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April 20, 2015

Richard Jensen
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Dear Mr. Jensen,

With SIM grant support, the Oregon Health Authority contracted with OHSU's Center for Evidence-based Policy to review alternative payment methodology (APM) implementation with provider networks in Oregon. While the state has initiated accountable contracts in their Medicaid and state employee health benefits purchasing, APM at the provider level is a critical lever to further health system transformation efforts across the state. The attached full report provides information, tools and best practices for planning and implementing these methods in Oregon, particularly for coordinated care organizations. This report has been finalized and will be released after OHA leadership review and approval.

The Center conducted a multi-step research process including a literature review, interviews with Oregon thought leaders and facilitated discussions with key stakeholders.

Key findings include:

Alternate payment methods have potential for reducing cost and utilization

Current evidence indicates alternate payment methods can be effective in reducing cost and utilization, while improving quality of care. However, findings have been mixed and most models have not been tested in Medicaid populations.

Oregon thought leaders support use of APMs

Thought leaders in Oregon understand and support the development of alternate payment methods. Concerns remain around some models and implementation processes, but the concept of using these methods to reduce cost and improve care is accepted and supported.

'One-Size-fits-all' is not the right approach for alternate payment methods

Environment and situation determine which model or blend of models to use. The importance of flexibility and adjustment from stakeholder feedback was consistently highlighted by those who have successfully implemented these methods. Reform decisions need to be made at a local level and engage all stakeholders, particularly providers. “Top-down” decision-making was rejected by all interviewed for this report as an unworkable and unsustainable strategy.

Challenges to implementing alternate payment methods in Oregon

Strong relationships with effective communication and a high level of trust and collaboration are important to successfully design and implement these methods. Developing these relationships takes time and can be difficult to build if past relationships were negative or nonexistent.

Those who successfully implemented methods indicated it was more difficult than anticipated and they spent from one to three years building necessary relationships. However, they indicated the nature of the CCO model inherently encouraged development of those relationships.

Additional challenges to implementation in Oregon include tension between creative service delivery and the need to adhere to traditional actuarial standards, the potential of CMS requiring medical loss-ratios for CCOs and the broader threat posed to global budgets by high-cost pharmaceutical or technological developments.

Conclusions

Research for this project revealed that the unique circumstances found in each Oregon community makes it difficult to create a standard approach or set of implementation tools. Successful development and implementation of alternate payment methods depends on creating an environment and a set of conditions that are conducive to collaboration and collective risk taking – conditions that in some cases are community-specific.

Next Steps

To continue successful implementation, the Oregon Health Authority has contracted with OHSU’s Center for Evidence-based Policy to:

- Develop a payment reform needs assessment tool for CCOs. This will help determine levels of readiness to begin the process of developing and implementing alternate payment methods.
- Provide alternative payment method presentations at learning sessions for CCOs and stakeholders.
- Develop and administer a process for providing technical assistance to selected CCOs.
- Provide intensive technical assistance on developing and implementing alternative payment methods for 2-3 pilot sites.

- Advance alternate payment methods for the CCOs not participating in the pilots and non-Medicaid payers or payees through four additional gatherings that highlight lessons learned from the pilot sites.

Please let us know if you have additional questions.

Sincerely,

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ALTERNATIVE PAYMENT METHODOLOGIES IN OREGON

The State of Reform

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ACKNOWLEDGMENTS

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Suggested citation:

Leof, A., Curtis, P., Gordon, C., Thielke, A., Evans, R. & Pinson, N. (2014). *Alternative Payment Methodologies in Oregon: The State of Reform.* Portland, OR: Center for Evidence-based Policy, Oregon Health & Science University.

The project described was supported by Funding Opportunity Number CMS-1G1-12-001 from the US Department of Health and Human Services, Centers for Medicare & Medicaid Services. The contents provided are solely the responsibility of the authors and do not necessarily represent the office views of DHHS or any of its agencies.

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Executive Summary

The Oregon Health Authority (OHA) contracted with the Center for Evidence-based Policy (Center) at Oregon Health & Science University to prepare a report on alternative payment methodologies (APMs) in Oregon. The purpose of the report is to assess the status of APM implementation in the state and provide Coordinated Care Organizations (CCOs) and other entities with information, tools, strategies, and best practices for planning and implementing effective alternative payment methodologies in Oregon.

This report on APM development builds upon prior work to support primary care homes in Oregon. In 2013, Center staff facilitated meetings convened by OHA and the Oregon Health Leadership Council to create a multi-payer agreement on implementation of Patient Centered Primary Care Homes (PCPCH) in Oregon. During those meetings, public and private payers agreed to:

- Use a common definition of primary care homes and levels of coordination, based on the State's PCPCH program
- Include payment models to practices in their network that are based on PCPCH participation and increasing levels of patient-centered coordinated care
- Use a common set of core metrics to measure progress toward achieving outcomes
- Find additional opportunities for meaningful collaboration that will support the long-term sustainability of primary care homes

Upon the successful completion of the multi-payer PCPCH agreement, attention was turned to broader payment reform initiatives, and this report was commissioned as part of OHA's efforts to support health system transformation in Oregon.

The Center completed a multi-step research process to develop this report, including a review of the policy and evidence literature, interviews with Oregon thought leaders, facilitated discussions with key stakeholder groups, and interviews with officials from three Oregon CCOs who had implemented APMs in their systems[1]. The literature review and qualitative interviews focused on six APM models[2]: episodes of care, bundled payments, pay-for-performance, payment penalties, shared savings, and shared savings with shared risk. A seventh model, capitation, was added to the report based on respondent feedback. The CCOs who had implemented APMs and were interviewed for this report use models that combine elements of shared savings, shared savings and shared risk, capitation, and pay-for-performance.

The report concludes that while there is general agreement in Oregon that APMs support the Triple Aim goals and are an important part of CCO development, implementation of APMs is often more challenging than participants anticipated. The CCOs identified in this project who successfully implemented APMs spent from one to three years working on their model, and in many cases this direct effort came after years of community stakeholders working collaboratively on other projects, or after dedicating significant energy toward building long-term relationships. The predominate finding is that development and successful implementation of APMs builds upon a solid underlying foundation of relationships built on mutual trust. While the research identified other necessary elements for success (e.g., actionable data, dedicated leadership, perseverance) as well as other challenges to APM development (e.g., concern

[1] Representatives from AllCare, Central Oregon CCO and Eastern Oregon CCO were interviewed about their APM implementation and a consultant from Yamhill CCO was interviewed about its APM development process. While other CCOs in Oregon have also moved forward with APM development and implementation, these four CCOs were selected for detailed review in this report based on recommendations from Oregon thought leaders and Transformation Center staff.

[2] Definitions of the APM models used in this report can be found on page 10 of the full report and a full description of the research methodology on pages 5 and 6.

about the application of actuarial standards, criticism of quality metrics), the research clearly demonstrates that the willingness of participants to trust one another and work together across traditional boundaries in health care is essential for APM success.

Additional key findings include:

- APMs can be effective in reducing utilization and costs while improving quality of care, although the evidence is mixed and most models have not been tested in Medicaid populations. Because APM development is relatively new, collecting data and evaluating models to identify key factors impacting success should be a priority. Capturing the experience of reform in Oregon will provide needed information on what works and help guide future reform efforts across the country.

- Oregon thought leaders understand APM methodologies and support the development of APMs. They see potential to improve care and reduce costs, and they are interested in moving forward in reform. While there were concerns about specific models and the process of implementing APMs, the general concept was accepted.

- There is no "one-size-fits-all" model for APMs. Different models will work in different situations, and fitting or blending models to the particular environment is critical for payment reform success.

- Reform decisions need to be made at the local level and engage all stakeholders, particularly providers. "Top-down" decision-making or the imposition of a model by a subset of decision-makers was rejected by both providers and CCO executives as an unworkable and unsustainable strategy.

- Successfully designing and implementing an APM requires relationships between stakeholders defined by trust and communication. Developing these relationships takes time and effort, particularly if the relationships were non-existent or negative in the past. Those who successfully implemented APMs indicated that they spent from one to three years building necessary relationship foundations before they were able to agree on a model and sign a contract. Interviewees noted that the nature of the CCO model encouraged the development of these relationships, and that successfully collaborating across traditional barriers on one issue (e.g., payment reform, provider practice improvements) made subsequent collaboration easier.

From the research, the Center identified initial best practices for the APM development process including:

Investing in Relationships

Successful implementers spent significant time building relationships that included frequent communication and dedicated time to build trust.

Strong Leadership

The involvement of top hospital officials, CCO executives, and prominent physician champions was a common feature in successful APM adoption.

Useable Data

Being able to manipulate data and test various APM scenarios was essential for implementers in building confidence, and their willingness to take risks. Good data is also needed to evaluate the success of APM models and assist in improving patient care.

Perseverance

Individuals who successfully implemented APMs used the words "perseverance" and "persistence" when asked what it took to implement a contract.

Simplicity

Simple, transparent models allow all potential stakeholders to understand and participate in APM development and implementation.

Win-Win Structures

Successful implementers agreed that they succeeded in getting a contract when all participants agreed that the structure was a "win-win" design.

This report underscores that meeting the goals of the Triple Aim through new payment structures and methodologies requires providers and insurers to work together in new ways. Interviews with Oregon thought leaders and CCO leaders revealed both a willingness and ability to implement APMs in the State. As the state proceeds with health care transformation, sustained commitment to reform from State officials, providers, health care executives and leaders will be necessary. This report provides information, and suggests strategies that support further development and implementation of APMs in Oregon.

Background

Health care providers in the United States have traditionally been paid on a fee-for-service (FFS) basis where they are reimbursed for each service they provide. With FFS reimbursement providers have little incentive to control the use of services or the cost of those services, and may be incentivized to increase the volume of services provided.

Experts have associated FFS payment with the overutilization and duplication of services, a reduced emphasis on primary care in favor of more expensive procedural care, and a reduced incentive to coordinate care across providers or improve efficiency in care (Frist et al., 2013). Alternative payment methodologies (APMs) are designed to change provider incentives so that reimbursement will reward the *value* of care provided instead of the volume of services delivered.

Alternative payment methodologies have been used in segments of the health care system for many years, including Medicare inpatient services (the Diagnostic-related Groups [DRG] system) and episode payments for maternity care, among others. Most significantly, the widespread use of capitation and managed care organizations in the 1990s was credited with holding down costs, but was criticized for limiting patient access to providers, creating burdensome authorization processes for specialty care and procedures, and for creating financial incentives for providers to avoid sicker or more complicated patients (Orzag & Ellis, 2007). To avoid these unintended consequences current payment reform initiatives generally include some form of quality measurement to ensure that providers are not reducing costs by withholding appropriate care or denying access to providers and services.

Oregon's health transformation plan requires that Coordinated Care Organizations (CCOs) implement at least one APM as part of their larger efforts to achieve the Triple Aim goals. The Oregon Health Authority (OHA) contracted with the Center for Evidence-based Policy (Center) to report on the evidence for APMs and the status of APM development in Oregon, and to suggest tools, strategies or best practices for moving forward with payment reform based on these findings. ***The purpose of this report is to provide Oregon's CCOs and other entities with information, tools, strategies, and best practices for planning and implementing effective alternative payment methodologies in Oregon.***

RESEARCH APPROACH

The Center for Evidence-based Policy (Center) used a multi-phased process to conduct the research necessary for the completion of this report, including:

- ***Review of policy literature on APMs***
  The Center reviewed policy literature to identify six basic APM models for further research. Key informant interviews identified a seventh model, capitation.
- ***Review of published literature***
  The Center reviewed evidence on the seven APM models, focusing on effectiveness in improving quality of care and reducing costs. This literature base was also reviewed for information on key implementation features that may contribute to the success of APMs.
- ***Thought leader interviews***
  The Center conducted semi-structured interviews with 18 thought leaders on health system reform in Oregon. Respondents included CCO and hospital executives, medical and behavioral health care providers, a legislative leader, an employer, and representatives from health care related professional associations (see Appendix F).
- ***Facilitated discussions***
  The Center presented initial findings to seven key stakeholder groups and facilitated discussions to vet initial findings and gather additional information on

APM development in Oregon. Stakeholder groups included the Oregon Medical Association, the health committee of the County Local Government Advisory Committee, Oregon's Healthcare Financial Management Association, and meetings of CCO chief executive officers and chief financial officers (see Appendix G).

- ***Implementer interviews***
  The Center conducted semi-structured interviews with 12 individuals involved in implementing APMs in Oregon CCOs as identified through thought leader interviews, stakeholder group discussions, and in consultation with the OHA Transformation Center (see Appendix F). Case studies on APM development at AllCare CCO, Central Oregon CCO, Eastern Oregon CCO, and Yamhill CCO are included in Appendices A through D.

The Center analyzed information gathered from the policy and evidence reviews as well as interviews and facilitated discussions to prepare this report. The findings include information on the status of APM development in Oregon and best practices in moving forward with payment reform. The completed report will be presented to OHA, the Oregon Health Policy Board, and other interested audiences.

ADDRESSING PATIENT SELECTION BIAS

The OHA requested the research address the risk of patient selection bias, and identify strategies to mitigate this as an unintended consequence of APM implementation. The Center reviewed the literature for patient selection bias, and asked interview and facilitated discussion participants about ways to prevent providers from avoiding or dropping patients with higher risk profiles. No literature was found that specifically suggested strategies to prevent patient selection bias. Thought leaders and participants in stakeholder discussion groups voiced concern about this issue, and identified risk adjustment and the use of quality metrics in APM models as strategies to minimize this bias. For example, AllCare CCO includes access measures in its APM model, with providers qualifying for payments based on whether the provider is open or closed to new patients, and how many new patients they are willing to take.

AllCare CCO also varies its primary care capitation rates based on patient acuity—creating four payment levels based on risk scores derived from the Chronic Illness and Disability Payment System. The goal is to avoid patient selection bias and equitably pay providers who serve high needs patients. Assessing risk is a complicated issue and there is significant debate over the best method for adjusting for risk (Wennberg et al., 2014). Cunningham (2012) notes that providers often "up-code" to maximize their payments. While interview and discussion group respondents expressed interest in learning more about risk adjustment options, assessing the evidence for these models was beyond the scope of this report. The literature included some evidence that payers are moving away from risk adjusted payment rates as they are difficult to define and administer (Bailit & Houy, 2014).

The remainder of this report is organized as follows:

- An explanation of the methods used in report preparation.
- Definitions of the seven basic APM models discussed in the report.
- A review of the evidence for each of the seven APM models' effectiveness, including responses from thought leaders, and feedback from stakeholder discussion groups.
- A discussion of performance metrics based on comments from thought leaders and stakeholder meeting participants.
- A discussion of respondents concerns about APM development and health care reform going forward in Oregon.
- A review of findings from interviews with implementers of APMs in Oregon.
- A description of "best practices" for APM implementation.
- Overall findings and conclusions.

Methodology

Center staff searched core policy sources[3] and Google using the terms "alternative payment methodology," "alternative payment," "payment reform," and "fee-for-service" to identify the APM models included in this report. Materials produced by groups involved in creating or evaluating APMs were identified and reviewed. Materials from the Robert Wood Johnson Foundation, Academy Health, Aligning Forces for Quality, Catalyst for Payment Reform, the Health Care Incentives Improvement Institute, and the Center for Healthcare Quality and Payment Reform, among others, were included in this review. All materials for these websites, as well as articles identified through the Google search, were reviewed and reference lists were checked for additional articles.

Center staff identified six basic APM models based on a review of these policy reports: episodes of care, bundled payments, pay-for-performance, payment penalties, shared savings, and shared savings with shared risk. These models are not mutually exclusive, and many APM programs consist of a mixture of these models in some form. However, these six basic models capture the essential elements of payment reform strategies. The six models are described briefly in the next section.

Capitation was not initially included as an APM model for this report, but was added after a significant number of thought leaders spontaneously discussed it in their remarks on APMs.

Center staff searched the MEDLINE® (Ovid) research database, and reference lists of identified articles for studies that compared one of the seven APMs with FFS payment to determine whether there were differential effects on quality of care, patient health outcomes, or costs. The search was limited to studies published within the last 10 years in the English language. A total of 1,339 studies were identified. After a full review of citations and abstracts identified through this search, one systematic review and 19 individual studies were included in this analysis. A full description of the formal search methodology is included in Appendix E.

While proceeding with the evidence review, Center staff worked with OHA to identify 18 thought leaders in Oregon and scheduled one hour-long, in-depth qualitative interviews. Interview participants were provided with preparatory materials on the six identified models and were asked for their thoughts specific to the six models[4], and payment reform overall. Interviews were transcribed and analyzed in ATLAS.ti™, a qualitative data analysis software program. Analysis provided initial findings on thought leader opinions about what is needed for Oregon to move forward with APM implementation. A list of thought leaders interviewed is included in Appendix F.

Center staff analyzed data from the evidence review and thought leader interviews, and presented the information to seven key stakeholder groups to vet the initial findings (see Appendix G). Stakeholders were invited to comment on the initial analysis of data and add their thoughts on APM development in Oregon.

Based on feedback from the key stakeholder groups, Center staff and OHA agreed to expand the scope of work to include the experiences of CCOs who had successfully implemented APMs. Working with the Transformation Center and other knowledgeable sources, Center staff identified four CCOs (AllCare, Central Oregon, Eastern Oregon, and Yamhill) that had implemented or made significant progress on APMs, and interviewed key officials at each CCO.

As part of the research protocol, all participants were promised anonymity, therefore attributed quotes are identified by numeric code.

[3] Core policy sources include the Center for Health Care Strategies, Commonwealth Fund, HealthAffairs, Kaiser Family Foundation, National Academy for State Health Policy, RAND, and the Urban Institute, among others.

[4] Although not identified as a model in the policy and literature scan, a significant number of participants in the thought leader interviews identified capitation as an APM option. As a result, it was included for consideration.

RESEARCH LIMITATIONS

The literature on alternative payment methodologies showed that APMs are associated with reducing health care service utilization, reducing costs, and improving quality in certain cases. However, the majority of APM research has taken place in Medicare and private payer populations and may not be relevant to Medicaid settings. Furthermore, the literature base is heterogeneous and the majority of evidence on APMs relies on observational study designs. This makes transferability across settings and confidence in findings difficult. Finally, there was little evidence to identify the key elements of models that are associated with success.

The evidence search may have been impacted by the significant variability in the terminology used to describe and define APMs, which could result in the search strategy failing to identify relevant literature. In addition, while some APMs have been in operation for some time (e.g., Medicare DRGs, some episode payments), most APM programs are still new and may not have published evaluations or outcomes data and thus may not have been captured by the literature search. Further, while some APM projects are beginning to release preliminary results with respect to cost and quality outcomes, there is not yet evaluation data indicating key factors impacting success. The APMs implemented by the CCOs in Oregon were all initiated in 2014 and no CCO had outcomes, cost, or evaluation data available for inclusion in this report.

Ideally, future research on these models and their outcomes will provide better information as to what works, and under what conditions. Because Oregon health care providers are early adopters of these new models, the work done in Oregon should provide valuable information for health care reform efforts across the country if properly evaluated

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APM Model Definitions

This section includes working definitions of the seven basic APM models discussed in this report including: episodes of care, bundled payments, pay-for-performance, payment penalties, shared savings, shared savings with shared risk, and capitation

EPISODES OF CARE

In this model, a provider receives a set payment for all care related to a defined "episode of care." The model requires an agreed upon definition of what constitutes an "episode," how long the episode will be in effect, and whether the payment is adjusted based on patient risk factors. Episodes of care have been used successfully for elective and planned procedures or events with clear boundaries. For example, surgeons have been paid on an episode basis for orthopedic joint replacement and coronary artery bypass graft including surgical services and pre and post-operative care, and obstetricians are often paid for prenatal and maternity care through an episode payment.

Episodes of care are designed to encourage provider efficiency (the elimination of duplicate or unnecessary tests or services) as well as encourage provider attention to safety to avoid acute interventions or complications. Ideally, provider behavior changes bring the actual cost of care below the negotiated episode price while improving patient outcomes. Providers benefit from a payment higher than services rendered and payers benefit by negotiating a favorable episode rate.

More recently, payers and providers have begun exploring episodes of care for patients with chronic conditions over a defined period of time. Experiments in episode payment for patients with chronic obstructive pulmonary disease or attention deficit hyperactivity disorder have been initiated, but no evaluations of these programs were identified.

BUNDLED PAYMENTS

A bundled payment model takes the episode of care structure further by including multiple providers in an episodic payment. Bundled payments require dividing one payment between multiple providers caring for the patient such as physicians (potentially both the primary care provider and specialists), hospitals, outpatient clinics, and auxiliary service providers (e.g., anesthesiologist, laboratory, radiology, rehabilitation). In theory, bundled payments maintain the positive incentives for efficiency and high quality care found in episodes of care while also including an incentive for providers to improve their coordination of care and collective accountability for patient outcomes.

PAY-FOR-PERFORMANCE

In pay-for-performance models providers are rewarded for meeting certain goals, which are generally defined by quality of care or patient outcome measures. Pay-for-performance systems are often focused on creating long-term savings through improving primary health care, the use of preventive health services, coordination of care across providers, and/or physician practice improvements. Pay-for-performance measures are designed to reward providers for focusing on quality of care rather than quantity.

PAYMENT PENALTIES

Under a payment model that includes payment penalties, provider payment may be withheld for failure to meet quality or outcomes goals, provider deviation from evidence-based practice standards, or when provider care is connected to sub-standard outcomes (e.g., certain health care acquired conditions, or never events). Payment penalties are designed to create motivation to improve quality of care and to enhance provider accountability for patient outcomes.

SHARED SAVINGS

In a shared savings model the payer sets a cost target and if providers meet or exceed those targets while caring for patients, they share in the savings of avoided costs. Shared savings plans usually include quality of care and/or health outcome measures. A provider's eligibility to share in savings usually depends on achieving acceptable scores on identified measures. Shared savings plans are intended to create an incentive for providers to deliver high-value care rather than a high volume of services.

SHARED SAVINGS & SHARED RISK

The shared risk model enhances the shared savings model by also putting the provider at risk if costs exceed the defined target threshold. Under shared savings providers earn more if they reduce costs below the threshold, but have no downside risk. In shared risk models if costs exceed the threshold providers may pay a penalty or share in the costs exceeding the target.

CAPITATION

Under capitation a payer gives a provider, provider group, or health system a single per-patient payment with the intention that the provider or health system will provide all necessary services to that patient during the contract period (usually a year). Capitation models create strong financial incentives for providers to manage patient care efficiently and avoid costly complications or expensive services such as emergency department or inpatient admissions. In response to the experience of the 1990s—where many believed capitated systems reduced access to necessary care—modern capitation contracts almost always include quality of care and patient health outcome measures to ensure that providers are not under serving patients.

Similar to capitation, global budgets pay providers an overall sum to provide a set of services over a given period of time. While capitation is based on the individual patient, global budgets are set based on a population of patients. Under Oregon's payment structure, each CCO is funded by the state based on a global budget for the OHP patients in their area.

Key Findings

This section is organized by APM model and includes a summary of the evidence review followed by findings from thought leader interviews and key stakeholder discussion groups.

EPISODES OF CARE

In this model, a provider receives a set payment for all care related to a defined "episode of care." The model requires an agreed upon definition of what constitutes an "episode," how long the episode will be in effect, and whether the payment is adjusted based on patient risk factors.

FINDINGS FROM LITERATURE REVIEW

The Center's evidence review indicated that paying providers for episodes of care is associated with reduced utilization and costs in Medicare prospective payment systems (PPS), and, with less evidence, in two Medicaid PPS programs and PPS programs utilized abroad. There was no clear evidence on whether episodes of care payments affected clinical outcomes or patient quality of care.

The evidence search identified a systematic review prepared for the Agency for Healthcare Research and Quality (AHRQ) in 2012, which assessed evidence on 21 distinct APM interventions. Hussey and colleagues' report for AHRQ (2012) included four systematic reviews on the Medicare Inpatient Prospective Payment System (IPPS), 54 additional studies of 16 other episodes of care, and four studies on different bundled payment systems. Most of the studies looked at Medicare PPS (e.g.., inpatient hospitalization, skilled nursing facilities, inpatient rehabilitation, long term acute care, and home health). Hussey and colleagues (2012) concluded that there was a low strength of evidence that episodes of care and bundled payments were associated with a modest reduction in costs (10% or less) and reduced utilization of specific services and shorter lengths of stay. The report found insufficient evidence to determine whether episodes of care payments affected clinical outcomes or patient care quality measures, and there was no evidence on how specific APM design features (e.g., the definition of an episode, single provider vs. multiple provider payments) affected cost, utilization or quality. The report found a low strength of evidence that for-profit providers reduced utilization more than not-for-profit providers, and low strength of evidence that hospitals "under greater financial pressure" were more likely to significantly reduce utilization in Medicare IPPS (Hussey et al., 2012, p. ES-9).

A separate article by Hirth and colleagues (2013) examined Medicare's PPS for kidney dialysis established in 2011. Comparing pre and post data from 2010 and 2011, Hirth and colleagues (2013) found that under the new system, patients were being shifted from more expensive pharmaceuticals to less costly alternatives resulting in a 34% decrease in total spending per session on major drugs. The report also concluded dialysis treatment providers improved their financial return under the new payment system (Hirth et al., 2013).

FINDINGS FROM THOUGHT LEADERS INTERVIEWS & STAKEHOLDER MEETINGS

Interviews with Oregon thought leaders and facilitated stakeholder discussions found that some providers had extensive experience with episodes of care payments and were comfortable with their use. Seven interview participants said that they were personally familiar with episodes of care, citing joint replacement, cardiac care, and obstetrical services as common examples. While no respondents explicitly rejected episodes of care as a payment option, several indicated strong support and respondents noted several factors to consider in development of these programs, including:

- Need for mechanism to ensure quality of care
- Need for mechanism to ensure medical necessity or

the appropriateness of the intervention

- Risk that providers will prefer healthier patients
- Need for a significant volume of patients: "We think that at less than 50 [patients], episodes of care don't make a difference, or are just hard to do" (P9).
- Changes in standards of care or new technology can quickly make an episode of care payment obsolete
- Uncertainty due to transparency of costs: How do you really know that a negotiated episode of care payment is appropriate?

Thought leaders agreed with literature review findings that episode of care payments have mostly been used for cases of discreet, limited care such as hospitalizations, maternity, or elective surgery. Some respondents mentioned risk adjusted case rates as an alternative to capitation for behavioral health or the creation of episodes for chronic conditions, such as diabetes. However, respondents had no direct experience with these methods and the literature review did not include evaluations of these types of programs.

BUNDLED PAYMENTS

As originally conceived, bundled payments were designed to pay a group of providers a prospective payment for all the care provided for a given episode of care. Because of significant logistical problems (see below), the model has evolved so that most versions now pay a FFS rate and then retrospectively reconcile costs with a set budget. If the costs come in under the budget, the payer shares the savings with providers. Some models also include shared risk, in that providers are responsible for a share of the costs in excess of the episode budget. In addition, rather than holding multiple providers responsible for the budget these models generally hold a single provider—usually a physician or an integrated delivery system—responsible for costs. In this form modern bundled payment systems are a version of a shared-savings and/or shared risk model.

FINDINGS FROM LITERATURE REVIEW

The literature review found very little direct evidence on the effectiveness of bundled payments, but there were a significant number of policy-based articles exploring the theoretical benefits of bundled payment models or detailing the difficulties in implementation. Participants in interviews were similarly less enthusiastic about the bundled payment model.

The AHRQ report discussed above (Hussey et al., 2012) included four studies of bundled payments, but the report did not separate these models out from episodes of care or provide conclusions specific to bundled payments. No evidence was found assessing the impact on costs, utilization, or quality of a bundled payment program using fixed, prospective payments to multiple providers.

Two reports analyzed a failed prospective, multiple provider bundled payment pilot program in California (Kary, 2013; Ridgely, de Vries, Bozic, & Hussey, 2014). In 2010 AHRQ funded the Integrated Healthcare Association (IHA) to lead a multi-stakeholder group including six California health plans, eight hospitals, and an independent practice association. The IHA's goal was to develop a standardized bundled payment structure that could be adopted by payers and providers statewide, and the group developed a bundled payment framework for hip and knee replacement surgery as a pilot project. Ridgely and colleagues (2014) noted that "despite enthusiasm for the project, numerous technical and cultural barriers prevented its successful implementation" (p. 1346). Challenges included conflicting priorities among participants that led to a narrow definition of qualified patients and thus a lack of sufficient volume of cases, "lack of trust and competing interests" among participants (p. 1348), technical difficulties in adapting claims systems, and uncertainty about viability under certain state regulations (Ridgely et al., 2014). The report did note that ambulatory surgery centers had the most success adapting and implementing the bundled payment for joint replacement. While the withdrawal of multiple insurers meant the initiative was not adopted on a broad scale, one payer did execute a contract with a single ambulatory surgery center, and realized a 40% savings from previous hospital charges (Ridgely et al., 2014).

Modified bundled payments that use retrospective reconciliation with FFS billings and shared savings have demonstrated success in a few cases. The Health Care Incentives Improvement Institute (HCI3) published a qualitative study in 2014 in which they interviewed seven payers who had implemented bundled payment programs as well as eight provider organizations associated with these programs (Bailit & Houy, 2014). Six of the seven payers were private insurers; the outlier was the Arkansas Medicaid program, through which the Arkansas Healthcare Payment Improvement Initiative has instituted a comprehensive bundled payment initiative for both Medicaid and commercial payers in the state (see below for further discussion of the Arkansas initiative).

Five of the six payers interviewed reported assessment data, and all five reported cost reductions, although specifics were not reported. The models studied by HCI3 also included quality measures and payers reported positive findings, including reductions in avoidable complications, more rapid recovery in patients with joint replacement surgery, increased adherence to clinical standards of care, and high patient satisfaction (Bailit & Houy, 2014). The report

noted that an important factor in payer satisfaction with the models depended on whether plans had an automated payment reconciliation process. Implementing automation took significant time and resources, and payers had varied experiences with vendors, but there was significant agreement that automation of payment reconciliation was important for these models to be effective in the long-term (Bailit & Houy, 2014).

FINDINGS FROM THOUGHT LEADER INTERVIEWS & STAKEHOLDER MEETINGS

Several interview participants noted that maternity care is often paid for through bundled payments in Oregon, and that some integrated behavioral health systems were paid successfully through bundled case rates.

Arkansas Payment Improvement Initiative

The state of Arkansas has implemented an innovative multi-payer APM statewide that includes elements of the episodes of care model, bundled payments, and shared savings with shared risk. The Arkansas Payment Improvement Initiative (APII) was developed through a partnership of Arkansas Medicaid, the state public employee and education insurance plans, the two largest private insurers in the state—Arkansas Blue Cross and Blue Shield and QualChoice of Arkansas—and Walmart, a large, self-insured employer (Thompson et al., 2014).

Under the APII, patients continue to receive care as usual and providers are reimbursed on a FFS basis. For care related to fourteen defined episodes[5], however, the FFS payments are subject to retrospective reconciliation for the Principle Accountable Provider (PAP). For every episode, the payer designates one provider as the PAP, generally the proceduralist if the episode is procedural in nature (e.g., surgery, obstetrics), or the provider who provided the majority of services during the episode period. At the end of each episode performance period, average costs for each PAP are calculated for each episode and compared to each payer's defined "acceptable" and "commendable" costs. If a PAP's average costs exceed the acceptable threshold, the PAP must return a portion of the "excess" costs. If a PAP's average is below the "commendable" threshold, the PAP will earn a bonus of shared savings. If a provider's average costs fall between the "acceptable" and "commendable" targets, no action is taken and the provider keeps the FFS reimbursement. Each episode includes exclusion criteria to insure that providers are not expected to meet these target costs for highly complicated patients, and most episodes also have risk adjustment payment rates for certain defined circumstances. In addition, most episodes also require providers to report on and meet certain quality of care goals in order to qualify for shared savings (Thompson et al., 2014). In order to assist providers in improving their performance, the APII issues baseline data reports to providers as well as quarterly updates to inform them of how well they are doing at meeting cost thresholds personally and in comparison to their peers (Golden et al., 2014). The APII recently reported Medicaid results from the five episodes launched in 2012: pregnancy, attention deficit/hyperactivity disorder (ADHD), hip and knee replacement, congestive heart failure, and upper respiratory infection. Nearly 2,000 PAPs participated in the program and the system recorded just under 2.67 million episodes before exclusions. Of the 2,000 PAPs, 489 were found eligible to collect shared savings totaling $396,103; however, 176 of these providers still needed to submit quality data in order to collect their bonuses. There were 278 providers who exceeded the acceptable level of costs and they were required to pay back a total of $594,191 to Medicaid. Only 15 providers requested reconsideration of their penalty and all 15 requests related to ADHD care (Golden et al., 2014).

Arkansas Medicaid also reported changes in provider practice patterns including "a 19% decrease in antibiotic prescriptions for upper respiratory infection; an increase in guideline concordant care in ADHD with a dramatic reduction in therapy visits combined with recognition of additional co-morbidities; cost stabilization in hip and knee replacement and congestive heart failure; and greater screening of pregnant women for hepatitis B, HIV and diabetes" (Golden et al., 2014, p. 1).

[5] The first episodes initiated in 2012 included pregnancy, attention deficit/hyperactivity disorder (ADHD), hip and knee replacement, congestive heart failure, and upper respiratory infections. In 2013, the program added episodes for colonoscopy, cholecystectomy, tonsillectomy and oppositional defiance disorder (ODD). Six addition episodes are to be added in 2014: coronary artery bypass graft, asthma, percutaneous coronary intervention, chronic obstructive pulmonary disease, ADHD/ODD comorbidity, and neonatal conditions. Details on the APII episodes can be found at: http://www.paymentinitiative.org/episodesOfCare/Pages/default.aspx

The PROMETHEUS Payment Initiative

With funding from the Robert Wood Johnson Foundation, HCI3 developed a standardized model similar to the Arkansas program, although providers have only up-side benefit without downside risk. The PROMETHEUS Payment initiative is intended to develop standardized bundle definitions that can be used in a variety of settings. The PROMETHEUS system has been implemented in a small number of markets, but no evaluations have been published (Delbanco, 2014a).

A small number of respondents (17%) indicated support for exploring bundled payments, noting that for bundled payments to work well services need to be clinically integrated, either through an integrated delivery system or through contractual agreements among providers.

I think bundled payments in the areas where there is real clinical integration is an appropriate next step. (P13)

One provider recounted his personal experience with a bundled payment for cardiac procedures, noting that every year there were difficult negotiations between the cardiologists, anesthesiologists, and cardiac surgeons over their share of the negotiated payment. The bundled payment program eventually ended when technological innovations led to changes in the standard of care and increased costs, but the payer declined to renegotiate the payment. As a result, the providers terminated the contract.

Another respondent described participating in a group effort to develop a bundled payment initiative across multiple providers. The participant stated that the initiative failed because "it was just too complicated" (P11). Other respondents expressed reservations, including many of the same concerns expressed about episodes of care (e.g., does not address patient selection bias, does not address appropriateness of services, needs sufficient volume and thus is not appropriate for small providers). One respondent had a particularly negative view of bundled payments, stating "I think bundled payments are dangerous," primarily because they can pit providers against each other as they negotiate for larger shares of the bundle or attempt to shift risk to other providers (P15).

PAY-FOR-PERFORMANCE

Pay-for-performance (P4P) programs, where providers are rewarded for meeting specific performance targets, comprised the majority of studies included in the evidence review.

FINDINGS FROM LITERATURE REVIEW

The evidence review found three comprehensive studies on private payer pay-for-performance programs (Gilmore et al., 2007; Rodriguez, von Glahn, Elliott, Rogeres, & Safran, 2009; Salmon et l., 2012), three studies on the Medicare Premier Hospital Quality Incentive Demonstration (Karve, Ou, Lytle, & Peterson, 2008; Jha, Joynt, Orav, & Epstein, 2012; Ryan, Blustein, & Casalino, 2012), three studies on the United Kingdom's Quality and Outcomes Framework (Gilliam, Siriwardena, & Steel, 2012; Lester, Hannon, & Campbell, 2011; Lester, Matharu, Mohammed, Lester, & Foskett-Tharby, 2013), and one study on a P4P program in the southern Netherlands (Kirschner, Braspenning, Akkermans, Jacobs, & Grol, 2013). A summary of these programs is included below.

Notably, across all of the P4P programs there was a consistent theme that the greatest improvement in quality occurred during the first year of program implementation. In a related measure, studies also showed that the lowest performers at baseline showed much greater improvement in quality measures than performers with a higher baseline score. One study asserted that while financial incentives for improving quality outcomes were effective, public reporting of provider performance on quality outcomes may also be an effective method in achieving quality outcome performance (Rodriguez et al., 2009).

Private Payer Pay-for-Performance Programs

Hawaii Physician Quality and Service Recognition Program

Gilmore and colleagues (2007) assessed the Physician Quality and Service Recognition (PQSR), an optional physician P4P program administered by the Hawaii Medical Services Association (Blue Cross Blue Shield of Hawaii). Physicians who enrolled were measured on clinical performance metrics, patient satisfaction, business operations and practice patterns and were eligible to receive as a bonus a variable percentage of their base professional fee based on their overall scores relative to other participating providers. The clinical measures used included breast, cervical, and colorectal cancer screening, use of angiotensin-converting-enzyme (ACE) inhibitor in chronic heart failure, use of long-term asthma control drugs, diabetic retinal exam, glycated hemoglobin (HbA1c) for diabetics, antihypertensive and lipid-lowering drug

compliance, and childhood varicella and measles, mumps and rubella vaccines. Physicians received detailed reports on their performance data including their individual percentile rate relative to other providers.

Gilmore and colleagues (2007) compared patient outcomes for those members whose providers participated in the program with those who did not, and found that patients with enrolled providers were significantly more likely to receive recommended care as measured by quality indicators than patients whose providers did not participate. Cost impacts were not evaluated.

California's Integrated Health Association Pay-for-Performance Program

Rodriguez and colleagues (2009) used patient survey data to assess whether a P4P program implemented across six insurers in California improved physician communication, care coordination, access to care, and office staff interaction. The program was managed by California's IHA, and enrolled 1,444 adult primary care providers in 27 medical groups. Based on 145,522 patient surveys (a 37.8% response rate) collected over four years (2004 to 2007), Rodriguez and colleagues (2009) found statistically significant improvement in physician communication, care coordination, and office staff interaction. The fourth measure, access to care, did not show significant improvement. Rodriguez and colleagues (2009) also found that physicians who had lower baseline composite scores had greater improvement over time than physicians with higher baseline performance scores.

Cigna's Collaborative Accountable Care Initiative

Salmon and colleagues (2012) assessed Cigna's Collaborative Accountable Care Initiative (CACI), a program that offers physicians financial incentives for meeting quality and cost targets as well as extensive practice support. During the first year of CACI, practices receive up-front support as a care coordination fee to invest in infrastructure needed to reach quality and cost goals. After the first year, practices continued to receive care coordination fees at the beginning of the year if quality and cost goals from the previous year were met. The amount of the financial incentive was correlated with how a practice performed relative to its goals. In addition to these financial incentives, Cigna provided support in informatics, care coordination, practice performance reports that identified opportunities to improve quality and control cost, and consultations to facilitate practice transformation. As an integral part of the CACI program, registered nurses were imbedded in practices as care coordinators. Care coordinators received training and support from Cigna, including quarterly conference calls and an annual training meeting. As of 2010 42 practices were participating in the CACI program (Salmon et al., 2010).

Salmon and colleagues (2012) compared medical costs and quality of care outcomes for patients of three regionally diverse practices participating in the CACI program with patients in the same areas whose providers were not participating. Participating providers included in the study were Dartmouth-Hitchcock Health in New Hampshire and Vermont (academic, integrated delivery system with 1,018 physicians and 16,674 patients), Medical Clinic of North Texas in the Dallas-Fort Worth area (141 primary care physicians with 8,753 patients), and Cigna Medical Group in Maricopa County, Arizona (158 physicians with 14,575 patients). Comparing total medical costs and medical cost improvement from the previous year, only the Arizona group showed a significant improvement over the control group, with 2010 total medical costs being $27.04 less per patient per month than the control group. For quality indicators, all three practice groups had greater improvement across all quality indicators compared to control groups, with the exception of New Hampshire's practice's screening of HbA1c in patients with diabetes (Salmon et al., 2012).

Cigna released results of the CACI program asserting that they had achieved 3% better quality performance than the market average, 3% better on total medical cost compared to market average, 50% fewer emergency department visits, and improvements in "compliance with diabetes measures" (Cigna, 2014). Cigna also announced that it would be expanding the CACI principles to small physician groups, hospitals, and specialty care providers focusing on obstetrics, cardiology, gastroenterology, orthopedics, and oncology (Cigna, 2014).

Federal Pay-for-Performance Programs

Medicare's Premier Hospital Quality Incentive Demonstration

From 2003 to 2009, the Centers for Medicare and Medicaid Services (CMS) ran the Premier Hospital Quality Incentive Demonstration (HQID), a P4P program designed to reward hospitals for providing better care. Under the HQID, hospitals in the highest two deciles of performance for a disease condition received financial incentives (1% to 2% bonus in Medicare payments), while hospitals with the lowest performance were at risk for a financial penalty (1% to 2% payment penalty starting in the third year of the demonstration) (Karve et al., 2008). Hospitals provided data on 33 measures for five clinical conditions and procedures: acute myocardial infarction (AMI), coronary artery bypass graft (CABG), heart failure (HF), community- acquired pneumonia (CAP), and hip and knee replacement (Jha et al., 2012). Starting in 2006, CMS began rewarding

hospitals for both quality improvement and overall quality in an attempt to encourage lower performing hospitals to improve quality. Participation in the HQID program was voluntary with 266 hospitals participating over the six-year demonstration (Jha et al., 2012; Ryan et al., 2012).

Two studies (Jha et al., 2012; Ryan et al., 2012) evaluated the effectiveness of HQID. Ryan and colleagues (2012) compared composite quality scores on AMI, CAP and HF measures of 250 HQID enrolled hospitals with the scores of 250 matched, non-participating hospitals. Using an adjusted annual quality improvement analysis, the study found that HQID-hospitals showed greater quality improvement on all three measures as compared to non-HQID hospitals. Ryan and colleagues (2012) also found that hospitals showed slower improvement gains in the second phase of the program (post-2006) despite the new quality improvement incentives added by CMS.

Jha and colleagues (2012) compared overall and condition-specific 30-day, risk-adjusted mortality for patients cared for in HQID hospitals (n=137,287) to patients cared for in non-HQID hospitals participating in Medicare's Hospital Compare program (n=1,069,034). In the study, there were significant differences between hospitals (HQID hospitals were more likely to be larger, non-profit or teaching hospitals located in urban areas in the southern U.S.) and patients (HQID patients were older, less likely to be women, more likely to be black, more likely to have chronic kidney disease, and less likely to have diabetes, hypertension or chronic pulmonary disease). Looking at data from 2002 to 2009, Jha and colleagues (2012) found that participating HQID hospitals and control hospitals had similar baseline mortality rates, rates of decline in mortality, and mortality rates at the end of the six years. Similar findings were reported for condition-specific mortality for AMI, HF, and CAP, but mortality associated with CABG was higher in HQID hospitals compared to controls at the end of six years.

International Pay-for-Performance Programs

United Kingdom's Quality and Outcomes Framework

The United Kingdom Quality and Outcomes Framework (QOF), introduced in 2004, is a large-scale, voluntary, P4P financial incentive system designed to evaluate, manage, and reimburse primary care practices. The QOF uses a point system to incentivize practices to achieve predetermined, clinical, organizational, patient experience and other service goals. From 2004 to 2013, the QOF used 146 indicators. For the 2014 to 2015 contract, the indicators on patient experience and quality were retired leaving 81 remaining indicators (Boeckxtaens, Smedt, Maeseneer, Annemans, & Willems, 2011; Gillam, Siriwardena, & Steel, 2012; Lester, Matharu, Mohammed, Lester, & Foskett-Tharby, 2013). A maximum of 1,040 points were annually available to practices in the original contract, with the 2011-2012 average payment per practices of $204 per point achieved (Boeckxtaens et al., 2011; Gillam, Siriwardena, & Steel, 2012). If maximum points were achieved, the subsequent income would account for approximately 20% to 30% of a profit sharing general practitioner's annual income[6] (Eijkenaar, 2012; Lester et al., 2013). The Center identified one systematic review (Gillam, Siriwardena, & Steel, 2012), and two individual studies evaluating the QOF (Lester, Hannon, & Campbell, 2011; Lester et al., 2013). Lester, Hannon, and Campbell (2011) focused on provider responses to the quality indicators used by the QOF and is discussed in the section on metrics below. The other two articles (Gillam, Siriwardena, & Steel, 2012; Lester et al., 2013) are described here.

In a systematic review of 94 studies published between 2004 and 2011 Gillam and colleagues (2012) evaluated the impact of the QOF on quality of primary care in the U.K. Particular attention was paid to the effectiveness, efficiency, equity, patient experience, and professional and team work aspects of the QOF. Gillam and colleagues (2012) found that the QOF resulted in improved care by increasing the use of computers, decision support, clinician prompts, patient reminders, and recalls. In addition, better recorded care, enhanced processes, and improvement in intermediate outcomes for most conditions were reported. Similar to the findings of other studies, the improvements in care were greatest during the first year after QOF implementation, reverting to pre-QOF quality improvement rates in subsequent years. Comparing clinical indicators across conditions Gillam and colleagues (2012) found that performance improvement for conditions not included in the QOF were significantly lower than those included in the QOF, with the differences increasing over time, however, details on this assessment were not included in the study.

Gillam and colleagues (2012) also found limited evidence that the QOF program was associated with admission rate and cost of care reductions, but no details were provided in the analysis. Gillam and colleagues (2012) note that although QOF has been assessed as cost-effective, economic studies have not taken the costs of QOF administration into account.

Patient experiences with QOF were mixed, with no significant changes in communication, nursing care, coordination or overall satisfaction (Gillam, Siriwardena, & Steel, 2012). However, patients with chronic diseases

[6] About 70% of general physicians in England are profit sharing and 30% are salaried (Lester et al., 2013).

reported worsened continuity of care, seeing their usual physician less often, and had a general lower satisfaction rating for continuity of care (Gillam, Siriwardena, & Steel, 2012).

Evaluation of QOF among providers showed that the program might have had a positive effect on practice organization (Gillam, Siriwardena, & Steel, 2012). During interviews, however, providers noted a decline in personal continuity of care with patients, and said that the QOF program seemed to have introduced a greater stratification of medical roles within practice teams (Gillam, Siriwardena, & Steel, 2012).

Lester and colleagues (2013) also studied provider responses to the QOF, conducting a qualitative study of 47 providers from 23 clinics. Providers reported that they had a sense of pride in practicing evidence-based medicine, felt the income provided by QOF was appropriate, and felt the QOF provided structure to their practice year. They also reported, however, a reduction in clinical autonomy, a loss of professionalism, and a sense of micromanagement. They expressed specific concerns about the use of indicators (a theme echoed in other findings in this report). Providers criticized the lack of provider involvement in developing indicators, the lack of consistency in the timing and changes to individual indicators and the overall QOF, and questioned the appropriateness of certain indicators.

Pay-for-Performance Program in Southern Netherlands

Kirschner, Braspennning, Akkermans, Jacobs, and Grol (2013) describes the development and evaluation of a P4P program designed through consensus by target users—general practitioners and deputies from two financing health insurance companies—in a southern region of the Netherlands. Quality indicators focused on clinical care, practice organization, and patient experience and were divided into tiered thresholds. Clinical indicators concentrated on six areas: diabetes, chronic obstructive pulmonary disease (COPD), asthma, cardiovascular risk management, influenza vaccinations, and cervical cancer screenings; and were developed based on evidence-based guidelines and available literature (Kirschner et al., 2013). As part of the program, practices could receive a maximum bonus of €6,890 per 1,000 patients (approximately 5% to 10% of practice income).

Kirschner and colleagues (2013) evaluated the performance of 60 practices participating in the P4P program by comparing a baseline assessment with reported performance measures after the first year of the program. Compared with all Dutch general practices, the study population under-represented solo practices and practices in large cities (Kirschner et al., 2013). Kirschner and colleagues (2013) reported that there were significant improvements in the clinical process indicators for diabetes, COPD, asthma, and cardiovascular risk management with improvements ranging from +4.2% to +26.3%. No improvements were identified for the influenza vaccination or cervical cancer screening rates (Kirschner et al., 2013). In general, Kirschner and colleagues (2013) found that higher baseline scores were associated with lower quality improvement scores. Solo practices improved more than duo practices; with both having greater improvements than group practices (Kirschner et al., 2013). Urbanization level (small versus large cities) did not have an effect on practice performance (Kirschner et al., 2013). Patient experiences with general practitioners and organization of care were positive and were reported to have significantly increased over the study period (Kirschner et al., 2013).

Summary of Findings from Evidence Review on Pay-for-Performance Programs

The evidence unequivocally indicates that P4P programs are successful in achieving improvement across a broad range of quality indicators. However, there is less evidence on whether P4P programs reduce utilization or costs, especially if administrative costs of the programs are taken into account at both the payer and provider level.

FINDINGS FROM THOUGHT LEADER INTERVIEWS & STAKEHOLDER MEETINGS

The majority of thought leaders interviewed for this report had personal experience with P4P programs and confirmed that the payments do affect provider behavior. Consistent with the literature base, they questioned whether P4P structures would decrease utilization and costs. Almost all respondents directly addressed performance metrics, providing extensive feedback on how the measurement systems could and should be improved. Due to the large amount of feedback received, a separate sub-section discussing metrics is included below. To ensure links to evidence contained in the literature, the Center did an additional, focused search for research evaluating metric effectiveness in achieving patient-centered and clinical outcomes, but no additional

> *Pay-for-performance has been a good experience for us because funders worked collaboratively to design metrics and look at gains that are appropriate for our population, and to engage in good quality improvement methodology.* (P6)

information was identified.

All but one thought leader had personal experience with P4P models, where reimbursement was tied to the achievement of some quality or outcomes indicator. One individual referred to P4P models as the "simplest" model and another stated that P4P is particularly appropriate in primary care settings because it encourages improvement without undue financial risk.

If you base payment on just achieving certain targets, then do people just gauge their work to meet the targets? And then just wipe their hands together and say, "all right, we did it," I'm not sure that's really transformative. (P8)

In each of the interviews discussion of P4P yielded expression of concerns and suggestions for how to improve the model. In addition to the potential for "teaching to the test," thought leaders questioned whether P4P would lead to reduced utilization or cost reduction, "patient shopping," or providers "dumping patients that are non-compliant."

PAYMENT PENALTIES

Payment penalties are designed to reduce harmful or inappropriate care by denying payment to providers for certain treatments.

FINDINGS FROM LITERATURE REVIEW

Medicare has instituted several payment penalty programs related to hospital readmissions and health care acquired conditions, and the Patient Protection and Affordable Care Act (ACA) prohibits federal Medicaid reimbursement of health care acquired conditions and other provider-preventable conditions (West, Eng, & Kirk,2012). Little evidence was found on the effectiveness of payment penalties in improving patient outcomes, although a report on non-payment for elective pre-term birth in Medicaid did show positive effects (Perelman, Delbanco, & Vargas-Johnson, 2013).

Medicare was given authority under the ACA to withhold payment for treating hospital acquired conditions and established the Medicare Hospital Readmissions Reduction Program. In May 2014 CMS reported that the incidence of hospital acquired conditions per 1,000 discharges had declined from 145 in 2010 to 132 in 2012 (U.S. Dept. Health & Human Services [DHHS], 2014). Under the Hospital Readmissions Reduction Program, hospitals with high 30-day readmission rates for heart attack, heart failure, and pneumonia can have up to 1% of their total Medicare reimbursements recouped. Penalties increase annually if hospitals fail to reduce readmission rates, with the 2014 penalty at 3%. Medicare reported that overall readmission rates had declined from 19% in October 2012 to 17.5% in 2013 (U.S. DHHS, 2014). No comprehensive evaluation studies of this program have been completed. No evaluations of Medicaid programs denying payment for health care acquired conditions and provider-preventable conditions were identified.

Medicaid programs have shown some success in reducing early elective deliveries by refusing to pay for inductions and Cesarean sections before 39 weeks unless they are medically necessary. A report prepared by Catalyst for Payment Reform provided a detailed report on how the Birth Outcomes Initiative, a multi-stakeholder group in South Carolina, successfully reduced early elective inductions by 50% and saved Medicaid $6 million in the first quarter after program implementation (Perelman, Delbanco, & Vargas-Johnson, 2013).

FINDINGS FROM THOUGHT LEADER INTERVIEWS & STAKEHOLDER MEETINGS

Oregon thought leaders were generally uncomfortable with payment penalties. While respondents expressed some support for denying payment for "never events[7]," they generally felt that payment penalties were too negative and would not encourage provider behavior change and participation.

A couple of respondents raised the concern that payment penalties would lead to providers leaning "towards the test." Two others specifically addressed hospital readmission penalties. In many cases, respondents noted what happened to the patient after discharge was outside the hospital's control. The hospital has no control over primary care provider follow-up, the quality of home health services, or whether physicians at a long-term care facility would

I would rather be on the side of incentivizing you to do the right thing than penalizing you for doing the wrong thing. (P20)

[7] "Never event" is a term coined by Dr. Ken Kizer of the National Quality Forum in 2001. The most recent list of "never events" was published in 2011 and includes 29 events in 6 categories: surgical, product or device, patient protection, care management, environmental, radiologic, and criminal. http://psnet.ahrq.gov/primer.aspx?primerID=3

I guess philosophically, in all areas of my life, I just don't see negative rewards being as effective as positive. (P5)

make an evening or weekend call rather than simply sending the patient back to the hospital. Yet if a patient is readmitted, the hospital is financially penalized. One respondent said, "I'm a hospital…my job isn't to take care of you to keep you out of the hospital. My job isn't to come and do home visits, right? My job isn't to take care of you in the nursing home. But yet, here's what I can tell you, … the hospital gets dinged for this readmission" (P15).

Another respondent specifically noted that given Medicaid's already low payment rates, payment penalties were not realistic for use in CCOs, stating that payment penalties "are really, really, really poorly perceived because providers say, 'look, you're not even paying me a reasonable amount already. How dare you do this?' Frankly, all providers don't like penalties, but it goes over especially badly with Medicaid" (P3).

Interviews and discussions did not specifically include non-payment for early elective deliveries and respondents did not comment directly on those programs.

SHARED SAVINGS & SHARED RISK

Models that engage providers in sharing savings from reduced health care expenditures have attracted significant attention and are a primary component of reforms promoted in the Patient Protection and Affordable Care Act. Many shared savings plans are structured as Accountable Care Organizations (ACOs) where a group of providers take responsibility for the care as well as the costs of care for a group of patients. Some episodes of care or bundled payment models also include shared savings and, potentially, shared risk.

FINDINGS FROM LITERATURE REVIEW

The evidence review identified one study that looked at a private-payer ACO, and several reports on Medicare ACOs. Shared-savings and shared-risk models vary significantly in how populations are defined, how costs (and thus savings) are calculated, and how payments are distributed amongst providers. The differences in models have made it difficult to determine what features of the models are associated with better outcomes. Evidence related to evaluation of specific models is outlined below. In addition, The Dartmouth Institute and Brookings Institute are conducting research that reviews ACO models and identifies structural and design factors associated with positive outcomes. Publication of this research is forthcoming. No evaluations of Medicaid ACO plans were identified through evidence searches.

Private Payer Evaluations

In 2010, Blue Shield of California, Dignity Health, and Hill Physicians Medical Group partnered to launch an ACO for 41,000 California Public Retirement System (CalPERS) employees and dependents enrolled in a Blue Shield health maintenance organization in the Sacramento area. The ACO was given a global per-member-per-month target budget with shared risk. If the yearly cost of care exceeded the global budget target, provider organizations could write off the expense; if service expenses were under the budget target, provider organizations shared the savings (Markovich, 2012).

After the program's first year, Milliman, an actuarial and consulting firm, was contracted to conduct an evaluation of the program cost and savings for 2010 (Markovich, 2012). Milliman reported that the ACO program savings were $15.5 million, with per member costs 10% lower than CalPERS members not in the ACO (Markovich, 2012). This savings correlates with a 1.6% per person per month savings in spending from the 2009 baseline amount for members in the program, and a 9.9% increase for members not in the ACO pilot (Markovich, 2012). Specifically, a decrease in inpatient days and hospital readmission within 30-days of discharge were largely attributed to the savings (Markovich, 2012). As an additional finding, Milliman found an unexplained increase in emergency department utilization in the ACO pilot program (Markovich, 2012).

Second year results from the ACO pilot were similar to first year results. In 2011, the pilot saved $21.5 million in comparison to what costs would have been without the program (Markovich, 2012). Similar to 2010, the 30-day readmission rate continued to decline (4.3% in 2010, 4.1% in 2011), however the length-of-stay slightly increased due to a reported increase in catastrophic cases. The average 2011 rate (3.75 days) was lower than the 2009 baseline rate of 4.05 days (Markovich, 2012). Overall for the two years, Markovich (2012) reported that the compound growth rate for health care expenditures was 3%. Markovich did not report on quality measures for the California ACO.

Medicare ACO Evaluations

The Centers for Medicare & Medicaid Services (CMS) has implemented several Medicare ACO initiatives. These include the Medicare Shared Savings Program (MSSP) and Pioneer Accountable Care Organizations (Pioneer ACOs),

both launched in 2012. In addition, the Medicare Physician Group Practice Demonstration (PGPD) was a five-year demonstration between 2005 and 2010 that served as a precursor to the current ACO programs.

The MSSP started on January 1, 2012, and now includes approximately 343 participating ACOs. Each MSSP ACO is comprised of one or more provider groups that work together to manage and coordinate care for a defined population of at least 5,000 Medicare fee-for-service beneficiaries. CMS reimburses MSSP ACOs on a fee-for-service basis combined with shared savings payment incentives that reward ACOs that achieve both quality standards as well as cost savings. After the first three years of participation, MSSP ACOs will be required to take on a two-sided risk model, in which organizations must share in both savings and losses.

In January 2014, CMS reported interim first year financial results for the 114 ACOs that joined the MSSP in January and April 2012 (CMS, 2014e). According to CMS, 54 of the 114 ACOs achieved spending below their expenditure benchmarks, and 29 of these ACOs generated shared savings totaling $126 million. Two ACOs operating under the two-side risk model spent more than their benchmark and were responsible for reimbursing CMS an unspecified figure. Medicare achieved a total net savings of $128 million (U.S. DHHS, 2014). The first-year interim results do not include ACO-specific figures regarding the amount of shared savings received, or the net financial return for MSSP ACOs based on initial program costs or investments made to become an ACO.

With respect to quality, CMS has released 2012 ACO performance results for 146 MSSP and Pioneer ACOs on five of the 33 quality measures the ACOs are required to report. These include four diabetes mellitus measures and one coronary artery disease measure (CMS, 2014a). According to analysis by Kaiser Health News, on average, ACOs achieved Medicare quality benchmarks for 65% to 75% of their patients (Rau, 2014). Quality performance across ACOs, however, ranged widely. For example, a Wisconsin ACO formed by two health systems kept 84% of its diabetes patients' HbA1c below the Medicare target (less than 8%), higher than the average ACO rate of 65%. By contrast, one Maryland ACO demonstrated only 24% of its patients had HbA1c below the Medicare standard. Some of the variation in ACO performance may be attributed to reporting errors given the first year of implementation of the program. Analysts have also noted that ACOs did not perform as well as the 66 large medical groups that are participating in the Group Practice Reporting Option within the Physician Quality Reporting System, a separate quality initiative that rewards eligible group practices for reporting quality measures for Medicare beneficiaries with certain conditions (Rau, 2014).

The first year interim MSSP ACO financial performance report indicates that 27 of the 29 ACOs that generated shared savings successfully reported quality measures, which was the only requirement in the first year for these organizations to receive their share of the savings generated (CMS, 2014e). The two ACOs that generated savings, but failed to report quality measures, did not receive shared savings payments. In future years, ACOs shared savings amounts will be partially determined on an organization's quality score across the 33 quality measures, which may further impact the extent and amount of shared savings achieved by participating ACOs (CMS, 2014f).

The Medicare Pioneer ACO program is designed to test the ability of ACOs with advanced care management experience to take on greater financial risk and rewards than offered under the MSSP. The Pioneer ACO program started in January 2012 with 32 participating ACOs, which were selected through an open and competitive application process. The program currently consists of 23 Pioneer ACOs, since nine of the original 32 Pioneer ACOs chose to leave after the first year of the three-year program. Seven of these nine Pioneer ACOs transferred to the MSSP, and two Pioneer ACOs left Medicare ACO programs entirely (Gold, 2013).

In addition to the differing organizational structures, the Pioneer ACO Model varies from the MSSP primarily with respect to payment and ACO financial risk. In the first two years of the program, Pioneer ACOs are reimbursed based on a two-sided risk, shared-savings payment model with higher levels of savings and risk than in the MSSP. In year three, Pioneer ACOs that have earned savings over the first two years are eligible to move to a population-based payment arrangement. Pioneer ACOs are also required to develop similar outcome-based payment arrangements with payers other than Medicare by the end of the second year (CMS, 2012).

In January 2014, CMS released results of an independent evaluation of the Pioneer ACO program's initial year (2012) financial results, estimating overall Medicare savings of $146.9 million dollars (L&M Policy Research, 2013). According to the evaluation, 8 of the 32 original Pioneer ACOs had significantly lower growth in total Medicare spending per beneficiary than their local market Medicare fee-for-service comparison groups, ranging from $32.87 to $104.29 per beneficiary per month lower. One Pioneer ACO had a significantly higher spending rate of $34.05 per beneficiary per month. The remaining 23 Pioneer ACOs did not differ significantly in total Medicare spending compared to their local comparison markets. Local market comparison groups were comprised of Medicare fee-for-

service beneficiaries who were not aligned or assigned to a Medicare ACO in the Pioneer ACO's local market (L&M Policy Research, 2013).

In addition to the independent evaluation, CMS reported in July 2013 that all 32 Pioneer ACOs successfully reported quality measures, and overall, ACOs performed better than published rates for fee-for-service Medicare beneficiaries for all 15 clinical quality measures. With respect to financial performance, 13 of 32 Pioneer ACOs produced shared savings, and two Pioneer ACOs had shared losses. Program savings were driven, in part, by reductions in hospital admissions and readmissions (CMS, 2013).

The Physician Group Practice Demonstration PGPD was a five-year Medicare demonstration project between April 2005 and March 2010. The project included 10 participating physician group practices (PGPs) selected on a competitive basis, varying in size from 232 to 1,291 affiliated physicians, and located in rural and urban settings. Providers participating in the PGPD demonstration were paid on a fee-for-service basis, in addition to shared savings of up to 80% based on satisfaction of certain cost and quality standards (Sebelius, 2009).

In the fifth year of the demonstration, all 10 PGPs achieved benchmark performance on 30 of the 32 quality measures. Seven PGPs achieved benchmark performance on all 32 quality measures. On average, the PGPs increased their quality scores from baseline by 11% on diabetes measures, 12% on heart failure measures, 6% on coronary artery disease measures, 9% on cancer screening measures, and 4% on hypertension measures (CMS, 2011; CMS, 2014b).

Over the course of the demonstration, 7 of the 10 PGPs received shared savings payments (Kautter et al., 2012). The PGPs that earned shared savings payments varied in each performance year:

- Year 1: Two PGPs earned shared savings totaling $7,323,697
- Year 2: Four PGPs earned shared savings totaling $13,840,014
- Year 3: Five PGPs earned shared savings totaling $25,278,792
- Year 4: Five PGPs earned shared savings totaling $31,679,844
- Year 5: Four PGPs earned shared saving totaling $29,434,607

Only two PGPs earned shared savings in all five years, and two PGPs earned shared savings in only one year. Of the three PGPs that did not earn a bonus payment in any year, one PGP had losses in all five years. All demonstration savings were generated among chronically ill beneficiaries and beneficiaries with high expected expenditures, which is consistent with the focus of the PGP interventions on high-cost, high-needs beneficiaries (Kautter et al., 2012).

Researchers analyzing the cost savings of the PGPD have estimated that most of the savings across all PGPs was achieved through care for beneficiaries dually eligible for Medicare and Medicaid, and that savings for non-dually eligible populations were not statistically significant (Colla et al., 2012).

FINDINGS FROM THOUGHT LEADER INTERVIEWS & STAKEHOLDER MEETINGS

Findings from the thought leader interviews and stakeholder meetings included significant discussion of shared savings and shared risk model structures. Twenty-one percent of respondents contended that shared savings would be significantly less effective without a risk component.

The preferable models include shared risk…If everyone has some financial accountability, and a shared understanding of common goals, then the risk part of it keeps people really engaged, and the savings part of it holds out some hope. (P8)

Several respondents raised concerns about accountability or control of patient outcomes, and whether a system could be designed that directly rewarded providers for the actions they took. One respondent was clear that "we are not ever going to have an incentive if the risk and reward is generalized. We will only have an incentive if we're paid for what we do" (P5). But others find creating provider-specific models is highly challenging:, "If you have a patient who has seen various providers for care, and at the end is controlling [her] diabetes and is no longer on depression medications,…how do you allocate the shared savings amongst endocrinologists, the psychiatrist, the emergency room physician, the whoever…How are you going to allocate the shared savings amongst those various providers? Who's most responsible for the patient's success and how do you do that equitably?" (P16).

Because creating shared-savings models that are provider specific is difficult, some models use more general algorithms to divide system savings. One respondent noted that these models – where providers share in the general savings achieved by the group but do not have their specific

performance rewarded – can be less motivating. Providers may find such models less "fulfilling because they do not exercise control over their performance. You get the tragedy of the commons" (P3). Providers may also feel at the mercy of other providers, whose actions they cannot control and there may be conflicts, particularly between physicians and hospitals, in dividing up the potential savings.

These concerns coalesced into a general sentiment that shared savings models require trust and good relationships among participants. Respondents outlined specific types of trust needed. First, providers must trust payers to accurately calculate costs and savings and be willing to pass those savings on to providers. Second, respondents questioned whether the benefits of shared savings would continue, or as happened with other programs, disappear as the payer reaped the benefits from provider actions, "As you get better at saving money, as you deliver care, the challenge is that the oversight body can decide to keep the money in the first place and say, 'no, we're going to give you less money next year'" (P9). Third, respondents emphasized that providers need to be able to trust other providers, not only to make an effort to improve care and cut costs, but also to fairly negotiate how to divide savings and risk amongst providers.

My experience is that health plan and health systems have so many ways of making money look different. We have all these sub-entities, and they all present their data differently. And so we know that the way you account and the way you price things has a huge impact on whether or not you declare savings. (P12)

While most respondents accepted the idea that savings in a shared savings plan would be returned directly to providers based on their care and reduced costs, two CCO executives disagreed with this strategy, arguing that, especially in a Medicaid system, the returns are likely to be so low as to have little effect. Instead, they made the case that any savings in the system be collectively reinvested in system changes or given to providers to encourage practice change. One, who had experience with this type of reinvestment described the program,

> *"We do have a shared savings plan, and what we have is we have a cap, and when there's money left over [from coming under the cap], we distribute it to people according to the wealth, to the value of the services they provide. So, you know, for example, we've used that money to support our patient-centered primary care home. We've used that money to pay doctors to be kind of, 'open access.' There's a bunch of things we've used that shared savings, but it's not shared savings on an individual line of service, like CMS uses, it's the overall shared savings. And that has been very useful to get doctors to do the kind of things we want them to do" (P9).*

The second CCO executive who also disagreed said,

> *"I think the shared savings model really does not have much future. I personally wouldn't focus on shared savings. I would focus on increased efficiency or effectiveness […] I think what you really want to do is say 'If this is the money we have, how do we use that existing resource to do things better, to get better outcomes?' So it's not so much savings as making every health dollar count. It's saying we can get more value out of this dollar if we redeploy it over here" (P12).*

Several respondents noted that for shared savings to work, data management is essential. Providers wanted access to data when designing and agreeing to models, and good data was essential for providing feedback to providers on their performance. Timely data was another concern. One respondent described an experience with a shared savings model, and noted that the lag time between provider actions and calculating the shared savings was unacceptably long.

The data is the real problem. I think people like shared savings, but how do you get immediate feedback to clinicians for performance? How can we expect any behavior to change when we won't know if there should be a payout until a year or more after the project is done? (P8)

As with other models, respondents shared concern that a shared savings and shared risk model might lead to patient selection bias, or patient shopping.

Of the four CCOs interviewed in this report for information on APM implementation, three were pursuing some form of shared savings and in one case the model included shared risk. Details on these models are described in the Implementation section below.

CAPITATION & GLOBAL BUDGETS

Capitation and global budgets are both payment strategies that pay providers lump payments to provide all defined services within a given amount of time. Capitated payments are patient specific – providers receive a standard payment for each patient for whom they are responsible over a given amount of time, usually a per-member-per-month payment or an annual capitation amount. Global budgets pay providers a lump sum to provide a given set of services for a defined patient population. In Oregon, each CCO is given a global budget by the State to provide all medical, behavioral, and dental health care services for the Oregon Health Plan members in their service area.

FINDINGS FROM LITERATURE REVIEW

Capitation and global budgets were not originally presented as a model during thought leader interviews. More than 50% of interview participants spontaneously discussed capitation, however, so it was included in this report as a seventh model. Discussions with CCO leaders who had implemented APMs also showed that capitation was a model in use in Oregon, most often for behavioral health, dental services, or primary care, but also with hospital services (see below for implementation interviews). The evidence search identified several studies that evaluated these types of sub-capitation models: four studies evaluated Colorado Medicaid's Mental Health Capitation Pilot Project, one study compared cost and patient outcomes with different payment structures for dental care in the U.K., and one study looked at primary care capitation in Canada.

In addition, two studies were identified that assessed Blue Cross Blue Shield (BCBS) of Massachusetts's Alternative Quality Contract (AQC). The AQC is a blended model that combines global budget payments to provider organizations with P4P bonuses to providers for meeting quality goals.

Colorado Medicaid Mental Health Capitation Pilot Program

The Colorado Medicaid Mental Health Capitation Pilot Program was implemented in 1995 with the State executing capitated mental health services contracts with seven out of 10 county-based areas. The remaining three areas provided mental health services through FFS reimbursement mechanisms (Kaskie, Wallace, Kang, & Bloom, 2006). Capitation rates were set by region at 95% of prior expenditures and included local psychiatric inpatient care, state hospital care for persons under 21 and over 65 years, community-based outpatient care, and mental health services provided by independent practitioners (Kaskie et al., 2006). Under the capitation contracts two models were evaluated: direct capitation to a single or group of non-profit community mental health center(s), and a managed behavioral health organization that was a collaboration between a single for-profit managed behavioral health care organization and community mental health centers in the area (Grieve, Sekhon, Hu, & Bloom, 2008; Kaskie et al., 2006).

Using a pre-post design, Chou, Wallace, Bloom, and Hu (2005) compared the cost and utilization of behavioral health services prior to the capitation pilot (1994 to 1995) to service provided during two post-implementation periods (1995 to 1996, 1996 to 1997). From Medicaid claims data, Chou and colleagues (2005) randomly selected severely and persistently mentally ill adults aged 18 years and over with a diagnosis of schizophrenia or bipolar disorder, or at least one 24-hour inpatient stay with a primary mental health diagnosis for evaluation. The sample was stratified by gender and mental health services costs incurred during the previous year; counties were matched based on percent of poverty, degree of rurality, and comparable industrial bases. The final sample included 176 patients from direct capitation areas, 195 patients from capitation with for-profit component areas, and 151 patients from FFS areas. Controlling for individual diagnosis, age, gender, cost risks, and ethnicity, Chou and colleagues (2005) found total outpatient service utilization decreased drastically under the capitation with a for-profit component model over the first two years, while the direct capitation model showed initial decreases in service utilization at one year post-implementation but slight increases during year two. The FFS model showed no change in outpatient service utilization. However, comparatively, overall utilization was significantly higher for both capitation models than fee-for-service at baseline, and two years post-implementation (Chou et al., 2005).

Similar to Chou and colleagues (2005), Kaskie and colleagues (2006) used a pre-post quasi-experimental design to evaluate the effects of the capitated models on total service users, the probability of repeat service use, and average expenditures per user (n=2,840 older adults). The analysis was based on FFS specialty mental health claims data from the Colorado Department of Health Care Policy and Finance and capitation data from Colorado Mental Health Services. Data were reviewed for two post-capitation pilot periods: October 1995 to June 1996, and October 1996 to June 1997. Using models adjusted for age, gender and diagnosis, Kaskie and colleagues (2006) found that repeat service use was reduced using the two different capitation models compared with FFS. This trend was also seen in expenditures in that the average expenditure for repeat service users and expenditures for all users decreased in the capitation models relative to FFS. Comparing the direct capitation model to the capitation collaboration model,

Kaskie and colleagues (2006) found reduced expenditures in the managed behavioral health care organization collaboration whereas the direct capitation expenditures did not exhibit substantial change.

Grieve and colleagues (2008) performed a cost-effectiveness analysis of the three different payment models comparing cost and outcome data nine months prior to the capitation pilot with the two nine-month periods starting three months post capitation (1995 to 1998). The cost analysis was from the Medicaid perspective and used data from the Medicaid claim databases. Unit costs were derived from the total costs of each episode of care for each user over the given time periods measured. Due the inherent patient differences and mean costs between the three groups, Grieve and colleagues (2008) used generic matching to randomly match patients across all groups adjusting for mean costs, mean quality adjusted life years (QALY), percent of patients with schizophrenia, percent of patients with bipolar disorder, mean age, sex, percent of previous high cost clients, and percent of patients using any service. During the second nine-month follow-up period costs and QALYs were discounted at a rate of 3%. Grieve and colleagues (2008) found that utilization decreased across all three groups with the capitation collaboration model showing the greatest utilization reduction (22%), compared with FFS at 7%. There was no difference between the reduction in direct capitation and FFS areas. Regarding cost-effectiveness, Grieve and colleagues (2008) reported that the direct capitation model was not cost-effective in comparison with the FFS or capitation with a for-profit component models. However, the capitation model with a for-profit component was reported to be cost-effective compared with the FFS or direct capitation models.

Dental Health Services in the U.K.

In a Cochrane systematic review of two randomized controlled trials (RCTs) in the U.K., Brocklehurst and colleagues (2013) explored the effects of FFS, capitation, salary, or a combination of these payment mechanisms on primary care dentist behavior and patient outcomes. The first RCT evaluated the impact of FFS and an educational intervention on the placement of fissure sealants in permanent molar teeth (n=68 dentists, 1,428 patients aged 12 to 14 years). The second study compared the impact of capitation with FFS payments on primary care dentists' clinical activity and level of dental decay (n= 688 dentists, 3,868 patients aged 5 to 6 years and 14 to 15 years). Brocklehurst and colleagues (2013) assessed both RCTs as having high risk of bias due to questionable blinding, and possible incomplete reported outcome data. Findings from the first study found that dentists in the FFS arm had a significant increase in clinical activity compared with the control group (9.8% greater number of fissure sealants for second permanent molars), after being adjusted for socio-economic status of the practice area, number of partners in the practice, number of patients, and number of restorative fissure sealants placed on first permanent teeth at baseline (Brocklehurst et al., 2013).

The second RCT reported similar results with clinical activity being lower in the capitation than FFS groups as measured through mean number of filled teeth, and mean percentage of having one or more teeth extracted. Utilization, measured by mean number of visits, was also reported as lower in the capitation group versus the FFS arm. Patients with dentists in the capitation group had a higher mean percentage of receiving active preventive advice than the FFS group. Regarding health care costs, the capitation group reported higher mean expenditures and higher rates of referral to the Community Dental Service than the FFS group. For patient outcomes, the RCT reported that dentists in the capitation group restored carious teeth at a later stage than the FFS arm (Brocklehurst et al., 2013). All of the outcome measures had a low or very low strength of evidence.

Primary Care Capitation in Canada

In Canada, all necessary services by providers and hospitals are fully covered without copayments or deductibles, but providers are reimbursed through a variety of payment methodologies. Glazier, Klein-Geltink, Kopp, and Sibley (2009) evaluated service utilization (measured by after-hours and emergency room visits) under primary care capitation (The Family Health Network model) and enhanced FFS payment (the Family Health Group model) for physicians in Ontario, Canada. Using 2005-2006 Ontario Ministry of Health and Long-Term Care data and Client Agency Program Enrollment tables, providers and patients in each model were stratified on geographic location. Physician characteristics were similar between the two groups including practice size, years since graduation, months in practice group, and group size, but the capitated physicians had a lower proportion of foreign graduates, a greater number of enrolled patients, and a higher proportion of inpatient and emergency department visits compared to office visits. This finding was consistent across all geographic areas. Patient characteristics were similar between the two groups based on age, sex, neighborhood and time enrolled in the physician group, but patients whose physicians were in the capitation group were less likely to have chronic conditions, had less morbidity and comorbidity compared to patients whose physicians were in the FFS group. Adjusting for physician and patient characteristics (described above), Glazier and colleagues (2009) found the capitation group had a lower proportion of after-hours visits, and a greater number of visits to the emergency department compared with the FFS model.

These findings were consistent across all geographic locations (rural, semi-rural, urban) (Glazier et al., 2009).

Massachusetts's Blue Cross Blue Shield Alternative Quality Contract Model

In 2009, BCBS of Massachusetts implemented the Alternative Quality Contract (AQC) model, a five-year global payment system with seven provider organizations consisting of over 4,000 physicians in 321 primary care practices (Song et al., 2011; Song et al., 2012). By 2011, 12 BCBS health maintenance organizations (HMOs) or point-of-service provider organizations were enrolled in the AQC, accounting for 44% of patients enrolled in one of these two BCBS programs (Song et al., 2011). The AQC global budget covers a continuum of care including inpatient, outpatient, rehabilitation, long-term care, and prescription drugs, and AQC provider organizations can receive P4P bonuses of up to 10% of their budget based on 64 ambulatory and hospital performance measures (Song et al., 2011). Technical support to the provider organizations is provided by BCBS, and includes reports on spending, utilization, and quality.

Evaluation of the AQC's first year showed a $15.51 decrease in average quarterly spending per enrollee, a 1.9% savings relative to the control group (Song et al., 2011). More than 80% of the savings were from procedures, imaging, and testing reductions largely associated with referrals to lower-cost providers and not a reduction in utilization. In a subgroup analysis, providers without prior experience with BCBS risk-based contracts were shown to have much larger savings (-$42.52) than providers with prior BCBS risk-based experience (-$9.29) compared to the control group (Song et al., 2011).

Analysis of the second year of the AQC contracts showed a $26.72 decrease in average quarterly spending per enrollee, a 3.3% savings relative to the control group (Song et al., 2012). Combined with the AQC's first year estimated per-member-per-quarter savings, the average estimated savings over two years was 2.8%. Similar to the first year analysis, savings were concentrated around procedures, imaging, and tests. The difference between providers with prior BSBC risk-based experience and those without such experience was also seen at two years. Providers without prior risk-based contracting experienced averaged savings of $60.75 per member per quarter over the first two years; providers with prior risk-contract experience showed an insignificant reduction of $13.42 per member per quarter over the same time period. Quality improvements were greater in the second year than in the first year, with 4.7% greater attainment of chronic care management, 0.3% greater attainment of adult preventive care, and 1.9% greater attainment of pediatric care quality thresholds compared to the control group (Song et al., 2012).

Sharp, Song, Safran, Chernew, and Fendrick (2013) conducted a focused evaluation of the AQC first year's effect on emergency department use. Comparing members with AQC enrolled primary care providers to members with non-AQC enrolled primary care providers, Sharp and colleagues (2013) found that the AQC group were younger, more likely to be male, and had a lower risk score compared to the control group (members with non-AQC providers). Prior to implementation of the AQC, the groups had different emergency department use: the AQC group had an adjusted average of 0.067 emergency department visits per enrollee per quarter compared with 0.082 in the non-AQC group. Sharp and colleagues (2013) reported a general decrease in emergency department use per member per quarter; however, there was no difference in emergency utilization decrease between the AQC group and the control.

FINDINGS FROM THOUGHT LEADERS & STAKEHOLDER MEETINGS

More than 50% of interview respondents discussed their experience with, and opinions of, capitation as an APM option. One thought leader with experience in an integrated delivery system was unequivocal in his support for capitation, "Ultimately, we need to move towards a system that's fully capitated, where groups are capitated and individual providers are paid on a salary or some other kind of model. But not one that relates in any way to volume of service…That's the way you have to go" (P10).

Other respondents noted that capitation had drawbacks as a model, including whether providers, particularly smaller practices, could take on the financial risk, how to ensure quality care, and whether capitation would lead to more significant change:, "With capitation, you still have to divvy it up and be financially prudent, but you may not be changing provider behavior and that is the ultimate goal" (P8).

We went down this path in the 90s with managed care and we went to capitation. There were fairly quick changes in utilization, and practice patterns as a result. I think what that taught people was that the financial incentives do matter. I think that what's different now is that people are a little wiser and more seasoned as to which of those worked and didn't work. (P8)

Some respondents advocated for sub-capitation, or capitation for certain services such as primary care or behavioral health, while others felt that sub-capitation was "baby-steps" or a "halfway-model" to taking on full-risk.

As noted above, the CCOs interviewed about their APM implementation have incorporated capitation into their models, most often with primary care and behavioral health, but also with hospitalization (see section on implementation below for more details).

CONCLUSIONS FROM EVIDENCE REVIEW, THOUGHT LEADER INTERVIEWS & STAKEHOLDER MEETINGS

Evidence shows that APMs can be effective in reducing utilization and costs while improving quality of care in some circumstances. However, there is little evidence to identify the key elements of models that are associated with this success and the majority of U.S.-based APM research has taken place in Medicare and private payer populations, and therefore may not be relevant to Medicaid settings. Furthermore, the studies reviewed indicated that the lowest performers at baseline show greater improvement in quality measures than those at higher baseline score.

The evidence showed that episodes of care were associated with reduced utilization and costs in both Medicare and Medicaid prospective payment systems, but there was little evidence as to whether episodes of care improved clinical outcomes or patient quality of care. Traditional bundled payments – which divide prospective payments among multiple providers – have had little success being implemented and Oregon thought leaders agreed that the concept might be too complicated for implementation. Modified bundled payments, which pay providers FFS and then reconcile expenses with a determined budget and generally hold only one provider responsible for costs, have demonstrated limited effectiveness at controlling costs and utilization, but Oregon thought leaders did not have direct experience with modified bundled payments.

Pay-for-performance models represent the greatest number of studies in the literature review and P4P programs are clearly successful in achieving improvement across a broad range of quality indicators. Pay-for-performance programs do affect provider behavior. However, there is less evidence, as well as concern among thought leaders and Oregon stakeholders, about whether P4P programs reduce utilization or cost.

Little evidence was found on the effectiveness of payment penalties in improving patient outcomes, and Oregon thought leaders are generally uncomfortable with this model as they find payment penalties to be "too negative" and unlikely to result in provider behavior change.

Shared savings models hold promise for cost savings, but have not been tested or found to be significant outside of Medicare populations.

The limited evidence identified on capitation payments found a relationship between capitation payments and reduced utilization, but no evidence was found on the relationship between capitation and clinical or quality outcomes. The studies of the Massachusetts BCBS Alternative Quality Contract Model, which combines global payments to provider organizations with P4P bonuses based on performance measures, found that providers enrolled in the AQC reduced spending per enrollee but that cost reductions primarily came from using lower cost procedural, imaging, and testing options rather than a reduction in utilization.

Oregon thought leaders varied in their enthusiasm for capitation and global payments with some respondents advocating that the significant financial risk inherent in these models would be highly motivating to providers and lead to creative and effective care. Others cautioned that the risk was not always appropriate and argued that all capitation and global budget models should be tied to effective quality metrics to prevent patient shifting and underutilization of services.

Overall, Oregon thought leaders understand APM methodologies and support the development of APMs. They see potential to improve care and reduce costs, and are interested in moving forward with payment reform. Oregon leaders agree that there is no "one-size-fits-all" model for APMs. Different models will work in different situations, and fitting or blending models to the particular environment is critical for payment reform success.

Because Oregon health care providers are early adopters of these new models the work done in Oregon could provide valuable information for health care reform efforts across the country, if properly evaluated

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PERFORMANCE METRICS

Almost all respondents directly addressed the question of metrics and raised concerns. The six main concerns are highlighted below.

If you had two or three goals, or maybe four or five then you can really make a difference. (P10)

One concern was that too many metrics would lead to a diffusion of effort. Providers are overwhelmed with the large number of metrics payers expect to be tracked. One respondent described a primary care provider who identified 130 different measures that various payers or regulators wanted him to report. Reducing the number of metrics and aligning metrics across payers was considered an ideal situation, if perhaps unlikely in the near future.

A second concern was whether current metrics actually produce meaningful data for purposes of transformation—do they actually "do something for the patient." Two respondents specifically cited the Screening, Brief Intervention, Referral to Treatment (SBIRT) metric as a concern. "So what is the outcome expected for SBIRT for example? I mean, we are just being paid for doing SBIRT regardless of what the outcomes are" (P6).

In the name of simplicity, we sometimes grab measures that are not viewed as impactful, only marginally impactful, and then the credibility of the whole system goes down. (P13)

A third concern related to the consistency and frequency of measures over time. As one respondent explained, "One thing we have to do better…is we have got to be consistent…You can't keep changing the rules" (P19). But others had a different perspective, recommending frequent review of metrics: "We've had these conversations [about] the metrics, various metrics committees – metrics should not be forever. You need to retire metrics, you can bring in new metrics, both as the metrics get met and as the ability to measure new things is put in place" (P12).

Fourth, some respondents noted that developing creative payment mechanisms was not always compatible with standardized Healthcare Effectiveness Data and Information Set[8] (HEDIS) measurements, yet CMS requires the use of these measurements. The NCQA and HEDIS measures are seen as "measures of the past" and not applicable in current health care models. Further, some respondents acknowledged that there are not performance metrics available that measure care or outcomes on the path of transformation.

Fifth, respondents desired more timely and consistent feedback on performance metric. "One thing I think we can improve on…is timeliness of cause and effect…I think the more directly its tied to when they are doing what they're doing, then you're going to get the outcome you're after" (P19).

A final concern was whether providers were being held accountable for outcomes over which they had no control. One respondent emphasized the point by stating, "I think that pay for performance, I'm a broken record here but…it's got to be something I have control over. Then it's fine" (P15).

There are so many diffuse things, stuff you can control or not control. I mean, I cannot control what my patient's hemoglobin A1cs are, and it really leads to all kinds of craziness. (P9)

Respondents also provided recommendations on metric development and implementation. A common recommendation was that providers should be consulted when metrics are developed, consistent with the findings of Lester, Hannon, and Campbell (2011) in the study of the U.K. QOF. Providers were not consulted when quality indicators were unveiled in the U.K. program. Lester and colleagues (2011) later interviewed 57 primary care providers in 24 clinics about their experience and reported on the unintended consequences that resulted from the program. Providers noted that there were problems with measure "fixation," meaning that providers may have done things that were inappropriate solely for measurement purposes. They also questioned whether the system led to "tunnel vision," where providers focused on financially incentivized actions over other care and noted that some measures were subject to misinterpretation, and some practices had differing interpretations of the quality indicators. Finally, they noted the risk of "gaming," where providers used clinical judgments to exclude patients from reporting on some indicators. The program did revise its quality indicators based on provider experience, but Lester

[8] HEDIS = Healthcare Effectiveness Data and Information Set, a set of 81 health care measures across 5 domains of care. The HEDIS measures are developed and supported by the National Committee for Quality Assurance (NCQA). See http://www.ncqa.org/HEDISQualityMeasurement.aspx

and colleagues (2011) recommended piloting quality measures with providers before rollout to avoid unintended consequences.

Respondents thought that provider input would lead to more appropriate and effective measures, and would also enhance provider "buy-in" to the program.

CONCERNS ABOUT PAYMENT REFORM GOING FORWARD

While respondents were generally supportive of APM development, the research process identified three perceived challenges or "threats" to the future of APMs in Oregon. These concerns were raised by a small number of participants, but they were spread across the research process. In expressing these concerns some respondents emphasized that in order to address them State officials would likely need to challenge federal agencies and regulations. Concerns included:

- The tension between encouraging flexibility in health care delivery (e.g., encouraging creative delivery of high quality care that rewards value over volume), and the need to conform to actuarial standards including reporting of relative value units or current procedure terminology codes that may not reflect creative delivery of care.
- The potential for CMS to apply medical-loss ratio limits to CCOs, undercutting the incentive structure of the model.
- The vulnerability of CCOs to high-cost pharmaceutical or technological developments. Several participants noted that even if they were successful in improving efficiency and cost effectiveness of care, their global budgets could be overwhelmed by uncontrollable costs in these sectors.

FINDINGS FROM IMPLEMENTATION INTERVIEWS

In addition to speaking with Oregon thought leaders and participants in stakeholder discussion groups, individuals involved with APM development and implementation were interviewed at four CCOs: AllCare, Central Oregon, Eastern Oregon, and Yamhill. While these four are not the only CCOs who have moved forward with APM development, they were consistently mentioned in interviews as being early adopters of payment reform in Oregon. A list of individuals interviewed is included in Appendix F.

Three of the four CCOs interviewed have signed contracts with providers to implement APMs in their network: AllCare, Central Oregon, and Eastern Oregon. The AllCare model is currently a pilot program, operating with primary care providers in Josephine County, one of three counties in which the CCO operates. The Central Oregon and Eastern Oregon CCOs operate system-wide programs. The CCO models and development experiences are briefly described here, and in more detail in the case studies included in the appendices (see Appendices A through D). Basic features of these models are summarized in Table 1.

The fourth CCO, Yamhill CCO, has engaged a consultant to assist in the development of a primary care APM. This CCO designed a five-step process beginning with an increase in

Table 1. *Key Features of Three CCO Alternative Payment Methodologies*

	Model Features				
CCO	Participating Providers	Capitation[1]	Shared Savings/ Shared Risk	Payment Withholds	Distribution of Payments Based on:
All-Care	PCPs: Josephine County	Yes: PCPs	Yes/No	No	Utilization, access & quality metrics
Eastern Oregon	Optional: Hospitals, PCPs	No	Yes/Yes	Yes: 5% provider withhold	Patient attribution
Central Oregon	Hospital & Physicians	Yes: PCPs & Hospital Services	No/No[2]	Yes: 25% provider withhold on specialists/hospitals	Utilization, process & quality metrics

[1]*These APM models address medical care services. Capitation is used for other services in these systems – AllCare capitates behavioral health and substance use disorder treatment with providers in each county, Eastern Oregon CCO capitates behavioral health services through its partnership with GOBHI, and all three CCOs have or are developing capitation contracts for dental services.*

[2]*While the Central Oregon CCO does not use a shared savings/shared risk model, because hospitals and PCPs are capitated they are at risk for the costs associated with care. In addition, any budget surplus funds are distributed to physicians based on their performance on quality metrics.*

the primary care conversion factor (already implemented) with the ultimate goal of implementing primary care global budgets. Steps include providing primary care providers with funds to develop practice infrastructure and inviting primary care providers to participate in developing a model to share state performance bonus funds. As of July 2014 no APM contracts had been signed. A description of the Yamhill process is included in Appendix D.

MODEL DESCRIPTIONS

Two of the CCOs—AllCare and Eastern Oregon—have adopted a shared savings model. The Eastern Oregon model also includes shared risk. The Central Oregon CCO has combined a capitated system with P4P bonuses for providers.

Details on these models, including how budgets, savings or deficits are calculated, and how savings or bonuses are distributed are described in case studies (see Appendices A through D). The case studies also describe the process each CCO used to come to an agreement on their APM.

The discussions with the CCO implementers combined with the policy and evidence review and conversations with thought leaders and stakeholders led to the identification of the following best practices for APM implementation.

Best Practices for APM Implementation

Participants in this research were supportive of APMs and indicated that it was no longer a question of whether Oregon would be implementing APMs, but instead how it would be done. Participants across the project identified the following best practices as necessary ingredients for how to develop APMs in Oregon.

1 Establish Relationships & Build Trust

Respondents in all phases of the research emphasized the need to have effective relationships between the payer and the providers and among providers as a baseline before APMs could be addressed. Positive, effective relationships were described as collegial, involving one-on-one communication, and having a high degree of trust, either existing or earned. Many respondents observed that such positive relationships were often lacking in the health care field, particularly in the relationships between hospitals and providers, between groups of providers, or between payers and providers. More than one respondent alluded to prior experiences or "history" when explaining why APMs had not seen greater adoption in the state, and indicated that some of the barriers might be due to personal animosity or distrust. In other cases, the lack of collaboration was described as being institutional— for example, specialists rarely interacted with PCPs and vice versa, or physicians viewed themselves as having different interests than hospitals.

You have to have relationships with the providers in order to do APMS. You can't walk in, out of the blue, and say, "Hi, I'm from the CCO, we want to change the way you are paid." That just doesn't happen. (P21)

While recognizing the difficulty of developing trusting, productive relationships in certain environments, respondents who had overcome barriers were overwhelmingly positive about the experience and felt that their "breakthrough" allowed them to work together on other challenging and rewarding issues, such as improving the quality of patient care. These respondents felt that the structure of the CCO endeavor compelled them to work across historical provider boundaries, and thus provided them with an important opportunity to make sustainable change.

2 Involve Strong Leadership

All implementers, as well as others providing input, stressed that having strong leadership was essential. AllCare emphasized that the leadership of a physician champion was a key element in their success. The physician led the APM development group, backed by the strong support of the CCO CEO, and together they were able to secure commitment to the program. In Eastern Oregon, conversations included all the hospital CEOs, top executives from Moda Health, and a number of physicians described as thought leaders in the area. The Central Oregon CCO also involved top leaders from the hospital system and the IPA as well as individual physicians. Support from these leaders, particularly in addressing or "getting beyond" historically difficult issues was seen as essential to keeping the group focused and making progress.

3 Secure High-Quality, Actionable Data

At all phases of the research participants noted that access to good data and the ability to manipulate that data to model financial outcomes was crucial to reaching consensus. This is particularly important in light of the paucity of research that is considered actionable. Providers face a great deal of uncertainty when agreeing to these new models. Being able to look at past claims data and use that information to model how they might fare under new payment structures is essential in building trust and securing provider agreement. Respondents also stated that having access to good data will also be crucial going forward. Because these models are new and there is little practical evidence available, many consider APMs to still be in a test phase, and intend to consider alterations if they do not preform as intended. Finally, access to data is necessary for providers to improve patient care and plan the practice changes necessary for health care reform to work.

4 Expect APM Development to Take Time, Perseverance & Breakthrough Moments

Participants in this project acknowledged that the process to develop APMs took a significant amount of time, effort, and persistence, and breakthroughs often came when participants felt some kind of pressure or a triggering event. All of the implementers described the APM development process as lengthy, with meetings taking at least a year. Multiple respondents specifically used the words "perseverance" and "persistence" when asked to describe what allowed them to succeed in implementing APMs.

So the sentinel event for the CCOs was the CCO forming and all the things that come along with that: how are we going to survive under a global budget? Unless we do something about payment, we won't be able to live in a global budget. (P21)

Respondents also described the situations that led to breakthroughs. A universal motivating factor was the challenge inherent in the CCO structure. Respondents cited the community-based structures of CCOs, the global-budget funding mechanism, and the requirement that CCOs implement APMs as three motivating factors encouraging APM development. Thought leaders and participants in stakeholder meetings also acknowledged the need to motivate change, with some suggesting that the State should be more directive in getting payers and providers to engage in APM development and clearer in its expectation of an acceptable APM. Respondents also cited acquiring useful data (see discussion above) and reaching a point where discussions on altering the model reached a point where all providers agreed it was a win-win proposal (see discussion below).

5 Keep it Simple

The evidence review showed that some APM development breaks down over the details. Trying to determine how to directly reward providers for their actions or agreeing on a risk adjustment framework can often tie down the development process. Both Eastern Oregon and Central Oregon described their model as "simple," in that they did not incorporate much complexity and applied the models to all providers equally. The same observation could be applied to the AllCare model, although it was not explicitly mentioned in their interview.

The other thing we decided is that we have just one risk model. Everyone is playing in that model. Everyone wins or loses in that model. We recognize that one hospital or one clinic might be doing well or not doing well. But we felt for the first one, we would keep it simple. (P23)

6 Create a Win-Win

Respondents from all aspects of this project recognized that APM development can be difficult, particularly when provider groups perceive that their financial interests are not aligned. Respondents across this project acknowledged the difficulty of APMs when some current health care partners may "win" and others may "lose" with a new payment structure. Two-thirds of implementers interviewed believed that their focus on creating a mutually beneficial, "win-win" agreement was crucial to their success.

Describing their approach to the negotiations one implementer summed it up as, "What's important to me is that it is win-win. You aren't fixing it so just we win" (P21).

Overall Findings & Conclusions

Research for this project revealed that the unique circumstances found in each Oregon community makes a standard APM approach or set of implementation tools unrealistic. Successful development and implementation of APMs depends on creating an environment and a set of conditions that are conducive to collaboration and collective risk taking–conditions that in some cases are community specific.

When leaders pay attention to the process of creating a collaborative environment, address historical boundaries, review current payment structures, and reject power struggles they have the opportunity to establish or sustain alternative payment methodologies in their system. To support this process, this report presents the following conclusions drawn from the six-step research process conducted for this report.

APMs have potential for reducing cost & utilization

Evidence shows APMs can be effective in reducing utilization and costs while improving quality of care, although the findings have been mixed and most models have not been tested in Medicaid populations.

Oregon thought leaders support use of APMs

Oregon thought leaders understand APM methodologies and support the development of APMs. They see potential to improve care and reduce costs, and they are interested in moving forward in reform. While there were concerns about specific models and the process of implementing APMs, the concept is accepted and supported.

There are perceived threats or challenges to APMs in Oregon

As well as the challenges of creating conditions of trust and collaboration, participants in this project identified three additional challenges or "threats" to the future of APMs in Oregon: the tension between creative service delivery and the need to adhere to traditional actuarial standards, the potential that CMS would require the application of medical loss-ratios to CCOs, and the wider threat posed to global budgets by high cost pharmaceutical or technology developments.

There is need for flexibility in design & decision making

There is no "one-size-fits-all" model for APMs. Different models will work in different situations, and fitting or blending models to the particular environment is critical for payment reform success. Successful implementers universally described a process where models were adjusted based on feedback from stakeholder meetings. In addition, despite having signed contracts, all implementers reported that they were still finalizing some pieces of their model and planned to evaluate and potentially revise the model based on initial findings. Reform decisions need to be made at the local level and engage all stakeholders, particularly providers. "Top-down" decision-making or the imposition of a model by a subset of decision-makers was rejected by respondents from across the health care spectrum as an unworkable and unsustainable strategy.

There needs to be a trustworthy process to design APMs

Successfully designing and implementing an APM requires effective, trusting, and communicative relationships among participants. Developing such relationships takes time and effort, particularly if the relationships were non-existent or negative in the past. Those who successfully implemented APMs indicated that they spent from one to three years building necessary relationship foundations before they were able to agree on a contract.

Throughout interviews and discussion groups, participants repeatedly expressed the necessity for a clear, objective, and collaborative design process that is built on a foundation of trust among all necessary parties, and includes trust building as an explicit component of the APM development process. This sentiment was echoed and reinforced by the early implementer CCOs who were interviewed. The three CCOs who have signed APM contracts with providers emphasized the importance of developing relationships with the providers who would participate in the new payment methodology. While all interview participants acknowledged that the process was sometimes challenging and time consuming, they reported that this work would yield longer-term return on investment by laying the groundwork for future cooperation and continued collaborative innovation around payment reform and improvements in clinical practices and patient care.

The research also identified the need for OHA and other state agencies to support and facilitate APM development in Oregon. In addition to negotiating with CMS over finances and reporting requirements, respondents expressed an interest in having OHA provide more direction regarding APM development. Respondents uniformly rejected the idea of having OHA impose a specific APM model or development process on CCOs, but several respondents requested greater support as well as clarity on the state's definition of an acceptable APM, and a notable cross section of respondents commented that OHA attention could spur CCOs to invest even more time and effort in APM development.

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Appendix A: *AllCare CCO Case Study*

AllCare Coordinated Care Organization serves approximately 48,000 OHP lives in Jackson, Josephine, Curry counties and the towns of Glendale and Azalea in Douglas county. Between 1996 and 2012, AllCare operated as a fully-capitated managed care organization for OHP. In 2012 AllCare received state approval as a CCO. The Mid-Rogue Independent Physicians Association (MRIPA) serves as the financial holding company for AllCare CCO and many of the MRIPA physicians serve in key advisory and board positions for the CCO.

AllCare has direct CCO competition in all three southern Oregon counties in which it operates and it competes with a different CCO in each county. (The only other region having CCOs in competition with each other is the Portland metropolitan area.) AllCare has contracts with 97% of the primary care providers (PCPs) in their service area and has service contracts with six area hospitals. Three of these hospitals are operated by Asante Health, one by Providence Health & Service, one by the Curry County Health Network, and one is a community hospital located across the border in Del Norte County, California (Sutter Coast Hospital).

In 2013, AllCare secured a Transformation Grant from the state to enhance and expand its pilot APM program. As of July 2014, the AllCare board had approved a shared savings methodology for primary care providers (PCPs). Currently deployed as a pilot initiative in Josephine County, the model is being tested, revised and refined as needed to meet the overall goals and objectives of the APM program. AllCare is working to finalize the model, expand it to PCPs in Jackson and Curry Counties and develop specialty care, behavioral health, and dental health APM pilots in Josephine County. The vision is to expand those payment methodologies to Jackson and Curry Counties as soon as practicable.

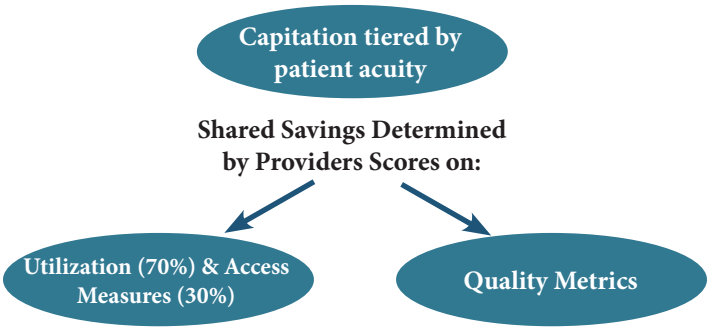
The AllCare project was initiated by a physician member of Mid Rogue IPA, Dr. James Van Horne, an orthopedic surgeon. In the spring of 2012 Dr. Van Horne attended a conference on payment reform and returned to southern Oregon committed to creating an APM in the AllCare system. With the support of CEO Doug Flow, Dr. Van Horne convened a committee of eight PCPs and two specialists who agreed to create a shared savings plan for PCPs who were carrying much of the burden of health care transformation. The committee agreed to review PCP payment policies in general and to construct a means of rewarding PCPs financially if they were able to reduce unnecessary emergency department (ED) visits and increase primary care and prevention visits while meeting certain access and quality metrics.

Regarding PCP payment in general, AllCare PCPs in Josephine County have received capitated payments for many years. As part of the new payment model, the Physician Compensation Committee decided to vary the capitation rate by patient acuity. The risk scores are based on the Chronic Illness and Disability Payment System (CDPS) that ranks patient acuity based on patient age, gender and ICD9 codes that have been submitted on encounter claims. The Committee finalized a capitation rate scale with four acuity levels. One reason for adjusting the capitation rate by patient acuity level was to equitably pay providers that serve high needs patients.

Next, the committee designed a shared savings model for PCP participation. The amount to be distributed under the shared savings plan would be determined by the Mid Rogue Board at the end of the year based on AllCare CCO net income, less funds invested in reserve accounts for other purposes. The plan expects that the shared savings will come from changes in PCP practice patterns that will result in a reduction of inappropriate and unnecessary ED utilization, fewer inpatient admissions and readmissions, and the use of lower cost surgical and imaging options.

The amount of savings each provider receives will be determined by a formula that takes into account utilization and access measures and, separately, quality metrics. AllCare describes the new PCP reimbursement changes as a "three-legged stool" as depicted in the graphic below.

Figure 1. *AllCare's PC Compensation Model*



Utilization measures include the rate of primary care visits per 1000 assigned members per PCP, preventive care visit

rates per 1000, the rate of ED utilization and the percentage use of generic prescription drugs versus brand named drugs. Access measures take into consideration whether the provider is open or closed to new patients and how many new patients the provider is willing to take. The formula specifics vary depending on whether the provider is a pediatrician or family practice physician. Within this category, 70% of a physician's score is determined by utilization measures and 30% by access measures.

Providers can qualify separately for a portion of shared savings based on their performance on a set of 12 to 14 quality metrics. The committee designing the APM spent a significant time selecting the metrics, beginning with a list of all the metrics the CCO must measure for state accountability requirements, PCPCH recognition criteria, and EMR Meaningful Use criteria for Stage 1. The goal was to select measures that satisfied criteria for multiple purposes and to reduce duplication as well as administrative burden. From that list, the committee eliminated a number of measures determined to be too narrow or too burdensome for providers to collect data. The payment providers are eligible to receive is determined based on the provider's ability to meet a set of benchmarks for each quality measure or by the progress they have made towards a goal. Each quality measure has a point score that weights various metrics based on CCO priorities.

AllCare staff is currently analyzing claims data, utilization and access measures, and quality metric scores from the first quarter of 2014 and comparing the numbers to baseline data from 2012 and 2013. This data is currently being tested to establish the final allocation formula to be used in distributing the shared savings. While the definitions of the measures were approved by the Mid Rogue and AllCare boards of directors in October 2013, the final algorithm for distribution of savings will be completed later this year and used to calculate 2014 PCP distributions in Josephine County.

AllCare intentionally limited its initial PCP project to physicians and independent nurse practitioners who are both providers and Mid Rogue shareholders primarily in Josephine County. By starting small, the plan intends to allow for an opportunity to work out the details in the program. The PCPs in Jackson and Curry counties have expressed an interest in participating in a similar plan, and AllCare is exploring program expansion options at this time.

The initial workgroup led by Dr. Van Horne also attempted to design a shared savings plan for specialty doctors in Josephine County but soon realized that they did not have the right configuration of participants. A new group was formed to include more specialty physicians and they began meeting in May of 2014 to develop a shared savings model for specialist physicians. They identified two opportunities to reduce costs: first, specialists identified numerous opportunities to enhance and streamline the PCP patient referral process. By agreeing to a set of clinical guidelines developed by the physicians, AllCare anticipates reduction of duplicative or inappropriate diagnostic services and streamline the transfer process between PCP to specialist. AllCare plans to facilitate educational sessions where specialists and PCPs work together to develop their standard of care and establish agreed-upon referral and information sharing processes. Second, AllCare is working with specialists to inform them of the relative costs of care in hospital as compared to ambulatory care settings. The committee believes specialists can generate savings for the CCO by using lower-cost, diagnostic and treatment settings. Savings generated through use of more cost-effective care settings will be shared with specialty physicians who meet utilization and quality measures as defined within their APM.

As with PCPs, the specialty care savings model will include utilization and access measures (for example, inpatient readmissions, use of lower cost settings for procedural care) and quality metrics. The committee is currently trying to identify a set of quality metrics that can be used to determine shared savings distributions across all specialty provider practices. Conversations regarding metrics and specialty coordination are continuing in the committee with consultation from a clinical advisory panel from across the CCO. Recommendations will be taken to the AllCare Board of Directors for approval.

Behavioral health, substance abuse, and dental services are provided by local agencies funded by AllCare with a global budget payment. AllCare is looking into developing quality metrics for these providers and more explicitly linking shared savings to the achievement of utilization, access and quality metrics.

AllCare is not currently and does not have plans to address alternative payment methodologies with hospital in their service area. As a provider-driven organization, they have concentrated their APM efforts in the non-hospital provider community.

Appendix B: *Central Oregon CCO Case Study*

The Central Oregon CCO (CO CCO) serves approximately 50,000 Oregon Health Plan (OHP) members in Deschutes, Cook and Jefferson Counties and parts of Klamath County. PacificSource Community Solutions administers the CCO's finances, but through a joint management agreement, the Central Oregon Health Council (COHC) has governance responsibility for the CCO. The COHC was established through state legislation in 2011 and is managed by a board consisting of county officials, physical, dental and mental health providers, consumers of CCO services, and representatives from St. Charles Health System, the Central Oregon Independent Practice Association (COIPA), and PacificSource Health Plans.

The Central Oregon medical community is notable for the fact that one hospital system – St. Charles – manages all four hospitals in the CCO service area. St. Charles also employs a number of primary care and some specialty care physicians in the St. Charles Medical Group (SCMG) and provides primary care services to 20% of OHP members in the CCO. Virtually all physicians in the area who are not employed by SCMG are members of the Central Oregon Independent Practice Association (COIPA), and COIPA primary care physicians care for the remaining 80% of OHP lives. In short, physician and hospital services are well organized in the region.

The CO CCO adopted an alternative payment methodology March 1, 2014 that combines capitation for primary care and hospital services with opportunities for all providers to earn a share of withhold funds as well as P4P bonuses from budget surplus funds. Providers earn these additional funds by meeting certain utilization, process and quality metrics.

Center staff interviewed representatives from both St. Charles Health System and COIPA about the APM and its development.

How Central Oregon CCO Distributes Its Budget

Of the global budget given to the CCO by the state, 8.5% of medical care funds are allocated to PacificSource for administrative costs. The remaining 91.5% of the medical funds budget is allocated amongst CCO providers in the following way.

Physicians

- Primary Care Providers (PCPs) are paid a per–member-per-month (PMPM) capitation fee of $21. They are also eligible to share in the hospital and specialist withhold funds based on how the system performs on utilization and process measures (see below).
- Specialty care physicians are paid fee-for-service (FFS) with a 25% withhold. The withheld funds may be earned back based on how the system performs on utilization and process measures. Specialist providers are also eligible to earn back a share of the hospital withhold funds based on performance.
- All physicians are also eligible to share in any budget surplus funds based on their performance on quality metrics. Surplus funds are determined by comparing the budget for total cost of medical care to actual expenses. In this first year, 50% of the quality funds, referred to as non-contingent, will be available to physicians in good faith they are working to meet the metrics; the other 50% of the funds, referred to as contingent funds, must be earned by achieving the quality parameters.

Hospital

- St. Charles Health System receives a monthly capitated payment for all OHP lives to provide all inpatient and outpatient hospital services. Behavioral health hospital services are not included in this capitation. The capitation rate is based on payments made to St. Charles over the previous year. Twenty-five percent of the hospital capitation payment is withheld and distributed back to the hospital and physicians based on achievement of process and utilization measures. Notably, 50% of the withheld funds are earmarked for the hospital and 50% of the withheld funds are allocated to primary care and specialty care physicians.

Other Providers

- Pharmacy services are managed through a separate contract, dental services will be capitated with dental providers, ancillary services are paid discounted FFS and are not eligible for withhold or surplus disbursement, and behavioral health services not provided through the patient centered primary care homes (PCPCH) are provided through county mental health. The CCO continues to work on an APM for mental health care with the counties.

Performance Measures

The hospital system and physicians are eligible to earn back a share of the hospital withhold funds based on performance on a shared set of utilization and process metrics. These metrics are designed to reduce inappropriate utilization and improve overall quality of care in the system as a whole, and CCO leaders believe that achievement of these metrics requires hospitals and physicians to work together.

Figure 2. *CO CCO Performance Measures*

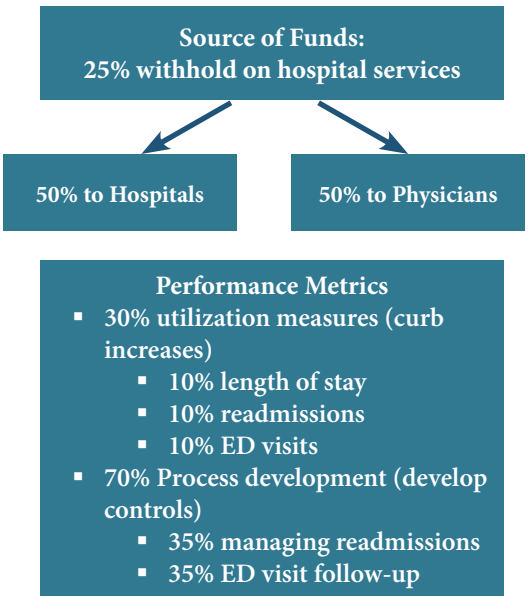


Chart derived from presentation provided by St. Charles staff previously presented at SCMG Family Care Meeting, June 17, 2014.

For the first year evaluation, utilization will be measured by comparing data from the first half of 2014 to the second half of 2014. (Earlier dates were rejected as not comparable due to the significant population changes that came with Medicaid expansion.) Successful performance on utilization measures is defined as the rates staying the same or improving (within one percentage point up or down). Thirty percent of the withheld dollars are earned back through the utilization measures.

For 2014, the CO CCO decided to prioritize process development and has made return of 70% of the withheld funds dependent on the providers designing and implementing processes to manage readmissions and follow-up on ED visits for OHP members. Providers have formed a steering committee to oversee the process development, and formed workgroups to discuss elements of the process. They have prepared reports and will have processes ready for implementation in January 2015. PacificSource, working with the provider contract team, will determine goals for 2015 and create a new formula for providers to earn back withheld funds.

Funds withheld from specialty care payments are earned back based on performance of these same utilization and process measures. Only specialty physicians and primary care physicians are eligible to share in these funds; the hospital does not share in the specialty care withhold.

In addition to earning back these withheld funds, physicians are also eligible to earn a share of any budget surplus through their performance on a subset of the state's quality measures. The CO CCO selected the following seven metrics to measure in 2014:

- SBIRT screening
- Follow-up care for children prescribed attention deficit hyperactivity disorder (ADHD) medication
- Development screenings of children < 3 years old
- Early elective delivery rate
- ED visit rate
- Mental/physical assessment for children in Department of Human Services custody
- Providers reporting Stage 2 meaningful use data

Budget surplus funds are allocated to the St. Charles Medical Group and COIPA and each organization distributes these funds to their physicians based on provider performance and their particular allocation formula.

A final bucket of funds consists of all unearned dollars. If hospital metrics are not met, leading to unearned withheld funds, or providers do not meet quality metrics goals, the unearned dollars are returned to the COHC. The plan is for the COHC to spend these funds on provider education to improve understanding of the APM model and enhance provider performance for future years.

Development of APM

St. Charles and COIPA staff attributed the successful development of their APM to four factors. First, the medical community had been meeting in Central Oregon since 2009 with a general goal of improving regional health and health care delivery. The core membership of this group had remained stable since the 2011 creation of the COHC. Even with this continuity and commitment, it took members of the APM committee more than 18 months to agree on a structure for the APM.

A second crucial factor was the role that leadership played in the development process. There was high level commitment to come to an agreement from both physicians and the hospital system, with executives from St. Charles, COIPA and major medical clinics in the region playing key roles in the development process.

A third essential element was the ability to access and

manipulate claims data on Medicaid patients. The COHC representatives worked with PacificSource to release the raw claims data rather than just aggregate reports and were able to use the information to model various versions of the APM.

Fourth, participants cited two crucial design choices. First, they adopted a significant withhold amount of 25% for both hospital and specialty services. Respondents felt that lesser withhold amounts were not motivating, but that 25% was significant enough to catch provider attention and motivate behavior change. Second, the hospital system agreed to share it's withhold funds with physicians based on achievement of common utilization and process measures. Hospital representatives realized that uniting the financial interests of physician and hospital would provide the greatest motivation to collaborate on system changes to reduce inappropriate utilization and reduce hospital lengths of stay.

The CO CCO implemented its APM in March 2014. There has been no formal evaluation of the program to date, but interview participants expressed confidence that they had selected a model which aligned provider incentives and would lead to improved care and reduced costs. In addition, CO CCO officials believed that through their APM development process, they had created relationships which would allow them to address the challenges of the CCO model in the future

Appendix C: *Eastern Oregon CCO Case Study*

The Eastern Oregon Coordinated Care Organization (EOCCCO) is geographically the largest CCO in Oregon, providing coverage for Oregon Health Plan members in twelve counties in eastern Oregon (Baker, Gilliam, Grant, Harney, Lake, Malheur, Morrow, Sherman, Umatilla, Union, Wallowa, and Wheeler.) There are ten hospitals located in the service area. The EOCCO serves 46,000 OHP lives spread out over a geographic land area of 50,000 square miles.

The EOCCO is administered by a partnership of Moda Health (handling medical and pharmacy services) and Greater Oregon Behavioral Health, Inc. (GOBHI, handling behavioral health care and chemical addiction treatment, care and services). Behavioral health services are fully capitated and managed by GOBHI. Center staff interviewed Moda Health representatives about the development of EOCCO's alternative payment methodology (APM) for medical services.

Moda staff emphasized that the health plan knew early on that in order to succeed as a CCO, Moda and GOBHI would need to develop relationships with the provider organizations in the area. Prior to forming the CCO, Moda had administered Oregon Health Plan benefits in four of the twelve counties, but their relationships with providers had been strictly contractual. Moda strategically devoted significant time and resources to meet individually with leaders from all ten hospitals in their service areas, as well as physician groups and local community leaders such as County Commissioners and Judges. In the early meetings, they invited representatives to participate as financial shareholders in the CCO, sharing financial risk with the administrators. Eventually, six organizations - Good Shepherd Health Care System, Grande Ronde Hospital, Saint Alphonsus Health System, St. Anthony Hospital, the Pendleton Independent Physicians Association (IPA), Inc., and the Yakima Valley Farm Workers Clinic - joined Moda and GOBHI as EOCCO shareholders.

Moda spent over a year meeting face-to-face with providers in the region, sending multiple, high-level staff members to meet with every hospital CEO multiple times, as well as with physician groups and community thought leaders. Given the large geographic area, they created 12 separate Local Community Advisory Councils (LCAC) and met with each council on a regular basis. The goal of this extensive outreach was to develop effective working relationships based on trust and shared goals as well as to lay the ground work for effective communication between CCO administration and local providers as a basis for future innovation.

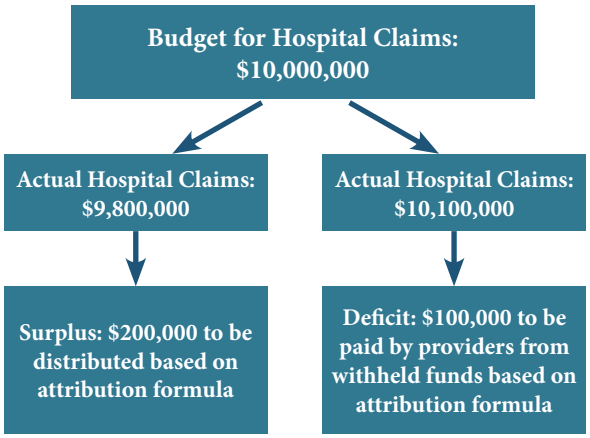
During the relationship building process, Moda described several instances where they were required to "tackle the tough issues." Some providers in the region had had negative experiences with managed care and capitated payment structures and were skeptical about new reforms. Others had negative experiences with other providers in the region and were reluctant to partner with them again. Over two years, Moda staff held meetings and addressed these concerns, noting that their willingness to invest time and resources in this work was essential. As one Moda representative said, "I can't emphasize it enough….unless you have some kind of relationship and this baggage is gone, you can't move forward."

In 2013, Moda began working with its provider partners to develop a shared savings/shared risk APM model for the CCO. The basic model includes both a 5% withhold on claims (the provider's financial risk) and the ability to share in CCO savings if claims are below estimated costs (see model specifics below). Moda financial staff met individually with hospital executives and medical clinic directors and used provider specific data to show how each facility could be expected to perform under the model given various conditions. After these presentations, Moda made minor adjustments to the model and invited voluntary participation by hospitals, patient centered primary care home clinics (PCPCH), Primary Care Providers (PCP's) and the independent physician associations (IPA). All ten regional hospitals, three out-of-area hospitals, and approximately 60% of the medial clinics chose to participate in the APM.

The model is a shared savings/shared risk model. All provider participants agree to a 5% withhold on their claims reimbursement, and this withhold is potentially at risk if the CCO exceeds its budget during the year. If the CCO produces a budget surplus at the end of the year, however, participating providers are eligible to share in the surplus based on an agreed upon formula.

The initial model looks only at claims related to hospital costs, prescription drugs, transportation and durable medical equipment. Each bucket of costs is calculated separately and actual claims paid out are compared to budgeted funds and used to determine whether there is a surplus or deficit.

Figure 3. *Example Model*



The surplus/deficit amounts for all included claims (hospital, Rx, transportation and DME) are reconciled and an overall surplus/deficit amount is determined before distribution or attribution. Any funds received by the state for quality measure achievement would be added to the distribution fund.

The surplus/deficit is then attributed to provider groups based on the following formula: (Note: provider risk for covering deficits is always capped by the 5% withhold. If the deficit should exceed the amount withheld from providers, the financial shareholders in the CCO would be responsible for the loss).

Figure 4. *Title*

Physician Fund: 15%

- Funds are distributed to specific physician groups based on PCP assignment.
- Example: A clinic with 10% of the CCO patients enrolled in its PCP would receive 10% of the 15% physician fund disbursement OR pay 10% of the 15% physician fund deficit responsibilities from its withheld funds.

Area Hospitals: 35%

- Patients are assigned to hospitals based on geography and PCP assignment in areas around the hospital;
- Example: a hospital has 20% of the CCO patients attributed to it based on geography and the patient's PCP assignment. The hospital would receive 20% of the 35% hospital payment OR be responsible for paying 20% of the hospitals share of the deficit out of its withheld funds.

Out of Area Hospitals: -10%

- Three out-of-area hospitals participate; Their share is based on last years out-of-area billings and the percentage of these billings they submitted.

The formula for the enrolled physicians and hospitals stays the same regardless of whether the result is a surplus or deficit. The reward or responsibility for the CCO varies, however. If there is a deficit, the EOCCO shareholders are responsible for 40% of the cost (as well as any deficit that exceeds the withhold total.) If there is a surplus, however, the CCO retains only 23% of the surplus. Two percent of the surplus will be distributed to the 12 LCACs and an additional 15% will be distributed to providers as a bonus based on quality measures.

The APM became operational in April 2014. The first distribution will be based on services provided between April and December 2014 and billed through March 2015.

The EOCCO noted that the model was intentionally simple. For example, there is just one risk model and all participants share in the same model. While there was some concern among participants that individual performance would not be fully considered in the equation, providers agreed to proceed with a general model. The CCO agreed to look at options for tracking and rewarding performance at a clinic or hospital level.

In addition, the current model does not include physician claims and they may be added in the future. The CCO notes, however, that physicians have significant influence over the hospital, prescription drug, medical transportation and durable medical equipment decisions and thus can directly affect the model's outcomes.

Finally, Moda emphasized that partnering with providers on the APM was only part of their larger innovation plan. Creating change in clinical practice is also seen as necessary, and the CCO through Moda hosts annual provider summits and manages a committee of providers who develop clinical best practices for dissemination. Moda also provides PCPs information on patients with high utilization and is developing further reports to help providers manage their business.

Appendix D: *Yamhill CCO Case Study*

Yamhill CCO is contracted with over a dozen primary care practices that serve the 18,000+ CCO members. The clinics vary in size, ranging from single physician practices to clinics with eight to fourteen primary care providers. Because of the variety in clinic size and the recognized need to support PCPs in developing their practice structures, the Yamhill CCO chose a stepped, transitional process to move toward APM implementation. To assist with this effort, Yamhill CCO hired a contractor, Dale Jarvis, to work with them on developing an APM for primary care providers.

The transitional process Yamhill CCO designed for their PCP APM development included an application to participate, seed grant funding, bonus payments, advanced primary care support and the eventual development of a primary care global budget.

The first step was to distribute an application in a face-to-face meeting with all PCP providers informing them of the CCO's plan to implement an APM. The application collected practice-specific information, and invited practices to participate in the development of potential models. It also informed applicants that the CCO had adopted an increase in the conversion factor for reimbursement for primary care providers. A copy of the application form follows this case study.

Second, the CCO invited practices to apply for seed grant funding for "triple aim infrastructure building." They set aside money from the CCO core budget and added transformation funds to pay for this component of the model.

In December 2013, all twelve practices were invited to participate in the development of an incentive plan to distribute money from the state's performance bonus system. This work involved developing a contract that defined the measures and performance indicators that would be used to calculate the bonus.

At the time of our July interview, the three largest practices had agreed to participate in the APM process and the CCO was following-up with the remaining nine to engage their participation.

> *"We need to do a more assertive sit-down with the other nine [practices]. Most of them have said yes, we want to do it, and then they tell us all the reasons why they haven't been able to. It's a really important window into how overwhelmed the small practices are"* (Dale Jarvis, telephone conversation, July 8, 2014).

Yamhill CCO refers to the fourth step of their APM as "advanced primary care support." The CCO solicited information from the practices on the steps they are taking to develop Patient Centered Primary Care Homes and intends to develop "PMPM add-on bands" on a tiered basis to support this development.

Step five, the ultimate goal, is to develop a primary care global budget for the PCP providers in the CCO.

> *"What my experience and research is telling us is that if you pay a PMPM add-on on top of fee-for-service it is very hard for the practice to move away from a volume-based model, where they are not able to do a lot that they could be doing like phone visits and other kinds of services that they can't necessarily get paid for. Or they don't have the right people, the people doing the work can't bill so they can't sustain it. We really think that moving toward a global budget frees up the people – with the right kind of safeguards – allows the clinic to do the right thing at the right time with the right team members in a way that everything else doesn't"* (Dale Jarvis, telephone conversation, July 8, 2014).

In the future, the CCO intends to work with other payers in the community "to try to get alignment with them around strategy four, the PMPM layer, and we would like to see all the payers in the community move toward PC global budgets for all the practices that are ready and capable of doing that."

Yamhill CCO is also working to develop a maternal medical home system. Jarvis reports that the CCO has not yet made plans to develop APMs for other specialty care or hospital services.

Yamhill County Care Organization
Your Local Health Partner

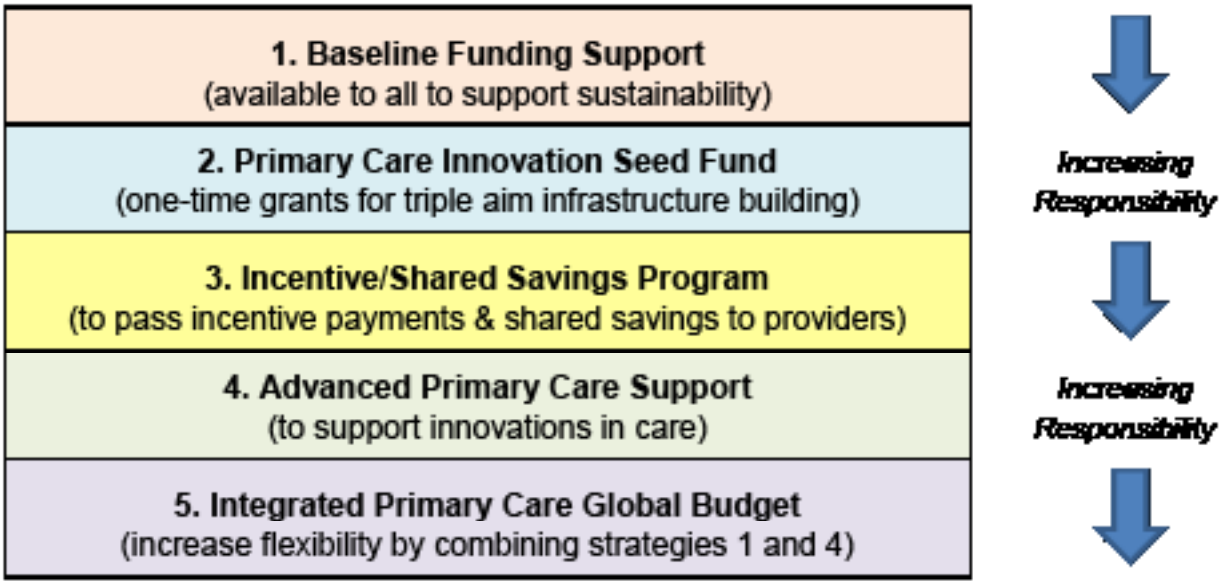
Primary Care Alternative Payment Model Funding Application

Overview

Yamhill County Care Organization (Yamhill CCO) is committed to primary care renewal in order to support achieving the goals of Oregon's health care transformation and the Triple Aim (optimal health outcomes, improved member experience of care, manageable costs). To support this effort we have created a multi-part Primary Care Alternative Payment Model Funding Strategy and are seeking applications from primary care clinics within the Yamhill CCO service area that wish to participate beginning November 1, 2013 or thereafter.

This Application describes the available funding strategies and includes application questions for each funding strategy area. There is no specific due date for applications; each application will be reviewed when submitted with approval based remaining available funds. For more information, please contact Katie Briedwell at kbriedwell@yamhillcco.org or Dale Jarvis at dale@djconsult.net or 206-613-3339.

Alternative Payment Model Funding Strategy At-A-Glance



Note: The Alternative Payment Model Funding Strategy Application begins on Page 4.

Yamhill County Care Organization
Your Local Health Partner

Alternative Payment Model Funding Strategy Descriptions

Strategy 1: Baseline Funding Support

Objective: To support sustainability by increasing fee for service payments.

Methods: 1) Increase the conversion factor and 2) open up CPT/HCPC codes that are currently not reimbursable based on provider request and YCCO approval.

Participation Requirements: Available to all YCCO primary care providers.

Phase 1 Budget: Up to $200,000.

Strategy 2: Primary Care Innovation Seed Fund

Objective: To support one-time grants to primary care clinics that require triple aim infrastructure building support that won't be covered through existing payment models or other Funding Strategies.

Methods: Provide additional funding to primary care clinics based on a funding request application (see below).

Participation Requirements: 1) 10% or more of your practice consists of YCCO enrollees or plan to serve an agreed upon target number of patients. 2) Achieves a threshold score on the funding request application.

Phase 1 Budget: Up to $100,000. There may be additional funding from the Transformation Grants.

Strategy 3: Incentive and Shared Savings Program

Objective: To pass incentive payments and shared savings to YCCO network providers based on an agreed upon distribution formula. Note that this strategy includes all participating YCCO network providers, not just primary care clinics.

Methods: Quarterly bonus payments to participating providers based on available funding that quarter and the distribution formula.

Participation Requirements: 1) Support development and participate in a Quality Contract that includes measurement and progress toward attainment of key performance indicators, including OHA incentive metrics.

Phase 1 Budget: TBD based on available CCO Incentive dollars and identified and allocated shared savings.

Yamhill County Care Organization
Your Local Health Partner

Strategy 4: Advanced Primary Care Support

Objective: To support the delivery of existing and new triple aim oriented service delivery innovations that are not fully covered through fee for service billings.

Methods: Provide additional funding to primary care clinics based on a funding request application (see below) from the requested start date through December 2014.

Participation Requirements: 1) Have achieved recognition as a Patient Centered Primary Care Home or be actively working on PCPCH status with the intention to achieve recognition within six months of the application date. 2) 10% or more of your practice is made up of YCCO enrollees or plan to serve an agreed upon target number of patients. 3) Achieves a threshold score on the funding request application.

Phase 1 Budget: Up to $750,000.

Strategy 5: Integrated Primary Care Global Budget

Objective: Increase the flexibility of the PCPCH to provide "whatever is needed" to help patients achieve the triple aim without the restrictions of having to fit the service into CPT and HCPC codes.

Methods: Convert historical billings plus Strategy 1 and Strategy 2 estimated dollars into a Per Member Per Month payment for YCCO enrollees that have been assigned to the PCPCH.

Participation Requirements: 1) Participation in Strategy 4. 2) Recognition as a Tier 3 PCPCH. 3) Participation in development and involvement in a Quality Contract that includes measurement and progress toward attainment of key performance indicator targets (measures to be determined).

Phase 1 Budget: N/A. Included in Strategies 1 and 4.

Yamhill County Care Organization
Your Local Health Partner

Alternative Payment Model Funding Strategy Application

General Information
Organization Information

Corporate Name:	
Clinic Name:	
Contact Person Name:	
Contact Person Phone:	
Contact Person Email:	
Application Date:	

Note: Please proceed to Question 1 on the following page. Questions 2 – 5 relate to Strategies 2 – 5. You only need to answer the questions related to the strategies you are applying for.

If you want to apply for:

- **Strategy 2: go to page 6.**
- **Strategy 3: go to page 7**
- **Strategy 4: go to page 8**
- **Strategy 5: go to page 11**

If you have any questions, please contact Katie Briedwell at kbriedwell@yamhillccu.org or Dale Jarvis at dale@djconsult.net or 206-613-3339.

Yamhill County Care Organization
Your Local Health Partner

Question 1: YCCO Primary Care Patients

1a. Are 10% or more of your current patients members of the YCCO?

Yes			No	

If your figures are different from those listed in below, please provided updated data in the table below.

Your Information	Current
Total Patients	
YCCO Patients	
YCCO %	

(If the answer to question 1a is YES, proceed to Question 2.)

1b. If the answer to question 1a is NO (less than 10%), how many additional YCCO enrollees will you commit to registering as assigned PCP patients during the next twelve months?

Your Information	Current	Additional
YCCO Patients		

Note: You do <u>not</u> have to achieve the 10% figure to qualify for Alternative Payment Model funding, but we are looking for your support to build community access.

Yamhill County Care Organization
Your Local Health Partner

Question 2/Strategy2: Primary Care Innovation Seed Fund

2a. Do you want to apply for funding from the Primary Care Innovation Seed Fund to support infrastructure-building support that won't be covered through existing payment models or other Funding Strategies?

Yes			No	

(If the answer to question 2a is NO, proceed to Question 3.)

2b. Please provide information on your Primary Care Innovation Seed Fund request:
2b1. Request description:

2b2. What is the amount of one-time funding you are requesting from YCCO?

2b3. How will this one-time request support the ability of your clinic to help patients achieve optimal health outcomes, improve their experience of care, and better manage costs?

2b4 Please provide a detailed budget for the request.

Expense Item	Amount	Other Comments
Total Budget		

Yamhill County Care Organization
Your Local Health Partner

Question 3/Strategy 3: Incentive and Shared Savings Program

3a. Do you want to participate in the Incentive and Shared Savings Program in order to be eligible for primary care incentive/bonus payments?

Yes		No	

(If the answer to question 3a is NO, proceed to Question 4.)

3b. Do you agree to participate in the development of the primary care portion of the Quality Contract and measure and make progress toward attainment of key performance measure targets, including OHA incentive metrics?

Yes		No	

Note: Primary Care-related OHA incentive metrics that may be incorporated into the Quality Contract include:

1. Screening for clinical depression and follow up plan
2. Controlling hypertension
3. Diabetes: HgA1c poor control
4. Follow up care for children prescribed ADHD medications
5. Colorectal cancer screening
6. Developmental screening in the first 36 months of life
7. Adolescent well care visits
8. Alcohol and drug misuse: screening, brief intervention, and referral for treatment (SBIRT)

Yamhill County Care Organization
Your Local Health Partner

Question 4/Strategy 4: Advanced Primary Care Support

Note: If you want to apply for Strategy 5, Global Budget PMPM, check NO and proceed to Question 5. If you are not sure about whether you want to apply for Strategy 4 or Strategy 5, you can complete both Questions 4 and 5. Note that many of the questions in Questions 4 and 5 are similar and if you complete both sections, you can copy your answers from Question 4 to Question 5.

4a. Do you want to apply for ongoing additional funding to support new and/or existing triple aim oriented service delivery innovations that are not fully covered through fee for service billings?

Yes			No	

(If the answer to question 4a is NO, proceed to Question 5.)

4b. Is your clinic currently recognized as a Patient Centered Primary Home?

4c. If the answer to question 4b. is YES, what is your current Recognition Tier?

4d. If the answer to question 4c. is NO, please describe your workplan for achieving PCPCH status within six months of the application date for this funding application.

Note: Funding is being made available for existing and new projects/innovations. For questions 4e and 4f, you can request support for one project/innovation or multiple projects/innovations. <u>If you are requesting support for multiple projects/innovations, please provide a separate set of answers for each project/innovation.</u>

4e. Please provide overview information of the triple aim service delivery innovation for which you are requesting funding.
4e1. Project title:

4e2. Project/Innovation Description:

4e3. Overall aims or goals of the Project/Innovation:

4e4. Has the Project/Innovation been in operation? If so, how long?

4f. Please provide additional information about the Project/Innovation.

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Your Local Health Partner

4f1. Measures that are/will be used to demonstrate efficacy:

4f2. Actual/planned activities to achieve the aims/goals:

4f3. Describe any evidence-based care guidelines or emerging best practices upon which the project is based.

4f4. If the project is already underway, please describe the benefits that have accrued to patients.

4f5. List the staff positions and full time equivalents that are supporting the project, adding any descriptive comments as needed:

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Your Local Health Partner

4f6. Please provide a detailed budget for the request.

Expense Item	Amount	Other Comments
Total Expense Budget		
Projected Revenues		
Net Need (Expense minus Revenue)		

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Your Local Health Partner

Question 5/Strategy 5: Integrated Primary Care Global Budget

5a. Do you want to convert your YCCO primary care funding to a per member per month (PMPM) capitation payment, replacing fee for service?

Yes		No	

(If the answer to question 5a is NO, you're FINISHED.)

5b. Have you achieved PCPCH Tier 3 Recognition?

Yes		No	

Note: If the answer to question 5b is YES, please proceed.

5c. Do you agree to participate in the effort to develop the primary care portion of the Quality Contract and measure and make progress toward attainment of key performance measure targets?

Yes		No	

Note: If the answer to question 5c is YES, please proceed.

5d. Please provide overview information of the triple aim service delivery innovations that support your request for moving to a Global Budget.

5d1. What Advanced Primary Care innovations have you already put in place to support the triple aim for your patients. Note that this is equivalent to question 4e above.

5d2. Overall aims or goals of the Project/Innovation:

5d3. Has the Project/Innovation been in operation? If so, how long?

5e. Please provide additional information about your Advanced Primary Care innovations.
5e1. Measures that are/will be used to demonstrate efficacy:

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Your Local Health Partner

5e2. Actual/planned activities to achieve the aims/goals:

5e3. Describe any evidence-based care guidelines or emerging best practices upon which the project is based.

5e4. If the project is already underway, please describe the benefits that have accrued to patients.

5e5. List any staff positions and full time equivalents that are needed to support your Advanced Primary Care efforts above and beyond what your fee for service funding typically pays for.

Position Title	FTE	Comments

5e6. Please provide a detailed budget of your costs supporting your Advanced Primary Care efforts above and beyond what your fee for service funding typically pays for.

Expense Item	Amount	Other Comments
Total Expense Budget		
Projected Revenues		
Net Need (Expense minus Revenue)		

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Your Local Health Partner

Note: The YCCO intends to use these figures to develop a Per Member Per Month (PMPM) rate based on your current fee for service payments plus these additional costs, with additional adjustments to achieve equity in payment across providers taking into account a risk adjustment that reflects the needs of the patients and the ability of the clinic to meet those needs. We will work with you on the calculations to ensure that they are financially feasible for both the YCCO and your clinic.

5f. What is your rational/business case for moving from fee for service to a global budget?

5g. What measures will you take to ensure that utilization will not drop and patient care will improve under a global budget?

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Your Local Health Partner

Scoring Key for Strategies 2 - 5

Note: We have included the scoring key to underscore our intent to support clinics in preparing successful APM Primary Care Applications. If you have any questions, please contact Katie Briedwell at kbriedwell@yamhillcco.org or Dale Jarvis at dale@djconsult.net or 206-613-3339.

Strategy 2: Primary Care Innovation Seed Fund

2b1. Request description (15 points)

0 points	5 points	10 points	15 points
The description does not appear to support important infrastructure building.	The description minimally supports important infrastructure building.	The description appears to support important infrastructure building.	The description clearly supports important infrastructure building.

2b3. How will this one-time request support the ability of your clinic to help patients achieve optimal health outcomes, improve their experience of care, and better manage costs? (15 points)

0 points	5 points	10 points	15 points
The funding request justification does not appear to be reasonable in relation to the expected benefits.	The funding request justification minimally aligns with the expected benefits.	The funding request justification adequately supports achieving the expected benefits.	The funding request justification clearly supports achieving the expected benefits.

2b4. Please provide a detailed budget for the request including projected revenues and planned expenses. (Revenues minus Expenses should equal the figure in 5.4.b.) (15 points)

0 points	5 points	10 points	15 points
The budget does not appear to be reasonable in relation to the expected benefits.	The budget minimally aligns with the expected benefits.	The budget adequately supports achieving the expected benefits.	The budget clearly supports achieving the expected benefits.

Strategy 2 Total Points	
Maximum Points	45
Threshold for Passing	35

Strategy 3: Incentive and Shared Savings Program

Does the answer to question 3 meet the participation requirements?

Yes		No	

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Your Local Health Partner

Strategy 4: Advanced Primary Care Support

Do the answers to question 4b – 4d meet the participation requirements?

Yes		No	

4e2. Project/Innovation Description (10 points)

0 points	3 points	7 points	10 points
The description does not appear to support an advanced primary care triple aim oriented innovation.	The description minimally supports an advanced primary care triple aim oriented innovation.	The description appears to support an advanced primary care triple aim oriented innovation.	The description clearly supports an advanced primary care triple aim oriented innovation.

4e3. Overall aims or goals of the Project/Innovation (10 points)

0 points	3 points	7 points	10 points
The aims/goals do not appear to support an advanced primary care triple aim oriented innovation.	The aims/goals minimally support an advanced primary care triple aim oriented innovation.	The aims/goals appear to support an advanced primary care triple aim oriented innovation.	The aims/goals clearly support an advanced primary care triple aim oriented innovation.

4f1. Measures that are/will be used to demonstrate efficacy (10 points)

0 points	3 points	7 points	10 points
There are no measures or those listed will not demonstrate efficacy.	The measures minimally support measuring efficacy.	The measures are adequate for measuring efficacy.	The measures clearly support measuring efficacy.

4f2. Actual/planned activities to achieve the aims/goals (10 points)

0 points	3 points	7 points	10 points
The activities do not appear to support an advanced primary care triple aim oriented innovation.	The activities minimally support an advanced primary care triple aim oriented innovation.	The activities appear to support an advanced primary care triple aim oriented innovation.	The activities clearly support an advanced primary care triple aim oriented innovation.

4f3. Describe any evidence-based care guidelines or emerging best practices upon which the project is based (10 points)

0 points	3 points	7 points	10 points
No guidelines or emerging best practices have been described.	Minimal guidelines or emerging best practices have been described.	Adequate guidelines or emerging best practices have been described.	Robust guidelines or emerging best practices have been described.

4f4. If the project is already underway, please describe the benefits that have accrued to patients (5 points)

0 points	3 points	5 points
Not under way or no benefits described.	Minimal benefits described.	Adequate or better benefits described.

Yamhill County Care Organization
Your Local Health Partner

4f5. List the staff positions and full time equivalents that are supporting the project, adding any descriptive comments as needed. (10 points)

0 points	3 points	7 points	10 points
The staffing does not appear to support an advanced primary care triple aim oriented innovation.	The staffing minimally supports an advanced primary care triple aim oriented innovation.	The staffing appears to support an advanced primary care triple aim oriented innovation.	The staffing clearly supports an advanced primary care triple aim oriented innovation.

4f6. Please include a project annual budget including revenues from other sources and expenses by expense category. (10 points)

0 points	3 points	7 points	10 points
No budget or the budget does not appear to support the project.	Minimal connection between the budget and the aims, goals and activities.	Adequate between the budget and the aims, goals and activities.	Strong connection between the budget and the aims, goals and activities.

Strategy 4 Total Points	
Maximum Points	75
Threshold for Passing	50

Yamhill County Care Organization
Your Local Health Partner

Strategy 5: Integrated Primary Care Global Budget

Do the answers to questions 5a – 5c meet the participation requirements?

Yes		No	

5d1. Project/Innovation Description (10 points)

0 points	3 points	7 points	10 points
The description does not appear to support an advanced primary care triple aim oriented innovation.	The description minimally supports an advanced primary care triple aim oriented innovation.	The description appears to support an advanced primary care triple aim oriented innovation.	The description clearly supports an advanced primary care triple aim oriented innovation.

5d2. Overall aims or goals of the Project/Innovation (10 points)

0 points	3 points	7 points	10 points
The aims/goals do not appear to support an advanced primary care triple aim oriented innovation.	The aims/goals minimally support an advanced primary care triple aim oriented innovation.	The aims/goals appear to support an advanced primary care triple aim oriented innovation.	The aims/goals clearly support an advanced primary care triple aim oriented innovation.

5e1. Measures that are/will be used to demonstrate efficacy (10 points)

0 points	3 points	7 points	10 points
There are no measures or those listed will not demonstrate efficacy.	The measures minimally support measuring efficacy.	The measures are adequate for measuring efficacy.	The measures clearly support measuring efficacy.

5e2. Actual/planned activities to achieve the aims/goals (10 points)

0 points	3 points	7 points	10 points
The activities do not appear to support an advanced primary care triple aim oriented innovation.	The activities minimally support an advanced primary care triple aim oriented innovation.	The activities appear to support an advanced primary care triple aim oriented innovation.	The activities clearly support an advanced primary care triple aim oriented innovation.

5e3. Describe any evidence-based care guidelines or emerging best practices upon which the project is based (10 points)

0 points	3 points	7 points	10 points
No guidelines or emerging best practices have been described.	Minimal guidelines or emerging best practices have been described.	Adequate guidelines or emerging best practices have been described.	Robust guidelines or emerging best practices have been described.

5e4. If the project is already underway, please describe the benefits that have accrued to patients (5 points)

0 points	3 points	5 points
Not under way or no benefits described.	Minimal benefits described.	Adequate or better benefits described.

Yamhill County Care Organization
Your Local Health Partner

5e5. List the staff positions and full time equivalents that are supporting the project, adding any descriptive comments as needed. (10 points)

0 points	3 points	7 points	10 points
The staffing does not appear to support an advanced primary care triple aim oriented innovation.	The staffing minimally supports an advanced primary care triple aim oriented innovation.	The staffing appears to support an advanced primary care triple aim oriented innovation.	The staffing clearly supports an advanced primary care triple aim oriented innovation.

5e6. Please include a project annual budget including revenues from other sources and expenses by expense category. (10 points)

0 points	3 points	7 points	10 points
No budget or the budget does not appear to support the project.	Minimal connection between the budget and the aims, goals and activities.	Adequate between the budget and the aims, goals and activities.	Strong connection between the budget and the aims, goals and activities.

5f. What is your rationale/business case for moving from fee for service to a global budget? (15 points)

0 points	5 points	10 points	15 points
The rationale/business case does not appear to support a shift to a global budget.	The rationale/business case minimally supports a shift to a global budget.	The rationale/business case adequately supports a shift to a global budget.	The rationale/business case clearly supports a shift to a global budget.

5g. What measures will you take to ensure that utilization will not drop and patient care will improve under a global budget? (15 points)

0 points	5 points	10 points	15 points
The measures do not appear to support a shift to a global budget.	The measures minimally support a shift to a global budget.	The measures adequately support a shift to a global budget.	The measures clearly support a shift to a global budget.

Strategy 5 Total Points	
Maximum Points	105
Threshold for Passing	70

Appendix E: *Medline Search Strategy*

Database: Ovid MEDLINE(R) and Ovid OLDMEDLINE(R)
<1946 to March Week 4 2014>
Search Strategy:

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1 exp Reimbursement Mechanisms/
2 exp "episode of care"/
3 exp delegation, professional/ or "delivery of health care, integrated"/
4 "fees and charges"/ or exp capitation fee/
5 exp Value-Based Purchasing/
6 exp Reimbursement, Incentive/
7 exp Capitation Fee/
8 Physician Incentive Plans/
9 exp Prospective Payment System/
10 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9
11 exp health services research/ or comparative effectiveness research/
12 comparative study/
13 12 or 13
14 10 and 13
15 limit 14 to (clinical trial, all or clinical trial, phase i or clinical trial, phase ii or clinical trial, phase iii or clinical trial, phase iv or clinical trial or comparative study or controlled clinical trial or meta analysis or randomized controlled trial or "review" or systematic reviews)
16 limit 15 to english language
17 limit 16 to humans
18 limit 17 to yr="2004 -Current"

Appendix F: *Interview Participants*

- **Cynthia Ackerman, RN, CHC**
  Vice President of Community Engagement & Government Affairs
  AllCare Health Plan

- **Phil Armstrong**
  Administrator and Chief Operating Officer
  The Oregon Clinic

- **Michael Bailit**
  President
  Bailit Health Purchasing

- **Peter Bernardo, MD**

- **Jim Bishop**
  CEO
  Harney County District Hospital, Burns, Oregon

- **Ed Blackburn**
  Executive Director
  Central City Concern

- **Kevin Campbell**
  CEO
  Greater Oregon Behavioral Health, Inc.

- **Patrick Curran**
  CEO
  CareOregon

- **Bob Dannenhoffer, MD**
  CEO
  Umpqua Health Alliance

- **Andy Davidson**
  President & CEO
  Oregon Association of Hospitals and Health Systems

- **Gwen Dayton**
  General Counsel & VP
  Health Policy, Oregon Medical Association

- **Brian DeVore**
  Director of Healthcare Ecosystem & Strategy
  Intel

- **The Honorable Mitch Greenlick, PhD**
  Member of the Oregon State House of Representatives

- **Robin Henderson, PsyD**
  Chief Behavioral Health Officer & Vice President
  Strategic Integration, St. Charles Health System

- **Denise Honzel**
  Consultant
  Oregon Business Council

- **William Hoveke, MAAA**
  Director, Underwriting and Actuarial
  Moda Health

- **Dale Jarvis**
  Consultant
  Yamhill CCO

- **Sean Jessup**
  Director, Medicaid Programs
  Moda Health

- **Maryclair Jorgensen**
  Director, Health Plan Administration, Payor Relations & Contracting
  St. Charles Health Plan

- **David Labby, MD**
  Chief Medical Officer
  Health Share of Oregon

- **Neal Mills, MD**
  Moda Health

- **Larry Mullins, DHA**
  President & CEO
  Samaritan Health Services

- **Peter Rapp**
  Executive Director of OHSU Healthcare
  Executive Vice President
  Oregon Health & Science University

- **Robin J. Richardson**
  Senior Vice President
  Moda Health

- **John Ryan**
  Executive Director
  Central Oregon IPA

- **Divya Sharma, MD**
  Medical Director
  Central Oregon IPA

- **Karen M. Shephard**
  Executive Vice President Finance & Chief Financial Officer
  St. Charles Health System

- **Greg Van Pelt**
  President
  Oregon Health Leadership Council

- **Michelle Vest**
  Consultant
  AllCare Health Plan

- **Alan Yordy**
  President & Chief Mission Officer
  PeaceHealth

Appendix G: *Facilitated Stakeholder Meetings*

- Coordinated Care Organizations CEO Meeting, Oregon Health Authority
- Coordinated Care Organizations CFO Meeting, Oregon Health Authority
- Health Committee of County Local Government Advisory Committee, Association of Oregon Counties
- Oregon Healthcare Financial Management Association, CFO Roundtable
- Oregon Health Leadership Council
- Oregon Medical Association
- Transformation Center, Innovator Agents Meeting