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Specialty Payment Model Opportunities Assessment and Design

Summary of the Technical Expert Panel for Oncology

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Oncology Technical Expert Panel Summary

Introduction

The Brookings Institution convened a technical expert panel (TEP) to solicit input on how best to design an alternative payment approach for oncology specialty care. The TEP was one phase of the Specialty Physician Payment Model Opportunities Assessment and Design (SPPMOAD) project, a Center for Medicare & Medicaid Innovation (CMMI) effort intending to identify opportunities for better alignment of high quality care delivery and supporting payments in oncology and additional specialties. The project aligns with CMMI's goals of developing models that either improve quality of care, reduce total costs of care, or both. CMMI's objective is to create and evaluate models based on these two constraints and scale them nationally.

Oncology care was selected as the first specialty for analysis in this project because cancer represents a high disease burden in the United States (US), consequently incurring high healthcare costs. Moreover, stakeholders in the oncology space are actively engaged in numerous efforts that are rewarding higher value care through the following mechanisms:

- Paying for services that are not fully covered in the current reimbursement system
- Shifting funds away from fee-for-service
- Shifting funds to and from other providers
- Capturing shared-savings

The Oncology TEP met in-person on November 20, 2013 in Baltimore, MD. In addition to the invited TEP members, staff from Brookings, RAND, MITRE, and CMMI attended the meeting either as conveners or listeners. A list of TEP members and meeting attendees is included in Appendix A.

Methods

The primary purpose of the TEP was to solicit feedback on the trajectory of oncology payment reform and provide an opportunity for a range of stakeholders to offer perspectives on types of reforms and their potential impacts. The goal was not to achieve consensus or produce a formal recommendation, but rather to begin to consider how different model components can fit together in an alternative payment model. In addition, TEP members discussed concurrent reforms that are needed to support changes in payment and care delivery. Based on the preceding environmental scan that included a literature review, numerous stakeholder interviews, and other evidence review, TEP members were asked to use four illustrative models as a starting point for discussion: clinical pathways, patient-centered oncology medical homes, bundled payments and oncology accountable care organizations. These four illustrative models were not exhaustive, but contained key concepts across a range of oncology payment reforms and thus provided a practical foundation for further assessment of practical models of payment reform. The meeting agenda is available in Appendix B.

TEP Meeting Objectives:

As articulated to the TEP members before the discussion, the objectives of the panel were:

- To provide input on how to best design payment and delivery reform models based on the following elements:
    - Care delivery structure
    - Payment structure
    - Requirements for provider groups
    - Potential undesirable consequences

- To address the following common questions when discussing alternative models:
    - What are the considerations for different settings?
    - What are the barriers to implementing the proposed alternative payment model?
    - What would make an alternative approach attractive to providers and payers?
    - What is the impact of the patient and patient engagement?

- To identify and discuss key elements needing further development within each of the following categories to support redesign framework:
    - Performance measurement
    - Data infrastructure
    - Patient engagement
    - Provider engagement

- To identify specific concerns regarding each of these identified alternative payment models

- To discuss the feasibility of implementing each of these alternative payment models

Prior to the in-person meeting, TEP members received a preparatory briefing booklet that included the following documents:

- An up-to-date draft of the Oncology Environmental Scan for review and comment;
- A list of related quality measures;
- Pre-meeting reading materials:
    - Avalere Health, LLC. Total Cost of Cancer Care by Site of Service: Physician Office vs. Outpatient Hospital. Mar 2012.
    - Bach PB, Mirkin JN, Luke JJ. Episode-based payment for cancer care: a proposed pilot for Medicare. *Health affairs.* Mar 2011;30(3):500-509.
    - Bosserman, LD, Verrilli, D, McNatt, W. Partnering with a payer to develop a value based medical home pilot: A west coast practice's experience. AJMC. 2012;18(2): SP88-SP90.
    - Newcomer LN. Changing physician incentives for cancer care to reward better patient outcomes instead of use of more costly drugs. *Health affairs.* Apr 2012;31(4):780-785.

- Sprandio JD. Oncology patient-centered medical home and accountable cancer care. *Community Oncology.* 2010;7:565-572.

Conceptual Framework

The meeting was organized around in-depth discussions of four illustrative alternative models that represent the predominant alternatives that the stakeholder interviews and literature review identified. These models progressively move away from fee-for-service toward more outcomes-oriented and population-based approaches. Figure 1 describes where various forms of each model lay in terms of payment aggregation across providers and level of comprehensiveness of the payment. To move beyond the labels on payment reforms, it is important to consider their implications for payment and how those changes may relate to changes in care delivery. The following conceptual framework was used to guide the TEP. Each alternative model, to varying degrees, works toward transitioning to a more comprehensive episode- or case-based payment, and reducing or limiting fee-for-service payments for some services. In particular, key questions include:

1) *Does the payment reform shift payments away from fee-for-service, or add to fee-for-service?* All of the models include some payments that are not based on volume and intensity, but they differ in whether they simply add a new kind of payment to fee-for-service or actually shift away from existing fee-for-service payments. This has implications for both the strength of the incentives to modify current practices and the flexibility and new financial risk that oncologists face in shifting to the new payment system.

2) *What is the size and scope of the case- or person-level payment?* All of the payment reforms include at least a component of payment that is tied to the case, episode, or beneficiary, rather than the volume and intensity of care. How big is this payment, and how broad are the services included? Does the case payment just include the oncology practice, or other aspects of care such as radiology, surgery, chemotherapy, and hospital services? The answer to these questions relates to how "accountable" the oncology practice becomes for delivering quality of care across the spectrum of medical services. Broader or larger case-based payments mean stronger incentives to limit costs and more financial opportunities to shift how care is delivered.

3) *Are shared savings included on care outside of the case payment?* Many payment reforms can be viewed as partial case payments, intended to cover some but not all of the services for a cancer patient. For those services outside of the case payment, do oncologists share in the savings when costs are lower? Do they face any "downside risk" if these costs exceed a target or benchmark? For example, many accountable care organizations (ACOs) give oncologists and other providers an opportunity to share in the savings when fee-for-service payments are lower than a target level, and some ACOs place providers at (limited) financial risk if total payments are higher. This is a mechanism for providing some incentives for lowering costs outside of a bundled payment, without placing providers at full financial risk.

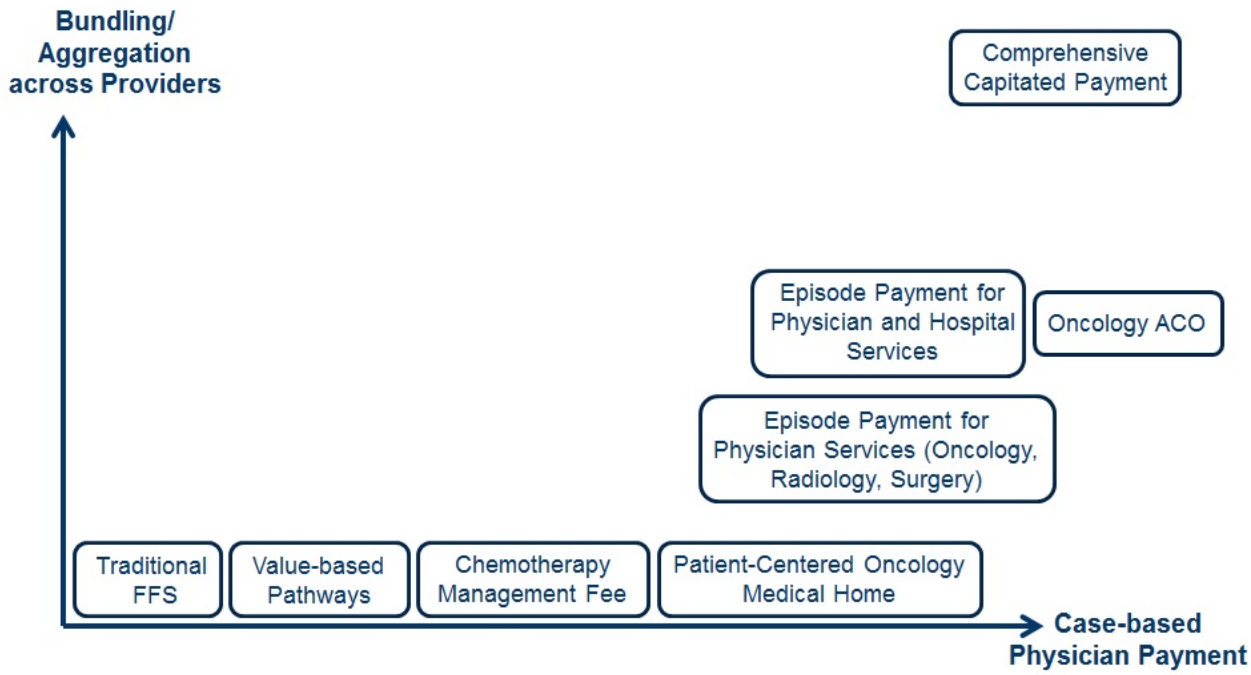

Figure 1: Model Progression by Case-Based Physician Payment and Bundling/Aggregation across Providers. *Source:* The Brookings Institution, 2013.

Alternative 1: Clinical Pathways

TEP members first discussed the clinical pathways model, which uses an add-on case payment to encourage adherence to predefined, evidence-based chemotherapy regimens. While this model typically does not alter existing fee-for-service payments, it does provide an additional incentive to treat patients consistently with the associated pathways. TEP members echoed concerns previously uncovered during the environmental scan. There was general agreement that clinical pathways should be viewed as a component of another model, rather than a comprehensive model in of itself. TEP members agreed that an evidence-based pathways model lacked a patient-centered focus, a care coordination focus, and a potential for continued savings over time, all of which are key components to payment reform.

Quality:

TEP members agreed that the clinical pathways model provides an approach to standardize care in accordance with available evidence and expert opinion. But some TEP members highlighted that pathways tend to focus singularly on chemotherapy drugs and do not take other cancer care services into account. Furthermore, one TEP member indicated that pathways tend to focus solely on 1st line therapies, without including other therapeutic pathways or avenues to clinical trials that might benefit a greater number of patients. One TEP member noted that a useful application of the pathways model might be for emerging drugs as they enter the market. This is because care would be standardized from

the initial onset of drug use. Another TEP member suggested that more work is needed to analyze waste in diagnostic and follow-up care, indicating that pathways should be expanded beyond drugs. This would also align better with patient expectations and a more comprehensive view of patient care.

A TEP member commented on how NCCN guidelines may actually be too broad and introduce extra variation into the provision of care. Another TEP member discussed how oncologists might interpret a pathway differently, which could introduce new kinds of variability in treatment plans. Furthermore, there was agreement that pathways should be expanded to include non-chemotherapy services, such as imaging and radiation.

Citing a limited body of research focused on the older adult population, one TEP member expressed concerns related to the use of guidelines that, by definition, can only be informed by what is currently known. While evidence-based care is the ideal scenario, the guidelines may be based on limited evidence, and not research involving the specific Medicare population. Consequently, they may not translate into the highest value of care for those patients. Therefore, ensuring transparency regarding the process of reaching consensus on the evidence-base underlying the pathways is essential. Some TEP members further indicated that what is known may not actually be what is best for particular patients. Additionally, using a pathways model implies that patients will be seeking chemotherapy, not palliative, treatment, which may be misaligned with the goals and values of the patient. Care delivery should incorporate the patient's perspective, even if the decision results in no treatment, or palliative maintenance. To counter this problem, one TEP member suggested that CMS establish a registry on actual use of pathways and then combine this with real world data to understand how pathways are being used, and their impact on outcomes and costs.

Despite the perceived disadvantages of implementing a clinical pathways model, TEP members generally agreed that pathways could be an effective tool to support patient care and could succeed within a broader reform model. It represents a starting framework that is a scalable and initiates the process toward outcomes.

Savings:

While there is recognition that implementation and compliance with evidence-based pathways will take time, several TEP members indicated that clinical pathways have the potential generate large savings by eliminating outliers and encouraging price competition on drugs and other therapies. However, some TEP members suggested potential savings are limited and could eventually plateau. The amount of revenue generated by the model would likely be dependent on scope of the pathways and whether the practice was already adhering to the pathways before the model took effect. One TEP member indicated that approximately 30% of providers are currently making prescribing decisions based on pathways. Another determining factor for savings TEP members identified was the degree to which drug margins represented a significant source of revenue in a practice.

Costs:

By fostering consistency in the delivery of care, some TEP members believed that clinical pathways

promote efficiency and decrease errors. If so, this would reduce administrative burden while improving the quality of care provided to the patient. Others disagreed, asserting that this model actually increases administrative burden because implementing electronic medical records (EMR) requires time, training, and substantial upfront costs. One TEP member highlighted that only 50-60% of practices are using EMRs, suggesting that there are many practices where data needed to apply pathways are less accessible. Furthermore, one TEP member cited concerns about delegating data entry to non-physicians for worry of mis-entry or error. There are also additional costs for physicians to keep up-to-date with genomic tools to inform decision making.

One TEP member asked if total physician payment would decrease with this model since physicians would no longer receive a margin on drugs. However, this model would function as an add-on to existing drug payments. Some TEP members argued that the truth about the profitability on chemotherapy drug margins remains debatable. Overarchingly, TEP members agreed that chemotherapy reimbursement reform is needed. It is possible that a pathways model could take steps toward a reduction in chemotherapy costs across the pharmaceutical marketplace while improving quality of care.

Potential Undesirable Consequences:

There was no direct discussion among the TEP members on potential undesirable consequences in this particular illustrative model.

Alternative 2: Patient-Centered Oncology Medical Home

TEP members agreed that the person-level payment component in a patient-centered oncology medical home (PCOMH) supports changes in processes of care that are fundamental to high quality care delivery. In addition, this model could be viewed as a transitional step toward full bundled or shared savings approaches. TEP members highlighted that PCOMH represents a change in the way practices approach care by focusing on the patient's needs and extending the physician's reach outside of the office. Importantly, PCOMH begins to address care fragmentation by placing more emphasis on advanced care planning, transitions in care, and using real time EMR data to follow-up with patients or identify patients in need of an intervention. The end result is not only improved patient outcomes (e.g., reduced ER visits and hospital stays), but also improved communication between the patient and provider.

TEP members highlighted that numerous provider-led quality initiatives already exhibit characteristics of the PCOMH, such as coordinating care and advanced care planning. Thus, some TEP members implied that this model could be easier to expand since some providers are already engaged in the fundamental building blocks of the model. There was disagreement, though, in the extent to which community oncologists were actually carrying out these services today.

One TEP member noted that detailed information on the implementation of existing PCOMH models is not readily available in the public domain. Thus, payers are unsure of how best to help providers transition to a medical home model. Another TEP member indicated that a challenge for Medicare may be that patients may already have a long-term relationship with their PCP or several other specialists. In

this case, the medical oncologist would need to be brought into this existing team of providers, which could be done via a medical neighborhood approach. Finally, it was noted that in addition to the medical oncologist, palliative care specialists should be included in the care delivery structure.

Quality:

Among TEP members, there was a general belief that the PCOMH model could help to improve quality of care and enhance the focus of delivery on patient-level care. However, TEP members expressed varying opinions regarding National Committee for Quality Assurance's (NCQA) role in oncology care. One TEP member did not believe that NCQA should be a roadmap for oncology care, citing concerns of imposing primary care values on an oncology practice. Another TEP member noted that NCQA assesses processes well and brings efficiency to measuring quality, which is a critical component to a physician-led care team. The Commission on Cancer (CoC) complements NCQA's work with enhanced data capabilities, and several TEP members wished that NCQA and CoC work in tandem.

One TEP member noted that COA has developed measures on features of care that are measureable today, and also established a commission to determine the elements that are needed to create a PCOMH. Another TEP member suggested that an area for future quality measurement might be assessing whether a provider treated, not just identified, psychological distress. Furthermore, a TEP member highlighted that measures need to be developed at the provider community level to make the implementation process easier.

Savings:

Primarily, downstream savings come from changes in the way care is delivered in a PCOMH model. One TEP member indicated that extending office hours and staffing at the practice level has reduced costs and generated savings with the prevention of emergency department visits and unnecessary hospitalizations. As such, patients can seek timely and more cost-effective care in the office setting, rather than the hospital setting.

Costs:

Although many oncology practices report engaging in some of the augmented delivery services characteristic of this model, the extent and maturity of these activities is unclear. Also, the degree to which a practice is already using mature information technology will impact the upfront costs of transitioning to an EMR. Finally, one TEP member noted that the PCOMH model is not sustainable as an add-on payment model, and there must be funds shifted from another domain for it to continue long-term. With such shifts, the PCOMH model could be viewed as a useful step toward full bundled payment or shared-savings arrangements.

Potential Undesirable Consequences:

There was no direct discussion among the TEP members on potential undesirable consequences in this particular illustrative model.

Alternative 3: Bundled Payments

TEP members agreed that some type of bundled payment system is likely in the future for oncology. By nature, bundled payments shift fee-for-service payments into global payments to encourage more conscientious provision of care by providers. However, there was also consensus that a larger global bundle in oncology would be very challenging to implement as a first step for CMS payment reform pilots in oncology. Given the difficulty for practices to truly understand the cost of their cancer care with available data, the need for data systems to mature, and the variable volume of patients with different cancer types in practices, TEP members were concerned that transitioning straight to a comprehensive bundle without adverse effects on quality would not be generally feasible for oncology practices.

Notwithstanding, one TEP member stressed that since bundled payments around episodes of care are expected in oncology moving forward, the field needs experience in whether and how such bundled payments would work in practice. This member believed that testing and adjusting bundled payment models in real settings should be a priority for CMS. Several other TEP members supported this idea, and one member indicated that CMMI had received a colon cancer bundle proposal several years ago, and the sooner such a bundle is piloted, the sooner there would be real-world data regarding the effects of bundled payments on care delivery and costs. Since bundled payments can vary in scope, composition, and features, many TEP members agreed that it would be possible for CMS to introduce a narrow bundle around one aspect of care and scale it over time.

Size and Composition of a Bundled Payment:

The majority of TEP members agreed that any bundled payment models immediately pursued by CMS should be narrowly defined and only for the most common cancers. Bundled payments can range from small bundles that include only the costs of chemotherapy administration—thereby delinking high cost pharmaceuticals from compensation—to fully comprehensive bundles that include all services rendered in cancer care. The TEP was primed to consider the following services for inclusion in a possible bundled payment: inpatient care; post-acute care; chemotherapy regimen development; drug acquisition, administration, and symptom management; radiological services; oncologist professional services and patient E & M; emergency department visits; hospice stays; durable medical equipment; and care coordination.

There was general consensus that smaller bundles involving only a subset of these services were more realistic for CMS pilot implementation in the near term. Several TEP members expressed concern that larger bundles would include substantial cost and utilization variability that are currently poorly understood, along with substantial differences in resource intensity at different points across the episode of care. Likewise, the majority of TEP members supported a narrower bundle for the common cancers, such as breast cancer and colon cancer. These diseases contain more discrete treatment regimens with more known costs. They believed that attempting to create bundled payments for every disease site and for each phase of a particular disease would create substantial challenges for CMS.

In examining the cost drivers in cancer, chemotherapy drugs, hospitalization costs, radiation costs, and imaging costs are considered the most resource intensive domains where evidence suggests that similar patients may be treated differently. To address the use of pharmaceuticals under a bundled payment approach, several TEP members felt that payments based on adherence to clinical pathways was a good starting point. One member mentioned that placing cancer drugs within a bundled payment would provide physicians a better understanding of the true cost of their prescribing habits, although most members believed that it was unreasonable to include chemotherapeutics, at least initially. TEP members believed that bundled payments to encourage better management of emergency room and hospital costs would also be beneficial, although there were conflicting opinions on whether an initial bundled payment should cover the full cost of emergency and hospital visits, versus only a limited portion of those costs or shared savings only. Several members suggested that a bundle including some emergency and hospital costs might encourage the use of patient navigators and social workers, as they might help to reduce the incidence of emergency room and hospital visits. Finally, TEP members raised the idea that radiology costs should be considered for inclusion in a bundled payment, as practices increasingly have the ability to do in-house imaging.

Existing Bundles and Optimal Sites for Model:

Because bundled payments were viewed a likely eventual step for Medicare payments in oncology, there were numerous opinions from TEP members as to what cancer sites and sites of care were most optimal for initial bundled payments in oncology. To begin, TEP members mentioned that since hospitals are already acquainted with inpatient care bundles, it would not be a radical transition to pay for hospital-based cancer care in bundles.

Beyond bundling of some hospital services, TEP member opinions diverged on what types of services would be most promising for a bundled payment approach in cancer care. A portion of the TEP members argued that components of oncology care with distinct procedures, boundaries of care, and low variation—such as radiation oncology and surgical oncology—were most ripe for bundled payments. One member mentioned that Roswell Park Cancer Institute takes a bundled payment approach to radiation oncology. Another member mentioned that a bundle around kidney cancer, which included the surgical tumor resection and a specified period of time post-surgery, would be a good place to start for a bundled payment. Finally, as previously mentioned, a bundled payment approach to chemotherapy administration could de-link payment from the price of chemotherapeutics and thus discourage variation in utilization. While the specific details of their recommendations differed, nearly all TEP members agreed that it would be best to start with a smaller, narrowly defined bundled payment at this time.

Quality:

Bundled payments have the potential to lead to higher quality, more cost effective care by enabling resources to be spent on preventing emergency visits and hospitalizations, and to provide other person-focused, better coordinated care. TEP members agreed that one of the linchpins of any bundled payment approach is robust quality measures to ensure the proper standard of care is being delivered to

patients. Patient protection is an important factor in this model, in light of the potential for the perverse incentive of under-providing care. Members agreed that measures should be both robust and validated, though there was discussion on whether quality measures alone are a sufficient quality floor in this model, since they may not represent all the important dimensions of care. Regardless, there was general agreement that sufficient quality incentives must be tied to these measures to ensure they are meaningful and used appropriately.

Savings:

Savings was briefly discussed and would be generally achieved through a decreased unit cost per bundle.

Costs:

TEP members widely agreed that one major issue with implementing a bundled payment approach in oncology care is the lack of clear evidence and predictability around the true cost of high-quality care for different cancer episodes. Without timely, understandable, and accurate data on the real costs, providers will not be able to assess whether they would be successful on a bundled payment.

One TEP member raised the issue of whether the bundled payment amount would cover the cost of caring for Medicare patients appropriately. According to that participant, Medicare covers approximately 80% of the cost for caring for Medicare cancer patients, due to the current payment system at sequester levels. Ensuring that the bundled payment is rooted in actual cost data that would reimburse the total amount for caring for this complex population is essential. In order for the bundled payment to be successful in cutting costs, it is important for some of the high spend areas to be included in the bundled payment. One TEP member suggested covering emergency visits, hospitalizations, and end-of-life care within the bundle to encourage better care management and end-of-life decision making.

Numerous TEP members agreed that any bundled payment needs well defined, narrow risk corridors. By nature, hospitals and physician practices are not entities that can bear substantial, unpredictable financial risk. As such, TEP members stressed the need for safe testing environments, knowing that the practice will be safe from financial strain if the bundle needs to be adjusted. Similarly, TEP members expressed concern about how community practices would fare in a bundled environment, due to issues with data maturity, understanding costs, and sufficient volume of patients in a particular cancer domain.

Accordingly, an additional yet important cost in a bundled payment approach centers on improved data systems. One of the major points raised by the TEP around bundled payments was that without the timely linkage of augmented claims data and key clinical data, it will be difficult to adjust practice patterns and payments to make a bundled payment approach work. Additionally, a lack of relevant, well-timed data will likely drive variation in costs and utilization under this approach. Ideally, this would include real-time data loops between the provider and the payer so that both can understand and analyze practice and cost data for practical adjustments to the model. There was mention by one TEP member of data registries, which could be created in a bundled payment approach so that patients,

providers, and payers would understand outcomes and might be able to compare institutions.

Potential Undesirable Consequences:

TEP members were primed that, while bundled payments might encourage efficiency and enable redirection of resources in ways that would improve care, one potential undesirable consequence of a bundled payment approach in cancer care is under-treatment of patients due to the greater financial pressure of constrained provider resources. Beyond this concern, TEP members raised two other potential undesirable consequences. During this discussion, TEP members covered their experience with the bone marrow transplantation bundle that currently exists in Medicare. One member noted that the increased use of observation days was the largest undesirable consequence with the bone marrow transplant bundle. Especially for an older population, this member noted that the use of observation days could impact where the patient lives, if they drive, how they gain access to rehabilitation services and more. In addition, one TEP member mentioned that a major barrier to managing patients effectively might be pharmacy benefit managers if included in a bundled payment.

Alternative 4: Oncology Accountable Care Organization

The number of primary care accountable care organizations (ACOs) has surged in recent years as health care reform efforts have stressed a dual focus of cost containment and accountability. However, improving care for cancer patients has often been difficult to incorporate as a major element of delivery reform in conventional ACOs due to its reliance on specialized providers and its expense. TEP members discussed the possibility of an oncology-specific ACO model, though few, if any, believed it was a model that would be easy for CMS to begin piloting now. Instead, several TEP members indicated their interest in participating in accountable cancer care elements as part of a broader accountable-care framework. One TEP member mentioned her practice's work as a medical neighbor to a primary care ACO. This allows the practice to achieve accountable care goals without the financial risks of being an ACO, or of disrupting the financial landscape of a primary care ACO. Another TEP member mentioned that his organization was engaging in accountable care work, such as care coordination and patient navigation, without entering full ACO contracts. Using the principles of accountable and patient-centric care, one TEP member posed the idea of creating a palliative care ACO, within which cancer patients could be delivered care. The TEP noted that many primary care medical home practices had transitioned to primary care ACOs. Similarly, an oncology medical home model might transition to an oncology ACO or bundled-payment model with ACO features.

Quality:

TEP members largely agreed that the values of accountable care were worth pursuing since fragmentation of care and a lack of multi-disciplinary decision-making are widespread and significant problems in cancer care. With regard to quality measures within an ACO framework, TEP members noted that palliative care evaluations should play a significant role in this type of patient-centric care. In addition, one TEP member asserted that ACOs in general need to develop and carry out better end-of-life care. Incidentally, it was noted that an ACO framework might only make this type of accountable

care more difficult, given the fragmentation of networks of providers. However, members also noted that since payment and shared savings are tied to a robust set of quality measures, hospitals and providers can both achieve financial gains by incentivizing this coordinated, high quality accountable care.

Savings:

Savings would be achieved through a combination of either shared savings (similar to the Medicare Shared Savings Program) or through some other financial benchmarking. TEP members asserted that there is a high likelihood of achieving savings through downstream savings from clinical process transformation, such as decreased emergency room utilization and fewer hospitalizations.

Cost:

The bulk of the TEPs discussion on costs in an oncology ACO model was centered on the amount of risk providers would take in ACO arrangements. Fully mature ACO systems would ideally function under a global payment mechanism, where providers are fully accountable for the cost and care of their patients. However, in existing oncology ACO pilots, providers operate within a low-risk, fee-for-service environment with a shared savings component to incent the important features of accountable and high-quality care.

Most TEP members were wary of CMS entering into substantial risk arrangements with practices, at least early in a pilot. Certain members noted that providers may not be interested in participating in high risk models. This is partially because providers often feel that they have little control over the high cost areas of cancer care. Additionally, ACO arrangements may not be expected to work in a cancer patient cohort, because unlike the often acute nature of primary care, cancer care is expensive for nearly every patient seeking treatment.

In contrast, one TEP member who is involved in an oncology ACO pilot mentioned that some providers are excited about the idea of taking on more risk, especially after they have had experience with shared savings and the greater visibility on patient-level cost data that goes along with it. The pilots intentionally avoided large risk in the first few years of the pilot, as a way to ensure that the practices were hitting the important quality targets of the model. In addition, the hospitals were partially at-risk in this model as well, which was a key to making it successful.

By and large, most TEP members agreed that full-risk, mature ACO arrangements were not ideal for a CMS pilot, but that the goals of more accountability and increased risk-sharing were worth working toward in a stepwise fashion.

Potential Undesirable Consequences:

There was no direct discussion among the TEP members on potential undesirable consequences in this particular illustrative model.

Support for Redesign

TEP members discussed the type of supports CMS would need to provide to implement a redesigned framework. Much of the discussion centered on data needs. Better data, and quality and cost indicators based on the data, would reduce uncertainty about the impact of payment reforms and thus could substantially increase provider participation and the impact of the reforms. Specific issues addressed during the discussion included:

- *Timeliness* – TEP members expressed frustration with the turnaround time for receiving meaningful data from CMS. Many agreed that appropriately adjusting quality benchmarks and payment rates is best accomplished when meaningful data is delivered to providers in a timely manner. With closer to real-time access to CMS data, married with clinical outcomes data, providers would be able to compare their performance with peers and make appropriate interventions to improve the care of patients at risk for quality problems or costly complications. Additionally, timely data would help to identify actionable utilization management issues.

- *Measures and Data*– Several TEP members expressed a desire for data on cost within a roughly defined episode or time period based on Medicare claims data. This would enable providers and payers to better understand the total cost of care, and opportunities for reducing costs under new payment models. TEP members also mentioned that increased transparency in cost and outcomes data from CMS would be a good starting point for building a useful data repository. Additionally, another TEP member stated focusing on patient-centered measures is an important step in building the data and creating benchmarks for most of the payment reforms under consideration.

Additional information desired by TEP members included the collection of data on staging, disease status, and survivorship. One member was concerned about the potential for administrative burden with increased data collection and suggested that payment reforms be paired with identifying innovations around information technology to make relevant clinical data more extractable from existing EMR systems.

The TEP agreed that one ultimate goal for data systems should be seamless and timely access to relevant performance data, particularly at the patient level. One member stated that the most satisfying part of an oncologists' job is knowing that high quality care was delivered, while the most dissatisfying element is grappling with confusing EMR systems. There was also frustration around the growing volume of collected, but unused data. A renewed focus on making progress with claims and EMR data to ensure that maximum time is devoted to high quality care delivery, over administrative order entry, resonated with much of the TEP.

When asked about quality measurement, the TEP largely agreed that it would be feasible to create a top 15 list of quality measures to facilitate the collection of the most relevant, meaningful data to construct the measures in support of payment reforms. One member identified a web-based patient survey that has been successfully used in their practice as a useful tool to collect patient-reported data and present it at the provider, practice, regional, and national levels.

Finally, the TEP discussed the importance of patient-engagement in cancer care moving forward. Most members agreed that it is difficult for patients to make evidence-based decisions about their care. There was a strong consensus that progress toward a seamless decision-support system, potentially integrated into the EMR, needs to be supported. An integrated system facilitates proper funneling of patients through the appropriate care pathway, resulting in a better patient experience. CancerLink, a powerful tool to receive and aggregate clinical data, was discussed favorably by several members. The combination of clinical and claims data, as this system provides, would provide the necessary data to payers and providers to ensure high quality and cost-effective care delivery.

RAND Analysis Plan

The RAND team provided an overview of their role in the project moving forward. In order to explore the opportunities under new Medicare payment models for oncology, RAND, with the help of CMS and Brookings, will define a series of model characteristics to be simulated. The two data sources to be used in the modeling phase of the project are full Medicare claims and enrollment information—available through 2013—and SEER data for validation—available through 2010. Through these analyses, RAND will determine and assess eligibility for the payment model, the impact of different levels of payment and utilization for different categories of services, and variation—both between and within providers.

The model design phase will involve key decisions about the trigger points for the model, types of settings and services included in the model, methods for attributing patients to providers, types of providers participating in the model, and risk stratification. The model simulation phase then includes three steps: 1) implement episode-based payment models rooted in historical episodes; 2) develop assumptions about Medicare spending trends and provider behavioral responses; and 3) simulate future impacts given the assumptions made about spending and behavioral response.

Finally, the RAND team concluded by soliciting feedback from the TEP on the type of assumptions they should make and the supporting analyses they should conduct. Several TEP members offered to help with the analytic efforts—for example, US Oncology offered to run the model simulations on their own data if it would be useful.

Conclusion of TEP

The TEP concluded with a note of optimism and great opportunity for payment reforms in medical oncology. All of the TEP members unanimously agreed to continue working further on this effort, whether it be in person or virtually. In addition, several TEP members approached members of the Brookings, RAND and MITRE teams to express their support of a CMMI pilot in this area in the near future.

Appendix A: Technical Expert Panel Attendees

Name	Affiliation	Attendee Status
Allen Lichter	American Society of Clinical Oncology	In Person
Amy Berman	Patient Advocate, John A. Hartford Foundation	In Person
Barbara McAneny	New Mexico Hematology and Oncology	In Person
Barry Brooks	US Oncology	In Person
Carolyn Aldigé	Prevent Cancer Foundation	In Person
Ellen Stovall	National Coalition of Cancer Survivorship	Teleconferenced
Lee Newcomer	UnitedHealthcare Group	Teleconferenced 10:00 AM – 11:00 AM EST
Mark Thompson	Community Oncology Alliance	In Person
Randy Burkholder	Pharmaceutical Research and Manufacturers of America	In Person
Robert Carlson	National Comprehensive Cancer Network	Arrived to TEP at 1:30 PM EST
Stephen Edge	Baptist Cancer Center	In Person
Virginia Vaitones	Association of Community Cancer Centers	In Person
John Sprandio	Consultants in Medical Oncology and Hematology	In Person
Jennifer Malin	WellPoint	In Person
Richard Weininger	CareCore National	In Person
Michael Kolodziej	Aetna	In Person
Jonathan Gavras	Florida Blue	In Person
Patti Ganz	UCLA Jonsson Comprehensive Cancer Center	In Person
Karen Bird	Dana-Farber Cancer Institute	In Person
Additional Attendees		
Amy Harbaugh	Centers for Medicare & Medicaid Services	In Person

Mary Kapp	Centers for Medicare & Medicaid Services	In Person
Jeff Clough	Centers for Medicare & Medicaid Services	In Person
Rahul Rajkumar	Centers for Medicare & Medicaid Services	In Person
Amy Bassano	Centers for Medicare & Medicaid Services	In Person
Pamela Pelizzaro	Centers for Medicare & Medicaid Services	In Person
Gerald Riley	Centers for Medicare & Medicaid Services	In Person
Darlene Fleischmann	Centers for Medicare & Medicaid Services	In Person
Mark McClellan	The Brookings Institution	In Person
Kavita Patel	The Brookings Institution	In Person
John O'Shea	The Brookings Institution	In Person
Judith Tobin	The Brookings Institution	In Person
Andrea Thoumi	The Brookings Institution	In Person
Jeffrey Nadel	The Brookings Institution	In Person
Chelsey Crim	The Brookings Institution	In Person
Joanna Klatzman	The Brookings Institution	In Person
Darshak Sanghavi	The Brookings Institution	In Person
Peter Hussey	RAND Corporation	In Person
Clare Stevens	RAND Corporation	In Person
Dan Speece	MITRE Corporation	In Person
Heidi Giles	MITRE Corporation	In Person
John Sheils	MITRE Corporation	In Person

Appendix B: Technical Expert Panel Meeting Agenda

Specialty Payment Model Opportunities Assessment and Design
Technical Expert Panel for Oncology Agenda

8:00 a.m. **Check In**

8:30 a.m. **Welcome and Introductions**
Rahul Rajkumar, MD, JD, Senior Advisor to the Deputy CMS Administrator

8:45 a.m. **Overview of the Day and Project**
Mark McClellan, MD, PhD, Director, Initiative on Innovation and Value for Healthcare and Senior Fellow, The Brookings Institution

9:00 a.m. **Overview of Redesign Framework**
Mark McClellan

9:30 a.m. **Frameworks for Payment Reform and Clinical Redesign Pilots: Alternative 1**
Mark McClellan – *Facilitator*
Kavita Patel, MD, MS, Fellow and Managing Director at the Engelberg Center for Health Care Reform, The Brookings Institution – *Facilitator*

10:30 a.m. **Break**

10:45 a.m. **Frameworks for Payment Reform and Clinical Redesign Pilots: Alternative 2**
Mark McClellan, Kavita Patel – *Facilitators*

11:45 a.m. **Lunch delivered**

12:00 p.m. **Frameworks for Payment Reform and Clinical Redesign Pilots: Alternative 3**
Mark McClellan, Kavita Patel – *Facilitators*

1:00 p.m. **Frameworks for Payment Reform and Clinical Redesign Pilots: Alternative 4**
Mark McClellan –*Facilitator*

1:45 p.m. **RAND Approach to Data Analysis**
Peter Hussey, PhD, Senior Policy Researcher and RAND Project Director at the RAND Corporation –*Presenter*

2:15 p.m. **Break**

2:30 p.m. **Elements to Support Redesign Framework**

Mark McClellan, Kavita Patel – *Facilitators*

3:30 p.m. **Concluding Remarks**
Mark McClellan

4:00 p.m. **Adjourn**
***Note: shuttle will be departing directly to BWI (Concourse C) at 4:15 p.m.**