ACAP Bundled Payment Collaborative Recommendations

2015

Introduction

For some time now, health plans have been moving toward value-based payments - paying providers in non-fee-for-service ways in order to improve quality, reduce the financial motivation to provide more, and sometimes, unnecessary care and to reign-in costs. Bundled payment has been a strategy used in the commercial, Medicare and Medicaid markets as one option to encourage providers to manage the costs and quality of care. A bundled payment is a fixed dollar amount that covers a set of services, defined as an episode of care, over a defined period of time.

In the Medicaid market, three states have mandated the use of bundled payments (either with providers or managed care organizations (MCOs)) and many more states are, or are considering, mandating Medicaid MCOs to use alternatives to fee-for-service payment to pay providers. The Association for Community Affiliated Plans (ACAP) sponsored a Bundled Payment Learning Collaborative (Learning Collaborative) during the summer and fall of 2014 involving nine member MCOs. The Learning Collaborative was designed to explore bundled payment as an alternative to fee-for-service payment via a series of five webinars explaining bundled payment (or "episode-of-care payment"). The webinars provided information on key decisions that MCOs need to consider in order to implement bundled payment arrangements.

As part of the Learning Collaborative, participating plans received an analysis of their data from the Health Care Incentives Improvement Institute (HCI3). Each MCO received reports highlighting the costs and utilization for 27 different episodes of care and for emergency department and inpatient services. The 27 episodes of care that were analyzed represented approximately one-quarter of total medical spend for each of the MCOs. Each MCO also received a benchmarking report that provides an analysis of the 27 episodes across all nine plans.[1]

This document provides a set of recommendations that ACAP MCOs should consider when implementing a bundled payment program. The recommendations incorporate information gathered from the data analysis provided to the nine MCOs participating in the Bundled Payment Learning Collaborative as well as extensive research on existing and prior commercial, Medicare and Medicaid bundled payment programs. These recommendations are a suggested approach that is based on the experiences of other plans. They do not, however, represent the only way to implement a bundled payment program and each plan will want to examine its own unique considerations before adopting any portion of these recommendations.

For Medicaid MCOs interested in implementing a bundled payment program, we recommend[2] first considering the following episodes of care: pregnancy and delivery, asthma and diabetes. The following recommendations cover the rationale for focusing on these three episodes, the definition of the three episodes-of-care, including the time period the bundled payment should

[1] Plans were also given the option to access an additional 57 episodes that included mostly conditions affecting adults.
[2] These recommendations are based on the work of Bailit Health Purchasing.

cover, which providers should have responsibility for the episode, and what the financial risk arrangement might look like.

In addition to these episode-specific recommendations we provide a simple financial planning tool that can help MCOs determine the necessary investment in resources, estimated savings and return on investment that can be expected from implementing a bundled payment program. The financial planning tool is meant to give plans a sense of the costs and impacts of the program and is not meant to replace a more sophisticated analysis tailored to the MCO's specific bundled payment program design and using the MCO's own data.

Episode of Care: Pregnancy and Delivery

I. Rationale

Medicaid covers approximately 40 percent of births in the United States and pregnancy is one of the most expensive conditions for any Medicaid MCO. Maternity costs are rising across the nation, having tripled since 1996.[3] In a six-year time period in the mid-2000s, insurer payments went up by 49 percent for vaginal births and 41 percent for Caesarean sections.[4] For the nine plans participating in the ACAP Bundled Payment Collaborative, pregnancy and delivery represented the highest percent of total costs for all episodes analyzed. Pregnancy and delivery ranged from being 4.4 percent of total costs for an MCO to 14.7 percent of total costs. In addition, most MCOs had wide variation among their providers' average costs. One of the driving factors of total cost variation between MCOs and variation in costs between providers is the use of Caesarean sections (many of which are thought to be unnecessary) to deliver babies. There are many factors that contribute to the increase in Caesarean sections, including that they garner more revenue than vaginal deliveries, some women choose to have elective Caesarean sections, and some providers perceive vaginal deliveries to carry more litigious risk, among other reasons. Caesarean sections ranged from 23 percent to 45 percent of all births for the nine plans, with four of the plans exceeding the national average, which is 33 percent.[5] A bundled payment for the episode of pregnancy and delivery may help to curb the costs of maternity care by limiting incentives to provide unnecessary services, including unnecessary Caesarean sections. It may also help to improve outcomes as providers will be incentivized to provide evidence-based prenatal care, which can reduce complications affecting both the mother and baby.

II. Definition

The following table describes the recommendations for key elements of the pregnancy and delivery episode. The recommendations were informed by consideration of the six different publicly-available definitions[6] and serve as a suggestion for Medicaid MCOs

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[3] Rosenthal, E. "American Way of Birth, Costliest in the World" *NY Times* June 30, 2013.
[4] Ibid.
[5] Centers for Disease Control and Prevention, 2012.
[6] Those definitions include the three states engaged in Medicaid bundled-payments (AR, OH and TN), as well as the Integrated Healthcare Association (IHA) and Health Care Incentives Improvement Institute (HCI3) PROMETHEUS Payment definitions. We also considered Minnesota's prenatal "basket of care."

pursuing a maternity bundled payment. In addition to each recommendation, an alternative option is sometimes offered with a rationale for why a plan would consider an alternative.

The recommended episode covers the time period from the beginning of the pregnancy until 60 days after the delivery of the baby.[7] We recommend that the provider responsible for the quality and costs within the episode be the provider or provider group that performs the delivery. In the case where the delivering provider (or providers from within his or her group) did not provide prenatal care because the mother did not seek care (i.e., no prenatal claims) or because the mother was not enrolled within the MCO during pregnancy, we recommend the episode be excluded from the bundled payment. This exception takes into account situations where the mother is enrolled in Medicaid by the care facility at the time of birth or the mother presents to a care facility for the birth without having seen a provider during the pregnancy.

Episode Element	Recommendations	Alternatives
Episode trigger	A live vaginal delivery or Caesarean section birth identified through retrospective review of claims.	No alternatives recommended. All publicly available definitions are consistent with the recommended episode trigger.
Episode time period	40 weeks prior to delivery, or the beginning of coverage, and 60 days post-delivery.	No alternatives recommended. All publicly available definitions are consistent with the recommended episode time period.
Episode services	All services as defined by PROMETHEUS Payment (which is inclusive of all pregnancy, and labor and delivery-related services).[8] Services related to care of the neonate are not included.	For many plans, costs associated with care delivered in the neonatal intensive care unit (NICU) are substantial and greatly affected by prenatal care. MCOs could choose to build a bundle that includes all services as defined by PROMETHEUS Payment into the budget, and includes the

[7] At the November 12, 2014 ACAP Quality Conference in Chicago, IL, a CMS official recommended that plans unbundle pregnancy, delivery, and post-partum visits so that the plans are receiving claims data for deliveries. The recommendation outlined in this paper uses a retrospectively paid approach where claims processes must not be changed and therefore plans will receive claims for the delivery.
[8] For more information on the code-level detail see:
Pregnancy: http://www.hci3.org/ecr_descriptions/ecr_description.php?version=5.2.006&name=PREGN&submit=Submit;
Vaginal delivery: http://www.hci3.org/ecr_descriptions/ecr_description.php?version=5.2.006&name=VAGDEL&submit=Submit
C-section: http://www.hci3.org/ecr_descriptions/ecr_description.php?version=5.2.006&name=CSECT&submit=Submit

Episode Element	Recommendations	Alternatives
		costs of services related to care of the neonate in the risk model.[9]
Responsible provider	The provider responsible for the episode is the provider or provider group that performed the delivery.	No alternatives are recommended.
Member enrollment	A member may have up to a 30-day gap in enrollment.	A health plan might consider not allowing for a gap in enrollment. Some states have continuous eligibility for pregnant women and gaps in enrollment in those states would not be expected.
Exclusions	Delivering provider did not provide any prenatal services for the duration of the pregnancy because the mother did not seek care or was not enrolled with the MCO during the pregnancy. Mother was not enrolled with the plan during the second and third trimesters of pregnancy.	A health plan might consider limiting the episode to low-risk pregnancies. This would exclude pregnant women with certain conditions (e.g., HIV, patients with active treatment of cancer, etc.).

III. Payment Model

The following table describes the recommendations for the payment model. This recommendation takes into account the experience of commercial, Medicare and Medicaid markets studied over a three-year time period. The recommended payment model does not differ by episode; however, for Medicaid MCOs that are considering implementing variants of the recommended episode or have some experience in operationalizing non-fee-for-service payment models, alternatives are offered.

[9] At this time, there are no known operational bundled payment programs that include the costs and services related to the neonate, but there is one plan known to be working to include those costs.

Episode-of-care: Pregnancy and Delivery

Elements of Payment	Recommendation	Alternatives
Administration of Payment	Fee-for-service with retrospective reconciliation soon after the conclusion of the performance period.	MCOs could use the recommended approach, but choose to withhold a portion of fee-for-service payments to be used to cover any potential provider losses that might need to be repaid to the MCO.
Budget	Risk-adjusted[10] budget that is calculated based on past performance of the individual provider.	A health plan might consider a flat-rate budget if it chooses to limit the bundle to only include low-risk pregnancies or if it creates a budget based on a blended rate for vaginal deliveries and C-sections.[11]
Margin[12]	None.	No alternatives are recommended for health plans that have yet to implement bundled payments.
Risk Model	Shared savings with stop-loss protection. The provider receives 50% of any generated savings.	A shared risk approach might be considered if the health plan has some experience in alternative payment models, is working with a provider who also has positive experience with other shared savings or shared risk arrangements, or for future years of the program. If an MCO chooses to include costs associated with the neonate in the risk model, the responsible provider could share in any savings generated by a reduction of babies needing NICU-level care.
Performance Adjustments	A certain quality threshold must be met in order for a provider to share in savings (see below for quality metrics).	A provider that did not meet the quality threshold, but did demonstrate statistically significant improvement relative to baseline could qualify as meeting the quality threshold.

[10] MCOs may want to use the same risk-adjustment methodology as the state employs in plan rate setting so that there is alignment between the state's approach to identifying risks for plan members and the plan's approach to identifying risks of providers' patients.
[11] A flat rate budget based on a blended rate of vaginal deliveries and C-sections should be combined with a stop-loss provision to account for high-risk, high-cost pregnancy and delivery episodes.
[12] A margin is an additional percentage increase to the budgeted price that recognizes the difficulty in provider's ability to continually be efficient year after year. In the first year of a program, we recommend no additional margin.

IV. Quality Metrics

Expecting high quality performance among providers should be a key component of an MCO's bundled payment program and we recommend that a quality threshold be met for a provider to be eligible to share in savings (see the payment model recommendations above) and that the threshold be increased to motivate improved performance over time, to the extent feasible.[13] The three states with bundled payment programs in 2014 are the only known Medicaid implementations of the pregnancy and delivery episode (to date). The table below represents all of the measures being used in the pregnancy and delivery episode by Arkansas, Ohio and Tennessee and for what purpose.

Medicaid MCOs should use the accompanying toolkit to identify the steps to take to assess whether these quality measures would be meaningful in their program and to identify what should be their threshold for shared savings for any measures chosen.

Measure	Specification	Used by	Purpose[14]
HIV screening	% of patients for whom HIV screening was conducted during pregnancy	Arkansas Ohio Tennessee	AR: Minimum performance to qualify for shared savings is 80% OH: Tied to shared savings in a yet-to-be-specified manner TN: Minimum performance to qualify for shared savings is 85%
Group B strep screening	% of patients for whom Group B strep screening was conducted during pregnancy	Arkansas Ohio Tennessee	AR: Minimum performance to qualify for shared savings is 80% OH: Tied to shared savings in a yet-to-be-specified manner TN: Minimum performance to qualify for shared savings is 85%
Chlamydia screening	% of patients for whom chlamydia screening was conducted during pregnancy	Arkansas Ohio	AR: Minimum performance to qualify for shared savings is 80% OH: Tracking only[15]
Ultrasound screening	% of patients for whom an ultrasound was performed	Arkansas Ohio	AR: Tracking only OH: Tracking only

[13] If performance levels are quite high, there may not be real opportunity for provider performance improvement, in which case the threshold should remain constant.
[14] As of November 2014, Ohio had not published the minimum (or maximum) performance thresholds for the quality measures that are tied to shared savings.
[15] "Tracking only" measures that could be generated at the plan level by provider claims, or providers could be responsible for reporting the results to the plan.

Episode-of-care: Pregnancy and Delivery

Measure	Specification	Used by	Purpose[14]
Screening for gestational diabetes	% of patients for whom gestational diabetes screening was conducted during pregnancy	Arkansas Ohio Tennessee	AR: Tracking only OH: Tracking only TN: Tracking only
Screening for asymptomatic bacteriuria	% of patients for whom asymptomatic bacteriuria was conducted	Arkansas Tennessee	AR: Tracking only TN: Tracking only
Hepatitis B specific antigen screening	% of patients for whom Hepatitis B-specific antigen screening was conducted during pregnancy	Arkansas Ohio Tennessee	AR: Tracking only OH: Tracking only TN: Tracking only
Tdap vaccination rate	% of patients for whom Tdap vaccination was given during pregnancy	Tennessee	TN: Tracking only
C-section rate	% of deliveries performed by Caesarean section	Arkansas Ohio Tennessee	AR: Tracking only OH: Tied to shared savings in a yet-to-be-specified manner TN: Maximum rate to qualify for shared savings is 41%
Elective deliveries before 39 weeks	% of non-medically indicated elective deliveries (by Cesarean section or induction) between 37 and 39 completed weeks gestation	N/A	https://manual.jointcommission.org/releases/TJC2013A/MIF0166.html
Low birth weight	% of infants born weighing less than 2500 grams	N/A	http://www.qualitymeasures.ahrq.gov/content.aspx?id=38563
Follow-up	% of deliveries that had a postpartum visit on or between 21 and 56 days after delivery	Ohio	OH: A similar measure will be tied to shared savings in a yet-to-be-specified manner http://www.qualitymeasures.ahrq.gov/content.aspx?id=47234

Episode of Care: Asthma

I. Rationale

Asthma is one of the most prevalent chronic conditions, especially for children. Twenty-five million people in the United States have asthma and the number of people being diagnosed increases every year.[16] About 10 percent of all children are diagnosed with asthma and it is the third-leading cause of childhood death.[17] Asthma is particularly important to Medicaid programs as it disproportionally affects low-income and minority populations. Asthma rates among minorities are 40 percent higher. The difference in adverse outcomes and hospitalization is also higher.[18] Similarly, twelve percent of children in poverty have asthma compared to eight percent of those living above the poverty line. Controller medications are an important part of managing asthma and incorrect or underuse of these medications is particularly profound among Medicaid-covered children. It is estimated that 73 percent of children covered by Medicaid underuse controller medications,[19] resulting in more acute exacerbations of asthma, which in turn leads to increased treatment costs.

For the nine plans participating in the ACAP Bundled Payment Collaborative, asthma represented the second-highest percentage of total costs for the original 27 episodes analyzed by HCI3. Asthma ranged from being 1.8 percent of total costs for a plan to 5.8 percent of total costs. A bundled payment for an episode of asthma may help to curb the costs associated with asthma flare-ups, which are estimated to cost Medicaid programs $272 million for pediatrics alone[20], by increasing the incentive to prevent asthma attacks through prevention and education.

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[16] "Asthma in the US: Growing every year." CDC Vital Signs May 2011. http://www.cdc.gov/vitalsigns/asthma/

[17] Pearson WS et al. "State-based Medicaid costs for pediatric asthma emergency department visits." *Prev Chronic Dis* 2014;11:140139. http://www.cdc.gov/pcd/issues/2014/14_0139.htm

[18] Baruchin A. "For minority kids, no room to breathe." *NY Times,* August 30, 2007.

[19] Finkelstein JA, et al. "Underuse of controller medications among Medicaid-insured children with asthma." *Arch Pediatr Adolesc Med* 2002 Jun; 156(6):562-7

[20] Pearson WS et al. "State-based Medicaid costs for pediatric asthma emergency department visits." *Prev Chronic Dis* 2014;11:140139. http://www.cdc.gov/pcd/issues/2014/14_0139.htm

II. Definition

The following table describes the recommendations for key elements of the asthma episode. The recommendations were informed by consideration of the five different publicly-available definitions[21] and serve as a suggestion for Medicaid MCOs pursuing an asthma bundled payment. In addition to each recommendation, an alternative option is sometimes offered with a rationale for why a plan would consider an alternative.

The recommended episode covers the time period from initial diagnosis, or the start of the "episode year,[22]" whichever comes last, and covers 365 days. The three states currently implementing Medicaid bundled payments have chosen to focus only on an asthma episode that is triggered by an asthma attack and continues for 30 days after hospital discharge. This allows those states to focus on the highest costs associated with asthma.[23] However, we recommend an expanded definition that motivates providers to work with patients to prevent asthma attacks, rather than triggering the bundle to begin when an asthma attack happens. It should be noted that to date, no chronic condition episodes are known to have been implemented by a state Medicaid program (except in the case of acute exacerbations). Chronic conditions, however, represent the greatest opportunities for cost savings. Implementing a chronic condition episode-based payment would be particularly innovative, albeit challenging.

[21] Those definitions include the three states engaged in Medicaid bundled-payments (AR, OH and TN), as well as the Health Care Incentives Improvement Institute (HCI3) PROMETHEUS Payment definition. We also considered Minnesota's voluntary asthma "basket of care."
[22] The start of an episode year can be the anniversary date of a concluded chronic condition episode, or it can be the first day of program implementation if the MCO uses a retrospective review of claims to identify potential ongoing episodes.
[23] In addition, one state has articulated that they focused on acute exacerbation of asthma because they believe episodes-based payment works best for acute care and that their strategy for chronic illness management is patient centered medical homes.

Episode-of-care: Asthma

Episode Element	Recommendations	Alternatives
Episode trigger	Diagnosis code of asthma or an occurrence of an asthma attack, whichever comes first.	A health plan could consider developing a bundle covering the acute exacerbation period only, and would therefore consider the trigger to be an asthma attack.
Episode time period	365 days.[24]	A health plan could consider a shorter time period of 6 months, or if developing an acute exacerbation episode, 30-45 days post-discharge.
Episode services	All services as defined by PROMETHEUS Payment related to the management of asthma.[25]	No alternatives are recommended.
Responsible provider	Primary care provider.	No alternatives are recommended.
Member enrollment	A member may have up to a 30-day gap in enrollment.	No alternatives are recommended.
Exclusions	Certain co-morbid conditions affecting the lungs (e.g., cystic fibrosis).	A health plan could consider limiting this episode to children 5-18 years old.

III. Payment Model

The following table describes the recommendations for the payment model. This recommendation takes into account the experience of commercial, Medicare and Medicaid markets studied over a three-year time period. The recommended payment model is the same for each of the recommended episodes in this document; however, for Medicaid MCOs that are considering implementing variants of the recommended episode or have some experience in operationalizing non-fee-for-service payment models, alternatives are offered.

[24] Once a PROMETHEUS chronic condition episode is triggered, it continues indefinitely, but the time period for which costs are measured is annual (unless shorter if the plan chooses).

[25] http://www.hci3.org/ecr_descriptions/ecr_description.php?version=5.2.006&name=ASTHMA&submit=Submit

Episode-of-care: Asthma

Elements of Payment	Recommendation	Alternatives
Administration of Payment	Fee-for-service with retrospective reconciliation soon after the conclusion of the performance period.	MCOs could use the recommended approach, but choose to withhold a portion of their fee-for-service payments to be used to cover any potential provider losses that might need to be repaid to the MCO.
Budget	Risk-adjusted[26] budget that is calculated based on past performance of the individual provider.	A health plan might consider a flat-rate budget if it chooses to limit the bundle to acute exacerbations of asthma.
Margin[27]	None.	No alternatives are recommended for health plans that have yet to implement bundled payments.
Risk Model	Shared savings with stop-loss protection. The provider receives 50% of any generated savings.	A shared risk approach might be considered if the health plan has some experience in alternative payment models, is working with a provider who also has positive experience with other shared savings or shared risk arrangements, or for future years of the program.
Performance Adjustments	Certain quality thresholds must be met in order for a provider to share in savings (see below for quality metrics).	A provider that did not meet the quality threshold, but did demonstrate statistically significant improvement relative to baseline could qualify as meeting the quality threshold.

IV. Quality Metrics

Expecting high-quality performance among providers should be a key component of an MCO's bundled payment program and therefore it is recommended that a quality performance threshold must be met for a provider to be eligible to share in savings (see the payment model recommendations above) and that the threshold be increased to motivate improved performance over time, to the extent feasible. The three states with bundled payment programs in 2014 are the only known Medicaid implementations of the

[26] MCOs may want to use the same risk-adjustment methodology as the state employs in plan rate setting, so that there is alignment between the state's approach to identifying risks for plan members and the plan's approach to identifying risks of providers' patients.
[27] A margin is an additional percentage increase to the budgeted price that recognizes the difficulty in provider's ability to continually be efficient year after year. In the first year of a program, we recommend no additional margin.

asthma episode, though they are limited to acute exacerbations, as opposed to our recommendation of asthma as a chronic condition. The table below represents all of the measures being used in the asthma episode by Arkansas, Ohio and Tennessee and for what purpose. We also recommend one additional measure that is applicable to a year-long episode in the management of asthma.

Medicaid MCOs should use the accompanying toolkit to identify the steps to take to assess whether these quality measures would be meaningful in their program and to identify what should be their threshold for shared savings for any measures chosen.

Measure	Specification	Used by	Purpose[28] or Source
Use of prescribed asthma medications	% of filled corticosteroid and/or inhaled corticosteroid prescriptions within +/- 30 days of the trigger start date	Arkansas Tennessee	AR: Minimum performance to qualify for shared savings is 59% TN: Minimum performance to qualify for shared savings is 82%
Follow-up visits	% of episodes wherein the patient visited an outpatient physician within 30 days post-initial discharge (Ohio has modified this to measure follow-up visits within 7 days.)	Arkansas Ohio Tennessee	AR: Minimum performance to qualify for shared savings is 28% OH: Tied to shared savings in a yet-to-be-specified manner TN: Minimum performance to quality for shared savings is 43%
Repeat asthma exacerbation	% of patients who had a repeat exacerbation episode within 30 days of initial discharge.	Arkansas Ohio Tennessee	AR: Tracking only OH: Tracking only TN: Tracking only
Inpatient episodes	% of patients where the acute exacerbation was treated in an inpatient setting	Ohio Tennessee	OH: Tracking only TN: Tracking only
Patient education	% of cases where education on proper use of medication, trigger avoidance or asthma action plan was discussed	Tennessee	TN: Tracking only
Smoking cessation counseling	% of cases where smoking cessation counseling for patient and / or family was offered	Ohio Tennessee	OH: Tracking only TN: Tracking only

[28] As of November 2014, Ohio had not published the minimum (or maximum) performance thresholds for the quality measures that are tied to shared savings.

Episode-of-care: Asthma

Measure	Specification	Used by	Purpose[28] or Source
Chest x-ray	% of patients for whom chest x-ray was conducted	Ohio Tennessee	OH: Tracking only TN: Tracking only
Asthma Management	% of patients who have asthma and meet specified targets to control their asthma	N/A	http://www.qualitymeasures.ahrq.gov/content.aspx?id=46691&search=asthma

Episode of Care: Diabetes

I. Rationale

Diabetes is one of the most common chronic health conditions and its incidence continues to grow rapidly. Eighteen states experienced over 100 percent growth in diabetes prevalence rates between 1995 and 2010.[29] Approximately 15 percent of all individuals diagnosed with diabetes were covered by Medicaid in 2003, and with the expansion of Medicaid in many states as a result of the Affordable Health Act (ACA), Medicaid is now covering a higher percentage of individuals with diabetes. It is also one of the most expensive chronic health conditions: $83 billion is spent in hospital care on an annual basis for patients with diabetes and it was estimated pre-ACA that Medicaid was responsible for covering 10 percent of those costs.[30]

For the nine plans participating in the ACAP Bundled Payment Collaborative, diabetes represented the fourth-highest percentage of total costs for the original 27 episodes analyzed by HCI3. Diabetes ranged from being less than 1 percent of total costs for a plan to 5.6 percent of total costs. A bundled payment for an episode of diabetes may be helpful at reducing costs and improving quality because it can help focus providers on adhering to well-established clinical guidelines that help prevent unnecessary and costly complications and hospitalizations. It should be noted that to date, no chronic condition episodes are known to have been implemented by a state Medicaid program (except on the case of acute exacerbations). Chronic conditions, however, represent the greatest opportunities for cost savings. Implementing a chronic condition episode-based payment would be particularly innovative, albeit challenging.

II. Definition

The following table describes the recommendations for key elements of the diabetes episode. The recommendations were informed by consideration of the two different publicly available definitions[31] and provide a possible pathway for Medicaid MCOs pursuing a

[29] "Diagnosed diabetes grows at a dramatic rate throughout the United States." *Centers for Disease Control and Prevention*. November 15, 2012.
[30] Briody, B. "Diabetes: Hospital bills cost U.S. $83 billion a year." *Kaiser Health News*. August 19, 2010.
[31] Those definitions include the Health Care Incentives Improvement Institute (HCI3) PROMETHEUS Payment definition and Minnesota's voluntary asthma "basket of care."

diabetes bundled payment. In addition to each recommendation, an alternative option is sometimes offered with a rationale for why a plan would consider an alternative.

The recommended episode covers the time period from initial diagnosis, or the start of the "episode year,[32]" whichever comes last, and covers 365 days. Because there is limited experience in the marketplace with a diabetes bundle, we offer only a few alternatives to the most comprehensive episode definition.

Episode Element	Recommendations	Alternatives
Episode trigger	Diagnosis code of diabetes by a primary care provider.	No alternatives are recommended. Unlike asthma, poorly controlled diabetes can result in a variety of different conditions and can also occur in absence of diabetes; triggering an episode on a diabetes exacerbation is quite complicated.
Episode time period	365 days	No alternatives are recommended.
Episode services	All services as defined by PROMETHEUS Payment related to diabetes.[33]	A health plan could consider a much more limited definition that would only cover a few key services, as done in the Minnesota diabetes "basket of care."
Responsible provider	Primary care provider	No alternatives are recommended.
Member enrollment	A member may have up to a 30-day gap in enrollment.	No alternatives are recommended.
Exclusions	Children 18 and under.	A health plan could limit this bundle to individuals with uncomplicated diabetes to more easily narrow the scope of the bundle.

[32] The start of an episode year can be the anniversary date of a concluded chronic condition episode, or it can be the first day of program implementation if the MCO uses a retrospective review of claims to identify potential ongoing episodes.
[33] http://www.hci3.org/ecr_descriptions/ecr_description.php?version=5.2.006&name=ASTHMA&submit=Submit

III. Payment Model

The following table describes the recommendations for the payment model. This recommendation takes into account the experience of commercial, Medicare and Medicaid markets studied over a three-year time period. The recommended payment model does not differ by episode; however, for Medicaid MCOs that are considering implementing variants of the recommended episode or have some experience in operationalizing non-fee-for-service payment models, alternatives are offered.

Elements of Payment	Recommendation	Alternatives
Administration of Payment	Fee-for-service with retrospective reconciliation soon after the conclusion of the performance period.	MCOs could use the recommended approach, but choose to withhold a portion of their fee-for-service payments to be used to cover any potential provider losses that might need to be repaid to the MCO.
Budget	Risk-adjusted[34] budget that is calculated based on past performance of the individual provider.	If a health plan significantly limits the scope of the bundle, a flat fee could be considered for this bundle.
Margin[35]	None.	No alternatives are recommended for health plans that have yet to implement bundled payments.
Risk Model	Shared savings with stop-loss protection. The provider receives 50% of any generated savings.	A shared risk approach might be considered if the health plan has some experience in alternative payment models, is working with a provider who also has positive experience with other shared savings or shared risk arrangements, or for future years of the program.
Performance Adjustments	Certain quality thresholds must be met in order for a provider to share in savings (see below for quality metrics).	A provider that did not meet the quality threshold, but did demonstrate statistically significant improvement relative to baseline could qualify as meeting the quality threshold.

[34] MCOs may want to use the same risk-adjustment methodology as the state employs in plan rate setting, so that there is alignment between the state's approach to identifying risks for plan members and the plan's approach to identifying risks of providers' patients.
[35] A margin is an additional percentage increase to the budgeted price that recognizes the difficulty in provider's ability to continually be efficient year after year. In the first year of a program, we recommend no additional margin.

IV. Quality Metrics

Expecting high quality performance among providers should be a key component of an MCO's bundled payment program and therefore it is recommended that a quality performance threshold must be met for a provider to be eligible to share in savings (see the payment model recommendations above) and that the threshold be increased to motivate improved performance over time, to the extent feasible. While there are currently no known operational diabetes bundles from which to draw quality measures, there are many widely-used, NQF-endorsed diabetes quality process and outcome measures. The following table represents key measures from the Minnesota Community Measurement (MCM) D5[36] measure set and HEDIS's Comprehensive Diabetes Care measure set.

Medicaid MCOs should use the accompanying toolkit to identify the steps to take to assess whether these quality measures would be meaningful in their program and to identify what should be their threshold for shared savings for any measure chosen.

Measure	Specification	Measure Source
Blood pressure control	% of patients 18-75 with diabetes who had blood pressure <140/90 mm Hg	MCM: http://mncm.org/reports-and-websites/the-d5/ HEDIS
Cholesterol	% of patients on a statin medication, unless contraindication or valid exception is documented[37]	MCM: http://mncm.org/wp-content/uploads/2014/10/Cholesterol-Component-Measure-and-Field-Specs-Diabetes-Example-DRAFT-10-8-2014.pdf
Blood sugar control	% of patients 18-75 with diabetes who had poorly controlled blood sugar (>8.0%)	MCM: http://mncm.org/reports-and-websites/the-d5/ HEDIS
Tobacco usage	% of patients 18-75 with diabetes who were tobacco users	MCM: http://mncm.org/reports-and-websites/the-d5/ HEDIS

[36] Minnesota Community Measurement is a nationally recognized quality improvement organization that has created a measure set consisting of five treatment goals that, if all reached for an individual patient, represent the gold standard for treating diabetes. MCOs can chose to use the Minnesota Community Measurement measures as an "all-or-none" bundle, as is done in Minnesota, or independently.

[37] Valid exception includes patients ages 21-75 with diabetes and ischemic vascular disease with an LDL < 40; patients ages 21-39 with diabetes and LDL < 190; or patients with diabetes ages 40-75 with LDL <70.

Episode-of-care: Diabetes

Measure	Specification	Measure Source
Aspirin usage	% of patients 18-75 with diabetes and document ischemic vascular disease who is prescribed aspirin or antiplatelet medication and either of those medications appears on the patient's active medication list any time during the measurement year	MCM: http://mncm.org/reports-and-websites/the-d5/
Tobacco cessation advice	% of patients 18-75 with diabetes who received a referral for cessation counseling by the provider	HEDIS
Ophthalmologic exam	% of patients 18-75 with diabetes who received a retinal exam in the measurement year	HEDIS
Nephropathy exam	% of patients 18-75 with diabetes who had a screening test or medical attention for nephropathy	HEDIS
Podiatry exam	% of patients 18-75 with diabetes who received a podiatric exam in the measurement year	HEDIS