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Charting a Course for Episodes of Care Payment Programs in Medicare



Facilitated by Leavitt Partners
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PREFACE

In July 2020, Signify Health, a leading company in episodes of care payment programs and a convener in Medicare’s Bundled Payment for Care Improvement – Advanced (BPCI-A), engaged Leavitt Partners, a specialized health care consulting firm, and a team of alternative payment model experts from Brandeis University, to identify barriers, best practices, and opportunities to improving Episode of Care (EOC) models in the Medicare program, including the current BPCI-A.

The Brandeis team focused their portion of the effort on how BPCI-A could fit within the construct of other Medicare programs, as a partially or fully mandated program.

In addition, Leavitt Partners organized a group of well-known and esteemed experts in the field of bundled payments and APMs (see Appendix 1) and led a series of discussions focused on addressing some of the barriers to a wider and deeper adoption of EOC models in Medicare.

The deliverable, which is embodied by this report, lays out consensus-based recommendations around what EOC models should look like in the coming years and what strategies can be employed to achieve the reforms. It consolidates the work of both groups and, as such, charts a concrete course for Medicare to better manage existing EOC programs and successfully expand them.

The document is organized into two sections. The first focuses on how to apply the lessons learned from the decade-long combined BPCI and BPCI-A programs into Medicare payment, and the second on how to expand the scope of EOC programs beyond the current inpatient focus.

LEXICON OF COMMON TERMS

- **Episodes of Care (EOC):** An EOC, also referred to as episode-based payment or bundled payments, is a patient’s entire treatment needed for an illness or “episode”. The episode-based payments (or “bundled payments”) provide a single, comprehensive payment that covers all services provided during a patient’s EOC.¹
- **Fee-for-service (FFS):** Fee-for-service is a method of payment in which doctors and other health care providers are paid for each service performed.²
- **Alternative Payment Models (APMs):** APMs are types of payment approaches that incentivize physicians, hospitals, and payers to deliver high-quality and cost-efficient care.³

¹ Episode of Care or Bundled Payments - Health Cost Containment. (2020). Retrieved November 9, 2020, from <https://www.ncsl.org/research/health/episode-of-care-payments-health.aspx>

² Fee for Service - Health Care Glossary. (n.d.). Retrieved from <https://www.healthcare.gov/glossary/fee-for-service/>

³ Alternative Payment Models (APMs) Overview. (2020). Retrieved from <https://qpp.cms.gov/apms/overview>

- **Bundled Payments for Care Improvement (Classic and Advanced) (BPCI/BPCI-A):** Created by CMMI, BPCI-A is an initiative to test the efficacy of bundled payment models in producing high-quality and cost-efficient care among Medicare beneficiaries.⁴
- **Total Costs of Care (TCOC):** TCOC are defined as the direct and indirect costs for an EOC over a period of healthcare coverage.⁵
- **Condition-based bundles:** Condition-based bundles are rooted in the concept of an “upstream” approach at the condition level, rather than the procedural level. Condition-based bundling often involve specialists within the care teams, as opposed to just primary care physicians or acute care providers, which focuses on identifying medically appropriate, less invasive, and cost-efficient treatments for the patient that may avoid surgery or hospitalization. Condition-based bundles can also incentivize better coordination of care among providers across the continuum of care and improve health outcomes.⁶
- **Peer Group Trend Factor Adjustment:** The Peer Group Trend (PGT) Factor Adjustment is used to adjust the final Target Prices for peer group trends that are driven by unanticipated, systematic factors such as payment system reforms occurring during the Performance Period, and that cannot be predicted using a prospective pricing methodology. The PGT Factor Adjustment is calculated by re-centering the Benchmark Price around realized Performance Period Clinical Episode spending within each peer group nationally, and then capped to within 10 percent of the prospectively calculated PGT value.⁷
- **Care Model:** The Care Model is depicted as three overlapping areas where care for chronic conditions takes place: community, health systems and the provider organization. This approach focuses on specific patient populations to ensure optimal care and encourages the provision of care across many different medical teams.⁸
- **Mandatory Models:** The Centers for Medicare and Medicaid Services (CMS) can issue mandatory payment models, where participation is required to determine whether a payment model works. Mandatory models are commonly employed when the agency does not believe they will obtain high participation rates, or have adverse selection effects, for voluntary models.⁹ This may be found with certain geographic areas or diagnoses.

⁴ Bundled Payments for Care Improvement (BPCI) Initiative: General Information. (2020). Retrieved November 9, 2020, from <https://innovation.cms.gov/innovation-models/bundled-payments>

⁵ CMS Health Care Innovation Awards. (2013, June 20). Retrieved November 9, 2020, from <https://innovation.cms.gov/files/slides/hciatwoimprvmt.pdf>

⁶ Firth, S. (2018, May 16). Bundle Payments By Condition, Not Procedure. Retrieved November 9, 2020, from <https://www.medpagetoday.com/publichealthpolicy/healthpolicy/72921>

⁷ CMS BPCI-A Pricing Methodology FAQ Document. (2020, September). Retrieved November 9, 2020, from <https://innovation.cms.gov/media/document/bpci-advanced-my4-pricing-methodology-faqs>

⁸ Module 16. Introduction to the Care Model. (2013, May). Retrieved November 9, 2020, from <https://www.ahrq.gov/ncepccr/tools/pf-handbook/mod16.html>

⁹ CMS Innovation Center Episode Payment Models. (2020, January). Retrieved November 9, 2020, from <https://innovation.cms.gov/files/reports/episode-payment-models-wp.pdf>



- **Voluntary Models:** CMS can also issue voluntary payment models, where CMS offers participating health systems and providers financial incentives. In voluntary models, participants also have the option to exit the model after giving notice to CMS.¹⁰
- **Patient Reported Outcomes:** Patient reported outcomes are patients' self-report of the status of their health, without interpretation of the patient's response by a clinician.¹¹

1. IMPLEMENTING BPCI-A NATIONWIDE

Nine years ago, CMS introduced the first generation of its comprehensive Bundled Payments for Care Improvement initiative, citing as its first objective to “Support and encourage providers who are interested in continuously reengineering care to deliver three-part aim outcomes.”¹² In the intervening years and successive generations of the initiative, we have observed widespread participation among hospitals and conveners. The most recent CMS evaluation indicated that there were FFS savings of approximately \$800M from BPCI Model 2 (and \$139M from Model 3) based on comparisons of patient-level outcomes for participants to non-participants. This suggests that BPCI-Classic was financially beneficial overall to the Medicare program with respect to utilization patterns and related cost savings. Other literature supports the general conclusion that bundled payment programs generate savings for the payers that sponsor them, and even other payers that contract with institutions participating in a bundled payment program.¹³

¹⁰ Ibid.

¹¹ NQF Patient Reported Outcomes. (n.d.). Retrieved from https://www.qualityforum.org/Projects/n-r/Patient-Reported_Outcomes/Patient-Reported_Outcomes.aspx

¹² CMS Innovation Center Bundled Payments for Care Improvement Initiative Request for Application. (2011, August 22). Retrieved November 9, 2020, from <https://innovation.cms.gov/files/x/bundled-payments-for-care-improvement-request-for-applications.pdf>

¹³ A Review of the BPCI Model: Year 6 Evaluation & Short-Term Program Recommendations, Signify Health, August 2020.

CMS summarized some major observations regarding experience to date, concluding that acute models with simple attribution have fared relatively well.¹⁴ They point to the need to set prices and incentives carefully so as not to spend more in rewards than are justified by the underlying savings. This is a point most salient for voluntary programs in which the payer's cost is the providers' revenue, and the payer seeks to reduce its own total cost while providing incrementally greater revenues (or margins) in terms of savings to the provider entities as an incentive to participate. Frequently, the savings generated by the provider participants may be at the revenue expense of a non-participant.

Seeking volunteers to test new concepts is a long-standing convention in research and experimentation. Researchers can test concepts as well as the ability of participants to devise or follow protocols that are intended to produce the desired outcomes. Making formal inferences about efficacy can be difficult if volunteers are compared to non-volunteers because of potential confounding effects co-occurring with the intervention. However, lessons from the experiments can be translated into worthwhile policies and programs. Specifically, BPCI has shown broad interest and participation, many examples of care redesign, and utilization effects that are consistent with the theory of change. A reasonable conclusion is that CMS has learned a better way, in BPCI, to pay for the episodes of care that have been tested so far.

For forty years, the Medicare program has largely depended on DRGs to pay for acute hospital services, and separate methods for professional and post-acute services. And for at least forty years, it has been widely believed that poorly coordinated payments contribute to poorly coordinated care, non-aligned incentives, and avoidable cost. The payment model based on total cost of care in episodes appears to be more in keeping with the goals of value-based purchasing. The variety of services and costs incurred during the episode are evaluated in light of the total cost and clinical outcomes occurring for the patient.

As such, changing the way in which Medicare currently pays for certain hospital stays and the care post-discharge makes sense in light of the BPCI program findings. Of course, that means a national implementation of key BPCI components would need to replace or integrate with existing Medicare payment systems. Thus, the episode in its entirety could connect and ultimately replace the subcomponents, i.e., the DRGs and other FFS claims. Importantly, as a permanent version of BPCI gets implemented, it should exclude those in the program today and phase them in as the program expires.

1.1 CONCEPTUAL ADVANTAGES

Value-based purchasing attempts to define performance measures and, ultimately, payment around meaningful clinical concepts that permit evaluation of clinical and cost outcomes simultaneously. Such clinical concepts include the totality of the patient-centered view of needed services, and which services clinicians provide across settings and over time. Fifty years and more ago, medicine typically occurred as individual service items, and fit with a fee-for-service payment model. During the intervening decades, the modern clinical model of care has come to be clinical teams organized around the patient's needs; i.e., the episodes of care, including definitive procedures, acute medical conditions, and underlying chronic conditions. Increasing and optimizing the value of care involves shared medical decision-making between the patient and their care team about treatment choices and settings of care to avoid negative clinical outcomes and use of services associated with adverse events.

Hence, the optimal unit of service for achieving and measuring value is the episode of care. Similarly, the unit of accountability should be framed to define the common needs of the patient cohort, and to identify contingent health outcomes and costs. As the clinical teams organize care around the respective needs of the

¹⁴ Ibid.

patient, it would be prudent to organize accountability, metrics, and financial incentives toward optimal value in each clinical context, and overall for the patient and cohort. Finally, the unit of payment also should correspond to the unit of accountability, as it is in BPCI. Starting with the set of acute medical conditions and procedures that have been included in BPCI makes sense since hundreds of provider organizations across the United States are familiar with the episodes and have already re-organized care to meet the demands of managing patients across institutional boundaries. For those providers, the BPCI episode has become the unit for measuring and achieving value as well as the unit of accountability.

1.2 THE URGENCY FOR DIFFUSION

The overall movement to value-based care involves a number of initiatives carried out by a range of stakeholders. While private payers and delivery systems have critical roles to play, the Medicare program has a unique role. Through the discipline of law and regulation, governmental programs can shape the contours of the entire industry, transcending pockets of activity or voluntary experiments. The time might be upon us for the Medicare program to “raise the floor” so that all qualifying episodes are handled through value-based purchasing principles. Upon such a floor, private stakeholders can align and extend their efforts in order to foster consistency in the industry, and Medicare can proceed to expand and refine its own efforts, as forecasted at the outset of BPCI. In the second part of this report we will explore some of the new dimensions of an episode payment program as well as address ways in which to make those programs successful for the Medicare Trust Fund and participating providers.

And there might be reasons for urgency to proceed. Surveys suggest that physicians increasingly have negative perceptions about value-based purchasing.¹⁵ CMMI and MedPAC are suggesting a need to rethink basic approaches to value-based purchasing for lack of systemwide uptake and transformative changes. The diverse and piecemeal approaches to VBP have had some success, although often mixed and tepid. In addition, there is complexity from the administrative burden of such programs, made worse by the number of different and inconsistent programs. Thus, the movement could benefit from consolidating gains and diffusing a consistent approach across most or all regions, markets, and delivery systems. After all, what are the incremental policy goals that are achieved by the continuation of a voluntary program that has consistently shown its effectiveness?

All things considered, this argues for diffusion of BPCI elements by Medicare generally; i.e., to make the bundled payment method the standard way for Medicare to reimburse providers who serve beneficiaries for the covered episodes. This step could anticipate a five-year diffusion and implementation period, during which CMS could work on refinements and subsequent generations of the current BPCI.

1.3 THE NEED FOR ADAPTION

The BPCI-Advanced APM is intended to offer stakeholders voluntary opportunities to enter risk-reward arrangements that differ from traditional Medicare. Implementing it as a permanent payment program would have to fit within the context of other permanent programs, which will require some refinement and adaptation of the current model. Within the structure of Hospital Value-Based Purchasing (HVBP) and the Quality Payment Program (QPP), it would be prudent to recast the basic elements of BPCI into a revised, mandatory payment method for hospitals, and a MIPS APM or MIPS Value Pathway (MVP) for clinical professionals, where providers could collaborate formally without necessarily facing the substantial financial risk associated with advanced APMs.

¹⁵ LaPointe, J. (2018, October 15). 61% of Doctors Say Value-Based Care Will Damage Their Practice. Retrieved November 9, 2020, from <https://revcycleintelligence.com/news/61-of-doctors-say-value-based-care-will-damage-their-practice>

1.3.1 BPCI ADAPTED TO THE HVBP

HVBP already is a mandatory program for IPPS hospitals and uses time windows surrounding the inpatient stay to include services before admission and after discharge to make inferences about relative efficiency. It operates as a measurement system with a modest payment adjustment (i.e., centered on a 2% withhold of the DRG payment). To measure cost in HVBP, CMS now uses the Medicare Spending per Beneficiary (MSPB), which sums Medicare Part A and B expenditures during an inpatient stay and for 30 days after discharge. The expenditure sums are calculated separately for each DRG, and then aggregated to reflect the profile of each hospital.

CMS could modernize the payment approach to be more like BPCI by replacing individual DRGs with a grouping of individual DRGs resulting in the larger BPCI grouping of clinical episodes as the unit of analysis, inferences about performance, and the basis for relative payment adjustments. CMS could profile hospitals based on the BPCI episodes in place of the corresponding individual DRGs. And to adjust for differences in case mix within the BPCI groupings, CMS could rely on the principal diagnosis codes for each hospitalization. More broadly, and for all patients included in the HVBP, CMS should consider some adjustments for differential patient risks related to unmet social needs that negatively impact clinical outcomes.

In addition, whereas HVBP utilizes a 2% withhold on the DRG payment to fund a pool that is distributed to hospitals based on their performance, CMS might consider increasing the amount of the withhold (or discount) in two ways. First, the withhold can be expanded to include the total cost of care for the entire episode, not just the DRG portion of that total. Second, the amount of the withhold can be increased beyond the modest 2% to an amount more likely to stimulate attention to relative efficiency. As a national program, the 20% level in BPCI might be too high. Without the waivers and gainsharing provisions allowed in BPCI, hospitals might not have the same leverage to affect all providers' contributions to the cost outcome. However, CMS might consider half that amount, or around 10% of the average total cost of the clinical episode as defined similarly to BPCI, and increase the weighting of the cost measure in the program.

1.3.2 BPCI ADAPTED TO MIPS

The prevailing Medicare systems do not recognize “conveners,” which can help providers participating as an entity in BPCI to address risk management and care redesign. That could leave hospitals as the default entity participating in the revised payment methods described here. Alternatively, CMS might consider how to



allow and encourage conveners to help facilitate effective implementation, along with waivers and gainsharing provisions.

The structure of MIPS APMs or the nascent MVPs might provide a mechanism whereby multiple MIPS-eligible clinicians (and their respective corporate auspices and conveners) can be evaluated, and paid in accordance with a multifaceted definition of value including efficiency, quality, and practice improvement. CMS might propose the BPCI episode framework in rulemaking for the MIPS program to complement the enhanced HVBP suggested above, and the continuing opportunity for hospitals and physician groups to opt for BPCI-A and operate as QPs.

By adapting HVBP for hospitals, and MIPS for clinicians, CMS could apply BPCI incentives to the main types of provider sponsors in the program today. A portion of the discount or withhold for each type of episode could be allocated between hospitals and clinicians using those payment systems. For example, if the benchmark price for a certain episode were \$20,000, then \$18,000 (\$20,000 minus \$2,000, or –10%) could be established as the efficiency benchmark level. In HVBP, that would be used as the new reference standard, or withhold subject to reconciliation. MIPS clinicians in the relevant MVPs could be evaluated against the respective benchmarks for each episode and scored within the Cost Category of MIPS accordingly.

In order to maintain an appropriate balance between savings that can accrue to a hospital in HVBP and a physician in MIPS, CMS should consider limiting the scope of measured savings for the physicians to the portion of the medical spend they can control or influence, including half of post-acute care.

2. Continuing to Innovate while Addressing Barriers to Adoption

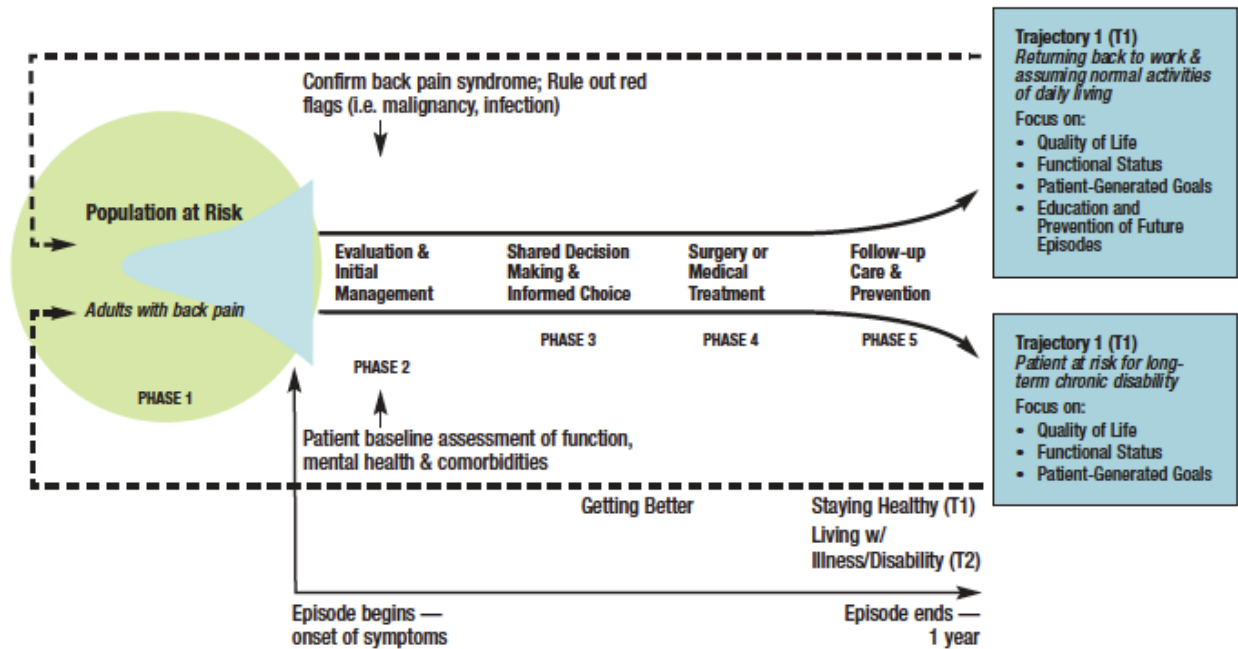
In the original RFP for BPCI, CMS declared, “We are also developing a plan to extend the concepts of episode payments and gainsharing to chronic care, and plan to begin design work to prepare providers and CMS for the conceptual and operational complexities associated with bundled payment for an episode of chronic care.”¹⁶ With the focus on DRGs, and more recently outpatient facility procedures, the work on chronic conditions seems to have been left behind. The need to innovate remains. Overall, payment needs to be modernized to incent risk-bearing, compensate for value-based outcomes and promote the development of the provider team culture necessary to achieve the desired results.

Patients’ contact with the healthcare system is generally predicated on their needs related to one or more clinical conditions. In some cases, patients might undergo an operation or receive other, non-surgical treatments. The clinical condition drives the provision of services, and provides the natural lens for viewing, informing, and rewarding excellence. Cohorts of patients being managed for a type of condition can serve as denominators in the calculation of statistical incidence rates of interest, such as onset of acute exacerbations or other sequelae, and utilization events such as hospital admissions or high-cost procedures. Innovation on episodes of care programs by including chronic conditions needs to address and appropriately distinguish various phases and exacerbations within the long-term trajectory of the patient’s condition, all the while rewarding a decrease in those exacerbations and unnecessary or low-value treatments and procedures. This

¹⁶ Ibid.

longitudinal framework was articulated in a 2010 report by the National Quality Forum¹⁷ and, more specifically, in the following figure excerpted from that report.

Figure E-1: Context for Considering a Low Back Pain Episode



An important policy goal is to implement condition-based bundles broadly – chronic and acute – so that they eventually include most of the acute and procedural bundles currently in the BPCI program. Hopefully, delivery systems would measure and perceive potentially greater opportunities in care redesign efforts that aim to avoid acute exacerbations and major procedures, as contrasted with the current bundles that focus on the marginal gains in production efficiency of the procedural or acute bundles. Such a model should lead to significantly better outcomes for patients and is also consistent with the larger policy objective of population health payments, albeit constrained to the management of specific conditions instead of the total costs of care for a beneficiary.

In line with this evolution is a 2020 Medicare Patient Advisory Commission (MedPAC) recommendation¹⁸ which encourages the development of models focused on managing specific high-cost conditions such as COPD. Designed effectively, EOC models that encourage early identification and whole-person management of conditions ranging from maternity to substance use disorder to musculoskeletal ailments such as back pain and arthritis have demonstrated statistically significant cost savings while improving patient outcomes. However, these models present certain complexities in their implementation that have stymied their adoption, in particular by Medicare. Our recommendations are designed to break down these complexities.

¹⁷ Measurement Framework: Evaluating Efficiency Across Patient-Focused Episodes of Care . (n.d.). Retrieved from https://www.qualityforum.org/Publications/2010/01/Measurement_Framework__Evaluating_Efficiency_Across_Patient-Focused_Episodes_of_Care.aspx

¹⁸ The Evolution of Medicare's AAPMs. (2020, October 2). Retrieved November 9, 2020, from http://medpac.gov/docs/default-source/meeting-materials/a_apm_medpac_oct2020.pdf?sfvrsn=0

PRICING

Generally, in programs and payment models, the definition of success depends on the stated goals – the desired outcomes and the policy objectives. If the goal is to encourage continuous improvement of even the best performers in order to find the outer rims of the efficient frontier in the management of a condition or a procedure, then how one sets the benchmarks from which performance will be judged is going to be different from a program whose goals is simply to create the greatest amount of savings in the shortest period of time for the Medicare Trust Fund.

Either way, the question to be answered on the back end of a program is what would have been the cost and clinical outcomes for patients if the program had not existed, or the payment model had not altered the services, quality, or cost? From a payer perspective, this represents a common problem known in economics as the principal-agent problem. How can the payer (the principal) arrange pricing such that the provider (the agent) will work in the interest of the payer's goals (which in this context is higher value)?

Embedded in this challenge is another common problem. Clinical and cost outcomes can look different either because an effective program or payment model has induced changes as hoped and theorized, or because essential assumptions are violated. In the latter situation, this often results from favorable selection or differences between the observed patient population of interest (e.g., in the bundle) versus the reference population from whom expected outcomes are determined.

If the cohorts of interest are truly equivalent to the reference populations, or if risk-adjustment is perfect, then simple comparisons can reveal the effect of the program. At the other extreme, if the program did not seem to achieve its objectives, but the cohorts differ significantly on important risk factors, then making inferences about effectiveness from simple comparisons can be naïve and misleading; (i.e., attribution of effectiveness to the program is falsely based on a spurious correlation between the entity and the result).

There are therefore two primary analytical and technical points that a Medicare alternative payment model must address: (1) the methods to establish benchmarks, trends and on-going adjustments; and (2) the way in which a comparison group is selected to test the null hypothesis (i.e. what happens in the absence of the program). The latter point is only relevant for third party evaluation of the program – which we address in a later section – if the first set of parameters are well designed and implemented. That's because the performance of those engaged in a program can simply be observed.

The approach taken to performance measurement needs to be in harmony with another important principle of optimal contracting, namely, the strength of the incentives. Unfortunately, it is often the case that incentives to improve efficiency are also incentives to alter the risk selection, or otherwise bias the inferences in favor of looking good. In some areas of care, setting external benchmarks (a/k/a hard budget constraints) might go beyond the risk tolerance of many providers, and spur behavioral responses that range into unintended consequences.

Benchmarks that begin with a provider's own historical cost level can bake-in unobserved differences in case mix, or risk selection, in order to reduce their spurious effects on outcomes and inferences. They also forgive or render neutral historical efficiency levels, allowing inefficient providers to work against their own wasteful histories while efficient providers must find new efficiencies beyond their successful historical achievement. The alternative is direct cross-sectional comparisons and inferences, which remove historical differences including persistent selection effects (i.e., non-equivalencies).

NOT PUNISHING THE GOOD

Attracting and retaining high performers in an alternative payment model is an important policy objective for private and public sector payers. That's because as they continue to find new efficiencies, they can help reset performance expectations on all providers. This holds true for both mandatory and voluntary models, and CMS should resist the urge to simply extract all possible savings from program participants when a program is mandatory, or risk seeing the better performers stop all attempts at further improvement, thus stalling the pursuit of the efficient frontier.

In order to incent participation by high-performing health systems, the CMS discount applied to any bundle would vary based on the provider's baseline performance on episode cost and quality with that of the regional average. Better performers would benefit from a lower discount/trend and poorer performers would get a higher discount/trend.

In mandatory programs, CMS could elicit bids from providers in any given region on any number of episodes. All providers would have access to their baseline data and the market average to prepare their bids. At the conclusion of the bidding phase, prices would be revealed to all. During the bid, each provider would know where they stand relative to others but not the specific price bid by others. Providers that have a better than average price and better than average historic quality would receive a market advantage by CMS waiving the hospital co-pay for beneficiaries going to those providers for care. CMS would also encourage MA plans to provide incentives to their beneficiaries for those providers. Importantly, Medicare should consider more impactful benefits changes to encourage beneficiary adoption of high-value-providers, in much the same way as has been done in the private sector, and avoid any of the incentives to simply accrue to MA or Medigap plans. This policy would encourage some degree of voluntary steerage by Medicare beneficiaries and reward the winning bidders, creating a competitive market dynamic.

To either of these approaches can be substituted predictions of benchmarks for future performance, in place of retrospective observation of average performance by peer organizations, or actual spending trends between baseline and reconciliation. Predictions can extrapolate the past levels or trends, or add additional factors such as policy goals. An advantage of predicting benchmarks is that, theoretically, all providers can be successful. This contrasts with zero-sum, tournament style approaches that reward or penalize providers based on their performance relative to each other in benchmarks derived from actual performance in the period. Not everyone can be better than average at the same time. Similarly, not everyone can beat the average trend rate in spending.

However, all of the current methods still rely on the observed historical payments made by the payer to the providers, which are all done on a fee-for-service basis. These payments have also influenced the care provided which may, or may not, reflect the optimal set of services for the optimal outcome. Further, historical claims do not account for innovations in care or other system improvements that enhance care coordination. As a result, new therapies, devices, or social interventions without CPT codes and/or practice coordination/change management updates unreimbursed by Medicare but valuable in an EOC model, would be unaccounted for in the benchmark. Omitting all of these services creates a disincentive to providing them and reaching far better outcomes. To an extent, failing to account for these services can perennialize inequities in health care.

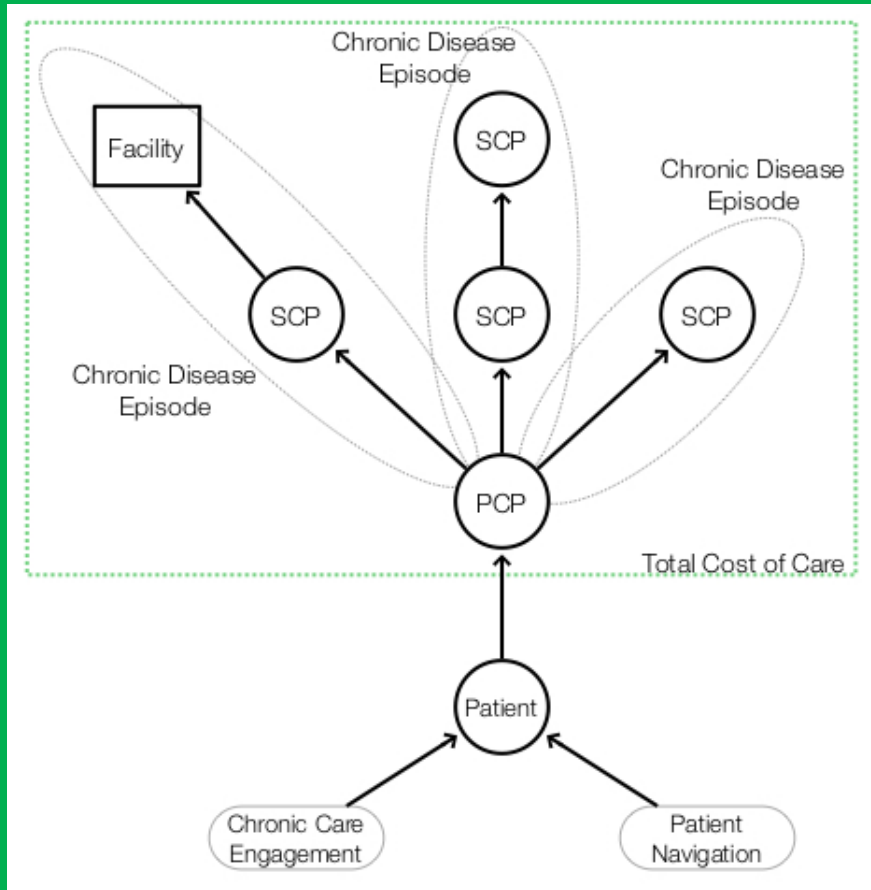
INTERACTION OF CONDITION-BASED EOC PROGRAMS WITH ACO/TCC PAYMENT PROGRAMS

As bundled payment expands, and interact with the HVBP and MIPS as well as primary care and health system focused APMs, understanding how these programs interact and how they can effectively complement each other is a policy imperative and in a prior section we provided recommendations for the interaction with HVBP and MIPS.

As Medicare expands EOC programs to include chronic condition bundles, methods will be needed to coordinate and align payments for services in the condition bundle with payments for BPCI-style bundles that exist within those condition bundles, such as for an admission for acute exacerbation of heart failure within a heart failure condition bundle. The most rational approach would be for the benchmark price of the hospitalization for acute heart failure bundle to be considered the “actual” cost for the chronic condition bundle, so that the incidence of acute exacerbation is made the concern of those managing the chronic condition, and the cost of the acute exacerbations that do occur is the concern of those caring for the patient during that time. And similarly, for the procedural bundle.

In a managed portfolio of APMs in which primary care physicians are at risk, specialists are at risk and some hospitals and health systems are at risk, all parties have a similar objective which is to ensure the appropriate management of patients. The figure below depicts how the risk arrangements can interact and build on each other. Consider a patient’s journey and their total costs of care (depicted by the dashed rectangle). Some of the care will be performed by the providers associated to the patient’s ACO and some will not. Generally, from the PCP emanates referrals to specialty care providers (SCPs) to help manage a patient’s chronic conditions. The specialists in the ACO should have a vested interest in managing the episode as efficiently as possible. However, when the case is delivered by a specialists outside the ACO, without an episode of care contract for a condition (represented by the oval dashed line), all care would be paid fee-for-service and without any accountability by the SCPs for the financial or clinical outcomes related to the condition(s) they’re managing. With EOC contracts active under the total cost of care

contract, the organizational associations don't matter as long as all the participants in the management of patients know each other's condition episode, procedural episode and acute event episode budgets. Ultimately, it's in each provider's best interest to refer the patients to the provider that has the lowest episode budget for the management of the condition, the acute event and the procedure.



As such, a proposed alternative methodology for setting the benchmark would be to start with an idealized care model and build up the costs of delivering that model from the ground up, inclusive of services that can help resolve social determinants of health, reduce disparities and inequities, and adopt care innovations that have a direct impact on improved care outcomes. The price could then be extrapolated from the benchmark by building in a margin for the provider and a trend rate for the performance period.

BUILDING-IN A MARGIN

All going concerns need a margin to survive and create a return for the capital invested in that concern. The alternative to allowing an explicit margin for the life of an alternative payment model is for the payer to provide the up-front capital, which is not reasonable. While it is beyond the scope of this paper to establish guidelines for the size of a margin in a specific program, our recommendation for a margin recognizes the inevitability of continued innovation in care, changes in practice patterns and other forms of modernization which cannot be accelerated without the on-going infusion of capital to fund those changes. And that capital needs a return.

In fact, as we've seen during the COVID pandemic, practice patterns shifted to accommodate patient needs. And practice patterns also shift when new technologies or methods for treating patients are introduced. However, the wide adoption of innovation that can improve patient outcomes can often be delayed by several years unless providers have the expectation of a reasonable return on the capital required to adopt and spread the innovation. This will become all the truer when innovation is focused on improving patient outcomes while reducing total costs of care.

The constant pursuit of the efficient frontier (where patient outcomes and the costs of producing those outcomes are optimized) requires a continuous investment by provider organizations. Some examples of these investments include:

- Change management (e.g. PROs adoption)
- Updated workflows/condition mapping to help illuminate system failure points.
- Investments in digital services to display the care model across all contracted providers.
- Predictive modeling tools that will give providers a better sense of patient flow.
- Outcomes measurement tools (EHRs) (e.g. FHIR)

We know that providers seeking to manage condition-based episodes will benefit from population-based care approaches, which include shared information and “best practices” for physicians in treating chronic care such as:

- Data on outcomes relative to visits which can assist providers in determining, with the patient, how to optimize visits and reduce ER visits.
- A standard metric, by condition, for a well-managed patient. This will include defined evidence-based care and shared learnings on interventions and outcome.
- Patient engagement and feedback tools, both to direct and measure the care itself, but also to ensure the right investment in meeting patient needs by service line.
- Reported data, specifically quality measures, by race/ethnicity or other patient characteristics to help with the identification of disparities and to have a mechanism for holding people accountable for addressing those disparities.

Models such as the Patient-Centered Medical Home (PCMH) are instructive, wherein a patient's treatment is coordinated through the primary care physician who ensures their patients receive all necessary and appropriate care.¹⁹ PCMH models rely on a centralized setting and utilization of clinical registries, information technology, and health information exchange to effectively manage patients, and these tools have been typically funded by a care management fee, which we propose to substitute with a defined margin.

Ultimately, the investment in these processes and tools will promote more accurate diagnoses, evaluation, and patient referral, thus reducing inappropriate utilization and unnecessary costs. But none of this can be possible unless the new benchmark is adjusted by including a margin that will allow the providers to invest and pay for these continuous practice improvements. Adding a margin will also help providers meet certain administrative burdens (such as the reporting of certain measures) and regulatory requirements that are mandated as part of the program design.

¹⁹ What is the Patient-Centered Medical Home? (n.d.). Retrieved November 9, 2020, from <https://www.acponline.org/practice-resources/business-resources/payment/delivery-and-payment-models/patient-centered-medical-home/understanding-the-patient-centered-medical-home/what-is-the-patient-centered-medical-home>

As a partial counterparty to a pre-determined margin, Medicare and other payers should consider the reduction in current administrative burdens as a means for provider organizations to free up capital. For instance, prior authorization is of questionable value on numerous laboratory services, imaging and procedures and results in added labor costs to manage the associated paperwork for multiple different requirements among multiple payers. Revenue cycle management for each claim embedded within an episode is an added production cost. Reducing and eliminating unnecessary and redundant administrative costs will offset some of the costs of value-based payment transformation.

SETTING TREND RATES

To reduce program uncertainty, trend rates should be set prospectively. However, as shown in a recent study, Medicare should apply a retrospective adjustment when the observed trend differs from the prospective trend within a specified range.

Prospectively set trend rates should take into account several elements:

- Price inflation which, for Medicare, is predictable based on the expected increases in fee schedules;
- Expected ambient utilization shifts caused by general (non-program-specific) pricing policies – for example the blended rates between inpatient and outpatient procedures that encourage shifts to outpatient settings;
- The planned and expected introduction of new technologies that are not included in the benchmark.

INNOVATIVE THERAPIES

When a new technology is introduced it is typically carved out of the target price and reconciliation of an episode because the costs and effects are difficult to predict. However, and in order to increase the adoption of therapies that are innovative and can benefit patient outcomes, CMMI should offer a provisional additional payment for new technologies to early adopters until the new technology or therapies become standard of practice (providers need to evaluate the impact of the new technology or new therapy on patient care). Where it contributes to better outcomes, the cost becomes part of the target, where it is not proven to add value to the care model, it is removed.

This policy would be consistent with the proposed rule on Medicare Coverage for Innovative Technologies (MCIT) under which CMS has proposed to cover for four years new medical devices which receive an FDA “breakthrough” designation while the market evaluates the contribution of the new technology to patient care. The Medicare outlier payment or new technology add-on payment (NTAP) in the inpatient setting and stop loss policies with commercial payers are deployed for similar reasons.

Ultimately, as providers engage in risk models, whether voluntary or mandatory, with reasoned and clinically defensible benchmarks, and fair trend rates (both prospective and retrospective), and are charged to innovate, they can’t continue to be constrained by the fee-for-service system. As described earlier, there are myriad rules and constraints that have been created to manage the FFS system, partially to reduce the potential that providers would over use low-value care services or to create beneficiary protections. However, very few, if any of these constraints make sense when shifting the accountability for clinical and financial outcomes to the delivery system. What is needed, therefore is a new way of framing regulations tied to payment. One way to provide greater flexibility would be for Medicare to grant a global waiver²⁰, and preferentially to the better performers. A global waiver would supersede the need for all of the individual waivers that providers have to request in existing APMs, by including all existing waivers into a single one.

²⁰ Legislative change may also be required here to adequately incent necessary care redesign.

INTEGRATION OF CONDITION-BASED EOC PROGRAMS AND A MANDATED BPCI-A PROGRAM

The original BPCI initiative and subsequent iterations have used the MS-DRG to identify qualifying bundles corresponding to clinical episodes, and distinguishing beneficiaries who align with the model versus others who are admitted but outside the scope of BPCI (i.e., not one of the qualifying DRGs). The use of DRGs for this purpose has been practical in that CMMI could piggy-back on the existing hospital payment system. Also, the expected cost for a bundle adjusts automatically with a different DRG, which has the effect of lowering the apparent and real financial risk faced by hospitals.

However, there are limitations to this approach. Most importantly, the eventual DRG found on the facility claim reflects intermediate outcomes during the episode. Consider the alternate scenarios shown in the table for a BPCI participant that has elected the COPD and major bowel procedure bundles. In the first type of example, a beneficiary is admitted for treatment of COPD, although intermediate outcomes can differ. The patient may become stable after treatment and discharged with a DRG indicating COPD. Alternatively, the patient might suffer downstream consequences such as pneumonia, which could alter the DRG to indicate complications, increase the payment to the hospital, and retroactively adjust the cost expectation to accommodate the complication. The patient might suffer even more consequential problems such as respiratory failure, be admitted to the ICU, and discharged with the DRG indicating treatment on a ventilator. In the latter example, the patient is not aligned to BPCI, and the entity is therefore not held accountable. In the second type of example, a patient is admitted for treatment of colon cancer. The operation might proceed without major complications, or lead to sequelae such as an AMI and omission from the scope of accountability based on the eventual DRG assigned.

Table 1: Examples of Intermediate Outcomes for a BPCI Participant Based on DRG

Reason for Admission	Intermediate Outcomes	Resulting DRG	Comment
COPD	Stable after Treatment	COPD	BPCI case
COPD	Pneumonia	Pneumonia	Omitted from BPCI
COPD	Respiratory Failure	72-hour Ventilator	Omitted from BPCI
Colon Cancer	Stable after Colectomy	Major bowel procedure	BPCI case
Colon Cancer	AMI after Colectomy	AMI	Omitted from BPCI

In effect, using the DRG to identify the association between the hospitalization and the condition episode can lead to the wrong assignment and therefore run counter to the desired effect of implementing condition episodes: reducing the frequency and intensity of acute exacerbations and unnecessary procedures. Following from the examples in the table, if a specialist has a condition episode payment for a patient’s COPD and the patient has an acute exacerbation leading to a hospitalization, Medicare should want that hospitalization to count against the condition episode budget. However, if that hospitalization is classified as Pneumonia or a 72-hour Ventilator based on the DRG, it may not count against the COPD condition episode budget.

Refocusing the inclusion of an inpatient stay into an episode payment based on the reason for admission solves the potential for mis-assignment and also addresses a perennial complaint of current BPCI participants, which is the inability to know with certainty which patients are included or not prior to the patient’s discharge.

EOC models would still be required to attest to Medicare conditions of participation (network adequacy, nondiscriminatory coverage, utilization management, appeals process) through a robust description in the program application and describe the features of any care redesign (e.g. virtual health and remote patient monitoring) in the plan of care, but could benefit from more flexibility in designing workable solutions.

One example of appropriate greater flexibility involves the provider's ability to determine how best to meet patients' care needs during an episode by selecting the best site-of-care, whether the patient's home, the clinical office, or a facility. Home-based care could include the hospital-at-home, SNF-at-home, hospice-at-home, and of course the provisioning of telehealth.

Ultimately, it is this ability to substitute more effective and efficient resources to achieve the best possible patient outcomes that will yield the best program results and, in the end, maximize Medicare's savings from the program.

CONSTRUCTING CONDITION EPISODES: TRIGGERS, DURATION, and ADJUSTMENTS

As state above, the work on chronic condition episodes seems to have been left behind, yet the need to innovate remains. The following recommendations emphasize key design elements for successful condition-specific episodes of care.

TRIGGERING A CONDITION EPISODE OF CARE

Payers and providers must determine the right "trigger" or beginning of an episode. Correctly marking the beginning of an episode can impact both spending and patient outcomes. As an initial step and to reduce the potential overlap and/or redundancy with primary care focused APMs, we recommend beginning the



condition episode with a referral to a specialist because it is at the initial specialist stage that the most variation in practice patterns and selection of high cost care options occur. As described in an earlier section of the document, this method of triggering the episode would be applicable whether or not the PCPs and/or specialists are in an ACO. Ultimately, the episode initiator/risk bearer can be the specialist, the PCP or a health system, and the risk contract can be shared between all of them. What matters is when the episode triggers, and that becomes all the more important with prospectively paid episodes.

THE EFFECTIVENESS OF EPISODES OVER CAPITATION

In the private sector, an alternative to identifying and operationalizing a specific trigger for a condition episode is to calculate and pay a capitated fee to a specialty group (also known as a specialty cap). While specialty capitated models can avoid a need for precise episode triggering because the payments fully cover all treatment for a population of patients across providers – from primary care to specialist to surgeons – for a particular condition or set of conditions, they also impute insurance risk on the providers accepting the capitation. In other words, in addition to being responsible for the costs of managing the condition when a patient is deemed to have that condition, the specialists also take risk on the number of patients in the population that end up having that condition. To a certain extent, the specialty capitation model can put specialists at odds with primary care physicians who may also have risk arrangements. That's because the PCPs would have an incentive to push any patient that seems to have a condition into the specialist's care in order to reduce their exposure, while the specialists would have an incentive to push those patients back to the PCPs to reduce the number of patients they have to manage.

Episode of care payments eliminate the insurance risk because the specialists would get paid a fixed budget for each patient that is deemed to have the condition. However, for the program to be effective, the episode must begin early enough to permit options for improving patient outcomes. If the patient is referred to the specialists too late (e.g. at the decision for surgery), the ability to impact costs and outcomes will be significantly reduced. As such, and contrary to specialty capitation models, PCPs with risk arrangements would have an incentive to treat their patients conservatively initially, but also refer their patients as soon as clinically appropriate to the specialists that have a condition episode contract in order to reduce the potential for inappropriate surgeries. And the episode-contracted specialist would welcome that patient as they stand to benefit from optimizing that patient's outcomes at a lower overall episode cost than they do under fee-for-service.

INTEGRATING PROCEDURAL EPISODES INTO A CONDITION-SPECIFIC EPISODE OF CARE

To facilitate accurate costing of the care path, condition-specific episodes may include surgical episodes within them. Condition episodes should begin prior to the surgical episode and, depending on the condition, extend beyond it. Structuring the condition and surgical bundles this way takes into account the appropriateness of a procedure compared with non-invasive alternatives. Surgical episodes should remain separate and discrete for purposes of calculating the target payment and should be complementary to condition-specific episodes in order to minimize overlap in payment models and attribution. For instance, if a patient with low back pain is managed in a condition-based bundle, the incentive for the specialist treating the patient is to achieve the same or better health outcome at a lower episode cost with non-surgical treatment than would be achieved with surgical treatment. The specialist benefits financially from more

appropriate utilization of invasive treatments such as injections and surgery. If surgery is deemed appropriate, it would trigger a separate procedural bundle, where the incentive is to manage the surgical episode efficiently. However, unlike procedural bundles, the condition-based bundle disincentivizes inappropriate utilization of surgery and other invasive treatments.

Importantly, the pricing of procedural episodes embedded in condition episodes should be “site-neutral” so as to not unduly influence the provider’s choice of clinical setting. These procedural bundles should be priced prospectively based on weighted averages among inpatient, outpatient, and ASC settings (to the extent allowed) while being mindful of case mix changes and the financial implications of more complex patients continuing to be treated in an inpatient setting. This weighted average enables providers to choose the most clinically appropriate setting. If inpatient bundles continue to be priced higher than outpatient or ASC bundles for the same procedure, it creates a perverse incentive to treat lower acuity patients in a higher acuity setting (e.g., inpatient).

EPISODE DURATION

Episode duration is another factor that can be adjusted to more accurately capture condition-based episodes and provide enhanced care coordination to a patient over time. Unlike episodes of care designed for acute events, chronic care, behavioral health, and substance use disorder (SUD) episodes are more complex and ongoing in nature. Where acute episodes involve care rendered over a specific inpatient stay, or a 90-day post-acute discharge period, chronic conditions can span many years. Several structural elements to models are necessary to enhance providers’ ability to manage patient care under these types of episodes.

For complex chronic conditions, an episode duration of one year, with patient-reported measures submitted to the payer on a quarterly basis, is optimal in order to assess the impact of the treatment approach on patient outcomes. Holding providers accountable for health outcomes decreases the incentive for withholding appropriate care as a mechanism to improve financial performance, which could occur under capitation. For certain conditions such as cancer, the episode duration should be renewable for additional one-year periods with continued performance evaluations. The target prices across the renewed episodes may vary depending on the condition. For example, cancer care should be priced based on severity and the intensity of the condition. While conditions such as back pain, where spend in the first year is likely greatest as a result of surgical interventions, second year and third year case rates, thus target prices, may be lower. This highlights the importance of risk adjustment based on stage of illness, not just claims.



THE ADOPTION OF GROUPEL LOGIC TO FACILITATE IMPLEMENTATION OF CONDITION-BASED EOC PROGRAMS

Clinical and episode construction logic must be utilized to determine the clinical relevance of individual services to one or more of the respective conditions for which a patient receives services. Although BPCI covers a variety of individual clinical topics, it has tended to look at one acute event at a time in relative isolation; fabric is missing to distinguish and associate the clinical conditions and events for a patient during even short time intervals, but especially longitudinally over long time intervals.

Technically, this calls for capabilities of an episode grouper or system. These can identify from input data the clinical condition and other circumstances that explain the provision of services, assign relevant services to the appropriate episodes, and keep track of the resource use attributable to one or more episodes. In simple cases, where a patient is being treated for a single condition or is experiencing an acute event that dominates the clinical picture for a window of time, “grouping” services might be fairly straightforward. Some exclusion rules might be sufficient to approximate clinical relevance.

However, many beneficiaries with one chronic condition also have concurrent chronic conditions, as well as acute medical conditions and needs for surgery or other significant therapies. Determining which services belong to which episode(s), and calculating a budget and performance metrics for conditions and patients requires clinical precision and sophisticated algorithms. Expectations for each type of episode can be calculated in tandem with the others, with episodes other than the subject of interest serving as important context, risk-severity adjusters, and clinical associations among related episodes.

Condition episodes comprise bundles of bundles in many cases, such as Ischemic Heart Disease serves as a risk for acute exacerbations (AMI, acute cardiac syndrome), surgical interventions (CABP, PCI), and complications (acute heart failure). CMMI might consider some developmental research and pilot testing involving such examples, using the CMS episode system to assign services according to clinical relevance, and keep the related episodes in proper association to make inferences about the conditions and nested episodes.

ADDRESSING SOCIAL DETERMINANTS OF HEALTH

An important way to improve the quality of care is looking beyond the clinic walls to assess the nonmedical factors impacting a patient’s health. Even when excellent medical care is provided, some populations of patients face social factors, or needs, such as food insecurity, unstable or unhealthy housing, social isolation, and lack of transportation that may negatively impact their health or may impede the delivery of effective medical care and diminish the value of the health care services provided.²¹ It is estimated that as much of 80 percent of health outcomes are driven by nonmedical social needs.²²

²¹ Social Determinants of Health - Frequently Asked Questions. (2019, December 19). Retrieved from <https://www.cdc.gov/nchhstp/socialdeterminants/faq.html>

²² Magnan, S. (2020, August 31). Social Determinants of Health 101 for Health Care: Five Plus Five. Retrieved from <https://nam.edu/social-determinants-of-health-101-for-health-care-five-plus-five/>

Integrating social needs care [management] into complex chronic care models may help providers improve and better manage a patient's overall health and wellbeing, resulting in lower overall spending.

However, many providers today do not yet screen for or incorporate social needs care management as a standard of practice. For instance, CMS data released in January 2020 found that social determinant codes (Z-codes) had only been collected for 1.4 percent of the total Medicare fee-for-service population in 2017.²³

CMS could encourage investment in social care coordination as part of a condition-based episode model, and address any potential Stark or Anti-Kickback limitations through waiver authority. The following represents steps that can be taken to better integrate social needs as part of an overall care plan.

- Ensure comprehensive provider education. Studies have found that although providers may be aware that their patients are facing social needs, few screen for social needs because they do not have the tools or the resources to help the patient address those needs.²⁴ Ensuring that providers understand the impact social needs have on health, how to best leverage screening tools, what resources are available, and how to make and track such connections is key.
- Encourage standardized and integrated screening for social needs. There are several social needs screening tools available, including the PRAPARE tool developed by the National Association of Community Health Centers and the CMMI Accountable Health Communities Screening tool.^{25,26} Organizations like UnitedHealthcare and the AMA have teamed up to standardize how social needs data is collected, and EHR companies like Epic have worked to ensure social needs screenings can be integrated into the EHR.^{27,28}
- Provide closed loop referral tools and resources that fit within providers' workflow to help address patients' social needs. When social needs are identified, it is critical that providers are able to make referrals to resources and other services to address those needs. Many providers are now taking advantage of social needs referral tools that help to connect providers with networks of community-based organizations and can track whether a referral has been completed. Such tools will need to be a seamless and standardized part of the providers' workforce.
- Allow greater data sharing across sectors to better understand the patient's history and provision of social resources. Without a true longitudinal life record, providers will be unable to understand how social factors have impacted, and continue to impact, their patients' lives.
- Institute improved accountability and incentives, such as by incorporating social needs data into risk adjustment. Holding providers more broadly accountable for health outcomes will incentivize a broader look at the drivers of health, however policymakers have also considered whether it is appropriate to risk

²³ Z Codes Utilization among Medicare Fee-for-Service (FFS) Beneficiaries in 2017. (2020, January). Retrieved from <https://www.cms.gov/files/document/cms-omh-january2020-zcode-data-highlightpdf.pdf>

²⁴ Frazee, T. K., Brewster, A. L., & Lewis, V. A. (2019, September 18). Prevalence of Screening for Social Needs by US Physician Practices and Hospitals. Retrieved from

<https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2751390>

²⁵ PRAPARE. (2020, November 16). Retrieved from <https://www.nachc.org/research-and-data/prapare/>

²⁶ The Accountable Health Communities Health-Related Social Needs Screening Tool. (2020). Retrieved from <https://innovation.cms.gov/files/worksheets/ahcm-screeningtool.pdf>

²⁷ UNH and the AMA collaborate to address access to better health. (2019, April 02). Retrieved from <https://www.ama-assn.org/press-center/press-releases/unh-and-ama-collaborate-address-access-better-health>

²⁸ PRAPARE Social Determinants of Health in the EHR. (2020). Retrieved from <http://www.nachc.org/wp-content/uploads/2016/07/PRAPARE-Epic-Training.pdf>

adjust payments to provider or quality incentives based on social need, in addition to members' health status. Doing so would increase provider incentives to screen for and capture social needs information.

- Creation of an advanced funding mechanism, reflected at performance period risk-sharing reconciliation, that can be requested and used by providers to fund specific services for a patient to address social determinants.

2.5. Evaluating Program Success

Today, CMMI model evaluation is substantially limited to the model's cost-savings to the Medicare program. If a goal of next generation EOC models is to increase care coordination and quality, measuring these features will help demonstrate model success. Increased care coordination can be measured in patient-reported outcomes (PROs) or functional status (as we have seen in versions of the Total Joint Model) as well as event rates such as earlier discharge, reduced complications, lower hospital readmissions, lower utilization of skilled nursing facilities, and faster return to work. Succeeding across these measures will contribute to a lower overall cost of care. Importantly, today the evaluations only focus on a specific period of time – the performance period – but don't provide an on-going monitoring of sustained quality and cost improvements.

MedPAC has recognized that one way to account for measuring model success across geographies may be to randomly assign providers to treatment and control groups.²⁹ This will reduce the regional differences in health care spending and may enable target prices to be set regionally with only the differences in the production costs of workforce and labor (*e.g.* salary and wages) to account for cost variation. Enabling a better comparison across care model delivery would also improve the bidding process for episode of care models.

MODEL EVALUATION

MedPAC has also recommended³⁰ testing and evaluating models over a longer period of time than is done today to account for the time needed for care models to evolve. Timeframes may depend on the type of condition or procedure and the volume of services. High volume episodes may allow for quicker evaluation of model reliability and validity than those episodes with low volume.

As stated above, models should be evaluated against standardized and relevant metrics that demonstrate achievement in stated cost and quality goals. These metrics should consider:

- Quality of care from patient's perspective. Measuring patient satisfaction integrates the patient perspective and answers the question, "Did the care meet the patient's goals?"
 - Patient-reported quality of care metrics should account for at least 50% of overall success goals.
- Optimal utilization of resources. Achieving this metric need not require lower costs of care, but should instead take into account the optimal incorporation of costs which contribute to substantively better care, particularly care that contributes to patient value.
 - Resource/cost of care metrics should account for roughly 40% of the overall success goals.
- A reduction in adverse events and preventable harms (*e.g.* hospital re-admissions, procedure complications, patient discharge to skilled nursing facilities) is a worthwhile metric, because success in reducing adverse events will translate into better resource optimization and is captured

²⁹ Ibid.

³⁰ Ibid.

there. However, some of these reductions may occur as a natural improvement in the quality of care and therefore not directly attributable to the program.

- Event-based metrics should account for less than 10% of overall success goals.

PATIENT-REPORTED OUTCOMES

A successful value-based program is built for quality and includes measurement. However, safety/harm measures are, by themselves, inadequate. Incorporating patient-reported outcomes (PROs) is a central part of ensuring quality of care in episodes. PROs ensure that the care given by the provider is meeting the patients' needs and serving its purpose, and this becomes all the more important as episodes of care payment programs move from retrospective reconciliation to full prospective payment. Ultimately the reduction in patient harm is entirely baked into the episode and what matters is the patient's outcomes.

Patient-reported outcomes (PROs) and EQMs, abstractions from the electronic health record that provide clinical data not just billing data, are more accurate than administrative claims data in measuring appropriate care delivery. However, a significant challenge in implementing PROs broadly has been the limitations of patient volume for any provider and episode. That's why we recommend that CMMI coordinate the aggregation of lives cross payers to implement an industry-wide measurement of patient-reported outcomes.

3. CONCLUSION

EOC models have evolved significantly in recent years from incorporating collective learnings from early piloted payment programs. They have expanded to managing the continuum of care required for chronic conditions, rather than acute events or procedures, improved care coordination across the country, and shown cost savings. While it is likely that EOC models will remain a key value-based strategy, there are several areas that can be improved upon in order to make them a successful APM. As CMMI refines the next generation of EOC models, our collective recommendations for program structure, payment, and evaluation can strengthen participation and foster model success.

In addition, the contributions in this document of researchers affiliated with Brandeis University have illustrated strategic ways to make EOC models permanent within Medicare and allow them to interact constructively with other existing programs.

Implementing the proposed recommendations of all contributors of this document will advance EOC models and increase provider's ability to meet the important goals of cost savings and quality health care.



Contributors

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America's Physician Groups represented by Valinda Rutledge, SVP, Government Affairs, formerly Senior Advisor and Group Director at the Center for Medicare and Medicaid Services Innovation

American College of Surgeons represented by Frank Opelka, MD, FACS, Executive Vice President of Health Care and Medical Education Redesign, Louisiana State University Health System, Medical Director of Quality and Health Policy, American College of Surgeons

Dr. Kevin Bozic, MD, MBA, FAOA, FAAOS, inaugural chair of surgery and perioperative care at the Dell Medical School at University of Texas at Austin

Brandeis University Heller School represented by Christopher Tompkins, PhD, Ph.D., Director, Institute on Healthcare Systems; John Chapman, PhD, Senior Scientist, Schneider Institutes for Health Policy; Moaven Razavi, PhD, Scientist, Schneider Institutes for Health Policy; Jennifer Perloff, PhD, Senior Scientist and Deputy Director at the Institute for Healthcare Systems, Schneider Institutes for Health Policy; Grant Ritter, PhD, Professor, Social Policy and Management

Joseph Fifer, President and CEO; Richard Gundling, FHFMA, CMA, Senior Vice President; and **Chad Mulvany, Director**, Healthcare Finance Policy, Perspectives & Analysis, Healthcare Financial Management Association

Mark McClellan, MD, PhD, director of the Robert J Margolis Center for Health Policy and the Margolis Professor of Business, Medicine and Health Policy at Duke University, formerly Commissioner, US Food and Drug Administration, and Administrator, Centers for Medicare and Medicaid Services

Jeff Micklos, Esq., Executive Director, Health Care Transformation Task Force

Lisa Woods, Senior Director of U.S. Health Care, Walmart