



ACCELERATING AND ALIGNING
POPULATION-BASED PAYMENT MODELS:

FINANCIAL BENCHMARKING

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About the CMS Alliance to Modernize Healthcare

The Centers for Medicare & Medicaid Services (CMS) sponsors the CMS Alliance to Modernize Healthcare (CAMH), the first federally funded research and development center (FFRDC) dedicated to strengthening our nation's healthcare system. The CAMH FFRDC enables CMS, the Department of Health and Human Services (HHS), and other government entities to access unbiased research, advice, guidance, and analysis to solve complex business, policy, technology, and operational challenges in health mission areas. The FFRDC objectively analyzes long-term health system problems, addresses complex technical questions, and generates creative and cost-effective solutions in strategic areas such as quality of care, new payment models, and business transformation.

Formally established under Federal Acquisition Regulation (FAR) Part 35.017, FFRDCs meet special, long-term research and development needs integral to the mission of the sponsoring agency—work that existing in-house or commercial contractor resources cannot fulfill as effectively. FFRDCs operate in the public interest, free from conflicts of interest, and are managed and/or administered by not-for-profit organizations, universities, or industrial firms as separate operating units. The CAMH FFRDC applies a combination of large-scale enterprise systems engineering and specialized health subject matter expertise to achieve the strategic objectives of CMS, HHS, and other government organizations charged with health-related missions. As a trusted, not-for-profit adviser, the CAMH FFRDC has access, beyond what is allowed in normal contractual relationships, to government and supplier data, including sensitive and proprietary data, and to employees and government facilities and equipment that support health missions.

CMS conducted a competitive acquisition in 2012 and awarded the CAMH FFRDC contract to The MITRE Corporation (MITRE). MITRE operates the CAMH FFRDC in partnership with CMS and HHS, and maintains a collaborative alliance of partners from nonprofits, academia, and industry. This alliance provides specialized expertise, health capabilities, and innovative solutions to transform delivery of the nation's healthcare services. Government organizations and other entities have ready access to this network of partners, including RAND Health, the Brookings Institution, and other leading healthcare organizations. This includes select qualified small and disadvantaged business. The FFRDC is open to all CMS and HHS Operating Divisions and Staff Divisions. In addition, government entities outside of CMS and HHS can use the FFRDC with permission of CMS, CAMH's primary sponsor.

Executive Summary

The Health Care Payment Learning & Action Network (LAN) was created to drive alignment in payment approaches across and within the public and private sectors of the U.S. health care system. To advance this goal, the Population-Based Payment Work Group (Work Group) was convened by the LAN Guiding Committee and charged with addressing issues critical to the success and accelerated adoption of population-based payment (PBP) models, specifically patient attribution, financial benchmarking, data sharing, and performance measurement. Comprised of diverse health care stakeholders, the Work Group deliberated, incorporated input from LAN participants, and reached consensus on many critical issues related to financial benchmarking, the subject of this White Paper.

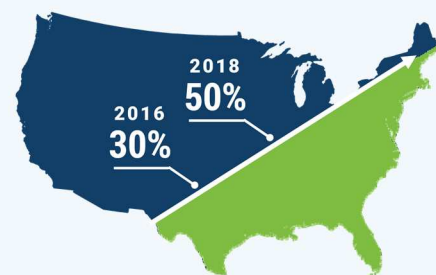
The Work Group acknowledges that moving payment incentives away from fee-for-service (FFS) toward shared-risk and population-based payment is necessary, although not sufficient in its own right, to create a health care system that pays for quality of care over quantity of services. The existing FFS system creates incentives for additional volume of services, while also undervaluing certain services. The current FFS system is not conducive to the delivery of person-centered care because it does not systematically reward high-quality, cost-effective care. By contrast, population-based payment models offer providers the incentives and flexibility to strategically invest delivery system resources, treat patients holistically, and coordinate care. The Work Group and the LAN as a whole believe that the health care system should transition toward shared-risk and population-based payments. The Work Group hopes the recommendations on financial benchmarking will provide an opportune starting point for payers and providers committed to PBP models.

The Work Group believes that financial benchmarking, which sets spending targets, is foundational to the success of PBP models because it drives efficiencies in care delivery and helps keep health care spending at sustainable levels. The White Paper documents principles and recommendations that should guide approaches to financial benchmarking in PBP models. The aim is to support increased alignment in how

Health Care Payment Learning & Action Network (LAN)

To achieve the goal of better care, smarter spending, and healthier people, the U.S. health care system must substantially reform its payment structure to incentivize quality, health outcomes, and value over volume. Such alignment requires a fundamental change in how health care is organized and delivered, and requires the participation of the entire health care ecosystem. The Health Care Payment Learning & Action Network (LAN) was established as a collaborative network of public and private stakeholders, including health plans, providers, patients, employers, consumers, states, federal agencies, and other partners within the health care ecosystem. By making a commitment to changing payment models, establishing a common framework, aligning approaches to payment innovation, sharing information about successful models, and encouraging use of best practices, the LAN can help reduce barriers and accelerate the adoption of APMs.

U.S. Health Care Payments in APMs



public and private payers set benchmarks in PBP models, and in doing so, lower barriers to PBP model acceptance and adoption.

The White Paper is predicated on the assumption that provider participation in PBP models will be voluntary, which has significant implications for how financial benchmarks are designed. Additionally, the Work Group's recommendations are grounded in the following principles for financial benchmarking:

- Trust among stakeholders is essential when establishing benchmarks.
- Financial benchmarks should incentivize and reward the delivery of high-value care.
- Transparency about the financial incentives providers receive is essential.
- Financial benchmarks should not impede access or lead to reductions in the quality of care provided.
- Properly implemented, the effect of financial benchmarks will, over time, shift resources to successful provider organizations and away from unsuccessful ones.

The White Paper provides guidance on the financial benchmarking process, with a goal of creating a set of consensus recommendations for use nationally. At a high level, the Work Group recommends the following:

- Approaches to financial benchmarking should encourage participation in the early years of the model's progression, while driving convergence across providers at different starting points toward efficiency in the latter years.
- Risk adjustment must strike a fine balance such that providers who serve higher-risk or disadvantaged populations are not unduly penalized and disadvantaged populations do not receive substandard care.

Overview

The LAN established its Guiding Committee in May 2015 as the collaborative body charged with advancing alignment of payment approaches across and within the private and public sectors. This alignment aims to accelerate the adoption and dissemination of meaningful financial incentives to reward providers and systems of care that implement person-centered care and patient-responsive delivery systems. [CAMH](#), the federally funded research and development center operated by the MITRE Corporation, was asked to convene this large national initiative.

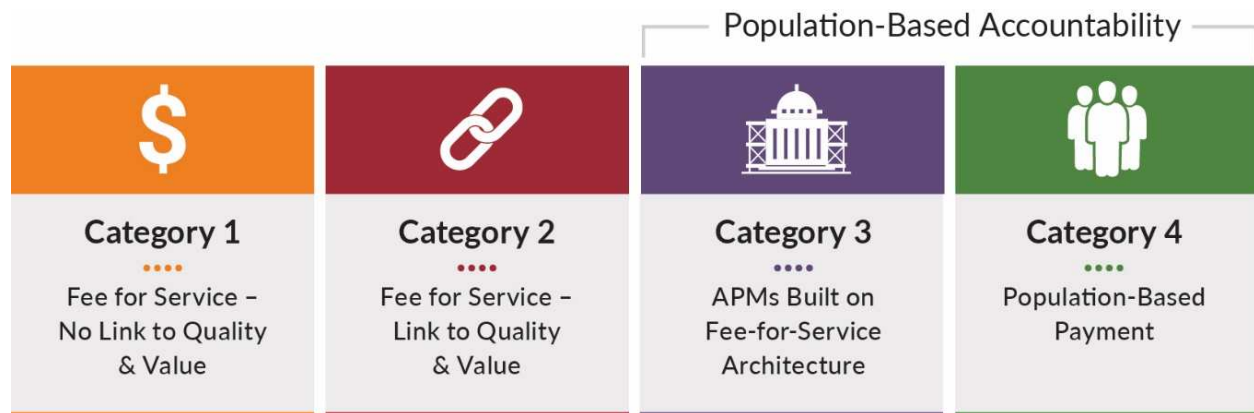
In keeping with the goals of HHS, the LAN aims to shift 30% of U.S. health care payments to alternative payment models (APMs) by 2016 and 50% by 2018. One possibility for reform is a move away from FFS payments to APMs, such as PBP models in which providers accept accountability for total cost of care, care quality, and health outcomes for a patient population across the full care continuum. This is a particularly promising approach to creating and sustaining a delivery system that values quality, cost effectiveness, and patient engagement.

Work Group Charge and Scope

In October 2015, the LAN Guiding Committee convened the PBP Work Group (the Work Group) and charged it with prioritizing methodologies and exploring alignment issues in support of the development, adoption, and success of population-based payment models under which providers accept accountability for a patient population across the full continuum of care.

Recommendations throughout this paper refer to APMs in which providers accept accountability for the full continuum of care that can be classified in Categories 3 and 4 of the APM Framework, depending on how they handle financial risk for provider organizations. The principles and recommendations presented in this paper are directed toward that subset of APMs which, for the sake of convenience, are referred to as “PBP models” (Figure 1). See [Appendix B](#) for additional information about related content produced by the LAN that informed the development of this paper.

Figure 1: APM Framework (At-a-Glance)



Source: [Alternative Payment Model \(APM\) Framework and Progress Tracking Work Group](#)

The Work Group determined that four priority issues are foundational for the success of population-based payment models. These include:

- [Patient attribution](#);
- Financial benchmarking;
- [Performance measurement](#); and
- [Data sharing](#).

Population-based models vary in the mechanism by which payment passes from payers to providers. Some models use a global budget while retaining the underlying FFS payment architecture. In others, an actual population-based payment is made from payer to provider. All of these population-based models, however, involve provider accountability for a patient population across the full continuum of care, including preventive care to end-of-life care and everything in between – with the goal of achieving better quality and outcomes and lower total cost for the population involved¹. The PBP Work Group’s efforts pertain to the full range of models in Categories 3 and 4 in which providers accept accountability for a population across the full care continuum for physical and behavioral health. The CMS Pioneer ACO Model and Medicare Shared Savings Program (MSSP), and private sector models such as the Blue Cross Blue Shield of Massachusetts Alternative Quality Contract (AQC), represent examples of Category 3; they employ a global population-based budget, but retain the underlying FFS architecture.

By contrast, the CMS Next Generation ACO program or commercial models, such as Kaiser Permanente, represent examples of Category 4 in which the population-based payment is made from payer to provider. The PBP Work Group’s focus differs from that of the Clinical Episode Payment (CEP) Work Group because, while both share a focus on Categories 3 and 4, PBP models include provider accountability for an entire population, while CEP models address provider accountability for those individuals within a given population affected by a particular condition, health event, or treatment intervention.

To encourage shifts away from FFS payment to enable more substantial reforms in care delivery, PBP models must address priorities such as attributing patients to a provider group, setting and updating financial benchmarks, sharing data between payers, providers, purchasers, and patients in the market, and measuring performance. There is considerable variation and lack of alignment in the way these components are implemented in the private and public sectors.

The PBP Work Group brings together public and private stakeholders to develop recommendations. A roster of Work Group members, representing the diverse constituencies brought together by the LAN, is provided in [Appendix A](#). Work Group members participate in this effort as individuals and not on behalf of their organizations.

Purpose of the White Paper

All PBP models must in some way employ financial benchmarks, which establish spending levels, typically on a per-member-per-month basis. Both payers and providers use these benchmarks to manage resources, plan investments in delivery support infrastructure, and identify inefficiencies.

¹ This definition is based on definitions found in the following sources: McClellan, et al., “A National Strategy To Put Accountable Care Into Practice,” *Health Affairs* **29** (2010): 982–990; and Mark McClellan, James Kent, Stephen J. Beales, Samuel I.A. Cohen, Michael Macdonnell, Andrea Thoumi, Mariam Abdulmalik, and Ara Darzi, “Accountable Care Around The World: A Framework To Guide Reform Strategies,” *Health Affairs* **33** (2014): 1507–1515.

Financial benchmarks are often established through notice-and-comment rulemaking in the public sector. In the private sector, financial benchmarks are more often negotiated between payers and providers. Given the large market share public payers command, they are able to establish financial benchmarks to more quickly drive efficiencies. This differential in discretion between public and private payers has important implications that are described more fully below, but it is important to recognize that once in place, financial benchmarks function similarly in the public and private sectors.

Establishing financial benchmarks in PBP models is critically important and technically challenging: it involves a broad assortment of complicated considerations that often require difficult tradeoffs among competing priorities. For example, lower benchmarks could reduce system spending if participation were mandatory, but may discourage voluntary participation, ultimately impeding success. Similarly, regional rebasing may allow payers to capture savings more quickly but may also dampen voluntary participation and decelerate delivery system innovations that would sustain significant efficiencies over the long term.

The Work Group expects that local circumstances will necessitate different weightings of priorities, resulting in legitimate variations in the technical details that underpin financial benchmarking approaches. Therefore, the Work Group does not believe that a one-size-fits-all approach is viable, and the purpose of the White Paper is not to advance one. Nevertheless, the Work Group and the LAN believe that certain types of variation impede progress in the goals of reforming health care spending and improving health care delivery by establishing counterproductive incentives for provider organizations. Accordingly, the Work Group has endeavored to identify the technical elements of financial benchmarking that carry the most significance. For each of these elements, the White Paper provides recommended approaches that are as detailed as possible, given the availability of reliable evidence.

The purpose of the White Paper is to provide a blueprint that can help guide the technical work of establishing, updating, and rebasing financial benchmarks in PBP models. Like any blueprint, the White Paper offers an overview of technical issues that must be addressed when making decisions about financial benchmarking, with an eye toward providing practical guidance. But, like any blueprint, the White Paper does not seek to resolve fully each and every technical issue; for example, where the evidence is sparse and consensus not forthcoming, the Work Group allows for the discretion of local health care decision makers.

Definitions

Certain key terms are used throughout the White Paper with the following definitions:

Financial Benchmark: A financial benchmark is a population-based spending level that is used to establish PBP rates for providers. Financial benchmarks may be based on a provider organization’s spending in the previous year (i.e., “historical” benchmarks), on regional or national spending levels (i.e., “regional” and “national” benchmarks), or through some mechanism (e.g., bidding). Once a method for setting benchmarks is in place, updated benchmarks must be risk-adjusted to take into account patient mix. Additionally, financial benchmarks should be adjusted to account for geographic variation in input costs (e.g., wages, rents, etc.) if variations exist across the covered region, but they should not be adjusted on account of variation in utilization of medical care.

Full Continuum of Care: Specialty and primary care, as well as care provided in hospital, post-acute care, safety-net, and clinical settings, which covers prevention and well-being, in addition to therapeutic services that span from the beginning to the end of life.

Population-Based Payment Model: A payment model in which providers are paid a set amount to provide a defined population with a given set of services for a given period of time. PBP models discussed in this White Paper correspond to payment models in Categories 3 and 4 of the LAN’s APM Framework (Figure 1).

Total Cost of Care (TCOC): Financial benchmarks reflect the TCOC for a given patient population over a given period of time. For the purposes of setting the benchmark, TCOC calculations should only include services covered under the insurance plan, because it would be unreasonable for benchmarks to reflect payments for services that are not covered (e.g., dental services). Nevertheless, the Work Group strongly believes that the scope of TCOC should be as broad as possible and should “carve in” behavioral health care and pharmaceutical costs, because these are critical areas of care for patients and have a significant impact on national health expenditures and patient outcomes. We also believe that TCOC should be:

1. Measured consistently within market segments (e.g., commercial, Medicare, and Medicaid);
2. Attributed to provider organizations that take accountability;
3. Designed to allow for maximum flexibility in how provider organizations spend money, including investments in social services and other interventions that address social determinants of disease (and in fact may not have been used to set the benchmark).

Finally, TCOC (as opposed to benchmarks) can be used to compare the efficiency of similar types of providers, and the Work Group believes that providers’ TCOC performance should be shared widely, in the manner described in the [PBP Data Sharing White Paper](#).

In addition to the technical considerations described above, the Work Group deliberated at length about how to properly balance the imperative to quickly achieve deeply needed efficiencies against the need to recognize significant financial and operational obstacles. The Work Group ultimately decided to favor the former over the latter, such that its recommendations reflect aspirational goals for payment reform.

Assumption

In order to advance a nuanced approach to financial benchmarking, it was necessary to make an assumption about the market conditions in which these benchmarks exist and the goals that they are intended to help achieve.

Assumption: Participation in PBP models will likely be voluntary in the vast majority of circumstances, but participation in PBP models should be driven in part by decreasing the lucrateness of FFS-based alternatives.

Provider organizations voluntarily enter into arrangements with public and private payers when they choose to treat members and beneficiaries covered by those payers. Provider organizations can always choose not to enter into arrangements with payers, but their choices may be significantly constrained and may prohibitively restrict their patient pools. This is the sense in which the Work Group defines the term “voluntary participation” in PBP models: provider organizations will most likely, in near term, to be able to choose to participate in a PBP model (or not), and their decision to do so will be driven in large measure by the financial implications of choosing one option over another.

Against this backdrop, there are two ways to increase participation in PBP models: 1) increase the appeal of PBP models; and 2) diminish the appeal of FFS-based alternatives. The first item, as it pertains to financial benchmarking, is the main subject of this White Paper and is discussed at length below. Although it is more tangential to the Work Group’s charge, the subject of diminishing the appeal of FFS-based alternatives was also considered. The consensus is that participation in PBP models will only increase significantly if FFS-based alternatives become less attractive, both financially and in support of favored care delivery options. In the interest of broad-scale payment reform, it is imperative to remove the pricing distortion in FFS systems, as well as exert downward pressure on the growth of FFS-based payment rates.

Nevertheless, the Work Group recognizes that currently, some regions may not be well-suited to transition from FFS-based payment. Because moving too quickly to adopt PBP models can cause access problems in these regions of the country, payers need to be confident that altering FFS-based payments will not result in unintended, deleterious access consequences before they implement wholesale changes.

Key Principles

In order to ensure that financial benchmarks help PBP models chart a course toward sustainable, high-value care, the Work Group established several key principles. These are delineated and explained below.

***Principle 1:** Trust among payers, providers, purchasers, and consumers is essential for managing PBP models over time as benchmarks are updated, rebased, and risk adjusted.*

It is essential for payers, providers, and purchasers to recognize that they are ultimately responsible to the same group of constituents, whether they are “members/beneficiaries,” “patients,” or “employees.” Because PBP models necessitate much closer relationships among payers, providers, and purchasers than their FFS counterparts, the Work Group believes that establishing at the outset a trusting relationship and a long-term commitment to cooperation are prerequisites for success of a PBP model.

***Principle 2:** Financial benchmarks in PBP models should incentivize high-quality, efficient care, enable accountability, and establish a target that fairly rewards provider organizations.*

Ultimately, the success of payment reform in driving positive system transformation requires behavior change. It is crucial that PBPs incentivize positive behavior change; this may require sacrificing short-term goals in order to achieve long-term goals.

For payers, financial benchmarks set cost targets that can help ensure overall spending remains at a sustainable level and to identify provider organizations that are capable of (or excel at) delivering high-quality, cost-effective care. Payers can use financial benchmarks to hold provider organizations accountable for delivering care efficiently and reward them for doing so, while encouraging lower-performing organizations to move quickly toward optimal performance levels.

For provider organizations, financial benchmarks set spending targets that are used to plan and invest in delivery system improvements, identify potential inefficiencies, and allocate resources throughout the delivery system.

***Principle 3:** Payers should transparently communicate to providers the risk-sharing parameters involved in participating in a PBP model, such that providers can access the information they need to fully comprehend the risks associated with participation, understanding that there is an inherent tradeoff between simplicity and precision in payment design, and that it may not be possible to precisely quantify risk ahead of time.*

Financial benchmarks are one of many mechanisms that payment models use to incentivize certain behaviors and activities and disincentivize others. It is therefore essential that providers understand which activities and behaviors these incentives are intended to motivate and what they need to do to succeed. Without transparency, financial incentives will create confusion and fail to achieve their intended goal of supporting delivery reform.

Incentives are complicated because they seek to precisely apportion financial risk and evaluate provider performance accurately and fairly. Providers' capacity to understand the intricate details of PBP models can come into conflict with the imperative to precisely structure financial incentives. In such instances, providers need to be well informed about the risk-sharing parameters, and payers have an obligation to provide them with the technical assistance needed to do so. Nevertheless, the desire for simplicity should not limit the mechanisms that PBP models use to motivate desirable behaviors and activities.

Financial benchmarks are used to guide and control future spending. In general benchmarks should be published ahead of the performance period; however, it is not always possible at the outset to anticipate dramatic events that will impact spending in the future (e.g., an influenza epidemic, the introduction of a new and costly pharmaceutical, or novel social policies that impact social determinants of health). Reacting appropriately to these unanticipated events (which may be exogenous to the health care system) is important, but can be challenging due to the significant financial stakes involved and because the complexity associated with ad hoc adjustments creates a tradeoff between simplicity and precision in the benchmarking.

Transparency and trust are crucial for reaching mutually acceptable solutions to unexpected events, because they will enable payers and providers to reach agreements that 1) fairly compensate provider organizations for costs that they cannot control; 2) do not eliminate the need for providers to make difficult decisions about how to allocate scarce resources; and 3) do not unduly raise costs for purchasers.

Principle 4: Successful approaches to financial benchmarking must simultaneously encourage participation while meeting financial, quality, and access objectives.

Financial benchmarks help provide a foundation for providers to deliver high-quality, cost-effective, and person-centered care. But they must be set in a way that encourages participation in PBP models, because setting benchmarks too aggressively can significantly limit their potential to more widely disseminate high-value health care. Therefore, financial benchmarks should be used as a key instrument to balance the need for participation in PBP models against the need to impose aggressive financial targets.

Although financial benchmarks might ideally target overall reductions in health care spending, reductions over current projected spending is an achievable yet ambitious goal. Additionally, neither financial benchmarks nor the PBP incentive structure as a whole should undermine access to care or the quality of care delivered. At worst, financial benchmarks should have no impact on quality and access and should not replicate inequities in the health care system or create new financial barriers to

needed care. At best, they will enable provider organizations to implement delivery system reforms that dramatically improve access and the quality of care and generate cost savings for purchasers and consumers.

Principle 5: *The effect of financial benchmarks is to enable*
1) efficient provider organizations to succeed;
2) struggling organizations to improve; and
3) failing organizations to fail.

There is deep concern about delivery of health care services that bring no benefit to patients (often estimated to be about 30% of spending) and that enormous spending variation persists among provider organizations that serve the same patient population. Given the large gap between where we are and where we want to be, significant restructuring in the public and private health care markets is needed. Accordingly, financial benchmarks can enable provider organizations that deliver high-value health care to accumulate the resources they need to invest in delivery system enhancement, expand quality improvement activities, increase their patient volume, and participate in other initiatives to help them succeed.

Financial benchmarks can help struggling but promising provider organizations to improve at a rate that allows them to quickly (but manageably) come into line with similar organizations in their region.

Some provider organizations will not be able to sustain themselves in a health care system that is engineered to deliver high-value health care, where care becomes efficient for patients. In many cases, eliminating these provider organizations is desirable for the health care system as a whole, and financial benchmarks may expedite this result. Nevertheless, eliminating failing organizations should not be an explicit goal for financial benchmarks, and great care should be taken to understand and estimate the impact of financial benchmarks on access to care, particularly in regions and market sectors that will require more time to achieve efficiencies. For patients, it is better to be able to access low-value care, than to be unable to access any care at all.

Core Recommendations on Establishing and Updating the Benchmark

The Work Group's recommended approach to financial benchmarking is summarized in the following recommendation:

Recommendation 1: *Approaches to financial benchmarking should encourage participation in the early years of the model's progression, while driving convergence across providers at different starting points toward efficiency in the latter years.*

The initial financial benchmark should be established in a way that favors lower efficiency organizations, while higher efficiency organizations should experience more favorable conditions each time the benchmark is updated or rebased. This approach is intended to ensure that high performers have the resources they need to succeed and that low performers adapt to continuously increasing expectations.

The recommended approach to financial benchmarking moves through three stages as the PBP model matures:

- In the first stage, financial benchmarks are set to maximize participation among provider organizations, and, in particular, inefficient organizations, in order to achieve limited efficiencies in the short run. The purpose of this is to attract a critical mass of providers and secure long-term commitments to PBP models.
- In the second stage, adjusted payments to comparable provider organizations are brought into alignment, incrementally driving efficiencies as provider organizations acclimate to new payment arrangements, invest in delivery system improvements, eliminate low-hanging cost and quality issues, and build trust with payers who administer PBP models. The goal of the second stage is to allow provider organizations the time and flexibility to reorient practices, resources, and workflows to align with PBP.
- In the final stage, the financial benchmarks for all provider organizations in a common market converge, such that risk- and input price-adjusted payments to all participants in the PBP model are equivalent. Once convergence occurs, the Work Group envisions a steady state for the PBP model, in which periodic updating (or rebasing) of the benchmark impacts all participating provider organizations similarly.

***Recommendation 1a:** The initial baseline should be based on provider-specific spending, taking into account the provider organization's history and local market forces.*

Because PBP models cannot support needed delivery system changes if providers elect not to participate in them, it is essential for the initial benchmark to encourage participation, especially among inefficient provider organizations. "Historical" benchmarks, based on an organization's past spending history, are favored by inefficient organizations because they do not require these organizations to perform at the same level as more efficient organizations. Initial baselines for PBP models should therefore be based on historical benchmarks, in order to maximize participation among inefficient provider organizations. It is important to note, however, that there are significant downsides to maintaining historical benchmarks for long periods of time, as discussed below.

***Recommendation 1b:** Updating and rebasing of the initial benchmark should not be based on provider-specific changes in spending.*

It is important for provider organizations to improve their performance and capture savings. If they believe that improved performance will lead to lower benchmarks, incentives to invest in programs to improve care are diminished because efficient provider organizations would need to make difficult improvements over existing efficiencies to capture additional savings. For this reason, updating should not be based on provider-specific performance. Instead, updates (or rebasing) should be based on predetermined formulas or trends reflecting broad populations (e.g., regional trends or fixed financial targets). Although it may result in a lesser allocation of savings to provider organizations in the short run, this approach maximizes the incentives for behavior change and appropriately prioritizes long-term performance.

Recommendation 1c: Updating and rebasing of the initial baseline should drive convergence around local spending rates as quickly as local conditions allow, with an eventual movement to regional rates in the medium to long term.

Financial benchmarks should be used to drive convergence in adjusted payments from public and private plans within a common payer segment (e.g., between Medicare, Medicaid, and private payers). The Work Group recognizes that convergence across payer segments is not likely and likely not desirable. Additionally, regional benchmarks must be adjusted to account for geographical variation in input costs (e.g., local wage and real estate costs), but these adjustments should not account for regional differences in efficiency. Within payer segments, successive updates to financial benchmarks should be used to reduce variation in adjusted payment rates over time. As updates to financial benchmarks are based less on historical spending rates, efficient providers will have an easier time meeting them, but it will be increasingly challenging for inefficient providers to do so. This is advantageous, because the alternative is over-paying inefficient provider organizations and under-paying efficient providers, which puts the former at an economic advantage over the latter, effectively penalizing efficient organizations for being efficient.

Further clarification is needed regarding the form convergence takes and where financial benchmarks are pegged in the steady state. In the first case, convergence can be achieved by simply raising payments to efficient provider organizations. Payment growth to inefficient provider organizations must be constrained to ensure that financial benchmarks are at least budget neutral across the system as a whole. All of the savings generated by efficient providers should not necessarily be reapportioned among participants in the PBP model.

If providers develop innovative delivery solutions that reduce overall costs, it may be most appropriate to reduce benchmarks accordingly to ensure that resources are redirected outside of the health care system and purchasers and patients are able to share in the savings generated. In other words, financial benchmarks should be lowered (or raised more slowly) as provider organizations develop more efficient approaches to care delivery, but the rate at which this occurs should not be so fast as to jeopardize widespread participation in PBP models. With respect to where to set the steady state for financial benchmarks, consensus was not reached on whether adjusted payments should be pegged to national benchmarks to ensure uniformity across the country. Nevertheless, there is a

strong consensus that regional benchmarks should represent the immediate initial goal of convergence and that this is an achievable goal.

In light of these considerations, the key question is: Over what time frame should convergence take place? It is essential to achieve convergence as quickly as possible due to the anticompetitive incentives in historical benchmarks; however, the speed of convergence is constrained by a variety of factors.

First, the voluntary nature of participation limits the ability to lower payments to inefficient organizations. Although financial benchmarks are only one element in the incentive structures that underwrite a PBP model, there is evidence to suggest that benchmarks are a critically important consideration when provider organizations decide whether to participate or remain in an APM. If convergence moves too fast, inefficient provider organizations will likely drop out, thereby minimizing the overall impact of the PBP model on payment reform.

Second, private payers must negotiate contracts with provider organizations, and leverage in these negotiations is dictated by local market power. A lack of leverage in contracting negotiations will necessarily limit the rate at which private payers can drive convergence. Public payers and private payers with more market power have more latitude to expedite convergence, but even in these cases the speed of convergence will be diminished by the voluntary nature of participation.

Finally, the speed of convergence will be constrained by extensive disparities in payment that exist in many regions today. Because the payment gaps between efficient and inefficient provider organizations in these regions is quite wide, it will take more time to close them, even if current rates for inefficient providers hold constant.

Recommendation 1d: There are multiple pathways to convergence but the end point is what matters.

There are at least two different pathways to achieve convergence through updates to the financial benchmark. First, a PBP model might impose differential updates, such that inefficient providers receive a lower update than efficient providers, year over year. Second, a PBP model might impose a blended approach, such that updates to the benchmark are increasingly based on regional or national benchmarks and decreasingly based on historical benchmarks. Both approaches (and likely others) are viable. Local health care decision makers are best positioned to choose the appropriate approach for them, but it is imperative to choose the quickest pathway to convergence around regional benchmarks.

Recommendations on Risk Adjusting Regional and National Benchmarks

Because historical benchmarks are based on an organization's previous spending rates, to a large degree they take into account the provider organization's case mix. Accordingly, risk adjustments to historical benchmarks (alone or as a proportion of a blended benchmark arrangement) only need to be adjusted to account for changing risk profiles over time.

By comparison, risk adjustment for regional and national benchmarks is considerably more important. Therefore, the following recommendation focuses on these types of benchmarks:

***Recommendation 2:** Risk adjustment must strike a fine balance such that providers who serve higher-risk or disadvantaged populations are not unduly penalized and disadvantaged populations do not receive substandard care.*

In the case of regional and national benchmarks, payments are based on comparisons between a provider organization's average costs in a given geographic area. Given that this determination does not take into account the patient populations served by a particular provider organization, these benchmarks can place providers who serve sick and vulnerable populations at a disadvantage, because treatment of these patients tends to incur greater costs. Although access to care can be compromised by under-adjusting regional and national benchmarks, overinflating benchmarks brings its own set of risks, including higher than needed expenditures. Therefore, the Work Group's specific recommendations on risk adjustment focus on striking the delicate balance identified in Recommendation 2.

***Recommendation 2a:** The state-of-the art of risk adjustment is likely to change over time, and it will be important to keep up with recent developments that improve the precision of risk-adjustment approaches.*

The Work Group considered at some length the fluid state of risk adjustment. An ideal risk-adjustment model does not currently exist, but the field is developing rapidly. At present, approaches will coalesce around regression adjustment approaches, but technical challenges persist. Thus risk-adjustment strategies remain an active area of investigation within the health care delivery and academic community.

There is sufficient evidence to combine regression-based models with reinsurance or outlier payments, and the use of survey and claims data may help reduce the potential for gaming. Nevertheless, it is not appropriate to recommend a particular set of risk-adjustment variables or a specific risk-adjustment system. Rather, it is important for risk-adjustment strategies to continue to be an ongoing area of investigation and for risk-adjustment approaches to gain precision through iterative refinements and the accumulation of additional information.

Recommendation 2b: Risk-adjustment models should minimize the connection between utilization and risk score.

Utilization should not be used as *prima facie* evidence that a provider organization is treating a sicker population (i.e., just because a provider organization spends more to care for a population does not mean that the population is necessarily sicker than average). Provider organizations should not be paid more for an added intensity of treatment just because the risk-adjustment model assumes that the patient population is sicker. The purpose of risk adjustment is to compensate provider organizations enough to account for how sick their patients are and how much it costs to care efficiently for those types of patients, while still maintaining an incentive to deliver high-quality care. Therefore, PBP model incentives to deliver efficient care are necessarily weakened to the extent that health care delivery (as opposed to the clinical characteristics of a population) affects the risk-adjusted payments.

Gaming is a considerable challenge when distinguishing between utilization and risk. When provider-reported diagnosis codes are factored into risk-adjustment models, there will always be an incentive to code (perhaps appropriately) in a way to receive a larger adjustment. Nevertheless, risk-adjustment models can take measures to limit the discretion of coders and reduce incentives to code overly aggressively. First, the use of survey data may reduce gaming because they could come from sources independent of the provider organization. Second, reducing uncertainty and interpretability in the data definitions that underwrite risk-adjustment variables will reduce the potential for miscoding. For example, ambiguous questions (e.g., “are you in pain?”) and assessments of diagnostic severity (e.g., moderate versus severe diabetes) tend to elicit responses that overstate risk and should be avoided if possible.

Finally, one possible way risk-adjustment models can reduce gaming is to increase the time lag between when codes are collected and when adjustments are implemented. This is because the incentive to code aggressively is enhanced when coding is done during the same year in which payments are implicated. Therefore, coding and gaming issues associated with concurrent risk adjustment could be significant, and, at worst, can lead to a situation in which PBP models emulate FFS systems with a short time lag.

Accordingly, the use of prospective risk adjustment, in which claims from one year are used to adjust payments in the following year, is recommended. It is also suggested to investigate longer time lags in order to further reduce the incentive for overly aggressive coding. The Work Group recognizes that new enrollees would have to be handled differently in a prospective risk-adjustment model, but this has been done with some success, such as in the Medicare Advantage program, in which risk-adjustment is done on the basis of lagged claims, and there is a separate process of handling new beneficiaries.

Recommendation 2c: Successful risk-adjustment models should accurately predict spending at the population and subpopulation levels, but it is not important for models to accurately predict spending at the individual level.

When it comes to evaluating the success for risk-adjustment models, it is considerably more important to accurately predict costs for a given population or sub-population than it is to accurately predict costs for particular individuals. This is because populations, not individuals, are the units of analysis used to establish population-based payments. Therefore, risk-adjustment models should be built to be predictive at the population level, allowing the residual noise at the individual level to be averaged away. Additionally, it is critical to construct risk-adjustment models that fit important subgroups, such as patients with similar clinical and demographic profiles. Use of models that cannot demonstrate adequate adjustment for these types of patients could contribute to access problems.

Recommendation 2d: PBP models should not disrupt care for needy populations, and risk adjusting for socioeconomic status (SES) may be one way to accomplish this. Nevertheless, SES adjustments should not be a mechanism for forgiving lower care for needy populations.

In much the same way that financial benchmarks should differ from market segment to market segment, risk-adjustment approaches should be tailored to individual market segments. In other words, commercial plans, Medicare, and Medicaid should employ unique risk-adjustment approaches because attributes of their specific patient populations warrant different sets of risk-adjustment variables and different assumptions in the underlying models.

Having reviewed the published literature and consulted with experts in the field, the Work Group determined that risk adjusting for SES within a given market segment may add little value, because some evidence suggests SES is not a statistically significant predictor of total cost of care. Tailoring risk-adjustment approaches to specific market segments is probably a valid approach to adjusting for SES; however, approaches to SES adjustment are developing rapidly, and in certain cases there may be ways to do so appropriately. Accordingly, it does not make sense to dismiss these types of adjustments outright, and there is value in monitoring the state of the field as it develops. Until there is greater consensus on whether and how to adjust for SES, the Work Group does not believe that it is appropriate to recommend a specific, technical approach. Also note that this recommendation pertains to adjusting benchmarks for SES and is not meant to apply to similar adjustment in clinical quality measures.

Conclusion

The Work Group is committed to the concept of transitioning from FFS to population-based payment models as a critical component of health care transformation to achieve better quality and outcomes and lower costs. The recommendations in this White Paper lay out an approach to financial benchmarking that can be used nationally by commercial and public PBP models. The Work Group believes that over time, alignment between public and private programs is highly desirable and should be possible.

Advancing the PBP Work Group's Financial Benchmarking Recommendations

The White Paper outlines a set of recommendations for financial benchmarking that the Work Group believes are critical to aligning PBP models. Stakeholders can help accelerate the adoption of this approach to financial benchmarking by taking the following actions:

- **Purchasers and consumers** can begin to familiarize themselves with the incentives – both positive and negative—that are associated with different approaches to financial benchmarking and to use approaches to financial benchmarking as an important determinant in plan selection.
- **Payers** can adopt the Work Group's recommendations when designing approaches to financial benchmarking in PBP models, while also giving providers the technical assistance they need to understand and thrive in these types of models.
- **Providers** can examine what types of delivery system changes would need to be made to succeed in the types of financial benchmarking arrangements detailed in this paper, begin to put these changes into place, and look for opportunities to participate in PBP models.

Appendix A: Roster

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[CAMH](#), sponsored by CMS, is a federally funded research and development center operated by the MITRE Corporation. MITRE is chartered to work in the public interest.

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Appendix B: LAN Related Content

The following provides links and a brief overview of each of the papers written by the LAN Work Groups. By reading the full suite of products, readers of this paper will be better able to make decisions about the most effective payment model(s) to implement and the key issues to consider when designing those models.

Visit our website (<https://www.hcp-lan.org>) for an up-to-date list of LAN [work products](#) and for a [glossary](#) of terms.

Last updated 6/15/2016

Accelerating and Aligning Selected [Clinical Episode Payment \(CEP\) Models](#)

This paper provides high-level recommendations for designing clinical episode payment models. A clinical episode payment is a bundled payment for a set of services that occur over time and across settings. The papers outline design elements and operational considerations for three selected clinical areas: Elective Joint Replacement, Maternity Care, and Coronary Artery Disease. Recommendations are organized according to design elements and operational considerations. Design elements address questions stakeholders must consider when designing an episode payment model, including the definition, the duration of the episode, what services are to be included, and others. Operational considerations relate to implementing an episode payment model, including the roles and perspectives of stakeholders, data infrastructure issues, and the regulatory environment in which APMs must operate.

Several key principles drove the development of the recommendations across all three episodes: 1) Incentivizing **person-centered care**; improving patient outcomes through **effective care coordination**; 3) **Rewarding high value care** by incentivizing providers and patients, together with their family caregivers, to discuss the appropriateness of procedures; and 4) **Reducing unnecessary costs** to the patient and to the health care system.

The recommendations are designed to speak to a multi-stakeholder audience with the goal of supporting broad clinical episode payment adoption.

[Elective Joint Replacement](#)

The elective joint replacement recommendations emphasize using functional status assessments (both pre- and post-procedure) and shared decision-making tools to determine whether a joint replacement is the appropriate treatment for a given patient.

[Maternity Care](#)

The maternity care recommendations emphasize the need for patient engagement, education, and parenting support services (in addition to clinical maternity care), to achieve a number of critical goals. These include increasing the percentage of full-term births and the percentage of vaginal births, while decreasing the percentage of pre-term and early elective births, complications, and mortality.

[Coronary Artery Disease](#)

The coronary artery disease recommendations are based on a CAD condition-level episode, which includes a “nested” bundle for procedures like percutaneous coronary intervention (PCI) and coronary artery bypass graft (CABG). The recommendations emphasize overall condition management designed to reduce the need for procedures, and strong coordination and communication between the

surgeons who perform cardiac procedures and the providers who deliver follow-up and long-term cardiac care.

Accelerating and Aligning Population-Based Payment (PBP): [Financial Benchmarking](#)

The Financial Benchmarking White Paper describes approaches for setting an initial benchmark and updates over time and also addresses risk adjustment considerations. The White Paper discusses the need to balance voluntary participation with the movement towards convergence in a market with providers at different starting points.

Accelerating and Aligning Population-Based Payment (PBP): [Patient Attribution](#)

The Patient Attribution White Paper describes the method by which patient populations are assigned to providers who are accountable for total cost of care and quality outcomes for their designated populations in a PBP model. The paper recommends that active, intentional identification or self-reporting by patients should be considered first. The paper also outlines nine additional recommendations that payers and providers can use when making decisions on attribution in their PBP models.

Accelerating and Aligning Population-Based Payment (PBP): [Performance Measurement](#)

The Performance Measurement White Paper offers both short-term action recommendations and a longer-term vision for accelerating alignment around APMs. The paper offers a way forward that could lead to radical change in how performance is measured across the board in order to enable effective population-based payments. The White Paper describes how to evolve from granular measurement systems of the full continuum of care, which focus on narrow and specific care processes, to more macro-level measurement systems oriented on outcomes. The paper also makes strong recommendations for immediate action steps by describing four key performance measurement principles and seven recommendations for building and sustaining a performance measurement system that supports and encourages collaboration among stakeholders.

Accelerating and Aligning Population-Based Payment (PBP): [Data Sharing](#)

The Data Sharing White Paper offers several guiding principles and recommendations that highlight the future development of data sharing arrangements in PBP models. The paper also outlines Use Cases for data sharing which describe particular types of data sharing arrangements, in both their current and aspirational states. The goal is to create an environment where data follows the patient and is available to stakeholders (patients, providers, purchasers, and payers) in a timely manner.