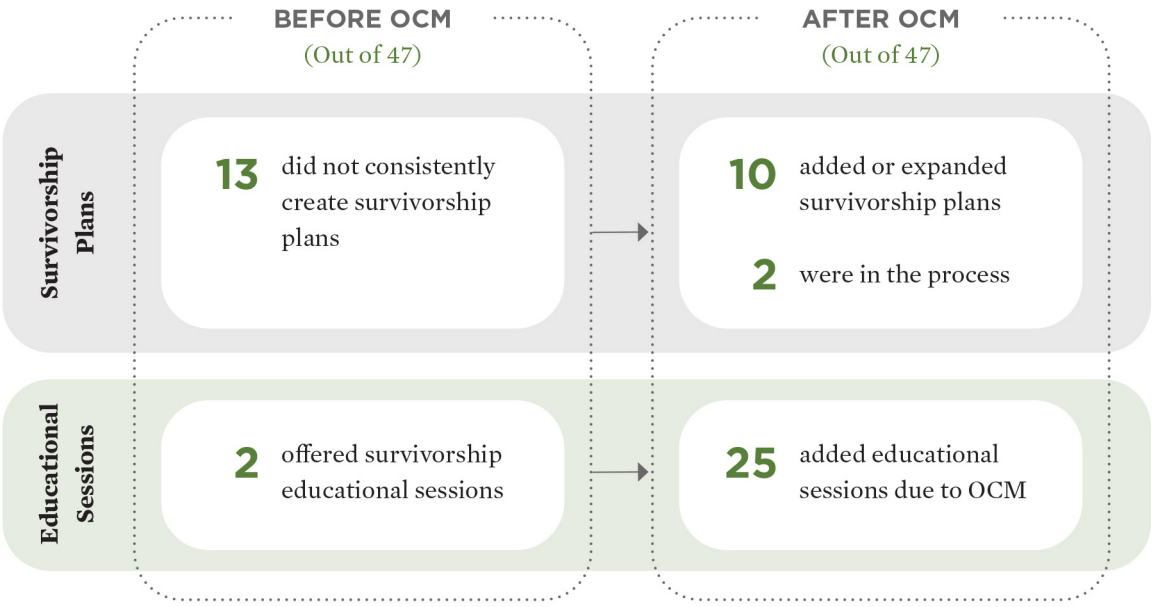
A patient's treatment often changes over time.

The oncologist can't know in advance which patients will need second- or third-line treatment, or what those drugs/costs might be.

SURVIVORSHIP PLANNING

Patients who undergo therapy with curative intent enter a survivorship phase after they complete successful primary and adjuvant treatment. Survivorship usually involves periodic tests or scans to monitor for recurrence, and for some patients it means long-term therapy for residual effects from their cancer or treatment. Cancer survivor plans are required in OCM, and they are endorsed by the American Society of Clinical Oncology (ASCO), the National Comprehensive Cancer Network (NCCN) and the Commission on Cancer.[8, 9]

Survivorship Care Plans generally include a treatment summary that details the treatments the patient received (chemotherapy drugs, radiation treatments, surgery, etc.), as well as a schedule for return visits and scans to monitor for recurrence, treatments to address long-term side effects, guidance about symptoms that should prompt a call to the oncologist, and advice about healthy lifestyle and cancer prevention. Most OCM practices use structured survivorship plan templates created by other entities (e.g., NCCN, ASCO), some of which are built into their EHRs. Most OCM practices now create treatment summaries and survivorship plans for all patients—a spillover from OCM that benefits others; a few create survivorship plans only for OCM patients.



The most important change in survivorship planning was adding educational sessions for patients. In 27 of the 47 practices a clinician, typically a nurse or APP, meets with survivors to explain routine monitoring and follow-up care, and answer any questions. These educational sessions are usually one-on-one and in person,[10] but two practices serving rural areas offered telehealth or virtual sessions (well before the COVID-19 related expansion of telehealth) for survivorship education. A few practices schedule group sessions. For example, one large OCM practice holds a regularly scheduled breast cancer survivorship clinic for women who recently completed treatment. Staff in three practices told us that survivorship plans can be a tool to help transition patients back to their primary care providers, by explaining when the patient does (and does not) need to visit the oncologist.

Before OCM began, most patients who received a printed survivorship plan were told to bring it to future physician visits (e.g., with primary care providers), because care decisions could be affected by a patient's prior cancer and treatment history. That printed copy could be damaged or misplaced and might never reach the patient's other providers. The new, more structured survivorship plans, documented and accessible in the EHR, are easier to distribute. At least 16 of the 47 OCM practices now send patients' primary care providers a copy of the survivorship plan (some EHRs automate this record sharing), and patients in several practices can also access their survivorship plans through an EHR portal.

5. Attention to pain, depression, and other psychosocial needs

OCM includes quality measures for managing pain and depression, and one of the Care Plan components is attending to patients' psychosocial needs. Most OCM practices began by ensuring that all patients are asked about these problems—systematic screening—followed by person-centered plans for addressing needs.

PAIN SCREENING

OCM practices are required to screen patients for pain and implement a pain management plan for those experiencing pain. Screening for pain was common among practices prior to OCM. Workflows were revised in many practices to make this screening universal and systematic for all patients; documenting a pain management plan also became more systematic (e.g., standardized forms or EHR fields).

All the OCM practices we visited use the standard 1–10 pain scale, and most do this screening at every patient visit. A few people mentioned dissatisfaction with the 1–10 pain scale:

- A nurse commented that the 1–10 pain scale is *not actionable*. She said her practice previously asked patients to indicate "no pain, some pain but tolerable, or pain that I'd like to fix." The practice abandoned this preferred pain screener in favor of the 1–10 scale, which they believed was required for OCM quality measure reporting.
- The medical director of a practice serving a Tribal community explained that the 1–10 pain scale is not culturally appropriate for that patient population. They tested a revised version, but were concerned that it would not meet OCM reporting requirements.

PAIN SCREENING AND THE OPIOID EPIDEMIC

The opioid epidemic and countermeasures to prevent and address addiction have resulted in some negative consequences for cancer care. While pain is extremely common among patients, there is a growing pressure to avoid over-prescribing opioids.

An oncologist observed that **accrediting bodies are deemphasizing pain assessment**, as part of a general effort to reduce opioid over-prescribing.

OCM practices in one state described a **strict new state regulation** requiring that physicians prescribing high-dose opioids must be certified in palliative care, including when prescribing for patients with end-stage cancer. They said there is now a severe shortage of palliative care physicians across the state, and patients who screen high for pain may not always receive adequate medication to control their pain.

Oncologists in a few practices said **screening for pain creates an expectation of treatment**, which may not be necessary for every patient with pain and raises addiction risks.

An oncologist suggested that oncologists should only prescribe for cancer pain, not for conditions that other physicians could treat (e.g., back pain), as this can **lead to duplicate prescriptions and opioid misuse**.

DEPRESSION SCREENING

OCM practices are required to screen patients for depression at least every six months, to identify those who may not otherwise mention emotional problems to the care team. Before OCM began, only five of the 47 practices systematically screened patients for depression using standardized screening tools. The other 42 practices began depression screening because of OCM, and most now screen all their patients.

Most OCM practices we visited give patients a standard depression assessment tool to fill out (e.g., PHQ2)[11] or staff ask the questions verbally. Most try to collect this information every six months (i.e., during every episode for patients who continue on chemotherapy), and some do so at every clinic visit, in part because they want to address depression quickly. Many practices now screen all their patients for depression, a spillover from OCM. If a patient indicates depressive symptoms on the initial screener, a second more detailed screener (e.g., PHQ9)[12] is administered. In most practices, a score on the second screener is used to flag patients for referral to a social worker or psychologist. In many practices, these referrals are automated: a staff member enters the screening score into the EHR, which triggers an automated referral that appears in the social worker's inbox.

Help with emotional problems is rated lowest on our survey.

Talking about emotional problems improved over time; getting help dealing with these problems did not.

COMMON DEPRESSION SCREENING TOOLS ARE NOT CANCER SPECIFIC

Some practices raised concerns about the lack of specificity in the validated measures for depression.

> Some chemotherapy side effects, like fatigue and poor appetite, **mimic symptoms of depression on the screener.**
>
> —Nurse Care Coordinator

> The PHQ tool is not specific to cancer patients and some of the questions are cookie-cutter.
>
> —Nurse Practitioner

Several oncologists told us that they can recognize when patients are depressed, without a formal screening tool. However, nurses in at least five practices stated that this is not always true, and screening identifies depression that would otherwise have gone undetected. A few nurses and social workers explained that patients tend to not raise mental health issues with the oncologists, whose focus is treating cancer.

We survey OCM patients to assess whether there are any changes over time in patients' experiences and perceptions of care quality. The survey asks whether the cancer care team helped the patient deal with pain, fatigue, and emotional problems. While the overall ratings on the survey are very high, help with emotional problems was consistently rated lower than the other topics. OCM requires that practices screen for depression, and this requirement did lead to more patients saying that their cancer care team discussed emotional problems. However, on our survey the patient-reported rates of receiving help for emotional problems did not improve.

Anxiety, depression, and other emotional problems are common among cancer patients and are often treatable through medication and therapy. However, several OCM practices described mental health care access barriers which they could not resolve:

- Insufficient financial resources to employ mental health practitioners in the practice.
- Inadequate community mental health resources and long waits for appointments.

> "I think we've always been good at checking in about emotional status, **but having the [screening] tool opens up a lot of discussions** that we wouldn't have had before.
>
> —Nurse Practitioner

> "I now see more Medicare patients, who get referred to me from the screening.
>
> —Social Worker

> "The screening fills a gap. The number one thing I like about OCM [is that it] opens up dialogue between patient and health care worker.
>
> —Medical Assistant

SCREENING FOR OTHER PSYCHOSOCIAL DISTRESS

Many OCM practices began using a standard form to screen for other types of psychosocial distress. In most practices this was new for OCM and raised awareness of patient needs that were previously unidentified, many of which could be addressed by social workers.

As a result of OCM, all practices we visited expanded or systematized screening for depression and other psychosocial needs, and many adopted the NCCN distress thermometer.

> With OCM, finally people are paying attention to social needs.
>
> —Social Worker

National Comprehensive Cancer Network®

NCCN Guidelines Version 2.2014
Distress Management

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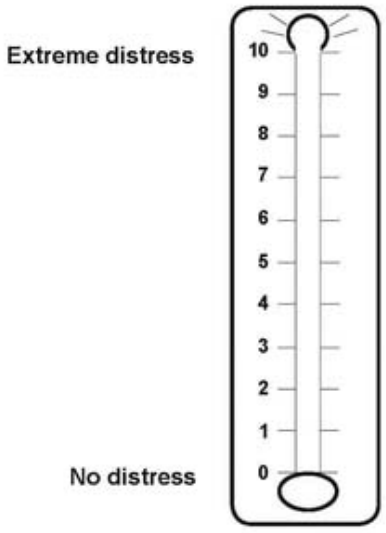
NCCN DISTRESS THERMOMETER

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



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

YES	NO	Practical Problems
☐	☐	Child care
☐	☐	Housing
☐	☐	Insurance/financial
☐	☐	Transportation
☐	☐	Work/school
☐	☐	Treatment decisions
		Family Problems
☐	☐	Dealing with children
☐	☐	Dealing with partner
☐	☐	Ability to have children
☐	☐	Family health issues
		Emotional Problems
☐	☐	Depression
☐	☐	Fears
☐	☐	Nervousness
☐	☐	Sadness
☐	☐	Worry
☐	☐	Loss of interest in usual activities
☐	☐	Spiritual/religious concerns

YES	NO	Physical Problems
☐	☐	Appearance
☐	☐	Bathing/dressing
☐	☐	Breathing
☐	☐	Changes in urination
☐	☐	Constipation
☐	☐	Diarrhea
☐	☐	Eating
☐	☐	Fatigue
☐	☐	Feeling Swollen
☐	☐	Fevers
☐	☐	Getting around
☐	☐	Indigestion
☐	☐	Memory/concentration
☐	☐	Mouth sores
☐	☐	Nausea
☐	☐	Nose dry/congested
☐	☐	Pain
☐	☐	Sexual
☐	☐	Skin dry/itchy
☐	☐	Sleep
☐	☐	Substance abuse
☐	☐	Tingling in hands/feet

Other Problems: _____

Source: National Comprehensive Cancer Network

MOVING FROM SCREENING TO ACTION

An OCM practice serving a low-income patient population adapted the NCCN distress screener by adding "food insecurity"; 20% of their cancer patients checked that box. Practice leaders alerted their financial counselors to help patients apply for food stamps, and the practice now offers patients a bag of groceries at every visit.

Some practices found that the thermometer was confusing for patients and instead implemented a checklist to screen for social determinants of health, asking if the patient has any problems related to housing, having enough to eat, transportation, paying for medical care and drugs, or other needs.

If a patient indicates distress, some EHRs automatically trigger a referral to social workers; in other practices the nurse navigator or care coordinator follows up with the patient. Some practices we visited initially screened only OCM patients, but over time nearly all practices began to screen all their patients—a spillover effect of OCM that benefits others.

Six of the 47 practices told us that although they screen for psychosocial needs, their practice and the surrounding community lack resources to adequately address many patients' needs. They expressed concern and frustration about screening for needs that they know cannot be met.

6. Person-centered end-of-life care

When patients are terminally ill and further intensive treatment may reduce quality of life, holistic care shifts to prioritizing pain management and symptom palliation. Extensive prior research indicates that timely hospice care referral, avoiding medical interventions in the last month of life, and death outside the hospital reflect better quality of care[13, 14, 15, 16, 17, 18] and higher satisfaction as perceived by family members and caregivers.[19] Eliminating ineffective, unnecessary, and often costly treatments at the end of life improves quality of life and also reduces Medicare payments.

OCM includes several elements that together are intended to improve end-of-life care. First, for every patient OCM requires Care Plans that document shared decision making and Advances Care Plans. The goal is to encourage oncologists to discuss preferences and planning with

> **The OCM focus on hospice is a good challenge.** It made us push our health system to improve their hospice program.
>
> —Palliative Care Physician

beneficiaries, especially for those who have advanced disease and limited life expectancy. Second, OCM practices' performance-based payments are adjusted for quality. One of the five quality measures CMS uses is the share of deceased cancer patients who entered hospice care more than two days prior to death—with more time to benefit from the services hospices offer. Third, OCM practices receive regular CMS Feedback Reports that contain several measures of end-of-life care, with national benchmarks. Finally, transitioning a patient to hospice rather than continuing costly and potentially futile treatment, reduces Medicare spending and helps the practice meet spending targets. All of these requirements, quality measures, and incentives are intended to make end-of-life care more person-centered, and encourage more and earlier hospice care, while reducing Medicare payments.

> Our area is very conservative, and people recoil at these types of discussions. **But now I bring this [ACP] up at the first visit. I tell them it's a requirement of a new Medicare program. I feel very liberated by that.**
>
> —Oncologist

ADVANCE CARE PLANNING

Most of the 47 practices enhanced and standardized processes for Advanced Care planning to meet OCM requirements, although what constitutes Advanced Care planning varied considerably. Thirty-two practices (68%) now have initiatives to ensure that patients receive health care proxy and advance directive forms to fill out. Clinicians in several practices told us that they use OCM as justification for asking reluctant patients to engage in discussions or complete Advanced Care Plans. Some practices ask patients, especially those with advanced disease, to detail more complete preferences about the care they wish to receive (and not receive) at the end of life. At least five OCM practices described efforts to normalize discussions about end-of-life care, and make this a routine conversation between patients and members of the care team.

REFERRAL TO HOSPICE CARE

Several oncologists told us that there is almost always another chemotherapy drug that can be tried, and it can be difficult to know when to stop treatment. Many oncologists also spoke about how difficult it is to shift their conversations with a patient from treatment to end-of-life care.

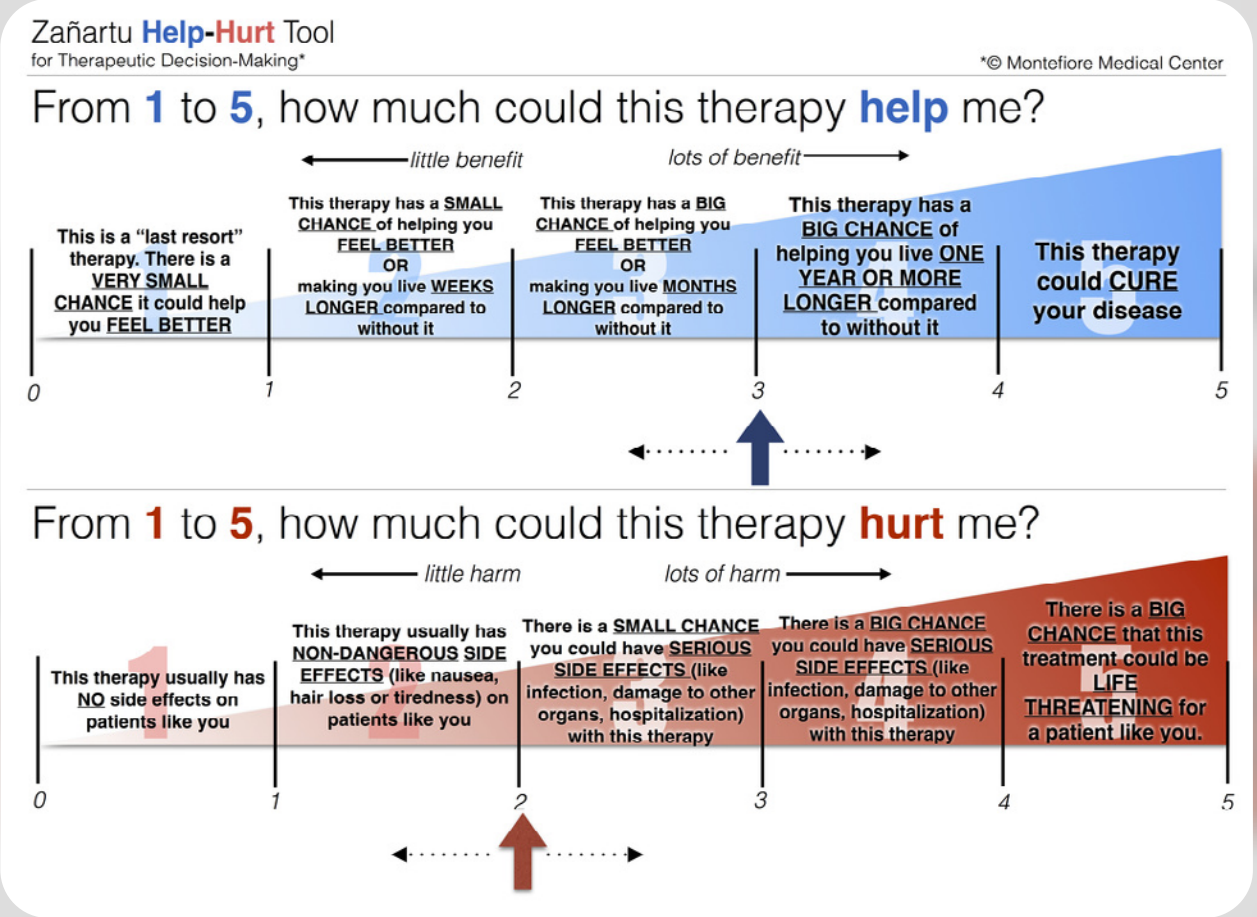
Most of the oncologists we met said that they address end-of-life plans more concretely when a patient's disease has progressed, and treatment is unlikely to prolong their life much further. Many also told us that they wait for a patient or a family member to begin the conversation about ceasing treatment. However, several nurses and social workers told us that oncologists can be so focused on treatment and not giving up that they fail to ask patients whether further treatment is desired. Nurses also explained that patients can be reluctant to tell their oncologist that they wish to discontinue treatment because **"they don't want to disappoint their doctor."**

Recognizing this tension, some OCM practices make a clear demarcation: the oncologist explains that continuing chemotherapy treatment may do more harm than good and recommends that the patient meet with a palliative care specialist; that specialist discusses comfort care and hospice options. This approach deliberately separates the oncologist from the end-of-life discussion. Several practices noted that OCM led them to hire additional clinicians with palliative care training. This expanded the practices' capacity to engage patients in discussions about palliative care needs and end-of-life care. After reviewing OCM Feedback Reports, at least nine practices realized that their hospice use rates were below average—they never had benchmarks before and were unaware of their subpar performance. In addition to encouraging Advanced Care planning, several practices hired more palliative care specialists to help patients decide when to stop treatment and transition to end-of-life care. Several practices described efforts to introduce palliative care earlier, when a patient with advanced disease is experiencing symptoms from the cancer or treatment, and to establish the palliative care physician's role as focusing on comfort (as distinct from the oncologist, who focuses on cancer treatment). In a few practices where staff told us that patients tend to equate palliative care with *giving up*, palliative care specialists have titles that convey symptom management and comfort care.

Practice Transformation Spotlight

HELPING PATIENTS WEIGH TRADEOFFS

In a large urban practice that serves a low-literacy population, patients with stage III or IV cancer are referred to the palliative care specialist. He uses a "help-hurt" tool to help patients articulate their values. It has two scales: "how much could this therapy help me?" and "how much could this therapy hurt me?" Patients are shown where their next line of potential treatment falls on both scales. The palliative care specialist told us that oncologists tend to emphasize the potential for help, but patients often focus on the potential for hurt; this tool helps a patient weigh both factors.



Practices described other mechanisms to facilitate discussions about ceasing treatment and transitioning to end-of-life care:

- A few OCM practices built 'triggers' into their EHRs to flag patients with poor prognoses and schedule appointments with a palliative care physician or social worker/counselor to begin discussing end-of-life care. These EHR triggers were implemented because of OCM.
- At least three OCM practices invited hospice care professionals to provide in-service training for all practice staff, to instill a greater appreciation throughout the practice of the benefits of hospice care.
- A practice that serves a large rural state recognized that it is burdensome to ask a patient to make an extra trip to discuss end-of-life care. They now try to schedule these appointments on the same day as other tests or treatments or arrange palliative care home visits or telehealth consultations.

CULTURALLY SENSITIVE END-OF-LIFE CARE

Clinicians in several practices spoke about some patients' cultural aversion to discussing poor prognoses, discontinuing treatment, or hospice care. Many also spoke about the lack of cultural congruence between practice staff and their patients, and the challenges this poses for effective conversations about these difficult topics.

Recognizing the importance of culture for end-of-life care, several OCM practices modified materials, language, staffing, and training to make difficult conversations more respectful of their patients' cultures and values. Some focused on cultural congruence between patient and provider and hired members of specific cultures, or trained their staff to understand and respect their patients' cultural norms.

THE IMPORTANCE OF CULTURE

Judgments about what constitutes quality of life or what suffering means are often influenced by one's culture. Individuals may have different beliefs about issues such as wanting to know that a diagnosis is terminal, involving family as primary decision makers, using life support measures, and location of death (e.g., in the home, in a hospital). Some racial and ethnic minority groups and people with disabilities mistrust the health care system and providers, which can influence views of health care options at the end of life. Individuals of certain cultures are more likely to engage in the process of Advanced Care planning, while others do not believe in talking openly with family members about life-limiting illnesses.

American Psychological Association: https://www.apa.org/pi/aging/programs/eol/end-of-life-diversity.pdf

- An urban OCM practice serves several distinct immigrant communities, each with its own language, customs, and community service organizations. Rather than organizing the practice based on oncology sub-specialty (e.g., breast cancer team, colon cancer team), the practice is organized according to the national origins most common in their patient population (e.g., Korea, El Salvador). Patients are assigned to their culturally congruent care team, which includes an oncologist, APP, nurse, and medical assistant who speak the language and understand cultural norms about discussing serious illness, terminal diagnosis, and end-of-life preferences.
- An OCM practice serving a Tribal reservation explained that in this Tribe's culture, a dwelling where a person died is often burned down. Since there are no inpatient hospices serving the reservation, this can lead to people dying in a motel or other inappropriate location, to spare the family home. The practice worked with the local hospices and hospital to identify safe alternative locations where hospice staff can support dying patients

PRACTICE CULTURE CAN AFFECT REFERRAL TO HOSPICE CARE

Nurses in some OCM practices spoke about feeling empowered to raise hospice care with patients who seem ready, or prompt **oncologists** to do so. In other practices, however, nurses said that oncologists do not welcome such suggestions, and **tend to wait too long to discuss end-of-life care** with patients and families.

In three practices, nurses implied that older oncologists were trained to treat aggressively and often delay hospice referral until a patient is actively dying.

Oncologists in two academic practices suggested that **patients seeking aggressive treatment for advanced disease choose academic medical centers** where the practice culture is oriented toward clinical trials, and "establishing the evidence base."

> **The culture here [academic medical center] is to treat until you no longer can.**
>
> —Nursing Director

- A palliative care specialist in a practice serving an immigrant Asian community explained that family members are more likely to accept hospice care when it is presented as an extension of home care, rather than specifically acknowledging that it is end-of-life care.
- Distrust of medical providers, often rooted in present and past systemic racism, can be difficult to overcome, especially in the fraught context of an impending death. An urban safety net practice serving a largely Black population recognized that many of their patients harbored a deep distrust of medical providers and were loath to discontinue treatment. Nearly every oncologist we spoke with in the practice said that they do not raise the topic of end-of-life care because this *breaks the trust relationship* between patient and provider. Instead, they wait for the patient or family to signal readiness to cease treatment. The practice hired a Black palliative care specialist who meets with hospitalized cancer patients to discuss managing pain and other symptoms. Practice leaders hope that establishing a supportive relationship with high-risk patients will ease future conversations about transitioning to hospice care.
- Another safety net practice serving a Black population took a different approach, assigning peer or lay navigators to patients undergoing complex treatments or with advanced disease. Black patients are assigned a Black lay navigator. The navigator usually sees a patient during each office visit, and over time establishes a close relationship. Navigators help with logistics (e.g., ride services or gas cards, housing vouchers for those who live hours away), explain treatment schedules, and act as an advocate and liaison to the care team. When an oncologist believes that additional treatment will not be beneficial and recommends hospice, the trusted navigator follows up to hear the patient's concerns, express sympathy, and reassure the patient that the care team will continue to offer support.

We surveyed families of deceased cancer patients who had received care in OCM practices, about quality of end-of-life care. We also used Medicare data to assess whether OCM affected deceased cancer patients who used hospice services at the end of life had earlier entry to hospice care.

We identified three factors that together may partially explain the lack of OCM impact on hospice use and timing: practice culture, family perceptions and expectations, and the appropriateness and feasibility of hospice care for certain groups of patients.

Our survey shows OCM had no impact on family-reported quality of end-of-life care.

OCM also had no impact on hospice use or timing.

PRACTICE CULTURE

The internal culture of an oncology practice can affect timely referral to hospice care, including how comfortable clinicians are with discussing goals of care with their patients. A critical event can be a catalyst for culture change within an oncology practice. For example, we visited a practice where four of the five oncologists left within one year, and other staff noticed a dramatic culture change—and more discussions about hospice care—with the arrival of four new oncologists. We heard from several nurses that older oncologists were trained to treat aggressively and often delay hospice referral until a patient is activity dying. Oncologists in two academic centers suggested patients seeking aggressive treatment for advanced disease choose academic medical centers and prioritize curative treatment.

FAMILY PERCEPTIONS/EXPECTATIONS ABOUT QUALITY END-OF-LIFE CARE

It appears that the current patterns of care are largely meeting family expectations. Most family members rated end-of-life care very highly before OCM began, and this did not change. For example, the rating family members gave for overall quality of care at the end of life was 9.3 out of 10—there was little room to improve. About 80 percent of family members reported that providers discussed hospice care,[20] and for those patients who did use hospice care, about 85 percent of family members said that it started at the right time (not too early or too late). In addition, most patients and their families have no direct prior experience with cancer treatment against which to compare their current care, and may not recognize substandard care or notice improvements resulting from OCM.

HOSPICE IS NOT FOR EVERYONE

There are circumstances and patients for whom hospice care is not the most appropriate end-of-life option.

- **Personal preferences:** Approximately three quarters of family members who responded to our survey said that their deceased loved one preferred comfort care rather than extending life as long as possible, but one quarter said their loved one preferred to extend life as long as possible (and many of these patients may not consider hospice care).[21]

- **Lack of caregiver support:** Hospice organizations do not provide 24/7 home care, so caregiver support is essential. Dying at home is not feasible for those who have inadequate caregiver support, who live far from the nearest hospice organization, or who have no home. In addition, many communities, especially in rural and inner-city areas, lack sufficient inpatient hospice beds for patients who cannot die at home. For some patients, an alternative may be dying in another type of institution, such as a nursing facility or assisted living facility, with hospice support.
- **Religious beliefs:** An OCM practice that serves many members of a particular religious community explained that church leaders prefer to extend life as long as possible, in the hopes of a divine miracle cure, and their followers do the same.
- **Cultural influence:** Two OCM practices mentioned that members of specific immigrant communities prefer to care for dying family members themselves, without help from hospice organizations.
- **Experimental treatments:** Several OCM practices with a research mission pointed out that patients who volunteer for a clinical trial are unlikely to enter hospice care weeks or months before death—while they are still in the trial—and more likely to wait until the last days or to die without hospice care.

For these and other reasons, some practices, especially those serving certain religious, immigrant, minority, rural, or homeless populations, face more obstacles to enrolling patients in hospice more than two days before death.

WHEN DYING AT HOME IS NOT AN OPTION

Hospice workers cannot provide care to a patient who lives outdoors, in a car, or in a homeless shelter. Opioids, morphine pumps, catheters, and other drugs and equipment cannot be safely offered to homeless people.

A palliative care specialist serving an urban community explained that there are few inpatient hospice beds, but there is a small hospital that has for generations been the place where homeless people go to die. For most homeless patients, dying in this hospital is a more feasible option than hospice care.

CONCLUSIONS

About Person-Centered Care in OCM

The following were the most frequent and substantial care process improvements oncology practices described as being expanded or enhanced due to OCM:

- **Better and faster access to oncology staff**, same-day urgent care for symptom management, and after hours/weekend care.
- **Improved communication** within the care team to identify and address patient needs, especially for patients at high risk for adverse events and those with complex care needs. Staff with designated responsibility for patient navigation.
- **Sharing more complete information with patients**, before treatment begins, about prognosis, treatment goals, and costs, to support transparency and shared decision making. Clearer explanations about what to expect after treatment is complete.
- **Consistent screening** for and attention to pain, depression, and other psychosocial needs that might otherwise go unaddressed.
- **Helping to identify and alleviate barriers to care** including financial barriers (e.g., transportation, temporary housing), and addressing obstacles to treatment adherence.
- **Expanding palliative care** and inculcating greater awareness among all staff of the value of earlier hospice care.

Despite these care process improvements, there was little measurable impact on patient ratings of care experience or on caregiver ratings of end-of-life care. In part this may be because patients and families rated care very highly before OCM began, on almost all dimensions of care in our surveys, and there was not much room to improve.

There was no OCM impact on hospice use or timing. This may reflect the culture in many practices and among oncologists to continue treatment until the patient asks to stop. To a certain extent it may also reflect the fact that hospice is not feasible, appropriate, or desired by every dying patient.

Moving Toward Value-Based Care

Opportunities Where Incentives Align

> We applied [for OCM] because we were intrigued by the idea of maximizing value of expenditures on oncology care, and getting better at tracking outcomes and utilization.
>
> — Oncologist in an OCM Practice

Thirty of the 47 practices we visited (64%) volunteered to participate in OCM at least in part because they foresaw a shift from fee-for-service to value-based payment (VBP), and wanted to learn how to balance cost considerations while delivering high quality care.

FINANCIAL INCENTIVES UNDER FFS MEDICARE

Over half of Medicare beneficiaries have traditional FFS coverage (the others have Medicare Advantage plans); OCM concerns those with FFS coverage. Participating practices can receive performance-based payments if they reduce total Medicare episode expenditures (while maintaining or improving five measures of care quality). Under FFS reimbursement, practices bring in revenue for each service delivered, including evaluation and management visits and administration of Part B (infused or injected) drugs. As shown in our companion report on OCM payment impacts, on average nearly 40% of the total Medicare episode payment – or about $13,500 out of a total of $34,000 – is for Part B (infused or injected) drugs. Most of the Part B drug payments are for drugs to treat cancer; a smaller share is for supportive care drugs. Since practices participating in OCM continue to be reimbursed under Medicare FFS rules, it is important to understand the incentives inherent in the way Medicare pays for Part B drugs.

> Like it or not, we're in the drug distribution business.
>
> —Oncologist

In FFS Medicare, physicians are paid the average sale price for a Part B infused drug, plus an additional 6% which is intended to cover the costs of ordering, handling, and safely storing chemotherapy drugs. This means the higher a drug's price, the greater the revenue from the additional 6%. This tends to incentivize more treatment with high-price drugs (drug manufacturers and distributers also understand this incentive). Given the high prices of infused cancer drugs, the 6% payment is a major source of revenue for oncology practices, often greater than their revenue from office visits and other related services. As one oncologist commented: **"Like it or not, we're in the drug distribution business."**

Practices participating in OCM continue to be paid under Medicare FFS rules. Based on the 47 case studies, it is our sense that the FFS incentives are powerful, and practices tried to identify opportunities to reduce total Medicare episode payments without greatly reducing their own FFS revenue. For example, reducing ED visits affects a hospital's FFS reimbursement not that of the oncology practice, and was therefore an attractive target.

Part D (oral drugs) account for another 20% of total Medicare episode payments (for beneficiaries who have Part D coverage). There are no similar financial incentives to use high-price Part D drugs, and many beneficiaries do not receive their Part D drugs directly from their oncology practice. Instead, Part D plans often guide patients to use specialty pharmacies in the plans' network. For practices, the main focus related to Part D drugs was on improving medication adherence, addressed in Chapter 1 above, which could lead to episode payment increases if more patients fill their prescriptions on time. (None of the practices identified this potential downside of improving medication adherence.) Practices also improved financial counseling to help patients locate resources to cover medication copays, and avoid delaying prescription refills.

OCM is taking place during a time of extraordinary innovation in cancer treatment, with the advent of new efficacious drug treatments that are also very costly. Several oncologists said immunotherapies, for example, are "game changing", and described patients who in the past would have had very limited life expectancy, and now survive with good quality of life for several years. Oncologists are excited to have useful new treatments to offer, and we heard profound reluctance to constrain the use of these effective but costly drugs. Thus, the perceived therapeutic advantage of new drugs, and the financial incentives to use costly infused drugs, align to favor more treatment with high-price drugs.

In this chapter we explore how practices grappled with these complex financial and efficacy incentives, and the strategies they employed to reduce episode payments without greatly impacting their own FFS revenue.

Many practices adopted clinical pathways to standardize care, and some mentioned that such pathways programs embed drug price as a third factor when two cancer drugs have equivalent efficacy and safety. A few also pointed out that efficacy and safety trump cost in these pathways, which can lead to standardizing the use of high-price drugs.

There were three other common cost-reduction targets practices described which, while not large drivers of episode cost, are under their control and promote efficiency without substantially diminishing their FFS reimbursement or interfering with oncologists' autonomy in their choice of cancer treatments:

- Using biosimilar and other lower-cost supportive care drugs
- Reducing drug wastage
- Preventing unnecessary ED visits and hospitalizations.

We also noticed a potentially important missed opportunity to reduce episode costs: radiation therapy. This chapter ends with practices' experiences of synergies between OCM and commercial VBP models.

1. Weighing costs of cancer treatments

At nearly every practice we visited, administrators and oncologists noted that drugs, especially chemotherapy and immunotherapy drugs, are the major component of episode costs and are rising the fastest. Almost all of the 47 joined Group Purchasing Organizations (GPOs) to increase their market clout and leverage with drug manufacturers and distributors. At the same time, most interviewees expressed a sense of futility about influencing drug prices – but few described attempts to directly negotiate prices.

Practices were loath to explicitly constrain oncologists' treatment options, but several employed strategies to engage physicians in considering the relative cost of alternative treatments. These strategies included clinical pathways programs, substitution of generic drugs, pharmacy and therapeutics (P&T) committees, and a few examples of changing therapeutic approach to favor less costly drugs.

Clinical pathways software: National treatment guidelines are broad, and for some cancers there are several drug regimens/combinations that meet the guidelines, giving physicians discretion as to which to select. Roughly half of OCM practices we visited use clinical pathways software programs to help guide these decisions. Most purchased commercial products, and a few created their own pathways tools. At least seven practices we visited adopted pathways programs explicitly due to OCM, in part because the literature suggests that standardization can reduce costs. For others, pathways programs were adopted before OCM to standardize care and make drug inventory/purchasing more efficient.

DIFFERING VIEWS ON INCORPORATING COST IN TREATMENT DECISIONS

Many oncologists focus on selecting the best possible treatment for each patient, and believe it is inappropriate (even unethical) to consider cost when making treatment decisions—regardless of Medicare or OCM incentives.

I don't know the price of drugs, and I don't want to know.

—Oncologist

Other oncologists worry about financial burden for patients and believe that shared decision making requires that patients are fully informed about all aspects of their care. The out-of-pocket estimates required in OCM highlight the benefit-cost trade-offs.

It is often possible to arrive at a treatment choice that best meets patients' clinical and financial needs.

—Oncologist

Pathways programs adopted by OCM practices generally prioritize efficacy, followed by safety/toxicity; some (but not all) include cost as a third decision element when two alternative regimens have equivalent efficacy and safety. In circumstances where there are equally efficacious and safe options, some pathways guide oncologists to select the least costly drug regimen. A few pharmacists and oncologists pointed out that clinical pathways can also standardize and promote the use of costly drugs. When a costly drug is slightly more efficacious or slightly less toxic than a lower-price (but still guideline concordant) alternative, the pathways favor the more costly drug.

Several oncologists expressed preference for clinical pathways that are designed and updated by physician committees, and they appreciate the ability to bring new information to these committees for consideration. They believe such pathways reflect 'real-world' clinical treatment decisions and are more useful than broad national guidelines. Several oncologists commented that clinical pathways help them stay abreast of new evidence and select the right drug for a patient's tumor or biomarker characteristics. A few mentioned that with the high price of many new

cancer drugs, they want to know when the evidence and professional consensus suggest potential for real benefit. Many also expressed antipathy toward commercial insurance companies' pathways which they believe unduly emphasize cost over clinical value.

Changing therapeutic approach: We heard about only two specific cost-conscious changes in therapeutic approach. Two practices told us they now prescribe hormonal therapy as the first line of treatment for patients with metastatic breast cancer that is hormone-receptor-positive/HER2-negative, and they prescribe a costly CDK46 inhibitor as the second line of treatment, if necessary, rather than the other way around (both approaches are guideline concordant). Several OCM practices told us they no longer use an expensive prostate cancer vaccine/immunotherapy because guidelines suggest it is no more effective than less-costly alternatives. They also explained that several commercial payers now refuse to cover this prostate cancer vaccine/immunotherapy.

Generics: Generic drugs cost less than the brand name alternatives (although newer generic cancer drugs may still have relatively high prices). The use of generic infused cancer drugs was widely adopted by OCM practices, often before OCM began. However, many new and efficacious but high-price drugs do not have generic substitutes. Moreover, market forces may not work as expected: a pharmacist described a manufacturer raising the price of a brand-name infusion drug after a generic competitor was introduced.

Pharmacy and Therapeutics committees: Most practices have long had P&T committees of physicians and pharmacists that decide whether to add new drugs to the practice formulary, regimens, and order sets.[22] In just a few of the practices we visited, P&T committees explicitly reject costly new drugs for which studies show little value over older, less expensive drugs (e.g., no meaningful survival advantage, no difference in toxicity/side effects). In most practices, each individual oncologist decides whether and how to weigh cost and efficacy when making treatment decisions. If an oncologist wants to use a drug that is not on the practice formulary (or is not consistent with a pathway or national guideline), practices have mechanisms for making exceptions.

> Pathways and guidelines remove variability and standardize care, **but also remove flexibility to control cost.**
>
> —Practice CEO

WHICH INFUSION DRUG COSTS LESS? "IT'S COMPLICATED"

Drug manufacturers and commercial insurers use many strategies to promote costly drugs, which practices told us makes it hard to know the prices of different drug regimens. Some commercial insurers negotiate a lower price for a drug with the manufacturer, and only authorize use of that drug (rather than therapeutically equivalent alternatives) for their insured patients. Some drug manufacturers reduce the sale price of a drug if a practice agrees to use it exclusively rather than a competitor's alternative. Manufacturers sometimes also reduce the price of a common non-cancer drug(s) if the practice (or its parent health system) agrees to also buy the manufacturer's cancer drugs—this could save money for the health system, but increase episode drug costs under OCM. In some cases, these package deals and pricing schemes can result in a practice paying more to buy a generic drug than its brand name equivalent. In addition, drug prices are constantly changing, often several times in a year, making it hard to know whether a particular drug is the lowest price option and adjust order sets accordingly.

OCM practices told us that EHRs do not readily support multiple order sets for different insurers/manufacturers. Practices therefore construct order sets to accommodate the most restrictive commercial payer requirements, and use the same order sets for Medicare patients—even when this results in higher Part B drug spending for Medicare under the average sales price FFS payment rules.

2. Favoring lower-cost supportive therapies

Supportive care drugs prevent or mitigate common side effects of chemotherapy such as nausea, bone loss, and neutropenia (vulnerability to infection). These drugs represent a smaller but still important contributor to episode drug spending. Although practice leaders and oncologists were wary about cost considerations affecting cancer treatment decisions, most were amenable to using less costly but efficacious supportive care drugs. Much of the small relative reduction in Part B episode payments came from emphasizing lower-cost supportive therapy.

OCM led to a relative reduction in episode payments for supportive care drugs that are used to prevent and manage side effects of chemotherapy treatment.

Supportive care drugs prevent or mitigate common side effects of chemotherapy such as nausea, bone loss, and neutropenia (vulnerability to infection). Many brand name supportive care drugs are quite costly (e.g., $5,000 or more for white blood cell growth factors injected after each chemotherapy infusion to prevent neutropenia). Some chemotherapy regimens pose a high risk of causing side effects such as neutropenia or nausea, but others do not. When the risk of neutropenia is low, national guidelines recommend against the use of prophylactic white blood cell growth factors or high-intensity antiemetics (anti-nausea drugs), and many oncologists are comfortable avoiding the use of these drugs, which some patients may not need for several months, or ever. These oncologists tailor the use of supportive therapies to the needs of each patient, rather than automatically ordering the costly drugs.

A few oncologists we interviewed disagreed, and believe the liberal prophylactic use of these supportive therapies—starting with the first chemotherapy infusion—is the best way to prevent problems and avoid ED visits. One such oncologist acknowledged that the cost of using prophylactic supportive care drugs might be far greater than the cost of an ED visit, but felt that avoiding ED visits is beneficial for patients despite the potentially greater cost.

> The way we look at it, by switching to biosimilars we can still keep patients from the risk of developing fatal neutropenia, but at the same time reduce the total cost of care.
>
> —OCM Oncologist

SUBSTITUTING LOWER-COST SUPPORTIVE THERAPIES FOR COSTLY BRAND NAME DRUGS WAS A COMMON VALUE-BASED STRATEGY AMONG THE 47 OCM PRACTICES WE VISITED.

7%

mentioned substituting **low-cost bisphosphonates** rather than denosumab for bone support.

13%

substitute **generic antiemetics** to prevent nausea whenever possible, and others were considering this.

50%

substitute **biosimilar white blood cell growth** factors to prevent fever and neutropenia.

In most practices, these changes were made in EHR order sets or as defaults in the pharmacy formulary; oncologists do not need to make separate substitution decisions for every patient.

3. Reducing drug wastage

Chemotherapy drug doses are generally calculated based on a patient's body surface area (BSA), or weight. Many drugs are sold in single-use vials, which are unlikely to precisely match a patient's dose. Any drug remaining in a single-use vial is discarded and the entire cost of the vial is billed to Medicare. The amount of discarded drug differs for various chemotherapy/vial size combinations, but research shows that up to one third of the drug in a single-use vial may be discarded.[23] This reflects drug manufacturers' financial strategy of packaging drugs in vial sizes larger than needed by most patients, which insurers pay for despite wastage.

Dose rounding and dose banding reduce drug wastage. Dose rounding involves rounding physician-ordered doses up or down to within 10% of the nearest vial size in which a drug is manufactured. Dose banding specifies a standard dose for patients whose BSA is within a certain range or 'band'; for each band, the dose is pre-prepared in syringes or infusion bags. At least 19 practices we visited (40%) use dose rounding, dose banding, or both, and most implemented these cost-saving strategies before OCM began.

A few pharmacists acknowledged that savings from dose rounding/banding are small and not an important factor in reducing Medicare payments. They believe, however, that reducing drug wastage is the responsible thing to do. We cannot assess the degree of drug wastage in any oncology practice, but the same sense of responsibility to reduce drug wastage may be equally present in comparison practices.

A few OCM practices mentioned other strategies to reduce drug wastage.

STRATEGIES TO REDUCE DRUG WASTAGE

(widely implemented before OCM)

1. Scheduling **several patients** who need the same drug for the same day
2. Preventing specialty pharmacies from **mis-shiping** Part D (oral) drugs to patients who no longer need them
3. Dispensing a **shorter 14-day** supply when a patient first starts an oral therapy

Practice Transformation Spotlight

MEDICATION RECONCILIATION REDUCES WASTE

An OCM practice hired a nurse navigator and a pharmacist to focus on their ~400 patients taking oral cancer treatments. The pharmacist does careful medication reconciliation during transitions (e.g., patients leaving the hospital and returning to oral cancer treatment at home), checks drug-drug interactions for patients taking cancer and non-cancer drugs, and ensures that discontinued prescriptions are not automatically shipped by mail-order pharmacies. She discovered many instances of patients receiving costly mail-order drugs they no longer needed (e.g., patients with treatment changes or on hospice), and of specialty pharmacies shipping drugs to the homes of deceased patients.

4. Value of reducing ED visits or hospitalizations

One of the OCM quality measures that CMS uses to adjust payments concerns ED visits. As discussed earlier, reducing ED visits affects hospital revenue, not that of the oncology practice. Reducing ED visits was therefore a common strategy. All 47 OCM practices we visited targeted ED visits as a cost driver that they felt could be curbed through better and faster symptom management, which benefits patients. The average episode of about $34,000 in total payments included less than one ED visit, and payments for ED visits averaged about $150 per episode. (This average includes the many episodes for hormonal therapy, during which there were no ED visits/payments.) Since hospitalizations for cancer patients often start in the ED, practices hoped that preventing ED visits would also prevent hospitalizations. Some individual OCM practices had small per-episode reductions in ED visits or hospitalizations, but as a group there were no differences from our evaluation comparison group.

Despite the focus by participants, OCM had no impact on ED visits, hospitalizations, or related payments.

OCM also had no impact on ED visits or hospitalizations to manage chemo symptoms.

Several practices explained that ED physicians may be unfamiliar with caring for cancer patients, and therefore tend to admit them to the hospital. These practices tried to counteract this tendency by staffing an oncology ED or embedding an oncologist in the ED, to meet patients' needs without a hospital admission.

WHY WAS THERE NO OCM IMPACT ON ED VISITS?

As described in the Chapter 1, OCM practices carefully identified at-risk patients for extra attention—faster phone triage, same-day urgent care, extended clinic hours, robust care coordination—all aimed at preventing ED visits and making care more person-centered. Leaders in several practices described this as win-win. Many care coordinators, navigators, and phone triage nurses defined the goal of OCM as reducing ED visits. It is our sense that many OCM practices did not fully appreciate the small potential for reducing ED visits, toward which they aimed so much effort.

PERSON-CENTERED CARE HAD MIXED IMPACT ON INFREQUENT ED VISITS

ED visits declined (slightly) in both OCM and comparison episodes; no (relative) OCM impact	• Pressures to reduce ED visits (from accountable care organizations, managed care, commercial insurers, etc.) were likely true for both OCM and comparison practices, and both reduced ED visits slightly, but the reduction was not greater for OCM.
Chemotherapy patients have few ED visits (not much room to reduce)	• 6-month episodes averaged <1 ED visit; there wasn't much room to improve. • Some ED visits are not preventable.
More check-in calls to patients may prompt more ED visits	• Additional coordinator/navigator calls to patients may elicit reports of transient symptoms, prompting recommendations to visit the ED to rule out a serious problem.

Nurses in numerous OCM practices described "catches" when they placed a check-in call to a patient who mentioned a new symptom (often not directly caused by cancer treatment), leading the nurse to recommend an ED visit—usually to rule out a potentially serious problem. Some of these ED visits might not have happened without the extra check-in calls. The unintended consequence of more calls to patients possibly prompting more ED visits was not explicitly mentioned by anyone we interviewed in the 47 practices.

Other Cost-Reduction Opportunities: A few practices described systematic efforts to reduce unnecessary advanced imaging (e.g., PET scans). Almost none focused on improving the value of radiation therapy to kill cancer cells.

A MISSED OPPORTUNITY TO IMPROVE VALUE: RADIATION THERAPY

Sometimes both chemotherapy and high-energy radiation are required to kill cancer cells. Radiation oncologists calculate the total dose of radiation a patient requires then divide this into fractions. Patients usually receive one fraction per day (e.g., five daily fractions per week for three weeks). FFS Medicare pays per-fraction, which incentivizes spreading the total dose over more fractions per days, even when this is without clinical benefit, and is more inconvenient and costly for patients. Medicare also pays more when complex radiation modalities are used (e.g., intensity-modulated radiation therapy, stereotactic body radiation therapy). In some clinical situations, national guidelines recommend fewer fractions and less complex modalities as being better for patients and more cost-effective (e.g., breast cancer, palliative radiation for bone metastases).

Thirty-three of the 47 practices we visited (70%) employ radiation oncologists as well as medical oncologists; of these, 14 are independent practices and 19 are owned by larger health systems. Fourteen of the 47 practices employ only medical oncologists and patients are referred elsewhere for radiation therapy. Most medical oncologists told us that they do not discuss treatment approaches, such as reducing fractions, with their radiation oncology peers. With a few exceptions, this was evident even when medical and radiation oncologists were employed in the same practice. Many OCM participants told us that the radiation oncologists in the practice are not in OCM, even when their patients' episodes are, and do not share in any PBPs. Radiation oncologists similarly explained that they are not involved in any OCM-related discussions, planning, or care process changes. For example, highlights from the OCM Feedback Reports are shared regularly with medical oncologists in one practice, but not with radiation oncologists who attend separate staff meetings.

There was no significant reduction in Medicare payments for radiation therapy relative to the comparison group.

OCM did not lead to relatively better adherence to national guidelines for radiation therapy after breast cancer surgery or palliative radiation for painful bone metastases.

This lack of impact was true regardless of whether practices employ radiation oncologists.

Although not discussed by practices we visited, we note that the strong FFS incentives to divide the total radiation dose into more fractions and to use more complex radiation modalities may overpower the more modest OCM incentive to reduce total episode payments and receive a PBP.

5. Many practices found synergies between OCM and commercial VBP models

By the fourth year of OCM, participating practices ranged from having no VBP contracts with commercial payers, to having 90 percent of their oncology patients covered by some sort of VBP model (OCM and commercial contracts combined).

MANY COMMERCIAL VBP CONTRACTS IN NEGOTIATION OR SIGNED

30%
had pre-OCM VBP commerical contracts and made care improvements that were also useful for OCM

27%
discussed VBP contracts with commerical payer(s) but did not sign

17%
negotiated VBP commercial contracts after OCM began, leveraging OCM successes

Most commercial VBP contracts differ from OCM in important ways. For example, few commercial payers attribute episodes to practices based on the plurality of [evaluation and management] office visits as OCM does, and many commercial payers require prior authorization for use of high-cost drugs (which Medicare does not). Despite such differences, several practices described synergies from operating both OCM and commercial VBP oncology models:

- A practice's commercial VBP contract focused on reducing hospital length-of-stay (LOS), which the practice was able to do through better and earlier discharge transition planning. Although LOS is not relevant for Medicare (which pays hospitals by diagnosis-related groups, not by day), the practice expects that better transition planning will reduce total episode costs for OCM as well.
- A practice with several dissimilar VBP contracts developed a four-point strategy to succeed in all of them: (1) expanded their pathways program, (2) improved triage processes, (3) improved access to and utilization of palliative care, and (4) enhanced care coordination.
- By meeting OCM-required care enhancements (e.g., patient navigation, distress screening, survivorship plans) a practice was prepared for similar requirements in its subsequent VBP commercial contracts.
- A practice reduced ED visits and hospitalizations across all its VBP contracts, including OCM.
- A practice implemented a readmission reduction program (as part of a health-system initiative) which improved its performance under OCM and other VBP models. Most practices expect more commercial VBP contracts, and said the lessons they learned from OCM participation would be immensely useful for the future.

NOT ALL PRACTICES WANT COMMERCIAL VBP CONTRACTS

"The oncologists didn't like [the commercial payer's] pathways, **which seemed to be entirely focused on cost, not best medical practice.**"

—Oncologist

"[The Commercial payer] wanted to do an oncology model, **but our [health system] leadership didn't want the value-based oncology model to complicate negotiations for the larger contract for the entire health system.**"

—Finance Director

"[The payer's] **reporting requirements are too high** for such a small share of our patients.

—Practice Leader

CONCLUSIONS

About Value-Based Cancer Care

OCM practices did not articulate a clear vision of what value-based cancer care should look like or how to best achieve it. Instead, practices targeted cost-reduction opportunities that benefited patients and seemed most within their direct control (e.g., better/faster symptom management), and that had little direct impact on their practices' FFS reimbursement (e.g., reducing ED visits does not affect practice revenue). Unfortunately, these cost-reduction areas where not necessarily the most sizable prospects in terms of reducing Medicare episode spending. They used clinical pathways software to standardize treatment decisions, substituted biosimilar and generic supportive care drugs, and reduced drug wastage; many of these efforts began before OCM. Chemotherapy/immunotherapy drugs contribute most to episode spending, but OCM practices offered few examples of explicitly prioritizing lower-price drug treatments (within national guidelines). This was likely due, at least in part, to Medicare FFS payment incentives that favor more treatment with high-price drugs. Although many commercial VBP contracts use methodologies that differ from OCM, practices described synergies between Medicare and commercial VBP contracts, and applied similar value-based strategies.

Using Data for Continuous Quality Improvement

> The feedback report was eye-opening. I like being compared to others. That's good data to show the physicians and get their buy-in for change.
>
> — VP for Oncology Services

OCM practices are required to use data for continuous quality improvement (CQI). To support this requirement, OCM offered practices quarterly Feedback Reports showing practice performance on key cost and utilization metrics, benchmarked against the average for OCM practices, and for all beneficiaries nationwide.

For most practices, this is the first oncology-specific benchmarking data they had ever had access to or received. Prior to OCM, nearly all practices we visited relied on internal clinical data from their EHRs, patient satisfaction survey data or cost information from billing systems to identify areas needing improvement. While these data could help practices target some of their efforts to improve quality or the patient experience, most still had no frame of reference on how their performance of these measures fared against others (e.g., benchmarks).

A few practices (8 out of 47) told us that receiving performance data from CMS was an important motivator for their OCM participation. CMS also offered claims data for all Medicare services (Parts A/B/D) for beneficiaries with episodes attributed to a practice, regardless of where the care was provided or by whom. In addition, many practices used their own internal data to guide CQI, such as patient satisfaction surveys and clinical data from their EHRs, and a few used data from external sources, such as the Quality Oncology Practice Initiative (QOPI) which allows participants to see performance relative to peers on oncology-focused clinical and process measures.

We learned that OCM practices used data in two main ways: to measure performance relative to benchmarks (Feedback Reports), and to measure performance by individual oncologists and/or clinics and identify outliers for corrective action (Medicare claims and EHR clinical data).

Data timeliness versus precision. Before discussing the specifics of how OCM practices use data for CQI, it is important to recognize the differences among the main data sources, and the tension between timeliness, data completeness and precision. The table below shows important strengths and weaknesses practices shared about the three main data sources they used for CQI.

CMS Data

	Quarterly Feedback Reports Provided by CMS	Medicare Claims Files CMS Shares with Practices	EHR Clinical Data
Timeliness	**6–7 months**	**8–20 months**	**Real time**
Completeness	Summary data on all care reimbursed by Medicare (within and outside of practice) for 6 month episodes of care Per-beneficiary-per-month (PBPM)summarized at the practice level 3 month claims runout	Individual claims for all care reimbursed by Medicare (within and outside of practices) for 6 month episodes Aggregated to the practice-episode level Includes both initial claims with shorter runout (2 months), and longer claims runout/more complete data (an additional 6 months and 12 months)	Within-practice/health system only, not care patients receive elsewhere All payers
Precision	**PBPM** (not per OCM episode) payment and utilization rates, summarized at the practice level	**Per OCM episode** payments and service use for individual patients	**Individual patients**, not limited to OCM episodes
Contents	Payment and service utilization rates, including end-of-life care Use of common cancer drugs Patient experience of care survey ratings and composite scores	Individual services and associated payments, all types covered by Medicare	Detailed clinical information No cost/payment information
Ease of use	**Easy** Compare practice performance on key metrics relative to benchmarks Use of supportive care drugs (including biosimilars, generics) by cancer type	**Hard** Data analyzed to show performance by individual oncologists or clinics Risk stratification to identify beneficiaries with high needs Insights about services beneficiaries receive outside practice	**Medium** Data analyzed to show performance by clinician or clinic (dashboards) Clinical quality measurement and monitoring Clinician-level adherence to clinical guidelines and documentation requirements

Feedback Reports, Medicare claims, and EHR clinical data. Quarterly Feedback Reports assign patients to practices based on a few months of claims (bills), and show beneficiary-per-month utilization and payments. They are a rough approximation of episode data, and generally have a 6-7 month lag. They and are intended to benchmark how a practice compares with national patterns, and show the direction and magnitude of change. Since providers have up to a year to submit claims for services (most do so in the first 1-2 months), CMS waits until essentially all claims are submitted for a performance period before creating the final data files used for calculating performance-based payments. Both initial and final files are shared with the practices, and have an 8 to a 20 month lag. Practices and their analytics vendors can decide to analyze initial claims with a shorter 2 month run out or wait for an additional 6 to 12 months for claims with more complete run-out. Practices' EHR clinical data are designed to support care delivery and are therefore "near real time" and not tied to claims billing/processing cycles.

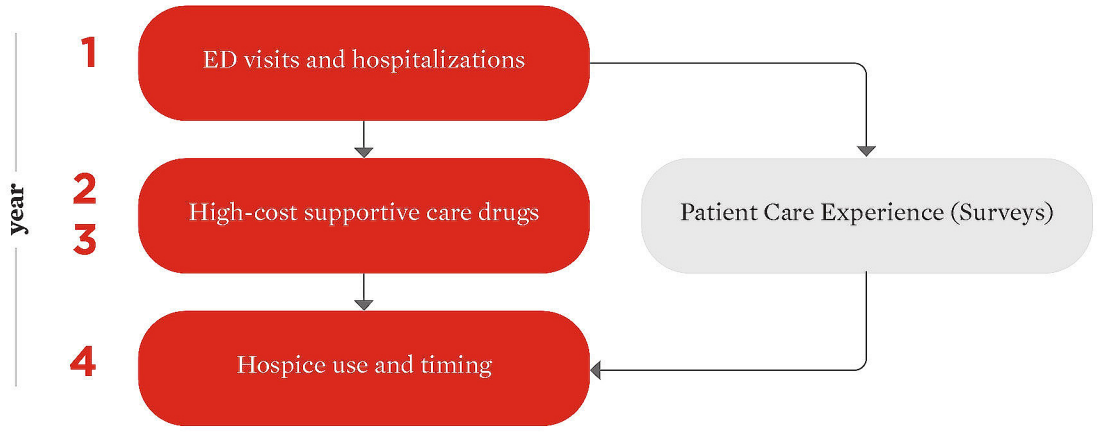
The sections below explore how practices used CMS-provided claims and Feedback Reports, and other data, to measure performance, and some of the actionable insights they gained for improving quality and reducing Medicare spending.

1. Using Feedback Report metrics and benchmarks for CQI

In the first two years of the Model, OCM practices used the Feedback Reports to track performance relative to benchmarks on key activities they had already identified as important for OCM-related CQI. Practices used the baseline Feedback Reports (reflecting the pre-OCM period) to identify areas where they were below the benchmarks - opportunities where they believed they could garner clinician buy-in to quickly improve care delivery. They also focused on the OCM quality measures that CMS uses to calculate performance-based payments. As previously discussed, many worked hard in the first 1-2 years of OCM to reduce ED visits (and OCM quality measure) through better and faster symptom management, and tracked performance in the Feedback Reports. For example, Feedback Reports indicated that one practice's ED utilization decreased over time, which they believe was due to a concerted "Call Us First" patient education initiative. In years 3-4, practices used the Feedback Reports to identify new CQI opportunities that they had not yet addressed. For example, many practices focused on hospice use and timing (an OCM quality measure) in later years of the Model.

OCM practices used the Feedback Reports to understand where their performance was below that of other practices—where there might be room to improve. They explained that benchmark evidence from the Feedback Reports is persuasive to oncologists and other staff, and helps garner buy-in for subsequent CQI activities. Several small OCM practices told us they rely heavily on the Feedback Reports, because they lack internal analytic abilities and cannot afford to hire consultants to analyze

MANY PRACTICES USED FEEDBACK REPORTS TO FOCUS ON HOSPITAL SERVICES FIRST, OTHER CQI OPPORTUNITIES LATER



claims or EHR data or conduct patient surveys. A few used data from the Feedback Reports to identify whether they were outliers in use of imaging services, or post-acute care.

ED visits and hospitalizations. As discussed in previous chapters, nearly all practices we visited focused their year 1 OCM activities on reducing ED visits and hospitalizations. Many began these initiatives before OCM, because this is a high priority in other CMS models and from other payers. As described earlier, they expected that focusing on ED visits would both improve care for patients, and lower total episode spending (without affecting practice FFS reimbursement). Practices closely tracked their performance over time on ED visits and hospitalizations, and whether their improvement efforts were having an impact.

Across OCM, efforts to reduce ED visits did not have a significant impact, relative to the comparison practices used in this evaluation. However, some practices did glean useful insights from Feedback Reports and other data that guided their efforts to reduce ED visits.

EARLY PERFORMANCE ON ED USE AND HOSPITALIZATIONS LED TO EXPANDED SAME-DAY APPOINTMENTS AND FASTER PHONE TRIAGING

Feedback Reports showed a practice that their **ED use was high relative to benchmarks**. They hired additional nurses at their central call center to triage calls and schedule same-day appointments.

Data from Feedback Reports prompted a practice to redouble efforts to educate patients to **"Call Us First" before going to the ED**. They reorganized the call center to ensure triage nurses could return calls quickly.

Practice Transformation Spotlight

FEEDBACK REPORTS GUIDE PRACTICE EFFORTS TO PREVENT ED VISITS

An OCM practice affiliated with a large health system learned from the first year's Feedback Reports that their ED use was high relative to benchmarks. They hired additional nurses at their central call center to triage calls and schedule same-day appointments for symptom management, to preempt ED visits. By the end of year 2, the practice received a sizable performance-based payment due in part to fewer ED visits and hospitalizations. They built on that early success by adding a new dedicated triage nurse to offer immediate symptom management when needed.

In reviewing Feedback Reports, combined with their own internal data, another OCM practice that 55 percent of cancer patients who visited EDs did not call the practice first, even though 80 percent of ED visits were during regular business hours. The practice redoubled efforts to educate patients to call the practice first, before going to the ED, and reorganized their call center and nurse triage help line to ensure that patient calls are returned quickly.

Hospice use and timing. Several practices told us that they were unaware of their poor performance on end-of-life care until receiving the Feedback Reports. This evidence of poor performance was not sufficient motivation for change in several practices, even after seeing the same pattern for several quarters. However, in some practices this evidence was compelling to physicians and other leaders, and the practices improved internal processes to hold earlier hospice discussions with patients.

USING FEEDBACK REPORTS TO TARGET ACTION

Hospice

- A practice with low hospice use, relative to benchmarks, standardized Advanced Care planning and improved coordination during the transition to hospice, which increased hospice use from 45 percent to 75 percent (among patients who died).
- An academic practice with low hospice rates relative to benchmarks conducted retrospective chart reviews and found that many late-stage cancer patients with multiple hospitalizations were not receiving palliative care. Practice leaders implemented a pilot program at their hospital to refer all hospitalized patients with metastatic cancer to inpatient palliative care. This pilot resulted in a 25 percent increase in hospice use.

High-cost supportive care drugs

- Feedback Reports showed practices their use of Part B and Part D drugs, including non-chemotherapy drugs commonly used as supportive therapy to mitigate toxic side effects of chemotherapy. By the second or third year of OCM, many practices identified overuse of high-cost supportive care drugs and encouraged oncologists to prescribe lower-cost/higher-value drugs, such as generics and biosimilars or created order templates to more directly implement these strategies.

- Feedback Reports show that a practice used more of a certain high-cost anti-nausea drug than other practices, and also used more white blood cell growth factors. The practice added guidance in regimens and order sets that steer oncologists to prescribe higher-value supportive therapies.

- A large practice holds frequent pharmaco-economics committee meetings, and began focusing on prescribing and utilization patterns shown in the Feedback Reports to better inform prescribing decisions based on drug efficacy and costs.

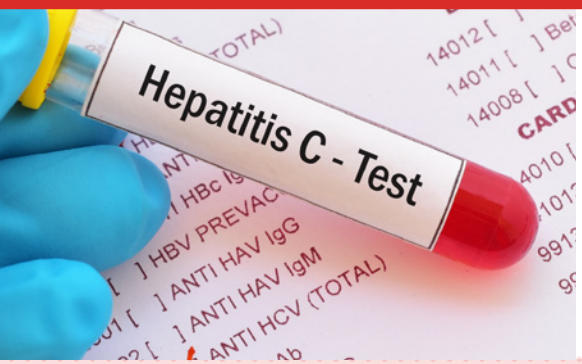
Patient experience As discussed earlier in this report, survey respondents overall rated cancer care quite highly before OCM began and there was little room to improve. However, survey scores for individual practices varied and the Feedback Report benchmarks showed some practices areas where they could potentially improve performance.

- After seeing low patient survey scores on shared decision making, one practice increased patient education by adopting some of the survey language about shared decision making, and coached oncologists to hold more effective discussions with patients. The practice's **scores improved more than 40% from year 1 to year 3.**

Mortality

- The Feedback Reports also show mortality by cancer type, and although practices' patient populations differ in terms of stage at diagnosis, comorbidities, and social determinants of health, a few practices derived useful insights from the mortality benchmarks in the reports.

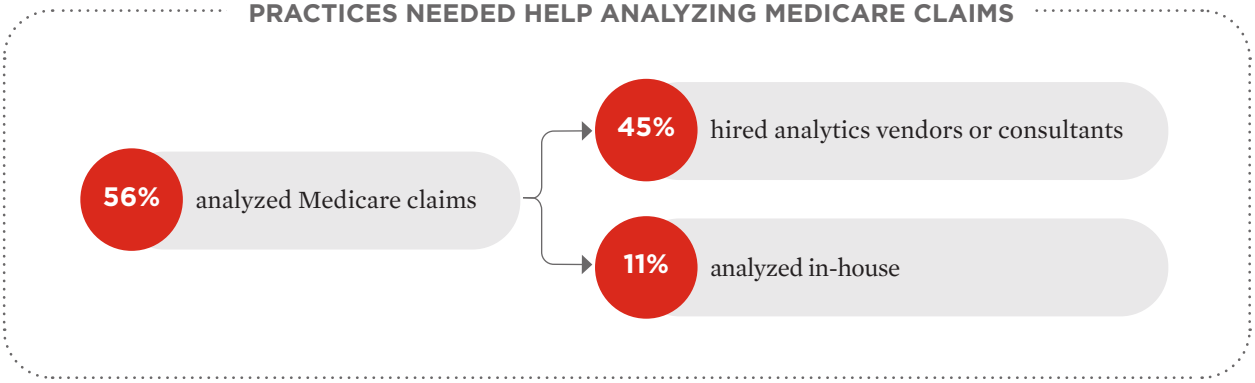
FEEDBACK REPORTS SHINE LIGHT ON HIGH LIVER CANCER RATES AND MORTALITY



Feedback Reports showed that an OCM practice had unusually high liver cancer mortality, despite employing liver cancer specialists and surgeons. This focused more attention on liver cancer, which is unusually high in the practice's geographic area. Since treatment is more successful when liver cancer is diagnosed before it spreads, the practice engaged with local hospitals and primary care practices to improve screening for Hepatitis C (a contributor to liver cancer), and emphasize early diagnosis.

2. Using Medicare claims for CQI

Twenty-six of the practices we visited (55%) attempted to use CMS-provided Medicare claims data, most with the help of analytics vendors/consultants. Practices that made use of the claims data tended to be larger and/or part of a health system: some received analytic support from their parent health system, and others had existing contracts with a data vendor or consultant (e.g., for EHR data support), which they amended to add analysis of Medicare claims data.



Vendors or consultants typically presented data in formats specified by the practice. Vendors that had more than one OCM practice as clients used the same reporting formats, and sometimes compared their clients—an additional set of benchmarks derived from Medicare claims. Many vendors created dashboards showing key metrics at the level of individual oncologists, or for separate clinics. A few practices asked their vendors to stratify metrics in other ways, for example by care teams, which typically included an oncologist, a nurse, a care coordinator or navigator, and a medical assistant. One OCM practice used the CMS claims data to explore episodes by subspeciality or disease area to identify whether they had problems with patient "leakage" rates with ones seeking cancer treatment outside the practice. The Medicare claims validated their internal data that this was not a large concern across subspecialties.

Practices use dashboards and similar tools to share performance metrics with individual oncologists used and demonstrate where there is room for improvement; they find that performance data is particularly helpful to secure buy-in. A small group of OCM practices employ the same data vendor to analyze their Medicare claims and present dashboard highlights prescribing patterns (chemotherapy and supportive medications), imaging, ED and other utilization, and episode cost. One practice we visited found this data particularly helpful because the vendor is able to compare their performance on key claims-based metrics across practices, and these practices hold a monthly meeting to share best practices and compare their progress with that of their peers. Each oncologist receives a monthly report card comparing themselves with their peers in the same subspecialty disease group (e.g., thoracic oncology). Practice leaders find that this prompts discussions about practice patterns that were not possible before having the evidence assembled from CMS claims.

By Year 3, nearly all practices shared feedback with Oncologists

YEAR 1

89%

of practices shared feedback with oncologists about (at least one):

1. patient care experience
2. adherence to clinical guidelines
3. ED visits hospitalizations
4. high-cost therapies

YEAR 3

99%

shared feedback with oncologists about at least one; 55% about all four.

PHYSICIAN-LEVEL AND CLINIC-LEVEL DATA REQUIRE CAREFUL INTERPRETATION

In a small practice, **caseloads can vary greatly from one period to the next**, preventing meaningful interpretation. One solution: removing outliers that skew averages.

When a practice's clinics serve **very different populations**, comparisons may not be useful. One practice's rural clinic serves low-income patients with many housing, transportation, and other challenges; its suburban clinic serves affluent patients who don't face these challenges. Comparing the two did not suggest actionable improvements for either.

Many small practices said they would prefer being benchmarked against other small, independent practices (peers), rather than the national and OCM benchmarks in the Feedback Reports.

Many practices organize dashboards to display the OCM quality measures at the practice level, clinic level, and/or oncologist level. These quality measures include pain and depression screening; utilization (ED visits, hospitalizations); end-of-life care (hospice use more than 2 days before death, chemotherapy in the last weeks of life); and patient satisfaction (from surveys). A few practices that use clinical pathways software share information with oncologists about adherence to pathways. Very few practices mentioned sharing episode cost data with oncologists.

Our OCM evaluation includes repeated surveys of OCM practice leaders.[24] From that survey, we know that OCM practices increased performance feedback to oncologists after OCM began. Some practices used data from Medicare claims, coupled with other internal data (usually from EHRs), to assemble this feedback for oncologists.

Several practices told us they aggregate data at the clinic-level, to compare performance at their various sites, and many aggregate data at the oncologist-level using report cards or other displays to show relative performance. A few cautioned that performance data comparing oncologists or clinics can be difficult to interpret, and may not lead to actionable CQI insights.

Risk stratification. In addition to using claims data to review costs and utilization patterns or create dashboards to inform CQI, a few practices used Medicare claims data to identify high- and low-risk patients.

Their goal was to better understand patient attributes that could signal higher-risk (and higher spending), to guide early intervention and direct additional resources to those patients. One practice developed a risk assessment tool in their EHR system - based on diagnosis, treatment regimens and comorbidities—using claims data and predictive analytics to assess risk based on a patient's prior utilization patterns. Two practices mentioned their data vendors were using Medicare claims data, coupled with EHR data, to develop risk scoring methodologies and systematically identify high-risk patients.

Challenges. The most common challenge practices mentioned was the timeliness of Medicare claims provided CMS. Lags of more than a year made it difficult to measure incremental impacts of improvement initiatives. Practices also felt limited using lagged claims data to inform high-value strategies for chemotherapy use given how often drug prices and indications can change. As a result, several practices told us they stopped analyzing Medicare claims because, after spending considerable sums on analytics vendors, the dashboards did not yield useful, actionable insights to guide future improvement activities. While data analytics vendors' prices varied, some practices described paying $100,000 to $200,000 for the first analysis of their claims. Others said vendors fees could exceed 50% of their MEOS payments.

One practice that analyzes their Medicare claims learned that total episode costs of most oncologists fluctuate above and below the target across performance periods. For example, out of eight oncologists in the practice, only one consistently stayed above or below the target for each of the first three performance periods, while all others fluctuated between periods. The practice concluded that the individual oncologists' episode costs, and those of the practice, are primarily driven by case mix fluctuations. They feel that an oncologist, or the practice, cannot do much to have an impact on costs without negatively impacting patient

> "We wish our practice could have used the CMS claims data in a timelier way to understand what [the practice] was doing early on. It would be helpful to get access to claims data much sooner; however, **there is a tension between receiving incomplete claims data faster, versus complete data slower.**
>
> —Oncologist

TURNING DATA INTO INSIGHTS IS CHALLENGING

45%

said the **cost of analyzing claims data is prohibitive.** Vendors fees for data analysis can amount to 50–75% of a practice's MEOS payments.

30%

said **claims data are too lagged to inform CQI.** 14- to 18-month lags mean improvements made in year 1 are not reflected until year 3.

13%

stopped analyzing claims because **analytics are too costly for the limited insights** gained. Six practices paid a vendor for one year but stopped after gleaning no actionable CQI insights.

care or "cherry picking" patients. Another practice raised a similar concern about interpreting benchmarks in the Feedback Reports, because practices differ in the severity of their patient case mix (disease stage, comorbidities, social determinants of health, etc.).

3. Using other data for CQI

Nearly all 47 practices we visited had certified EHRs before OCM began, and several upgraded or replaced their EHRs during the first four years of the Model. Some EHRs were designed to generate useful data outputs or reports for CQI purposes, but most require additional analytics and customization. This posed barriers, especially for smaller or under-resourced practices. Large practices and those affiliated with medical centers or health systems were better able to collect and analyze performance data and create customized output or reports from their EHRs and other internal systems. When practices are part of larger health system, they have access to data about care provided across their entire system, such as medical records and comprehensive discharge data from their affiliated hospitals. This more complete data has utility for CQI, for example going beyond numbers of hospital readmissions to understand the medical reasons for readmissions—some of which could be preventable. For example, two practices in large health systems noticed that patients who came to their hospital EDs with dehydration were almost always admitted to the hospital. They held educational sessions with ED staff about hydration for chemotherapy patients, and one stationed an oncology nurse in the ED to meet cancer patients'

> Given the high cost of such analytic assistance, and the considerable delay in CMS claims data, any scant insights our data analysts could derive from it are largely obsolete and not worth the investment.
>
> —Quality Director

CQI INSIGHTS FROM TRIANGULATING MULTIPLE DATA SOURCES

An OCM practice hired a vendor to combine Medicare claims and EHR data and generate dashboards tracking progress on key OCM metrics (e.g., pain management, ED visits, hospitalizations, referrals to hospice). The practice holds a monthly multidisciplinary OCM leadership meeting to review the dashboards, compare performance across clinics, and target CQI. For example, scores from pain screening highlighted clinics where additional psycho-oncology and hospice services are needed.

hydration needs without hospital admission. Both practices planned to track whether admissions related to dehydration declined in their health systems' hospitals.

Many EHR vendors offered data analytics and performance reports as product enhancements or add-ons, but this was often cost-prohibitive. An information technology manager at one large OCM practice noted that they attempted to purchase data analytics products from their EHR vendor in pieces, but the vendor required purchasing the "entire OCM module." They made the large investment but were disappointed in its limitations to identify actionable CQI. The practice later hired a different vendor to analyze their CMS claims and generate reports on performance metrics from their EHR, without the costly add-on module. The new vendor is measuring regional and clinic level performance, because the practice has locations throughout their state, and this is proving useful: early analyses indicate some clinics have higher rates of ED visits, hospitalizations, and ancillary service use.

Several practices mentioned that private payers are beginning to provide performance metrics, but this usually represents a very small share of a practice's patient population. A few practices mentioned using data from external sources, such as QOPI, but those data are not nationally representative.

OTHER DATA SOURCES OF LIMITED UTILITY

Other payer data

Each commercial plan (payer) covers a **small share of a practice's patients**, insufficient for establishing benchmarks.

Patients can change plans every year, making it difficult to understand episode utilization and cost patterns.

QOPI data

QOPI is **voluntary** and attracts high-performing practices that choose which data to report; **benchmarks can therefore be skewed**.

QOPI does not capture all services and has **no cost or payment information**, making it difficult to understand (or improve) value.

CONCLUSIONS

About Data, Benchmarks and CQI

OCM practices used the Feedback Reports to understand progress in meeting OCM requirements and improving care. While a only a few practices were initially motivated to join OCM for the opportunity to receive Medicare claims data, most came to appreciate the Feedback Reports and found them valuable for identifying areas where improvement efforts could be productive.

- In year 1, practices used Feedback Reports to identify poor performance (relative to benchmarks) such as ED visits and hospitalizations where there was room to improve.
- In later years, practices used Feedback Reports to tackle more challenging topics such as hospice use and timing, and the use of higher-value supportive care drugs.

Practices found physicians were persuaded by benchmarked performance data, which helped garner buy-in for CQI initiatives.

Practices described challenges in using Medicare claims data, especially timeliness/lags and analytic costs. Several practices that initially paid substantial fees to data vendors to analyze these data eventually stopped, because it yielded few actionable insights. Small practices and under-resourced practices serving disadvantaged patients, could least afford to hire analytic help.

- Nevertheless, several large practices used claims data to compare performance across their clinic sites or across individual oncologists, to identify poor-performers and target remediation efforts.
- A few practices in urban areas used claims data to understand which of the many local hospitals their patients use for emergency care. They hoped to improve communication with the ED staff in those hospitals, to avoid inpatient admission for cancer patients whose needs (e.g., hydration) can be met in the ED.
- A few practices used claims linked to EHR data to conduct root cause analyses (e.g., reasons for readmissions), which guided CQI efforts.

Standardizing Efficient Care Delivery

> We were a federation of independent practices that joined into a larger group...OCM gave us the incentive to pull all the sites together.
>
> — Lead Oncologist

An important motivation for OCM participation was standardization, and most OCM practices we visited (90%) standardized important elements of care delivery. Standardization has three interrelated meanings with respect to patient care, and many practices mentioned more than one:

- Standardizing key elements of person-centered care and patient navigation (addressed in Chapter 1)
- Standardizing treatment protocols (addressed in Chapter 2)
- Standardizing care delivery across their clinic sites and patients (the main topic of this chapter)

Every practice we visited has multiple clinics: a few have 2 clinics, most have 3–8 clinics, several have more than 12, and the largest have more than 100 clinics. Many also have one or more hospitals in their health system, and sites for ancillary services (e.g., imaging, radiation therapy). We observed two main arrangements:

- **Hub and satellites:** common in academic and other large health systems, where the hub or main clinic is on the medical center campus, and the satellites are community-based clinics in the suburbs and exurbs (some quite rural). Often a patient will have diagnostic tests, surgery, or other inpatient care at the medical center, then receive chemotherapy treatments at the satellite clinic nearest their home.
- **Federation:** common among independent practices, where clinics vary in size and have some (varying) degree of management autonomy. Often the individual clinics are located near community hospitals where surgery, radiation therapy, social work, and other services are available. Some practices also operate small rural clinics, the smallest of which are open just a few days a week, staffed by oncologists and other clinicians on a rotational basis who otherwise work at one of the larger clinics.

Regardless of the arrangement, we heard two themes about implementing OCM as a consistent program across multiple clinics/sites: standardizing information technology and standardizing services. This chapter also addresses how standardization prompted by OCM benefits non-Medicare patients (i.e., spillover).

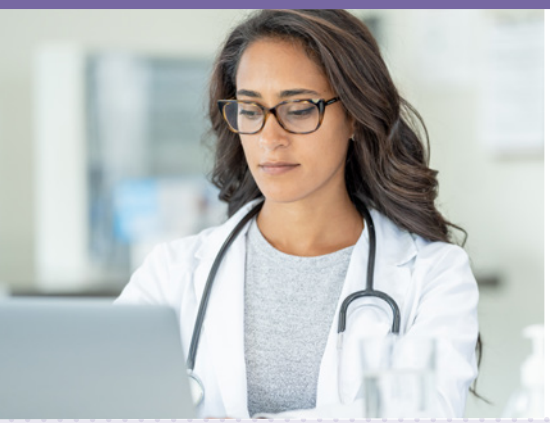
> Our three sites are now using the same EHR. **We work more closely together** and it's easier to accommodate patients who have surgery in our hospital, then go back to their local clinic for chemo, with one unified record in the EHR.
>
> —Practice Leader

1. Standardizing information technology

Many of the practices we visited expanded over time through mergers and acquisitions. When two or more practices merge, they usually bring different EHRs, business/analytic software, and other technology. Most practices try to reduce complexity by shifting to a single EHR platform, and otherwise aligning information technology. A few practices told us that staff at their constituent clinics were so firmly wedded to their previous systems that there was little enthusiasm for consolidating to a single standard. For example, when several clinics are each affiliated with different community hospitals, and those hospitals use different EHRs, it can be expedient for each clinic to use the same EHR as its affiliated hospital—even if this results in a multi-site practice having multiple EHRs.

There are non-trivial challenges when a practice uses multiple EHRs across its clinics/sites. Under OCM, CMS requires population-based quality measure reporting at the practice level (e.g., depression screening every six months), and some other payers have similar requirements. When a practice uses one integrated EHR across all its clinics, this quality measure reporting is reasonably straightforward. However, when a practice has multiple EHRs, and different accompanying analytic software, merging data and reporting at the practice level is cumbersome and labor-intensive. Multiple EHRs can also complicate patient care, and even jeopardize quality, when a patient receives services in more than one location and the medical records are not consolidated and available to all clinicians.

STANDARDIZING IT BENEFITS PRACTICES AND PATIENTS



- A single EHR **enables standard order sets** across the clinics, which makes drug purchasing more efficient.
- A single pathways software program simplifies necessary updates when the evidence-base suggests corrections for efficacy or safety.
- Updated and consistent phone triage technology, and 'scripted' symptom management software for triage nurses, reduces **delays for patients seeking medical advice**.

Several practices we visited began OCM with multiple legacy EHRs across their clinics/sites. Practice leaders told us they wanted to migrate to a single EHR, but this is a costly and complicated process and clinicians resisted learning a new EHR. The OCM reporting and documentation requirements were the impetus to finally convince all internal stakeholders to adopt a single technology platform, and the MEOS resources helped subsidize upgrades and staff retraining. Beyond gaining efficiencies for OCM reporting, practices described several benefits from standardizing technology across their sites.

2. Standardizing care across sites/clinics

Leaders in many practices mentioned standardizing care across their sites/clinics, beyond information technology and treatment regimens/protocols. They wanted to standardize efficient use of supportive care drugs; navigation and care coordination; patient education and shared decision making, especially related to end-of-life care; quality and quality measurement—leaders envisioned a single practice rather than an amalgamation of siloed clinics. The OCM concept of the practice as the unit of measurement, reporting, and compensation made this desire more of a concrete necessity. Leaders said that having awareness that the practice would succeed or fail in OCM together, not as separate clinics, brought a new spirit of interdependence and cooperation across their sites.

> We aim to provide the same standard of care regardless of where a patient is treated.
>
> —Practice Leader

Some practices had an explicit goal of making care essentially identical in all their clinics, and stated that a patient should expect the same care and services regardless of which clinic their oncologist works in. For example, they mentioned standardizing care processes, tools and templates, and standardizing staff positions/assignments, to achieve greater uniformity. Other practices, especially those with a few very small rural clinics, stated that offering identical services across sites would be financially and logistically impossible, but still wanted to offer more consistent services to patients in rural communities. For example, it is not financially feasible to employ a social worker at a very small rural clinic, but some practices offer these services to their rural patients via telehealth.

A few very large practices told us that although they have a long-term goal of standardizing care across their many clinics, this has proved to be extremely challenging, and they are not yet entirely successful. Different cultures within each clinic, and different opinions about investments (especially hiring additional staff), prevented consensus. For example, a large practice consolidated management functions, but allows the director of each clinic to decide how to spend operating funds and invest profits. Some clinics hired nurse navigators, others hired social workers or financial counselors. Practices may therefore have somewhat different enhanced oncology services, funded by OCM, across their clinics.

Several practices mentioned benefits from standardizing workflows and care processes across all their clinics, and from standardizing patient education, especially related to Advanced Care planning.

> Our practice does only as well as our worst performing clinic. **OCM made us look at [performance] on a more global scale.**
>
> —VP, Value Based Contracting

STANDARDIZING EFFICIENT CARE DELIVERY

Practices made a number of changes to make care delivery more standardized and more efficient. Some examples:

- Standardizing the frequency and timing of patients' lab tests to prevent excessive testing and associated costs.
- Standardizing imaging/scans such as when to use CT scans rather than most costly PET scans.[25]
- Standardizing risk assessment to target the highest-risk patients for proactive outreach and symptom management, focusing extra effort where it can do the most good.
- Standardizing survivorship discussions for rural patients using telehealth, to minimize travel (and reduce no-shows).
- Standardizing and simplifying documentation, and shifting these tasks from physicians to other staff, whenever possible. Several practices hired scribes to reduce documentation burden on physicians, opening more of physicians' time for appointments with patients.

Practice Transformation Spotlight

SCRIBES REDUCE PHYSICIAN DOCUMENTATION BURDEN

At least four OCM practices hired medical scribes to take notes during physician office visits and complete documentation, including OCM-required documentation, in the EHR. They told us this improves physician morale and productivity, and enhances buy-in and support for quality measurement. One practice began using scribes in oncology (spurred by OCM reporting and funded with MEOS resources). This was so successful and so welcomed by physicians that other departments across their health system also hired scribes.

STANDARDIZING PATIENT EDUCATION AND ADVANCED CARE PLANNING

Many of the person-centered changes that the practices implemented for OCM were deliberately standardized from the outset, with new staff assignments, new tools, and new workflows.[26] Leaders in many practices explained that care is now more consistent across all their clinics, and they train staff and monitor performance to ensure this consistency. Most deployed this standardization across the entire practice, which they believe improves quality for all patients. For example, all practices previously educated patients about their treatment plans; both the timing and content of these educational sessions were expanded and standardized due to OCM.

HOW STANDARDIZING CARE FOR OCM SPILLS OVER TO BENEFIT ALL PATIENTS

Expanded clinic hours, urgent care, and improved phone triage improve timely symptom management for all patients.

All patients encouraged to **"call us first"** rather than go to an ED.

Care Plans created for every patient with IOM-recommended elements (treatment plan, Advanced Care Plan, survivorship plan, etc.) However, OOP estimates can only be created for OCM because they can be complex or time consuming to create.

Screening and follow-up for depression and pain, and other psychosocial needs.

Adherence monitoring to identify and address potential barriers to care.

EHR changes in order sets or as defaults in the pharmacy formulary; oncologists do not need to make separate substitution decisions for every patient.

Standardized tools to assess each patient's risk status and offer proactive outreach and targeted support for those at highest risk.

Most OCM practices now create Care Plans for every patient, not only those in OCM. They also assign staff to review the information in the Care Plans with every patient, usually before treatment begins. OCM Care Plans include documentation of Advanced Care planning to encourage cancer patients to designate a health care decision maker/proxy, and articulate preferences about care (e.g., Do Not Resuscitate forms). In four practices we visited, new staff were hired to discuss Advanced Care planning with cancer patients—one practice hired social workers for this role, the others hired Physician Assistants or Nurse Practitioners—and standardized the timing and documentation of these discussions. One practice built an automated 'trigger' in the EHR that alerts a nurse when a patient successfully completes treatment, and the nurse schedules a session with the patient to explain survivorship care and routine monitoring. In nearly all OCM practices, these improvements apply to all patients. Many OCM practices also standardized financial counseling about out-of-pocket costs, and many standardized risk assessment tools to identify high-risk patients and additional proactive outreach to support them.

> "It would be difficult to undo these initiatives now that they have been embedded in the clinic."
>
> —Oncologist

3. Benefits of standardization for non-Medicare patients (spillover from OCM)

In every practice we visited, we saw examples of improved care delivery that applies to every patient, not only those with Medicare FFS insurance—beneficial spillover from OCM. Many oncologists, nurses, and administrators told us that high-quality care should be the same for every patient, and we heard many versions of the common sentiment: **"If it's good for Medicare patients, we should do it for everyone."** Having redesigned workflows, tools, and staff assignments for OCM, they said it would be pointlessly confusing to continue the 'old' processes for other patients.

> "However, it would be very difficult and painful [to continue] without a payment reform structure. **Infrastructure dollars [like MEOS] are very important to offering enhanced cancer services.**"
>
> —Oncologist

Some standardization may be more obvious to patients, such as expanded clinic hours and faster phone triage. Other standardization may be more obvious to clinicians and staff, such as standard order sets and Care Plan checklists. Enhanced oncology services and value-based care are important for other payers. Several practices told us that during contract negotiations with commercial and managed Care Plans, they successfully argued that Medicare funded initial investments (through MEOS payments) which benefited everyone, and other payers should now contribute to sustaining them.

CONCLUSIONS

Standardization for OCM Benefits All Patients Served by a Practice

- Practices valued the opportunity OCM provided to increase standardization and get everyone, including separate clinics throughout their practice, to deliver care consistently. Leaders said that standardizing services, and being held accountable as a single practice, brought a new spirit of interdependence and cooperation across their sites.
- The OCM requirement for practice-level reporting prompted many practices to improve and standardize care delivery, consolidate to a single EHR across the practice, and adopt a single suite of tools (e.g., clinical pathways software, scripted telephone triage software).
- OCM practices standardized workflows and services across their multiple clinics, especially screening for pain and depression, patient education, survivorship planning, patient navigation, and Advance Care planning.
- Standardizing technology, workflows, and care delivery benefits all patients in a practice. This spillover from OCM also benefits other payers, as OCM practices highlight during their commercial contract negotiations.

OVERALL CONCLUSIONS

Participants' Perspectives on OCM

OCM led to substantial patient-centered practice transformation. The most common improvements were implemented to meet specific OCM requirements, such as documenting Care Plans, consistent depression screening, OOP cost estimates to help patients plan for the financial impacts of cancer treatment, and better patient navigation. We conclude that the practices invested MEOS funds and hired staff to comply with Model requirements. In addition, most of these improvements were implemented for all patients in the participating practices, with many examples of beneficial spillover to non-Medicare patients.

Practices focused transformation efforts on the quality measures that CMS uses to adjust performance-based payments in OCM, and that also had potential to reduce total episode spending without markedly affecting practice's FFS reimbursement. The clearest example was the widespread focus on reducing ED visits and hospitalizations – two of the original quality measures CMS used for payment adjustment. Many OCM practices invested in better and faster symptom management by extending clinic hours, hiring more staff, changing clinic schedules to enable more same-day urgent care appointments, and improving phone triage to answer patients' calls quickly. Practices expected that better symptom management would prevent ED visits and some subsequent hospitalizations, and reduce FFS payments to hospitals and total episode spending, without affecting practice FFS revenue.

Earlier referral to hospice is another OCM quality measure, and Advance Care Planning is an OCM requirement. Earlier use of hospice could also reduce total Medicare episode spending, and help practices earn performance-based payments. Despite these aligned incentives, hospice use and timing did not improve more for OCM patients than for the evaluation comparison group. Practices described many challenges in encouraging earlier hospice including patients' cultural, religious, and life circumstances, and the tendency of many oncologists to continue systemic therapies even when potential benefit for the patient is slim.

OCM requires depression screening and a follow-up plan. Survey respondents reported that the biggest gap in services —an opportunity to improve patient care experience—was getting help with emotional problems. Many practices lack relevant specialists/expertise on their own staff and in their communities. They explained that reimbursement for mental health professionals is too low to cover their salaries. Faced with this need, and inadequate resources, practices could use MEOS funds to hire and support more mental health practitioners – but only a few did.

Practices successfully reduced episode spending for supportive care drugs. They substituted biosimilar, generic, and less costly drugs, and reduced the prophylactic use of supportive therapies that may not be needed by all patients. Many of these improvements began before OCM and align with national clinical guidelines. On the other hand, practices missed the opportunity to reduce episode spending by following clinical recommendations for expanding use of short-course radiation therapy. We note that the majority of OCM practices we visited employ radiation oncologists and Medicare FFS incentivizes long-course radiation therapy.

Some OCM practices used the benchmarks shown in Feedback Reports to identify targets where improvement seemed feasible, and garner physician support for change. They generally found the CMS claims data to be less useful, very costly to analyze, and often outdated by the time the analyses were completed or additional time was allowed for the final reconciliations. Some spent a large share of their MEOS revenue on data analytics vendors or consultants, but several stopped after gleaning few actionable insights.

Annex

[1] Chemotherapy is defined for OCM purposes as systemic therapies including cytotoxic chemotherapy, hormonal therapy, biologic therapy, immunotherapy, and combinations of these therapies.

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[2]Demartino JK and Larsen JK. Equity in cancer care: pathways, protocols, and guidelines. J Natl Compr Canc Netw Oct. 1, 2012;10, Supplement 1:S1–S9.

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[3]Page RD, Newcomer LN, Sprandino JD, et al. The Patient-Centered Medical Home in Oncology: From Concept to Reality. 2015 ASCO Educational Book. Retrieved on June 7, 2016 from http://meetinglibrary.asco.org/content/11500082-156

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[4]Demartino JK and Larsen JK. Equity in cancer care: pathways, protocols, and guidelines. J Natl Compr Canc Netw Oct. 1, 2012;10, Supplement 1:S1–S9.

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[5] National Cancer Institute Center to Reduce Cancer Health Disparities. Patient Navigator Research Program. Available at: NCI CRCHD—National Cancer Institute. Core functions of patient navigation: Coordinating appointments with providers to ensure timely delivery of diagnostic and treatment services. Maintaining communication with patients, survivors, families, and the health care providers 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 financial support and helping with paperwork. Arranging transportation and/or child/elder care. Facilitating linkages to follow-up services. Community outreach. Providing access to clinical trials. Building partnerships with local agencies and groups (e.g., referrals to other services and/or cancer survivor support groups).

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[6]Delivering High Quality Cancer Care; https://www.nap.edu/catalog/18359/delivering-high-quality-cancer-care-charting-a-new-course-for.

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[7]Arastu A, Patel A, Mohile SG, et al. Assessment of Financial Toxicity Among Older Adults With Advanced Cancer. JAMA Netw Open. 2020;3(12)

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[8]https://www.cancer.gov/about-cancer/coping/survivorship/follow-up-care.

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[9]https://www.asco.org/practice-policy/cancer-care-initiatives/prevention-survivorship/survivorship-compendium.

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[10]Case studies were conducted before the COVID-19 public health emergency; more care may now be provided via telehealth.

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[11]Patient Health Questionnaire 2: https://www.hiv.uw.edu/page/mental-health-screening/phq-2.

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[12]Patient Health Questionnaire 9: https://www.mdcalc.com/phq-9-patient-health-questionnaire-9.

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[13]Ersek M, Miller SC, Wagner TH, Thorpe JM, et al. Association between aggressive care and bereaved families' evaluation of end of life care for veterans with non-small cell lung cancer who died in Veterans Affairs facilities. Cancer 2017;123(16):3186–3194.

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[14]Kris AE, Cherlin EJ, Prigerson H, et al. Length of hospice enrollment and subsequent depression in family caregivers: 13-month follow-up study. American Journal of Geriatric Psychiatry 2006;14(3):264–269.

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[15]Wright AA, Keating NL, Ayanian JZ, et al. Family perspectives on aggressive cancer care near the end of life. JAMA 2016;315(3):284–292.

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[16]Wright AA, Keating NL, Balboni TA, et al. Place of death: correlations with quality of life of patients with cancer and predictors of bereaved caregivers' mental health. Journal of Clinical Oncology 2010;28(29):4457–4464.

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[17]Wright AA, Zhang B, Keating NL, et al. Associations between palliative chemotherapy and adult cancer patients' end of life care and place of death: prospective cohort study. BMJ 2014;348:g1219.

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[18]Wright AA, Zhang B, Ray A, Mack JW, et al. Associations between end-of-life discussions, patient mental health, medical care near death, and caregiver bereavement adjustment. JAMA 2008;300(14):1665–1673.

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[19]Christian T, Hassol A, Brooks G, Gu Q, Kim S, Landrum M, Keating N. How do claims-based measures of end-of-life care compare to family ratings of care quality? Journal American Geriatrics Society. 2020 69(4): 900–907.

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[20]Some patients with cancer die unexpectedly, from their cancer or other causes, before any discussion about hospice care take place; other patients may not have been interested in discussing hospice care.

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[21]Some patients who preferred comfort care may have died suddenly, from their cancer or from other causes, before transitioning to hospice care.

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[22]An EHR order set is a combination of drugs (the drug regimen) that a physician can order with a single 'click', rather than ordering each drug separately. Oncology order sets can be designed to align with clinical pathways programs. The pathways software guides a physician through the treatment decision for a specific patient, then the physician clicks on the order set that matches the selected treatment.

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[23]Bach PB, Conti RM, Muller RJ, Schnorr GC, Saltz LB. Overspending driven by oversized single dose vials of cancer drugs. BMJ. Feb 2016;352:i788.

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[24]Findings from the OCM practice leader surveys are available in the OCM Annual Report for Performance Period 1-5.

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[25]Computed tomography (CT) scans reveal structural changes; positron emission tomography (PET) scans reveal chemical and physiological changes.

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[26]See Chapter 1 for more information about person-centered care.

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