HCP-LAN Maternity Multi-Stakeholder Action Collaborative

Issue Brief: The Business Case for Maternity Care Episode-Based Payment

Why Episode-Based Payment in General?

Episode-based payment is a value-based payment methodology that offers reimbursement for all of the clinically appropriate services needed by a specific patient for a particular condition or treatment. Episode-based payment is increasing in popularity as Medicare, commercial and Medicaid plans and states are implementing the approach. While many episode-based programs are still in their infancy, there are a number that have shown to be effective at reducing costs and improving the quality of care.[i]

Episode-based payment is particularly effective where there are high costs, or when there is significant variation in the cost associated with managing a particular condition or treatment. Under episode-based payment, a provider is typically held accountable to one price for a set of services. This accountability can incentivize the optimization of care delivery processes, the implementation of evidence-based care, and a reduction of unwarranted variation in care to maximize savings potential and improve patient experience and quality outcomes. For example, an episode-based payment approach for maternity care can motivate providers to provide enhanced services, like continuous labor support, or doula care, and breastfeeding support interventions which can improve birth outcomes and lower costs.[ii]

Selected Results of Episode-Based Payment Across Conditions

In certain clinical areas, episode-based payment has proven successful for payers.

Medicare:

In the first 21 months of the Bundled Payment for Care Improvement (BPCI) program, where Medicare pays providers for 48 different clinical episodes, Medicare payments declined more for hospitals participating in the joint replacement episode than those that were not, without a significant change in quality outcomes.[iii] Furthermore, under CMS's Acute Care Episode demonstration and the BPCI program, the average Medicare episode expenditure declined nearly 21 percent over six years at one health system for joint replacement.[iv]

Medicaid:

In the Medicaid market, three states have implemented episodes on a broad basis – Arkansas, Tennessee and Ohio. Results for the first two states are available now.

In the first year of *Arkansas*' program during which it implemented a maternity episode and four other clinical episodes, the state saw a 5 percentage point decrease in cesarean birth rates, though an increase in the length of stay for the condition, perhaps indicating a shift to more clinically appropriate cesarean birth. In addition, improvements were made in screenings for asymptomatic bacteriuria, hepatitis B specific antigen, use of ultrasound and screening for gestational diabetes. As for cost, more Medicaid providers improved their cost profile than worsened their cost performance. [v]

Similarly, *Tennessee*'s Medicaid program implemented maternity and two other episodes and realized a savings of over $6 million - and experienced an improvement in quality.[vi] (For more information on specific quality improvement for the maternity episode, see below.)

Commercial:

On the commercial side, several payers have implemented episode-based payment – some have implemented one or two episodes, while others have implemented a suite of episodes. *Horizon Blue Cross Blue Shield of New Jersey* has the longest-standing experience among commercial insurers with wide-scale episode implementation. Horizon first implemented joint replacement episodes in 2010 and has since expanded its program to over nineteen different episodes, and contracted with more than 900 physician "Episode Conductors" (i.e., physician partners accountable for the episode of care.). Results reported thus far in orthopedic cases, have shown a significant decrease in the average cost of hip replacements, a reduction in all-cause readmissions, hip revisions after replacements and knee revisions after replacements.[vii]

Why Episode-Based Payment for Maternity Care

There are three compelling reasons to pursue maternity episode-based payment.

Maternity care is a major spending area for commercially insured and Medicaid populations.

- Childbirth is the most common reason for hospitalization in the US, representing about 10 percent of all hospital stays.[viii] Pregnancy, labor and birth account for 7 of the top 20 most expensive hospitalized conditions[ix] and account for 27 percent of all costs in the Medicaid program. [x] It is the single largest group of diagnoses, by cost, for employers providing health insurance benefits[xi] and accounts for 15 percent of all costs for commercial insurers.[xii]

Maternity costs and care vary significantly across and within states, with varying cesarean birth rates (and costs) a significant contributor.

- Across the country, the costs of maternity care can vary greatly. For example, commercial insurers in Louisiana pay about $10,000 for a vaginal delivery and $14,000 for a cesarean birth while commercial insurers pay over $15,000 for a vaginal delivery and over $21,000 in California.[xiii]
- The use of often unnecessary cesarean births (at high and varying cost) is one of the most significant drivers of the overall cost of maternity care, particularly impacting hospital costs. According to an analysis of nine Medicaid managed care plans, the use of cesarean birth ranged from 23 percent to 45 percent[xiv] of births – the national average is 32 percent.[xv]

- High rates of cesarean births persist for a confluence of reasons[xvi], including, in part, because of the underlying fee-for-service payment system that rewards this high cost procedure. Cesarean births garner more revenue than vaginal births; during 2010 the average total commercial payment for maternity and newborn care was $18,329 for a vaginal delivery and $27,866 for a cesarean birth. [xvii] In Medicaid, average payments were $9,131 (vaginal birth) and $13,590 (cesarean birth).

Episode-based payment can address cost and quality problems associated with maternity care.

- Rising maternity care costs are not correlating with improved outcomes. For example, ACOG found that the steep increase in cesarean rates since the mid-1990's was not accompanied by any discernable improvements in maternity and infant health.[xix] Despite the existence of evidence-based care trajectories for low-risk pregnant women (and often for lower risk pregnant women who have pre-existing chronic conditions or develop pregnancy complications for which the care trajectory during pregnancy is also evidence-based), patients often receive unwarranted variation in the quality of their care. There are enormous opportunities within the delivery of maternity care to engage women and their families in a way that supports person-centered care and may positively affect outcomes for women and babies
- Often under a fee-for-service payment model, prenatal care, labor and birth, and postpartum care are viewed and care delivered as three distinct treatment periods. However, by viewing them as three phases in one episode through the use of episode-based payment, there is a potential for incentivizing team-based care, care coordination and other types of interactions and care delivery that support positive cost and quality outcomes.[xx]
- The use of episode-based payment is gaining foothold for maternity care because it's expected to help curb the costs of maternity care by limiting incentives to provide clinically inappropriate services, including unnecessary cesarean births. Reducing unnecessary cesarean births for first-time mothers, could lead to an even further reduction of cesarean births as those women are less likely to have a cesarean for subsequent births than women who had a cesarean birth for their first child. Episode-based payment might also help to improve outcomes as providers will be incentivized – via the use of outcome-level maternity quality measures – to provide "low-touch" evidence-based interventions, such as enhanced prenatal care, more meaningful care coordination, doula services, and others -- which can reduce complications, lead to lower use of cesarean births and early elective deliveries, and improve outcomes for both the mother and the baby.

Evidence of Cost Savings from Using Episode-Based Payment for Maternity Care

Many of the maternity episode payment arrangements that are in existence today are quite new and have not operated long enough to have reportable ROI results. The fact that they are continuing to operate into second and third years, however, is indicative that the episodes are having a positive effect on maternity cost and/or quality. Some entities have shared evidence of positive quality improvement with likely positive financial implications. For example, Geisinger's Perinatal ProvenCare Initiative has reduced NICU admissions by 25 percent, and has not performed an early induction or elective cesarean birth before 41 weeks unless medically indicated since 2011.[xxi]

Two episode-based programs have reported positive savings specifically for their maternity episodes: Tennessee's Medicaid program and Horizon Blue Cross and Blue Shield of New Jersey.

Tennessee's Health Care Innovation Initiative

Through Tennessee's Health Care Innovation Initiative, the Tennessee Division of Health Care Finance and Administration mandated that its Medicaid managed care organizations implement a maternity episode (among others) with its providers on January 1, 2015. The episode covers prenatal care, delivery, postpartum care, and treatment of any complications or related readmissions of the mother.[xxii] Maternity episodes saved the state over $4 million dollars in the first year. See the table below for details on Tennessee's maternity episode savings as reported by the State.

In addition to the cost savings, Tennessee experienced a positive improvement in quality since the episode was implemented in 2015. All quality measures improved in performance over the baseline, including a 2.2 percentage point decrease in its cesarean birth rate, a 3.9 percentage point increase in Group B Streptococcus screening rate, and a 1.6 percentage point increase in its HIV screening rate, among other quality indicators.

Results of Tennessee's Maternity Episode in 2015[xxiii]	
Number of episodes in 2015	21,058
Reduction in total episode cost	$4,719,519
Provider reward payments	($527,466)
Provider penalty payments	$244,952
Total savings to the state	**$4,437,006**[xxiv]
Total per episode savings	**$210.70**

Horizon's Episode of Care Program

As previously mentioned, *Horizon Blue Cross Blue Shield of New Jersey* operates its "Episode of Care" program, which today, consists of nineteen different clinical episodes, including maternity care. Much like other maternity episodes, Horizon's episode covers prenatal care, delivery and postpartum care. Horizon has enrolled over 300 physicians in its maternity care episode and has seen success in important clinical outcomes, such as the Caesarean section rate. New Jersey has a much higher rate of cesarean births than the country (more than 40 percent vs. 32 percent) and Horizon has experienced a 32 percent reduction in the number of cesarean births among its Episode of Care provider partners (compared to its non-Episode of Care Partners) as a result of its new maternity payment model.[xxv] Among network providers who are not in the Episode of Care program, the rate of cesarean births remains flat, while among Episode partners, the rate is on the decline, resulting in improved quality of care and recovery for patients (moms and babies), and a reduction in the overall cost of care. Horizon reports a return on investment in the range of 1.5 to 2.0:1 for its maternity episode.[xxvi]

Horizon is also tracking prenatal and postpartum visits, and opioid use among surgical patients (including women who had a Cesarean birth), post-episode.

The Glidepath to Establishing Maternity Care Value Payment

The road to adding value-based payment to maternity care could be as straight forward as immediately pursuing an episode-based payment approach. Or depending on market dynamics such as the degree of engagement of providers, could include a multi-step process for getting to the same destination. Specifically, state payers and plans could consider implementing blended case rates as an interim step toward implementing episode-based payment for maternity care.

Blended Case Rate:

The concept of a blended case rate involves making a consistent reimbursement rate to hospitals for vaginal births or cesarean births. Effectively, this means raising the rate of a vaginal birth and lowering the rate of a cesarean birth so that they are equal. This payment strategy eliminates any financial motivation for providers to push for cesarean births. Instead, it provides a financial disincentive for cesarean births since surgery is expensive and resource-intensive for a hospital. One approach to creating a blended case rate is to multiply the desired percentage of utilization for each type of delivery by the original reimbursement rate and then adding the two figures together to get one weighted average rate.

Two blended case rate programs have reported positive savings: a Minnesota Department of Human Services initiative, and a Pacific Business Group on Health-led effort.

Minnesota Department of Human Services (DHS)

In 2010, Minnesota DHS (the Medicaid program) implemented a blended case rate for hospital maternity payment. It created the blended rate by assuming a 5% reduction in cesarean births. This changed the vaginal delivery rate from $3,144 to $3,528 and the cesarean birth rate from $5,266 to $3,528.[xxvii] As a result of this, the Medicaid program realized a $2.25 million annual savings.

Pacific Business Group on Health (PBGH)

PBGH – a coalition of public and private purchasers that focus on improving health care – created a program in 2012 to improve the financial and quality outcomes of maternity care among three hospitals in Southern California, including by implementing a blended case rate. Within one month of implementing the blended case rate at each of the three hospitals, the cesarean birth rate for low-risk mothers dropped by an average of over 20% and all three hospitals were able to sustain the decrease eighteen months after implementation. In addition, vaginal births for mothers who had cesarean births for their first child increased by 40% in two of the three hospitals[xxviii]

Typically, a blended case rate only covers labor and delivery. It does not include prenatal care, postpartum care, or the costs related to caring for the baby. This allows providers to begin to experiment under a payment model that is similar to episodes, before being held accountable for additional coordination of care across provider types, and in some instances, across patients (i.e., mother and baby).

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iii Dummit LA, Kahvecioglu D, Marrufo G, et al. "Association Between Hospital Participation in a Medicare Bundled Payment Initiative and Payments and Quality Outcomes for Lower Extremity Joint Replacement Episodes." JAMA Intern Med. September 27, 2016. http://jamanetwork.com/journals/jama/article-abstract/2553001

iv Navathe AS, Troxel AB, Liao JM, et al. "Cost of Joint Replacement Using Bundled Payment Models." *JAMA Intern Med.* January 3, 2017 http://jamanetwork.com/journals/jamainternalmedicine/article-abstract/2594805

v Statewide Tracking Report. Arkansas Center for Health Improvement. January 2015. www.achi.net/Docs/276/

vi Presentation made by the Tennessee Division of Health Care Finance and Administration to the Provider Stakeholder Group, October 19, 2016. https://tennessee.gov/assets/entities/hcfa/attachments/OctProviderMeeting16.pdf

vii HCI3. "Nation's Largest Commercial Value-Based Healthcare Program Delivers on Triple Aim." February 2015.

viii Pfunter A, Wier L, Stocks C. "Most Frequent Conditions in U.S. Hospitals, 2011." Healthcare Cost and Utilization Project (HCUP) Statistical Briefs. Rockville, MD: Agency for Healthcare Research and Quality (US) www.hcup-us.ahrq.gov/reports/statbriefs/sb162.pdf

ix Torio C and Andrews R. "National Inpatient Hospital Costs: The Most Expensive Conditions by Payer, 2011. August 2013. Healthcare Cost and Utilization Project (HCUP) Statistical Briefs. Rockville, MD: Agency for Healthcare Research and Quality (US) www.hcup-us.ahrq.gov/reports/statbriefs/sb160.pdf

x Moore B, Levit, K and Elizhauser, A. "Costs for Hospital Stays in the United States, 2012." Healthcare Cost and Utilization Project (HCUP) Statistical Briefs. Rockville, MD: Agency for Healthcare Research and Quality (US).

xi Wier LM., Andrews RM. The national hospital bill: the most expensive conditions by payer, 2008. Statistical brief #107. March 2011. In: Healthcare Cost and Utilization Project (HCUP) Statistical Briefs. Rockville, MD: Agency for Healthcare Research and Quality (US) www.ncbi.nlm.nih.gov/books/NBK53976/.

xii Moore B, Levit, K and Elizhauser, A. "Costs for Hospital Stays in the United States, 2012." Healthcare Cost and Utilization Project (HCUP) Statistical Briefs. Rockville, MD: Agency for Healthcare Research and Quality (US).

xiii Truven Health Analytics MarketScan Study. "The Cost of Having a Baby in the United States." January 2013. http://transform.childbirthconnection.org/wp-content/uploads/2013/01/Cost-of-Having-a-Baby1.pdf

xiv HCI3 analysis of Medicaid managed care plans for the Association of Community Affiliated Plans. 2015.

xv Centers for Disease Control and Prevention. National Vital Statistics Report. December 23, 2015. www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64_12.pdf

xvi Among the reasons for persistently high cesarean births include: low priority of enhancing women's own abilities to give birth, as a side effect to common labor interventions, because of lack of informed choice about VBACs, physician practice culture, and limited awareness of harms of a cesarean birth. Source: "Why is the US Cesarean Section Rate So High?" National Partnership for Women and Families. August 2016 http://www.nationalpartnership.org/research-library/maternal-health/why-is-the-c-section-rate-so-high.pdf

xvii Truven Health Analytics MarketScan Study. "The Cost of Having a Baby in the United States." January 2013. http://transform.childbirthconnection.org/wp-content/uploads/2013/01/Cost-of-Having-a-Baby1.pdf

xviii Truven Health Analytics MarketScan Study. "The Cost of Having a Baby in the United States." January 2013. http://transform.childbirthconnection.org/wp-content/uploads/2013/01/Cost-of-Having-a-Baby1.pdf

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xxi Health Care Payment and Learning Action Network. "Clinical Episode Payment Models." 2016. http://hcp-lan.org/workproducts/cep-whitepaper-final.pdf

xxii Memo to TennCare Managed Care Organizations from Keith Gaither, Director Managed Care Operations. September 4, 2014. www.tn.gov/assets/entities/hcfa/attachments/ProgramDescription.pdf

xxiii Presentation made by the TN Division of Health Care Finance and Administration to the Provider Stakeholder Group, October 19, 2016. https://tennessee.gov/assets/entities/hcfa/attachments/OctProviderMeeting16.pdf

xxiv Calculated by subtracting reward payments from the reduction in total episode cost and adding provider penalty payments to the reduction in total episode cost.

xxv "University Hospital in Newark and Horizon Blue Cross Blue Shield of New Jersey Announce Value Based Collaborative." Horizon Blue Cross Blue Shield of New Jersey press release. http:// www.bcbs.com/news/press-releases/university-hospital-newark-and-horizon-blue-cross-blue-shield-new-jersey Last accessed February 21, 2017.

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xxvii Catalyst for Payment Reform. Maternity Care Payment Brief. http://catalyzepaymentreform.org/images/documents/CPR_Action_Brief_Maternity_Care.pdf Last accessed February 15, 2017.

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