EOC Sub-Group
Meeting Agenda 1-29-15

VT Health Care Innovation Project
Episodes of Care Subgroup Meeting Agenda
Thursday, January 29, 2015 10:00 PM – 12:00 PM.
ESD (ADPC) Room, 289 Hurricane Lane, Williston, VT
Call in option: 1-877-273-4202
Conference Room: 2252454

Item #	Time Frame	Topic	Presenter	Decision Needed?	Relevant Attachments
1	10:00–10:10	Welcome and Introductions		N	
2	10:10-10:25	Episodes of Care Overview	Alicia Cooper	N	Attachment 2a: Bundled Payment Fails To Gain A Foothold In California Attachment 2b: NEHI Paper Attachment 2c: Power Point
3	10:25-10:45	Future of Episodes in Vermont – Objectives of Subgroup	Discussion	N	
4	10:45-11:45	Review: What we know, what we want to know, and PMWG EOC selection criteria	Discussion	N	Attachment 4a: EOC Program Crosswalk Attachment 4b: Criteria Matrix
5	11:45-12:00	Public Comment and Next Steps		N	

Attachment 2a - Bundled Payment Fails To Gain A Foothold In California

By M. Susan Ridgely, David de Vries, Kevin J. Bozic, and Peter S. Hussey

Bundled Payment Fails To Gain A Foothold In California: The Experience Of The IHA Bundled Payment Demonstration

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ABSTRACT To determine whether bundled payment could be an effective payment model for California, the Integrated Healthcare Association convened a group of stakeholders (health plans, hospitals, ambulatory surgery centers, physician organizations, and vendors) to develop, through a consensus process, the methods and means of implementing bundled payment. In spite of a high level of enthusiasm and effort, the pilot did not succeed in its goal to implement bundled payment for orthopedic procedures across multiple payers and hospital-physician partners. An evaluation of the pilot documented a number of barriers, such as administrative burden, state regulatory uncertainty, and disagreements about bundle definition and assumption of risk. Ultimately, few contracts were signed, which resulted in insufficient volume to test hypotheses about the impact of bundled payment on quality and costs. Although bundled payment failed to gain a foothold in California, the evaluation provides lessons for future bundled payment initiatives.

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The Affordable Care Act has increased interest in new payment models to address gaps in quality and cost. One of the alternative models is episode-based or "bundled" payment. Under bundled payment, a group of health care providers receives a fixed payment that covers the average cost of a bundle of services. Fixing the price that providers will receive for a bundle of services gives them an incentive to reduce the number and cost of the services contained in the bundle.[1]

Bundled payment is also expected to improve the value of care by improving communication and coordination of care across providers and eliminating inappropriate, unnecessary, or duplicative services.[2] Quality improvement can be embedded in bundled payment arrangements through the use of an explicitly defined "warranty" (that is, a period after the defined episode during which the providers would be held responsible for the treatment of associated complications), performance incentives (such as shared savings or gain-sharing opportunities), or an agreement to meet certain quality benchmarks as a condition of participation in the contract.

Bundled payment has received a lot of attention in both the commercial and public sectors during the past five years. In the public sector, the Centers for Medicare and Medicaid Services (CMS) has experimented with bundled payment with some success, and the Medicare Payment Advisory Commission, which advises Congress on Medicare policy, has long advocated bundled payment for the fee-for-service Medicare program.[1] Under the Affordable Care Act, CMS is continuing to experiment with bundled payment via the Bundled Payments for Care Improvement (BPCI) initiative, with an eye toward developing additional evidence of its impact.

Evidence is lacking on the effectiveness of bun-

dled payment in terms of improving the quality of care, reducing its cost, or both. Existing evidence about bundled payment programs mostly comes from bundled payment designs with more limited scope that have little generalizability to current programs.[3]

Our previous study of the PROMETHEUS bundled payment system, which was developed and piloted in three communities by the Health Care Incentives Improvement Institute from 2008 to 2011, illustrates the challenge of generating evidence on this new payment approach. Despite enthusiasm for the model among participants in the initial operational sites, numerous technical and cultural barriers prevented its successful implementation.[4]

However, experimentation with bundled payment has continued in the private and public sector. One of the most visible of the private-sector experiments has been taking place in California during the past three years. In this article we describe the bundled payment pilot in California for orthopedic surgery and analyze why it did not succeed.

The Bundled Payment Demonstration For Orthopedic Surgery

In 2010 the Integrated Healthcare Association (IHA), a stakeholder leadership group in California, and the RAND Corporation, an independent and objective evaluator, were awarded a three-year, $2.9 million demonstration and evaluation grant from the Agency for Healthcare Research and Quality. The project, called the IHA Bundled Episode Payment and Gainsharing Demonstration, was intended to implement and evaluate bundled payment for orthopedic surgery for commercially insured Californians younger than age sixty-five.

At the beginning of the grant period, the participants included six of California's largest health plans, eight hospitals, and an independent practice association. Leaders of each of these organizations were willing to participate in a consensus process to develop a bundled payment demonstration and then to contract with other organizations to implement a pilot for orthopedic procedures. Their participation was motivated by a desire to gain experience with a new payment model that could lead to improvements in care.

Working with various technical consultants, the IHA managed a consensus-oriented planning and implementation process. The organization convened a steering committee to set out guiding principles and to help lead the pilot (that is, to make final decisions based on the recommendations of the technical committees described below).

The IHA also convened technical committees whose members were specialist physicians and representatives of health plans or hospitals. The technical committees were tasked with defining the bundles—that is, specifying which services were included in a bundle and which were excluded (for a list of services that were included in or excluded from the total joint replacement bundle, see Appendix Exhibit 1A).[5] Through the committee consensus process, it was determined that the IHA episode definitions for total knee replacement and total hip replacement would include "facility, professional and medical implant device charges for the inpatient stay; a 90-day post-surgical warranty for related complications and readmissions are [*sic*] included, but other post-acute care is excluded."[6]

The IHA and its consultants developed model contract provisions that could be used in negotiations between the health plans and hospitals. However, because of antitrust concerns, the IHA was not involved in price or contract negotiations. The parties were free to modify any of the model contract provisions except for the bundle definitions. If the parties happened to be negotiating the overall preferred provider organization (PPO) contract at the time, the bundled payment arrangements were folded in. Otherwise, bundled payment negotiations were undertaken separately.

Study Data And Methods

EVALUATION The AHRQ grant, as described above, contained an evaluation component, which was carried out by a team including this article's authors. The goal of the evaluation was to determine whether bundled payment for orthopedic procedures for Californians younger than age sixty-five who have commercial insurance could be implemented by health plans, hospitals, and physician organizations across the state. Implementation in a large number of organizations in California would provide an opportunity to test hypotheses about the impact of bundled payment on cost and quality and would also help address questions of how "scalable" the concept was.

We used case-study methods[7] to describe the evolution of the bundled payment initiative and to understand its impact from the perspective of the diverse stakeholders in the process. The original evaluation plan included a quantitative evaluation of the impact of bundled payment on costs and quality for orthopedic procedures. However, this component was dropped because of significant delays in implementation and the

Bundled payment has received a lot of attention in both the commercial and public sectors during the past five years.

much lower-than-expected volume of surgeries under the orthopedic bundles. Because of low volume, there would not have been sufficient statistical power to detect the hypothesized effects.

STUDY POPULATION The case-study population included multiple representatives of six California health plans, five hospitals, one independent practice association, and the state regulatory agency. (A number of hospitals, after expressing initial interest, did not participate in the pilot. Others dropped out of the pilot before our evaluation. Representatives of one hospital declined to participate in an evaluation interview). In addition, we interviewed a representative of one participating ambulatory surgery center (ASC) and four technology vendors. A number of these people also served on either the steering committee, a technical committee, or both. Finally, we interviewed five orthopedic surgeons who were associated with the two hospital systems that signed bundled payment contracts in the pilot

Appendix Exhibit 2A[5] describes the interview respondents and the topics included in the interviews. Following informed-consent procedures approved by the RAND Institutional Review Board, we assured the people whom we interviewed that their responses to our questions would be deidentified and aggregated for reporting purposes.

Study Results

In spite of a high level of enthusiasm and effort among a broad cross-section of stakeholders in California, the IHA bundled payment pilot experienced a series of significant delays and was ultimately unable to achieve its objectives. Some of the problems that have been documented in the literature on bundled payment and that plagued the PROMETHEUS bundled payment pilot sites[4,8] emerged again in the IHA pilot.

For a variety of reasons, the volume of procedures reimbursed under bundled payment during the pilot period was exceptionally low. One reason is that not enough of the original "willing" organizations stayed with the pilot.

Of the six original health plans, two high-volume PPO plans dropped out altogether. These two large commercial plans withdrew because they were not confident that the pilot would lead to care redesign and lower costs. Another smaller health plan—a health maintenance organization—eventually decided that bundled payment was incompatible with its primary book of business—that is, the type of business on an insurer's books at a particular time, which in this case was capitated contracts. That plan's departure left three PPO plans that ultimately executed bundled payment contracts.

Of the eight hospitals that originally indicated an interest, only two eventually signed contracts with PPO plans. Hospitals dropped out because of a perceived lack of need for the pilot in their own institutions and concerns about the time and effort involved. However, two ASCs did sign contracts with a single health plan and would have signed with additional health plans had offers been forthcoming.

Not only did hospitals drop out of the pilot, but the volume of orthopedic procedures for adults younger than age sixty-five insured by the remaining PPOs was extremely low—only thirty-five cases in three years. Volume has been much higher in the ASCs: 111 orthopedic procedures have been reported since the pilot began. However, health plans have been slow to contract with ASCs as an alternative provider, despite their lower surgical costs compared to hospitals.

Why The Demonstration Failed To Achieve Its Objectives

From the point of view of stakeholders, four primary factors, discussed below, were responsible for the failure of the IHA pilot. In the aggregate, they highlight the aspects of design and implementation that will be critical to the success of future tests of this payment approach.

DIFFICULTIES IN DEVELOPING BUNDLE DEFINITIONS Stakeholders agreed that a single set of bundle definitions was necessary and that no existing set of definitions was adequate for the pilot. However, stakeholders also reported that although the consensus process had the benefit of transparency, the time required to reach consensus on bundle definitions slowed the implementation of the pilot considerably.

One representative of a physician organization explained: "It definitely went longer than any of us thought. We felt it was important to

have consistency…[but] when you peel back the onion, you find things that complicate this, and it can take a long time. When these things take a long time, people tend to lose interest and start to think it's never going to happen."

Parties also had difficulty reaching consensus about what exclusions (for example, preexisting comorbidities and other potential risk factors such as high body mass index) would apply to the bundle definitions.

Some stakeholders felt that negotiation over potential exclusions entailed gamesmanship on the part of early participants. For example, representatives of health plans told us that they were interested in broad inclusion criteria that would expand the number of patients potentially covered under each bundle. They also favored more expansive bundle definitions to lengthen the time of the episode and include more services (such as presurgical care and postacute care). In contrast, hospitals and surgeons generally sought to narrow the inclusion criteria (to include only the lowest-risk patients) and to limit the length of the episode, since including preadmission or postdischarge services would increase the need to coordinate care among a greater number of providers.

Reflecting these diverging basic interests, the resulting definitions were quite conservative in terms of both patients and services included. In the pilot, the hospitals and surgeons prevailed: For example, the bundle definitions excluded obese patients (those with a body mass index greater than 40) and postacute and rehabilitation services.

An additional complication was providers' concern about the unprotected financial risk that they would incur if they operated on higher-risk patients, given the decision not to risk-adjust bundled payments (that is, not to adjust payments to account for the fact that some patients will be more expensive to treat), create stop-loss measures (which provide protection against unpredictable and catastrophic loss), or require the purchase of reinsurance in the contract (which involves transferring some of the risk to a third party). In the end, almost all stakeholders agreed that the bundle definitions, which represented a compromise among the parties, proved to be too narrow to capture an adequate number of procedures to make bundled payment viable.

Even before the pilot, the IHA had observed that there were a limited number of joint replacement cases in the population of people younger than sixty-five who were insured by a commercial PPO. Once the two large commercial PPOs exited the pilot, the problem of low volume became more acute for the remaining participants.

Almost all stakeholders agreed that the bundle definitions proved to be too narrow to make bundled payment viable.

Volume was a key consideration in decisions related to whether hospitals could expect to spread the costs of clinical redesign across a high volume of patients, whether physicians would be adequately incentivized to change practice patterns, and whether health plans would invest in changing their administrative procedures. Unfortunately, in the end, the answer to all of these questions was no.

One representative of a health plan summarized the problem this way: "There's just not enough volume in those bundled orthopedic payments for a commercial population. Without bundles that focus on those medical procedures that a commercial population is likely to use, there's no return on investment, there's no financial incentive for us or the providers to spend a lot of time developing and administering these bundled payment programs."

This is an interesting observation because most commercial insurers are concerned with addressing the rising costs of orthopedic procedures. However, bundled payment does not address the appropriateness question (whether a particular patient needs a particular procedure). Thus, the participating commercial payers may have been signaling that they were more concerned about an increase in the use of these procedures than they were about the cost per case.

LACK OF TRUST AND COMPETING INTERESTS

Especially early in the process, stakeholders were skeptical about the motives of various parties. One representative of a health plan said: "I think everyone was interested in the concept, but when it got to the nitty-gritty, the dollars, it became clear they had no desire to go forward. The hospitals that participated were more there to protect what they had. They weren't looking for the cost savings like we were looking for them."

This lack of trust and transparency may have

Claims payment continued to be a significant concern throughout the pilot.

been a legacy of aggressive negotiating over previous contracts. In any case, it became visible in the earliest discussions.

An early challenge facing the IHA pilot was the conflict in how health plans and providers viewed pricing for the bundles. Health plans expected to negotiate price reductions compared to what the hospitals were being paid under fee-for-service. However, hospitals were concerned about implementation costs and the increased financial risk they would assume under bundled payment (for example, being responsible under a warranty for the cost of treating complications such as a readmission and treatment for a surgical site infection). As a consequence, some sought a higher level of payment than they received under fee-for-service. Differing views persisted in negotiations between the parties and at times rendered the negotiations difficult and slow.

One representative of a hospital said: "Frankly, ...the [IHA] plan participants and the provider participants were from separate perspectives. From the providers' perspective, they wanted to keep it manageable in size and use it as a true pilot, for key learnings and to be able to share in the reward for increased efficiency instead of having that money go back to the health plan. But from the plan's perspective, to be blunt, I think they were looking at it as, 'How could we use this pilot as a way to lower our costs immediately?'"

To the extent that hospitals and physicians were willing to take risks and offer warranties under bundled payment, the hospitals wanted the health plans to steer higher patient volume to their facilities. They wanted health plans to do this either through benefit design changes such as lower out-of-pocket costs or by designating the facilities as centers of excellence. However, to do so would have required the health plans to file new benefit options for regulatory approval, making these changes impractical within the pilot period.

As a result, the IHA project did not include incentives for consumers to use the participating hospitals. This lack of steering of patients greatly reduced hospitals' enthusiasm to participate.

LACK OF TECHNICAL INFRASTRUCTURE FOR PROCESSING AND PAYING CLAIMS Health plans' automated claims systems are set up to pay on the traditional fee schedule for physicians and per diem payments for hospitals, not to pay for bundles. Early in the IHA demonstration, it was a lack of off-the-shelf software that was identified as the problem. But even when claims adjudication software became available, low volume made the purchase of such software a nonstarter for health plans.

Seeing the low volume, health plans decided that they would have to process claims manually. This made it impossible to test automated processes for paying or denying claims that were submitted to the insurer within the pilot.

In addition, at least initially, hospitals lacked the capability to pay physician claims under the bundle. The IHA approached two technology vendors to help. Within a year, one vendor had developed a new software program for hospitals to pay physician claims.

Despite these efforts, claims payment continued to be a significant concern throughout the pilot. Limited volume hampered the pilot's ability to test these claims payment solutions.

DELAYS AND UNCERTAINTY ABOUT STATE REGULATORY DECISION MAKING Both health plans and hospitals were concerned that paying physicians for the services that they independently provided to the patient under the bundle might violate the prohibition in California state law of the corporate practice of medicine, which prevents hospitals from directly employing physicians.[9] To address this concern, the IHA retained a law firm to develop a model contract template that defined the relationship between parties as that of a prime contractor to a subcontractor, with the hospital accepting payment for the entire episode of care and disbursing payment to physician subcontractors. In the end, however, the dominant model adopted by the participating health plans and hospitals was to split the bundled payment in two: one bundled payment for all professional services and another for all facility services.

Health plans also had to address other regulatory concerns. Regulation of health plans in California is complicated, with jurisdiction split between two state agencies. However, for the PPO plans it regulates, the California Department of Managed Health Care must approve all contracts between a health plan and a provider. The kinds of issues that concern the department include the parties to the contract, the services provided in the bundle, the bundle period, the warranty, whether the health plan delegates risk to an intermediary, and how providers are paid.

In the words of a participant representing the state regulatory agency: "The concern with bundled payment is that if you're paying an intermediary who is making the payment to each downstream provider, what happens if the intermediary doesn't pay the provider? ...Our concern is if the intermediary doesn't pay the downstream provider, is the health plan still on the hook for that payment? If [the health plan] is, that risk arrangement isn't a particular concern for us. If the plan says, 'It's the intermediary's problem,' then we have a concern. That intermediary would seem to be functioning in some sort of insurer-like capacity."

In addition, the Department of Managed Health Care was concerned about issues of consumer cost sharing. To preempt regulatory problems, the health plans decided to require patients to pay the lesser of what they would have paid on the fee-for-service bills and the nominal coinsurance rate due under bundled payment.

Although the IHA provided model contract templates, each of the health plans had to negotiate approval of its own contracts with the department. The first contract took approximately nine months from submission to approval. The time delay and uncertainty associated with obtaining regulatory approval for contracts added significantly to the delay experienced by the pilot participants.

Discussion

The IHA was not able to spread bundled payment across California markets, patient populations, and conditions as initially hoped. The demonstration generated substantial expertise in developing episode definitions and other technical aspects of implementation. However, little experience was gained in actually providing orthopedic services under bundled payment arrangements and learning what the requirements might be for "scaling" bundled payment approaches nationally.

The IHA pilot might have been dubbed the "no risk, no reward" experiment. It did not fail because its participants lacked enthusiasm or did not work hard, but because design decisions made early in the process set a course from which the pilot could not recover.

Making the potential reward significant enough to stimulate both administrative and clinical changes required a high volume of patients. However, providers were not willing to accept risk for factors viewed as outside of their control (for example, patients' baseline comorbidities that increased their risk of complications). Health plans wanted lower costs. They also expected providers to undertake extensive clinical redesign and assume the financial risk for complications and readmissions, without risk-adjusted rates (to subsidize the care of higher-risk patients) or stop-loss protection (to protect providers against losses that exceed certain limits). The administrative costs to health plans to automate claims adjudication would not have been justified by the potential savings.

Inadequate patient volume was the single largest factor driving the disappointing outcome of the IHA pilot.

In the end, the pilot was not implemented as planned. This left the evaluators without data from which to draw conclusions about how bundled payment actually affects health care quality or costs.

Despite the failure of the pilot, health plan, hospital, and physician participants somewhat surprisingly continue to be interested in bundled payment arrangements, provided the implementation problems that plagued this pilot project (and others) can be solved.

One hospital representative concluded: "Despite the low number of patients, I do think it's worth it. ...This is where health care is shifting. Our participation in this has given us such a leg up on things. We've accomplished so much in terms of...defining what the flow should look like, how to identify these patients, how to track for readmission. ...All of that may not be apparent when you look at the five patients seen to date, but it's caused us to think critically about what's needed to care for these patients in this type of a model."

One interesting and unexpected result was the strong interest from ASCs. Initially, IHA staff did not focus on outpatient surgery. However, health plans saw value in the ASCs, which typically charge much less than hospitals for equivalent procedures. IHA staff did add an ASC representative to the consensus process, and one ASC signed a contract with one health plan for a 40 percent reduction over the hospital price.

There remains a strong conceptual basis to support a role for bundled payment in bending the cost curve.

Lessons For Future Bundled Payment Programs

The IHA Bundled Episode Payment and Gainsharing Demonstration generated a number of lessons that could increase the likelihood of successful implementation of bundled payment programs in the future.

ENSURE SUFFICIENT VOLUME Bundled payment requires significant changes to processes used by providers and payers to deliver and pay for care. Without adequate volume, there is no strong incentive to make needed changes. Volume can be increased by focusing on common conditions or procedures, including multiple large payers and providers in the program, and limiting exclusions. Inadequate patient volume was the single largest factor driving the disappointing outcome of the IHA pilot.

IMPLEMENT APPROPRIATENESS CRITERIA The pilot did not directly address the issue of appropriateness of the treatment for specific patients. However, some literature suggests that bundled payment may encourage the overuse of bundled procedures.[10] In turn, this suggests that future bundled payment programs might benefit from explicit attention to the issue of appropriateness, either through the implementation of appropriateness criteria or, at a minimum, by requiring that providers use shared decision making (which actively engages the patient in determining the appropriateness of the surgery or its timing based on both the scientific evidence and the patient's preferences).

FIND ACCEPTABLE METHODS FOR MANAGING RISK Providers and payers understandably have competing interests in the distribution of financial risk. In the IHA pilot, provider risk was mitigated by excluding higher-risk patients, which contributed to lower volumes. Alternative methods such as risk adjustment and stop-loss protection could be used to limit risk without decreasing volume.

Ideally, bundled payment programs should incentivize providers based on performance risk (that is, factors that are within their control) and adjust or control for insurance risk (factors that are outside of providers' control).

KEEP THE BUNDLE DEFINITION SIMPLE Defining when bundles of services start and stop and which services are included and excluded can be challenging and can lead to complicated, overly detailed bundle definitions. This can cause delays in implementation and increase the technical difficulty of administering bundled payment programs.

Simpler bundle definitions may be less satisfying conceptually. However, they provide a more achievable starting point for the programs.

IDENTIFY TECHNICAL SOLUTIONS FOR ADMINISTERING BUNDLED PAYMENT Claims adjudication for bundled payment has been a major barrier to the programs' administration. Manual adjudication of bundled payment claims, in which bundled cases are flagged and processed outside of payers' normal automated systems, limits the ability to scale a program. Automated solutions are being developed, but they were prohibitively expensive in the IHA pilot.

Future bundled payment participants should not underestimate the difficulty and cost of administering bundled payments. The IHA pilot produced a number of tools, including bundle definitions and model contract language, that could be used in the administration of other bundled payment programs. (These tools can be found online at http://www.iha.org.) However, the barriers that limited the successful application of these tools in the IHA pilot would need to be addressed.

INCORPORATE CHANGES IN BENEFIT DESIGN Providers had limited incentive to participate in the IHA pilot, in part because there was no aspect of the program that steered patients to participating providers. Changes in benefit design such as decreased out-of-pocket responsibility could increase patient volumes for participating providers.

Conclusion

Bundled payment programs are being tested by Medicare and commercial payers alongside many other payment and service delivery reforms. Given the poor results from the PROMETHEUS and IHA pilots, it is reasonable to ask what the rationale is for pursuing bundled payment any longer. One reason is that our simulation modeling work[11] and the work of others[12] suggest that bundled payment has great promise for controlling health care costs. Tellingly, participants in both demonstrations remained gen-

erally supportive of the bundled payment model, assuming that solutions to early barriers could be developed for future applications.

There remains a strong conceptual basis to support a role for bundled payment in bending the cost curve in the health care system. Still, there is limited evidence that bundled payment will achieve its promise. However, if health plans, hospitals, physician organizations, and others incorporate the hard-won lessons learned from the early pilots, the potential and promise of this payment model may yet be realized. ■

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NOTES

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5 To access the Appendix, click on the Appendix link in the box to the right of the article online.

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Attachment 2b - NEHI Paper

THE NETWORK FOR EXCELLENCE IN HEALTH INNOVATION

A Bundle of Potential and Risk: Bundled Payment and its Impact on Innovation

A NEHI Issue Brief |November 2014

About NEHI:
NEHI is a national health policy institute focused on enabling innovation to improve health care quality and lower health care costs.

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INTRODUCTION

Health care payment reform is moving quickly in the United States, with more than two-thirds of reimbursements expected to be tied to some form of value-based payment by 2020.[1] Bundled payments have emerged as a promising tool in this new wave of risk-shifting, and stakeholders across the country – including Medicare, Medicaid, employer groups, and commercial health plans – are recognizing the model's potential in addressing some of the issues of over-utilization of services and fragmented care. Bundles, generally defined as a predetermined payment for an episode, or group of related health services, require providers to assume some financial accountability and adhere to established quality metrics.

As this model continues to evolve, many have observed its implementation with little attention paid to its impact on medical advancement and innovation. There remain serious concerns that require further consideration, including bundles' quality standards and influence on clinical experimentation. NEHI (Network for Excellence in Health Innovation) has been at the forefront of this discussion, and convened in July 2014 two expert roundtables of stakeholders from across the country – including Center for Medicare and Medicaid Innovation (CMMI), provider, employer, payer, patient group, and industry leaders (see Appendix). This Issue Brief reflects findings from the event, in addition to background research and expert interviews conducted by NEHI on what this changing landscape means for patient access to innovative therapies and medical devices.

AN EXPANDING LIST OF DISEASE AREAS

Bundled payments began in the 1980s through small pilot programs and have gained traction since then for many reasons, including the Affordable Care Act's (ACA) encouragement of gain-sharing programs, pervasive use and availability of data, and the country's largest payer, Medicare, becoming involved.[2] Additionally, it has become easier for systems to leverage already proven models over time.

Early bundled payment demonstrations established a proof-of-concept for the model but were limited in scope. Most of these programs were narrowly defined to surgical procedures, such as short-term cardiac and orthopedic procedures in the inpatient setting, which have discernable start and end points along with clear definitions of success. In many ways this is still the

norm: as of 2013, 87 percent of bundles were for surgical conditions, 91 percent of which were within the cardiac or orthopedic space.[3]

However, policymakers now are trying to bring the model to scale in other costly areas – such as chronic disease, behavioral health, and oncology – but these medical areas are also more complex and thus the challenges and concerns for bundled payments are greater.

Bundled payments have been generally absent from chronic disease and behavioral health over the years due to logistical challenges, including limited past examples available to help guide implementation, no solid consensus on treatment regimen, or agreement of what complications should be included as a disease-related cost.[4] Nevertheless, some key players are looking to break ground. CMMI has issued a Request for Information (RFI) on bundling complex, chronic disease in the outpatient setting, and state programs, like Arkansas' Medicaid, are beginning to see tremendous opportunity in behavioral health bundles given the prevalence of mental illness in Medicaid populations.[5] (See Figure 2)

While oncology bundles face similar challenges, more progress has been made in this area, with multiple initiatives emerging in the private market and CMMI's ongoing development of a new multi-payer oncology bundling initiative.

A serious debate is emerging over what types of procedures are appropriate for bundling. The answer is likely to be realized over the next few years as more players become involved and others pioneer new efforts.

AN EXPANDING LIST OF PLAYERS

As the list of bundled disease areas continues to grow, so does the list of participants implementing these programs. The common thread between all of these programs is the desire to reduce practice variation and control spending in high cost disease areas. However, due to widespread experimentation with the model, bundles vary significantly in terms of level of risk; type of payment (retrospective or prospective); the incorporation, or not, of post-acute services; length of the episode; disease areas; and setting: national, state, commercial, or employer-led.

National Models

Bundled payments have taken the country by storm, and the Centers for Medicare and Medicaid Services (CMS) has been leading the charge, testing various pilots in different episodes and types of settings. Bundling has for a long time been considered a possible remedy for the serious variation in Medicare expenditures across the country,[6,7] and the Affordable Care Act recently reawakened interest in the model by calling for a more expansive Medicare bundling program, now known as the Bundled Payment for Care Improvement (BPCI). (See Figure 1)

Figure 1: Bundled Payment for Care Improvement (BPCI)

Building off past successful bundled payment demonstrations – like the Acute Care Episode[8] and Participating Health Bypass Center[9] programs – the Center for Medicare and Medicaid Innovation (CMMI) began testing four models in 2013 in both acute and post-acute settings. This new demonstration program, Bundled Payment for Care Improvement (BPCI), has so far had notable achievement within 48 episodes (per the table below) and has caught significant interest among provider groups. In August 2014, CMS announced that thousands more participants would be joining the program, making it the largest voluntary program within Medicare of more than 6,000 participants.[10]

BPCI Participant	Model	Type of facility	Episode	Average Savings/Case	Annualized 2014 Savings
A	Model 3; Retrospective	Full service post-acute care	Orthopedic	$2,300	$3,000,0000
B	Model 4; Prospective	Non-profit health system	Orthopedic and cardiovascular	$1,300	$1,232,400
C	Model 4; Prospective	Multi-facility integrated delivery system	Cardiovascular	$2,667	$544,068
D	Model 2; Retrospective	Community hospital, focus in general and orthopedic surgery	Orthopedic	$1,164	$75,671

Source: data courtesy of The Camden Group

CMMI has shown notable success with BPCI and has also signaled interest in expanding its impact through new specialty episode models in the outpatient setting. CMMI is interested in opportunities not only in the procedural space, but also within complex and chronic disease management. [11]

Additionally, CMMI is in process of designing an oncology bundled payment strategy, an Oncology Care Model (OCM), that would include most cancer types, apart from rare cancers that might be difficult to price-set, and all Medicare expenditures (A, B, and D). Among the program's many requirements, participants would be required to treat patients in compliance with nationally-recognized clinical guidelines and adhere to 32 quality metrics, eight of which will be used to determine performance-based payment. CMMI is hoping to have OCM be a multi-payer model that could align incentives among commercial and pubic payers and make the transition easier for practices interested in becoming involved.[12,13]

State Models

Several states are also in the process of leading bundled payment programs with support from CMMI, recognizing the opportunity to drive standardization and consistent practice patterns in areas where there is significant high cost and variability for their populations. Arkansas' Health Care Payment Improvement Initiative is ahead of the curve in many ways, and is the first mandatory, multi-payer demonstration model of bundled payment in the country.

Figure 2: Arkansas Health Care Payment Improvement Initiative

Since 2012, Arkansas' multi-payer initiative has been testing bundled payments in more than a dozen episodes, including several less traditional episodes like ADHD, Asthma, and oppositional defiance disorder, in which all pharmacy costs are included. Arkansas Medicaid has noted significant improvements gathered from the first year of episode claims and quality data, including a dramatic decrease in ADHD therapy visits and cost stabilization within episodes for hip and knee replacements and congestive heart failure.[14]

"The first round of performance reports from our multi-payer payment transformation efforts is very promising. Quality metrics show improvement and the financial impact — gain sharing and claw-backs — influenced providers. But most importantly, providers sense a new opportunity to reassert clinical leadership and guide needed change."

- *Joseph W. Thompson, MD, MPH, Surgeon General for the State of Arkansas and Director, Arkansas Center for Health Improvement*

Employer Models

Self-insured employers have for a long time realized the promise of bundled payments, and several have been involved in longstanding arrangements with high performing health systems across the country. These systems are able to provide consistent, high-quality care at a discounted price for employees. For example, Lowe's has contracted with a leading cardiology hospital, Cleveland Clinic, over the last 17 years for heart surgery procedures. Lowe's has saved significant upfront costs for nearly every operation, despite covering travel expenses for its employees and without accounting for downstream savings, such as readmissions and employee productivity. Lowe's is expecting to see similar benefits through its involvement with a new multi-employer bundling initiative, The Employers Centers of Excellence, arranged by the Pacific Business Group on Health.[15] (See Figure 3)

Figure 3: Pacific Business Group on Health's Employers Centers of Excellence

In January 2014, several leading employers joined the Pacific Business Group on Health's Centers of Excellence Network (ECEN). ECEN coordinates bundled payment agreements with four hospital systems that offer knee and hip replacements under a discounted, bundled rate for employees willing to travel at no personal cost.

Enthusiasm is growing for this program and current participants include:

Walmart	***Johns Hopkins***
Lowe's	***Kaiser Permanente Orange County***
McKesson	***Mercy Hospital***
	Virginia Mason

As of July 2014, ECEN had more than 1,500 unique inquiries and more than 300 completed surgeries, along with 100 surgeries scheduled and 80 more under review. ECEN is now in the process of expanding into other procedural areas and is looking to have several Centers of Excellence open for spinal surgeries by January 2015.[16]

Commercial Models

There is also tremendous movement taking hold in the private market across the country.[17] Many commercial plans have for years been involved with bundling and are more recently expanding their programs into complex disease areas. Horizon Blue Cross Blue Shield is one payer that has been increasingly pursuing new applications for bundled payments for pregnancies, deliveries, and joint replacements, and now is involved in breast cancer episodes as well.

Horizon's program is among many commercial efforts to curb costs within oncology treatment, which is expected to reach up to $173 billion in annual national expenditures by 2020.[18] United Healthcare has been piloting bundled payments in oncology but has employed a very different strategy than Horizon to confront the issue of surging cancer costs. (See Figure 4) United's goal is to remove any adverse incentives tied to prescribing chemotherapy drugs by carving out costs for these therapies, while Horizon focuses on normalizing practice patterns through clinical pathways.

Figure 4: UnitedHealthcare Oncology Bundled Payment Pilot

UnitedHealthcare recognized the opportunity for oncology bundles recently, with cancer costs accounting for 11 percent of its budget and rising steadily. A pilot bundling program was instituted from 2009 to 2012 among five participating sites, covering more than 810 patients within 19 various clinical conditions of breast, colon, and lung cancer diseases. Through some episodic payment and carve outs for the cost of therapies, United demonstrated a 34 percent decrease in total medical costs without a sacrifice in quality of care. These tremendous savings were in spite of a 179 percent increase in chemotherapy drug costs.[19]

Physicians were given freedom to change their preferred drug as they wished as new data became available, which happened several times throughout the course of the pilot. Participants were able to find solutions and efficiencies that worked best within their systems, including reducing utilization rates of imaging services, optimizing discharge processes, and scheduling check-ins sooner.[20]

IMPLICATIONS FOR INNOVATION

Across the country, the benefits of bundled payments are being demonstrated within clearly defined procedures, and are showing promise in other high cost, less defined medical areas. As these programs continue to expand and test new frontiers, the impact on patient access to innovative therapies and technologies is largely unknown. Now is the time to consider the potential challenges and risks to innovation in this evolving payment environment, and put forth a strong multi-sector effort to confront them.

Quality of Care

While the traditional fee-for-service system brings with it well deserved concerns about overutilization, in this new era of risk shifting, the health care system may be facing the contrary effect: an underutilization of appropriate services. It is critical that adequate quality metrics be built into models to safeguard against potential underuse of services, particularly in regard to the adoption of valuable, but costly therapies within episodes of care.

Experts agree that quality metrics within these models are not robust enough to account for an appropriate range of outcomes, particularly in complex disease states in which bundles are growing.

Quality metrics are often more concerned with quantifiable outcomes, overlooking more progressive, but just as important, measures like long-term outcomes and patient reported outcomes such as patient satisfaction and quality of life.

Further, due to the short-term focus of bundles, metrics may overlook potential benefits that therapies provide outside of the relatively short window of a bundled payment, which is often structured over 30, 60, or 90 days. For new innovations that have been developed to meet marks outside of these time frames, there is no guarantee that these outcomes will be recognized or rewarded through reimbursement.

Experimentation and Adoption of New Innovations

Along the same lines, strict adherence to clinical guidelines and assigned therapies could jeopardize clinical experimentation and the adoption of new innovations without appropriate pathways for experimentation. The demonstration and adoption of new innovations in the real-world is dependent on experimentation by early adopters in the health care system. Bundles' sharp focus on cost and short time windows may discourage providers from tailoring treatments to individual patient's needs and thus could harm the innovation ecosystem and personalized care.

If new data show that a certain therapy leads to significant outcomes, it is often unclear how the bundle will account for that new innovation, especially if that drug is more expensive than what is originally accounted for in the bundle. Bundling products and strict adherence to clinical pathways could slow innovative approaches to treatment, especially for medical areas like cancer that rely on innovative and often experimental care.

The Innovation Ecosystem

All this creates an uncertain environment for innovators. Without clear signs from the health care system on quality targets in which to aim and that proven innovations will be reimbursed, incentive for innovators to invest in the development of future innovations may be harmed.

Bundling may also impact medical research within academic medical centers (AMCs), which have been a vital leader in testing and establishing the value of innovations over the years. If AMCs now have to compete on cost, their ability to cross-subsidize research, train the next generation of physicians, and provide novel care may be impeded. Further complicating the issue is the reality that National Institutes of Health (NIH) funding has drastically decreased in recent years.[21,22]

As bundled payments and other value-based payment reforms continue to grow, it becomes important to address where leading health systems, like AMCs, will get the money to continue this innovative work, and how innovators can be incentivized to create products that align with the shift toward value in the U.S health care system.

CONCLUSION

Given that bundled payments likely are here to stay as the number of players and programs continue to expand, the following topics require further consideration:

Creating Adequate Safeguards for Innovation

There must be some mechanism within bundled payment arrangements to encourage adoption of new and proven technologies into routine practice.

> ***"Moving forward, we need to make sure that whatever policy we create is not freezing, in that piece of time, the option for innovation for the patients."***
>
> - ***Ryan Hohman, Friends of Cancer Research***

Possible options include carve-outs as evidenced through the UnitedHealthcare example, add-on payments, or other clearly defined mechanisms for clinicians to tailor treatments to patients' individual needs when predefined clinical guidelines are insufficient. Episodes that rely heavily on guidelines must be able to accommodate new innovations that match patient preference and experience. Clinical flexibility must be addressed from the outset of bundled payment construction, to ensure physician autonomy and to promote the idea that not every patient will fit a guideline.

Bundled payments do not need to be strictly prescriptive to be successful, as physicians are enormously innovative and can transform care processes while curbing costs if incentivized properly.

Collaborating to Demonstrate Value

Additionally, there is tremendous opportunity for industry to partner with payers and providers to better understand the impact of their products and needs of the health care system in this new environment. Manufacturers should continue to collect and promote evidence on cost and clinical effectiveness to support adoption of their innovations, and also work with other stakeholders to collect information on how therapies might demonstrate value in the long term. These data partnerships can allow manufacturers to gain feedback and data on their products in real time and earlier in the product development process, thus helping create more impactful therapies and improve upon already established technologies.

> ***"We can be helpful to our customers in doing some of that coordination of care and reengineering. We as a company have spent a lot of time innovating in that area, looking at the preoperative experience – patient education and preparation, the intraoperative process – making the operation as efficient as possible, and coordination with post-surgical care. I think this will be a very important area of innovation for the device companies looking forward."***
>
> - ***Jeffrey Binder, Biomet***

Redefining Industry's Role

It is even more important now for Manufacturers to show benefits beyond just the individual product, such as how their product may improve or fit within care processes, through wraparound services and educational materials for physicians and patients. Innovation should no longer be siloed from the context of care, and manufacturers should focus their efforts on creating clinical solutions rather than single innovations.

To do this, providers, payers and others will need to open their doors to new partnerships and relationships with industry. Manufacturers are tremendously innovative and are willing to bring a wealth of knowledge to this new era of value-based care.

Improving Quality Measures Through A Multi-Sector Discussion

Finally, there must be adequate safeguards within bundled payments to encourage physicians to provide appropriate care to patients – matching the right therapy, to the right person, at the

right time. Multi-sector agreement of standard quality metrics must be developed to create measures that can reflect a broader, more appropriate spectrum of outcomes.

Bundled payments are only one model in a larger trend toward paying for value. As providers become more experienced with risk-sharing, others are likely to become involved, leveraging already proven models and combining them with other value-based efforts, like Accountable Care Organizations.

> ***"To have a health plan be in charge of [developing the kind of metrics we all want to have] won't work. We need everyone in the room; we need to be able to objectively talk about things."***
>
> - ***Steve Spaulding, Arkansas Blue Cross Blue Shield***

It is more important now than ever for the health care community to focus its effort on understanding how to do bundle payments right, and in a way that allows for continued and improved patient access to innovation. This requires continued study on how best to implement them, in what disease areas they work best, and how programs can make room for innovative care.

APPENDIX

Innovation in an Era of Payment Reform: How Will Bundled Payments Impact Innovation?

July 10, 2014

The Pew Conference Center, Washington, DC

List of Expert Roundtable Participants:

Deirdre Baggot, Vice President, The Camden Group; Expert Panel Reviewer, CMMI

Jeffrey Binder, President & CEO, Biomet

Molly Burich, Senior Manager, Government Affairs – Reimbursement and Policy, Otsuka Pharmaceuticals

Trisha Frick, Assistant Director of Managed Care Contracting, John Hopkins Healthcare LLC

Ryan Hohman, JD, Managing Director, Policy & Public Affairs, Friends of Cancer Research

Bob Ihrie, JD, Senior Vice President, Compensation & Benefits, Lowe's

Juan Reyna, MD, Urologist, San Antonio, TX; President, LUGPA Integrate Practices/Comprehensive Care

Steve Spaulding, Senior Vice President, Enterprise Networks, Arkansas BCBS

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Attachment 2c - Power Point

Episodes of Care Sub-Group

January 29, 2015

Meeting 1

Meeting 1: Objectives

- Part 1
  - Review sub-group charge
  - Episodes of Care overview
  - Using EOC data to support delivery system transformation
  - RFP and funding request preparation
- Part 2
  - Review of EOC work to date
  - Preparation for Meeting 2

PART 1

Sub-Group Charge

The Episodes of Care sub-group will play a key role in developing and defining the future of Episodes data use in Vermont. The sub-group will recommend a number of episodes for further exploration using already established selection criteria. The sub-group will also aid in the development of a Request for Proposals (RFP) to elicit bids from potential vendors to produce user-friendly data reports related to selected episodes in the State. Sub-group members will be asked to provide recommendations regarding:

- selection and definition of episodes
- methodological considerations
- identification of appropriate quality measures
- report development and dissemination for delivery system transformation including identification of the need for additional provider supports to enhance the use of data and analytics
- bid review and vendor selection

Episodes of Care

- An episode of care consists of all related services for one patient for a specific diagnostic condition from the onset of symptoms until treatment is complete.
- Episodes constitute clinically and economically meaningful units of service, such as all services and total costs associated with treating a particular condition, or providing a particular type of service.

Aspects of an Episode of Care

- Length of Time (acute, chronic)
- Range of Services

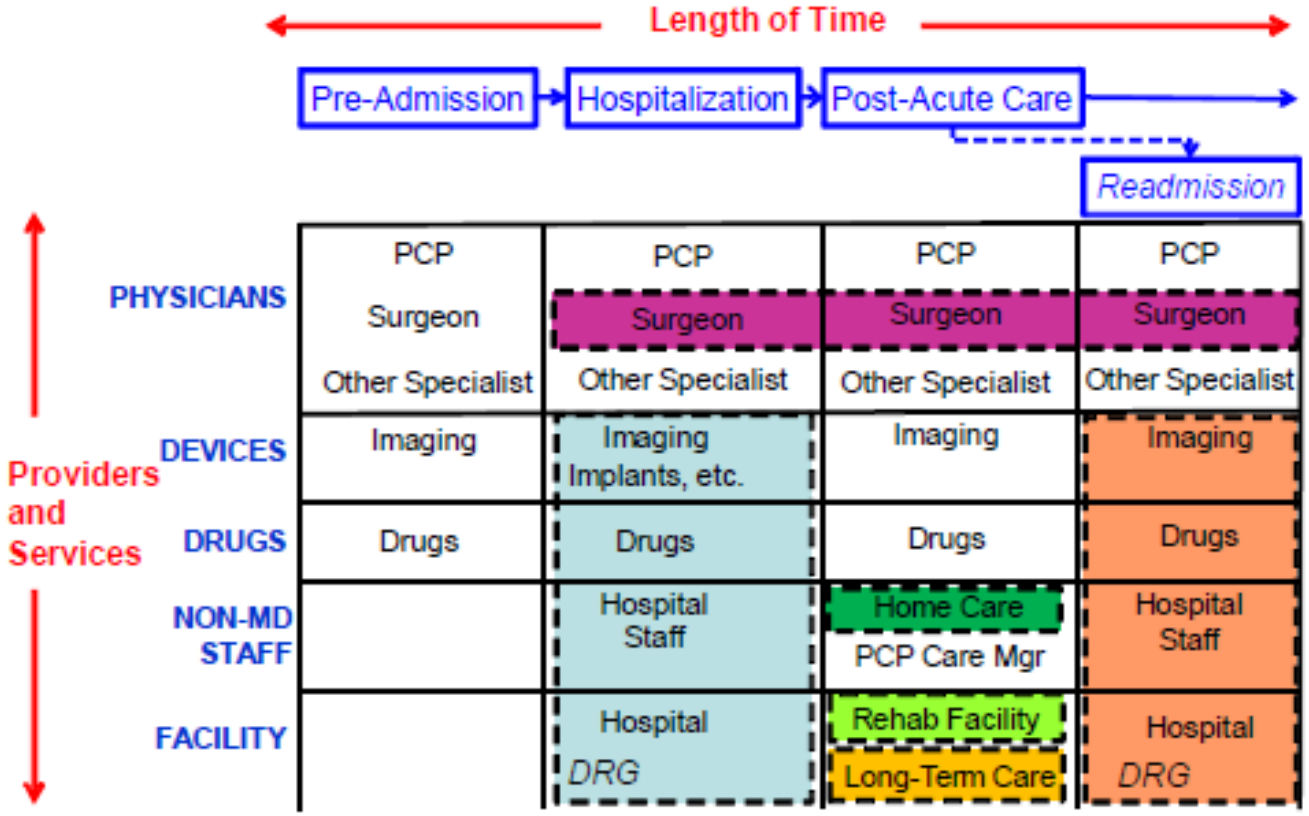


Figure 1: Center for Healthcare, Quality and Payment Reform, *Transitioning to Episode-Based Payment*

Using Episodes

- As the foundation for alternative payment models
- To answer questions in support of delivery system transformation:
  - For what conditions are services provided and costs incurred?
  - Do utilization patterns for specific conditions suggest excessively high or variable rates of particular services?
  - How do cost and utilization patterns differ across providers serving patients for clinically-similar conditions?
  - How much duplication of service occurs for patients seen by different providers in different settings over time?

Types of Improvements Expected

- Making efficient substitutions among treatment options
- Avoiding complications
- Managing chronic conditions
- Managing acute conditions
- Providing particular forms of treatments or tests efficiently and effectively

Part 1: Sub-Group Decision Points

- In the absence of an episode-specific payment model, do we see value in further examining Vermont EOC data?
  - If yes, this sub-group will define this value, both broadly and with respect to specific stakeholders.

- Is there sufficient stakeholder interest in this work to justify developing a request to use VHCIP funds to further develop the use of Vermont EOC data?
  - If yes, this sub-group will devote the next several months to developing such a funding request, and an RFP for vendor support.

Brainstorming: Advantages & Challenges

- **How would the state stand to benefit by making information on EOCs more readily available to payers, providers, ACOs, advocates, beneficiaries, etc.?**

- **What are the perceived challenges or disadvantages?**

PART 2

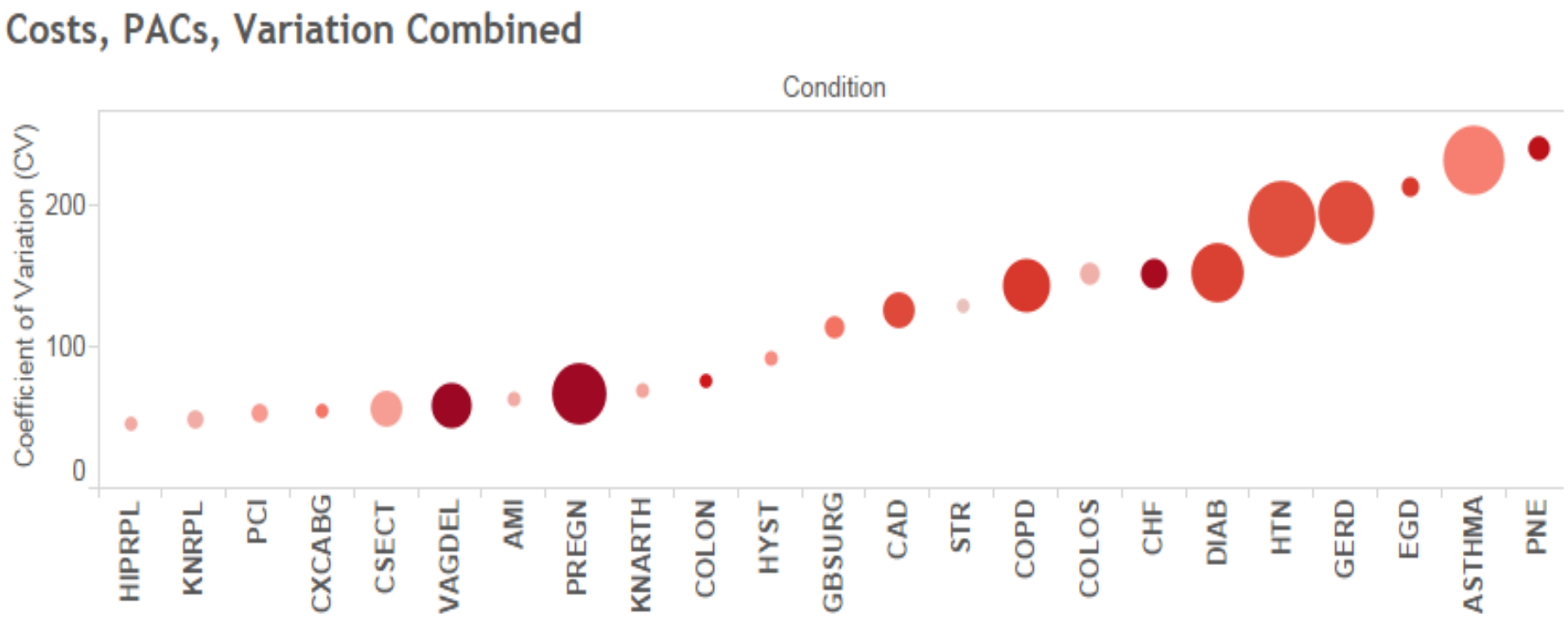
National "Universe" of EOC

- Across federal, statewide, and private programs, there are currently >90 EOCs in use
  - Attachment 4a
- We have seen VT-specific data for 25 of these episodes
  - HCi3/PROMETHEUS
  - Analysis on VT Medicaid and commercial populations using VHCURES data

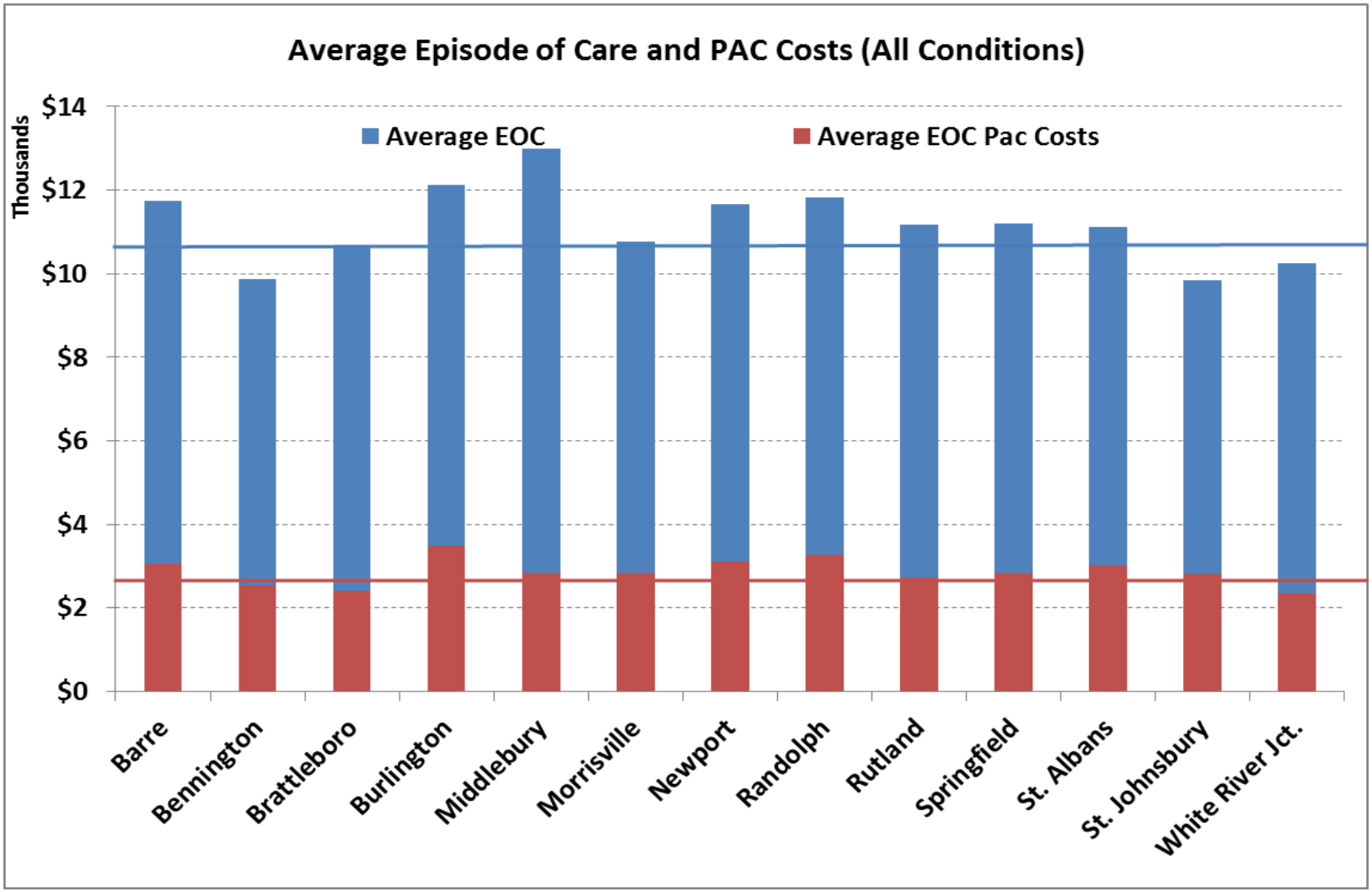
Aspects for Consideration in EOCs

- Total Episode Cost
- Cost of Potentially Avoidable Complications (PACs)
- Episode Volume
- Variation
  - Least vs. most costly cases
  - By region (or facility, or provider)
  - By payer population

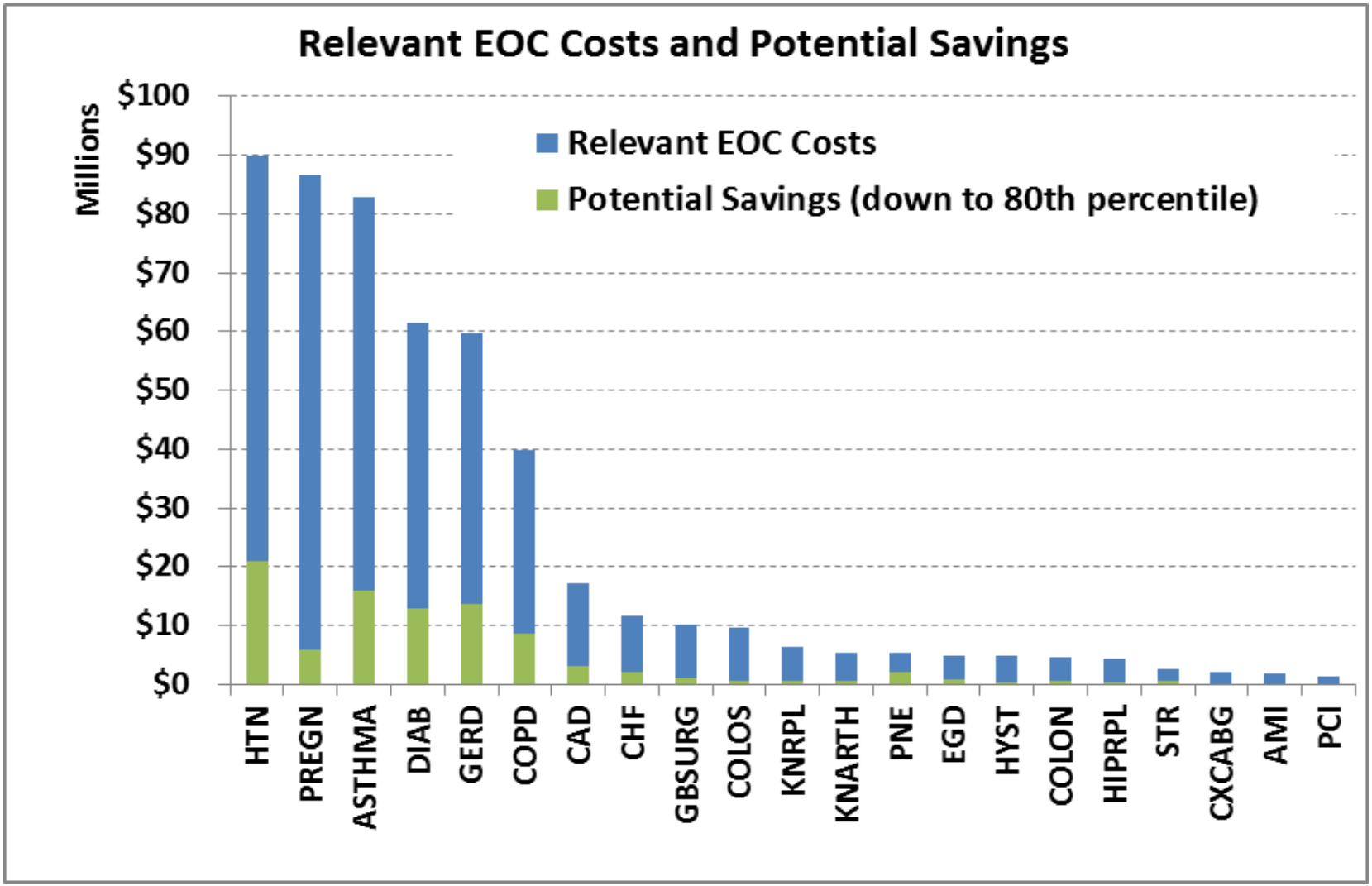
Costs, PACs, Variation



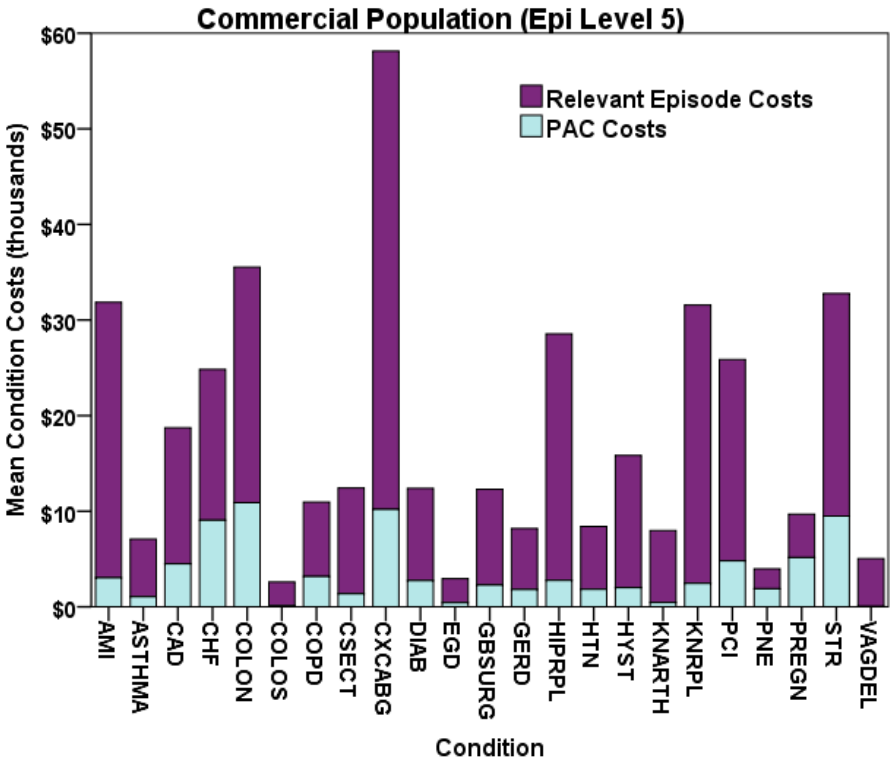
Variation by HSA

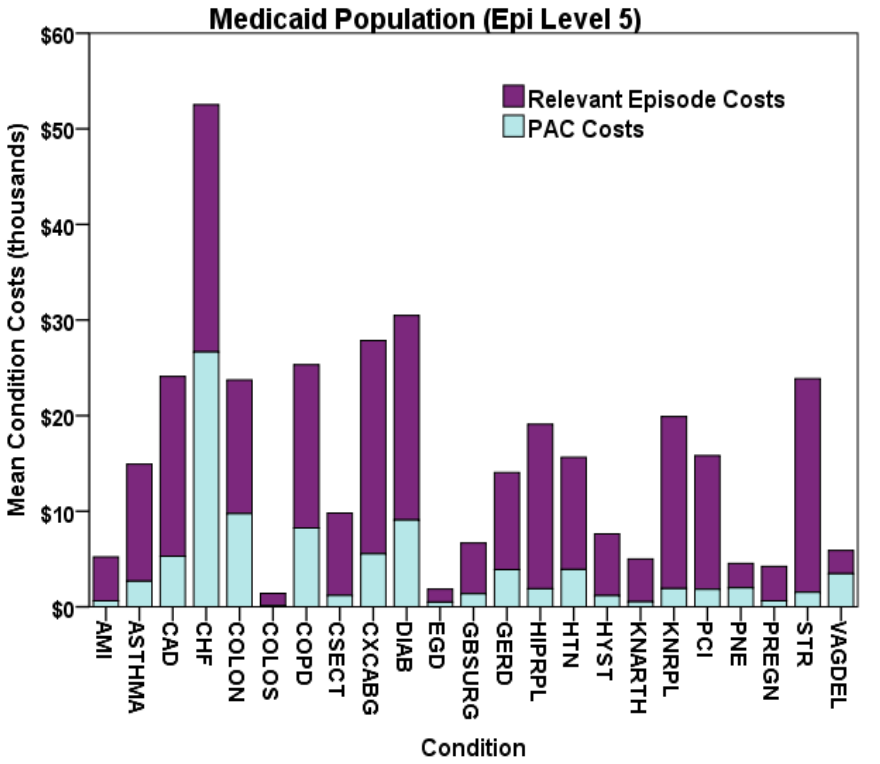


Variation by Episode

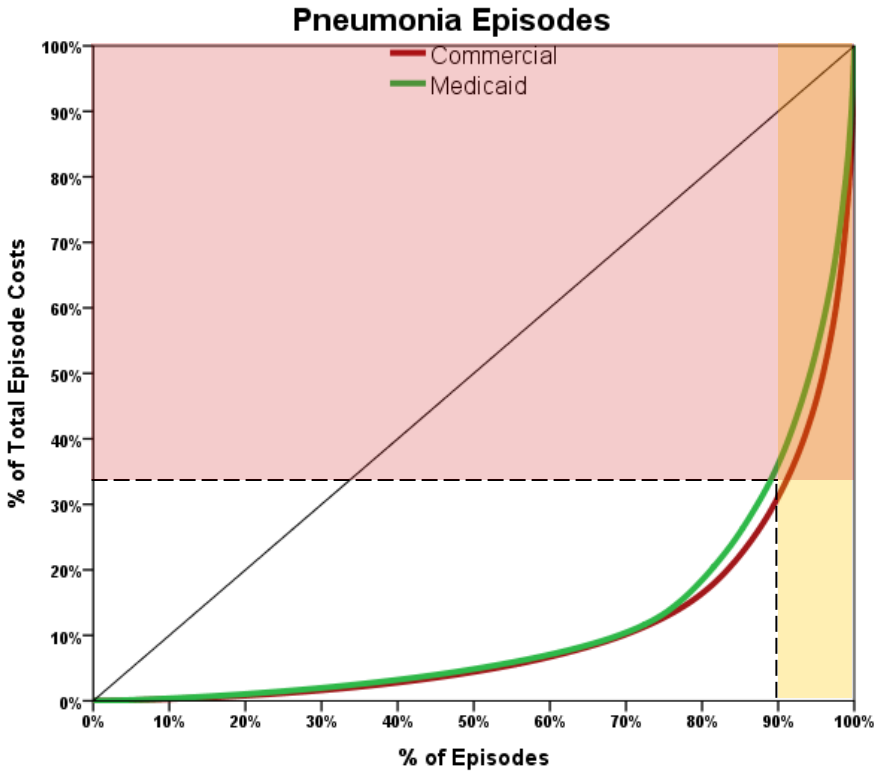


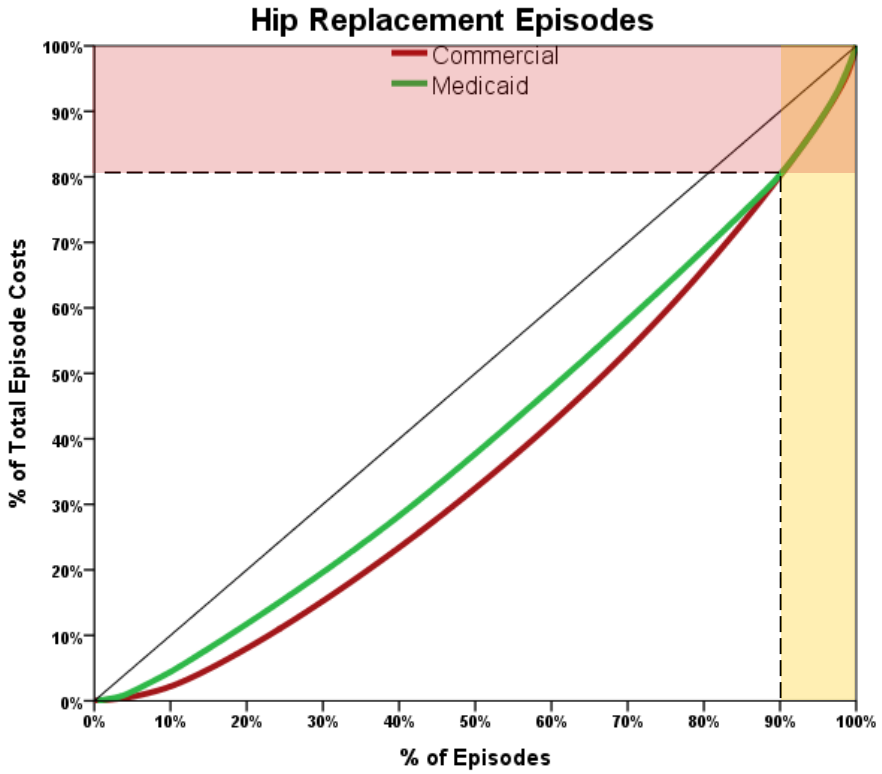
Variation by Payer Population





Variation within Episodes





With the VT EOC work thus far:

We **CAN**:

- Identify episodes with current opportunities for cost, complication, and/or variation reduction
- Examine variation by region, payer, facility, and provider

We **CAN NOT**:

- Use de-identified data to look at patterns according to ACO attribution
- Explore other episodes of interest
- Develop a system for ongoing EOC monitoring and reporting

PMWG's EOC Selection Criteria

1. EOC is of interest to providers
2. EOC is consistent with state-wide clinical priorities and/or other health reform efforts
3. EOC has adequate sample size across payers and providers
4. EOC has high potentially avoidable complication (PAC) rate or other defined opportunities for improvement
5. EOC has high resource variation
6. EOC represents opportunities to improve coordination of care among primary care, specialists and other specialized service providers (e.g., MH, SA, DTLSS)
7. EOC has evidence-based guidelines or clinical pathways that could improve care delivery system or quality of care

Part 2: Sub-Group Decision Points

- Using EOC data already available, which episodes of interest would we like to examine more closely?
  - Sub-group staff will prepare more detailed, episode-specific reports for review at later meeting.

- Are there other episodes (beyond the 25 we've already seen) that we would like to focus on for future work?
  - If so, which, and why? Sub-group staff will provide supporting information as available.

"Homework"

- Use the Criteria Matrix (Attachment 4b) to identify episodes of interest
  - May also include episodes of interest from Attachment 4a
- Take into consideration your organization's priorities
- Send your "Top 5" to Mandy Ciecior (amanda.ciecior@state.vt.us) by COB **02/10/15** for discussion at the next meeting

Meeting 2: Objectives

- Review EOC selection criteria
- Discuss members' priority episodes
- Develop "short list" of episodes of interest for methodology considerations discussion (target 5-8 EOCs) at Meeting 3

- **Future meeting schedule?**

Attachment 4a - EOC Program Crosswalk

Episode	Arkansas	Horizon Healthcare Innovations	Medicare ACE	HCi3	ProvenCare	Minnesota	Tennessee	Ohio	Episode Predominance
Tonsillectomy	x								1
Accidental Falls				x					1
Acute Renal Failure				x					1
ADHD	x								1
Adverse effects of drugs				x					1
Allergic Rhinitis/ Chronic Sinusitis				x					1
Acute Myocardial Infarction		x		x					2
Arrhythmia / Heart Block				x					1
Arterial thromboembolism (SRF)				x					1
Aspiration Pneumonia (SRF)				x					1
Asthma	x			x		x	x	x	5
Bariatric Surgery				x	x				2
Bipolar Disorder				x					1
Breast Biopsy				x					1
Breast Cancer		x		x					2
Coronary Artery Disease				x					1
Cardiac Defibrillator Implantation			x						1
Cardiac Pacemaker Implantation and Replacement			x					x	2
Cardiac Valve Replacement Surgery			x					x	2
Cataract Surgery				x	x				2
Catheter Associated UTIs (SRF)				x					1
C-Difficile Infection (SRF)				x					1
Cellulitis, Skin Infection (SRF)				x					1
Central Venous Catheter Infn (SRF)				x					1
Congestive Heart Failure				x				x	2
Cholecystectomy	x								1
Colon Resection	x	x		x					3
Colon Cancer				x					1
Colonoscopy				x					1
Coma, persistent veg. state (SRF)				x					1
Complication of Implanted device SRF				x					1
Complication surgical procedures SRF				x					1
Chronic Obstructive Pulmonary Disease	x			x				x	3
C-Section				x		x			2
Complex Coronary Artery Bypass Graft	x		x	x	x			x	5

Decubitus Ulcer (SRF)				x					1
Deep Vein Throm/Pulm Embolism (SRF)				x					1
Delirium, Encephalopathy (SRF)				x					1
Depression				x					1
Dermatitis, Urticaria (SRF)				x					1
Diabetes				x					1
Diabetes, poor control (SRF)				x					1
Diverticulitis				x					1
Upper endoscopy				x					1
Fluid Electrolyte Imbalance (SRF)				x					1
Gastroesophageal reflux disease				x					1
Gallbladder Surgery				x					1
GI Bleed (SRF)				x					1
Glaucoma				x					1
Hepatitis (SRF)				x					1
Hip/Pelvic Fracture				x					1
Hip Replacement			x	x	x			x	**4**
Hypertension				x					1
Hypotension / Syncope (SRF)				x					1
Infections (SRF)				x					1
Intestinal Obstruction (SRF)				x					1
Knee Arthroscopy				x					1
Knee Replacement & Knee Revision		x	x	x		x			**4**
Low Back Pain				x	x	x			**3**
Lumbar Laminectomy				x					1
Lung Cancer				x					1
Malignant Hypertension (SRF)				x					1
Mastectomy				x					1
Meningitis / Encephalitis (SRF)				x					1
MRSA, Drug Resistant Infections (SRF)				x					1
Nutritional Deficiency (SRF)				x					1
ODD	x								1
Osteoarthritis				x					1
Pacemaker / Defibrillator				x				x	**2**
Pancreatitis (SRF)				x					1
Coronary Angioplasty	x		x	x	x				**4**
Perinatal	x				x		x		**2**
Pneumonia				x				x	**2**
Poisoning (SRF)				x					1
Pregnancy		x		x		x			**3**

Preventive Care				x					1
Prostate Cancer				x					1
Prostatectomy				x					1
Rectal Cancer				x					1
Respiratory Failure (SRF)				x					1
Sepsis (SRF)				x				x	**2**
Shock / Cardiac Arrest (SRF)				x					1
Shoulder Replacement				x					1
Stroke				x				x	**2**
Tonsillectomy				x					1
Total Joint Replacement	x	x	x				x	x	**5**
Transfusion related complications SRF				x					1
Transurethral resection prostate				x					1
Upper Respiratory Infection	x			x					**2**
Urinary Tract Infection (SRF)				x					1
Vaginal Delivery				x		x			**2**

Attachment 4b - Criteria Matrix

Payment Models Work Group
Criteria for Evaluating Episodes of Care Data

EOC	EOC is of interest to Physicians	EOC is consistent with state-wide clinical priorities or other health reform efforts	EOC has adequate sample size across payers and providers	EOC has high potentially avoidable complication rate or other defined opportunities for improvement	EOC has high resource variation	EOC represents opportunities to improve coordination of care among primary care, specialists and other specialized service providers (e.g., MH, SA, DTLSS)	EOC has evidence based guidelines or clinical pathways that could improve care delivery system or quality of care provided
CAD							
CHF							
AMI							
PNE							
COPD							
ASTHMA							
CxCABG							
PCI							
DIAB							
KNRPL							
KNARTH							
HIPRPL							
GERD							
EGD							
COLON							
COLOS							
GSBURG							
HYST							
VAGDEL							
CSECT							
HTN							
STR							
PREGN							

EOC Sub-Group Timeline and Charter

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Episodes of Care Sub-Group

Timeline and Work Charter

<u>Tentative</u> Sub-Group Meeting Schedule:

Phase 1

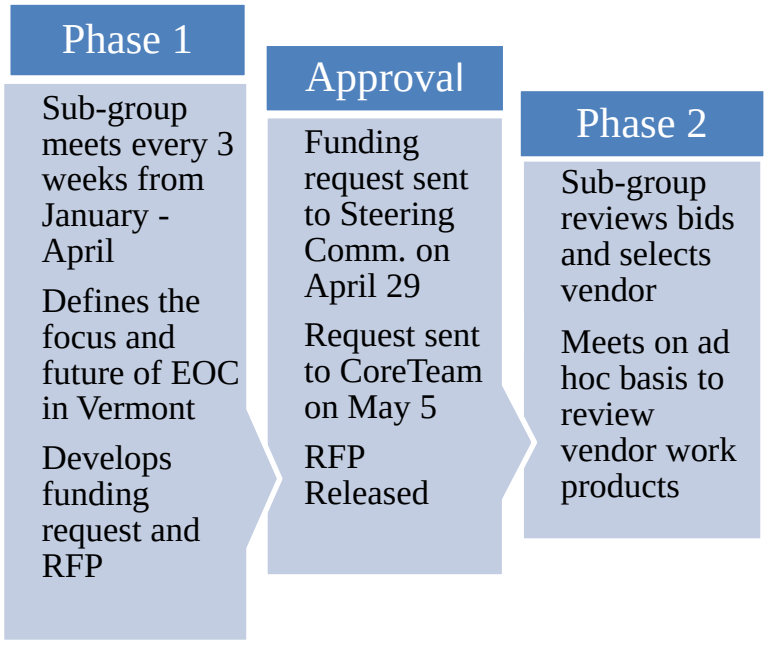
- *January 16 PMWG meeting*
- Week of January 19
- Week of February 9
- *February 23 PMWG meeting*
- Week of March 2
- *March 16 PMWG meeting*
- Week of March 23
- Week of April 13
- *April 20 PMWG meeting*
- Week of April 20 (if needed)

Approval

- Wednesday, April 29: Funding Request to **Steering Committee**
- Tuesday, May 5: Funding Request to **Core Team**

Phase 2

- Week of June 22
- Week of July 6 (if needed)
- Ad hoc meetings after contract execution



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Phase 1 Meeting Topics:

Week of January 19: Introduction, Priority-Setting

- Define overall focus for Episodes analytics and reporting to impact delivery system transformation
    - Who will use this information, and how?
- Review current programs
    - Review examples already discussed in PMWG
    - Explore episodes not yet discussed
    - Adapting publically available methodologies for VT

Week of February 9: Select Episodes

- Review PMWG EOC Selection Criteria
- Develop "short list" of episodes of interest

Week of March 2: Methodology Considerations

- Levels of variation (HSA, provider, payer)
- Minimum sample size
- Provider attribution
- Risk adjustment
    - Use existing standards
    - Develop new approach

Week of March 23: Quality and Cost

- Quality and cost measures
    - How to measure efficiency and effectiveness for each episode of interest
        - *More robust quality measure recommendations could be requested of QPM prior to RFP release*

Week of April 13: Reporting Needs

- Determine how EOC data will be analyzed and reported
    - Level and types of analysis
    - Methodological transparency
    - Report formats and distribution; recipients
        - Consideration of data dissemination methods already in place (e.g. Blueprint for Health practice and HSA profiles)
- Outline Funding Request and RFP

Week of April 20: Finalization of Approval Materials

- Finalize the Funding Request and RFP, incorporating changes suggested by PMWG

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Episodes of Care Sub-Group Work Charter

I. Purpose

The Episodes of Care sub-group will play a key role in developing and defining the future of Episodes data use in Vermont. The sub-group will recommend a number of episodes for further exploration using already established selection criteria. The sub-group will also aid in the development of a Request for Proposals (RFP) to elicit bids from potential vendors to produce user-friendly data reports related to selected episodes in the State. Sub-group members will be asked to provide recommendations regarding:

- selection and definition of episodes
- methodological considerations
- identification of appropriate quality measures
- report development and dissemination for delivery system transformation including identification of the need for additional provider supports to enhance the use of data and analytics
- bid review and vendor selection

II. Membership

The Episodes of Care sub-group will consist of a variety of healthcare experts from across the State. Membership will include an array of individuals including health care providers, health plan representatives, ACO representatives, advocates and State employees with a range of expertise including clinical practice, data analytics, and quality improvement. Meetings will be facilitated by VHCIP staff from the Department of Vermont Health Access.

III. Sub-group Expectations

- Members will attend approximately one meeting every three weeks during the first four months, and on an ad-hoc basis thereafter; members should be able to make attending these meetings a priority in their schedule.
- Members will demonstrate a good understanding of Episodes of Care and the ability to think critically about issues that arise in meetings. Information may be distributed to the Sub-group in advance of meetings to ensure all members are prepared to contribute.
- Members will be expected to represent the perspective(s) of their stakeholder groups in all discussions and decisions.
- Members are to keep the statewide goal of the triple aim in mind during discussions and decision-making.
- Members will aid in establishing clear guidelines and expectations for the funding request for vendor support to further develop Episodes of Care data utilization in Vermont.
- Members should understand that the process will seek but not mandate consensus. Members should support the goals of the process, but members are free to disagree on specific decisions within the process. If consensus cannot be reached on specific topics, divergent views will be reflected in the minutes

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IV. Meeting Format

Meetings will be 90 minutes in length and held in Williston or Montpelier. A call-in or webinar option will be provided for members who are unable to attend in person. All sub-group meetings and activities will be subject to provisions of the Vermont Open Meeting Law.