# One health system's bundled payment journey

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Kate Gillespie is Vice President for Orthopedic and Neuroscience Service Line for Virtua Health System in Marlton, New Jersey. She is responsible for overseeing strategy and programme development for the orthopaedic and neuroscience service lines. Her experience in healthcare spans over 35 years, 20 years of which have been in bedside care delivery and nursing oversight. She received her MBA in 2010 and obtained her Black Belt Six Sigma certification. Where she worked on lean projects and operational process improvement. In her current role, her focus is on building a strong foundation of outstanding clinicians, driving market growth and establishing best practice models across the system's continuum of care. She is preparing the service line for value-based reimbursement, which includes a focus on cost reduction, quality outcomes and customer experience throughout the episode of care. In 2015, Virtua entered into the CMS Bundled Payments for Care Improvement (BPCI) for total joints and successfully achieved 15 per cent under CMS target pricing while maintaining high quality outcomes. Kate is currently President of the New Jersey State Nursing Association. She has presented at multiple conferences, including the American Academy of Orthopaedic Surgeons (AAOS)/National Association of Orthopaedic Nurses (NAON) and Healthcare Financial Management Association (HFMA) on topics around CMS Bundled Payment and the successful journey of Virtua's Joint Replacement Institute.

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Christine Gordon is the Director of Reimbursement for Virtua Health System, Inc. in Southern New Jersey. She is responsible for submitting all the governmental reports for the health system and has oversight of all aspects of the health system's regulatory reporting; Medicare/Medicaid cost reports, appeals and facilitating audits. She has more than 29 years of healthcare finance experience, working as a Medicare auditor and directly within the healthcare setting. As the healthcare continuum has changed, Christine's reimbursement expertise has proved helpful in analysing all the new Medicare value-based programmes. Christine is co-chair of the Medicare Bundle Payment Program for Virtua for Orthopedic Services to help develop and manage Virtua's voluntary Medicare bundled payment programme for Joint Replacement. Christine is an active member of the New Jersey Healthcare Finance Management Association chapter, and also serves on the education and reimbursement committees. She has a BSc and an MBA from Rosemont College.

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**Abstract** Traditionally, Medicare has made separate payments to providers for every service a patient has had during the course of his or her treatment. As with all things, however, times change, and this approach resulted in fragmented care coordination across the continuum for the patient and at a tremendous cost to healthcare providers. To help ensure accountability, the Center for Medicare and Medicaid Innovation (Innovation Center) developed an initiative called the Bundled Payments for Care Improvements Initiative (BPCI) to test the waters in regard to a payment model that helped reduce costs while improving the quality of care for patients. To implement this plan, healthcare providers had to figure out how to strategically implement and align all their business practices

across physicians (both internal and external) and all post-acute providers. This paper describes how Virtua implemented new care redesigns and clinical pathways, assessed what resources it had internally and which ones it needed to outsource, how to get buy-in from the physicians, ensure post-acute collaboration and be able to assess all these new processes in order to make any changes going forward. Virtua successfully achieved 15 per cent under CMS target pricing, while maintaining high quality outcomes, with the initial CMS BPCI programme for total joints. Virtua will use these learnings to go further with the new bundled payment model.

KEYWORDS: care coordination, implementation process, strategic planning, challenges, physician engagement

#### INTRODUCTION

As the healthcare industry has evolved and changed over the years, so have the payment streams that enable health systems and insurance companies to survive in our fast-paced world. In order to ensure that Virtua can adapt to these new payment models and remain ahead of the curve, we must engage our administrative leadership, physicians and post-acute facilities to align our objectives with these new payment models. In 2013, in order to deal with the skyrocketing healthcare cost, the Centers for Medicare and Medicaid Innovation (Innovation Center) established the Bundled Payments for Care Improvement Initiative (BPCI) as one of the first episode-based payment models. The Innovation Center was created to 'test innovative payment and service delivery models that have the potential to reduce Medicare, Medicaid, or Children's Health Insurance Program (CHIP) expenditures while preserving or enhancing the quality of care for beneficiaries'. Traditionally, the Centers for Medicaid and Medicare Services (CMS) reimburses providers for each service provided to a patient regardless of the quality of service provided. This new payment model, however, incentivises providers who invest in innovation, care redesign and enhanced care coordination for their patients. The original BPCI model was made up of four different payment models providers

could choose from, which in turn would link payments for an entire continuum of care for a patient over a period of time, instead of traditionally for each service provided. CMS hoped that over time health systems would be able to better manage their patients' care and provide higher quality and coordination of care at a lower cost.

So how do health systems start managing their patients to ensure higher quality and better care coordination at lower cost? How do health systems start to capture episodes of care outside their own systems for patients when they leave their facilities? How do health systems get clinicians, reimbursement departments, physicians and post-acute care (PAC) facilities to pool their resources and work together to ensure a successful transition to this new payment model?

First, it needs to be recognised that success is not something that happens overnight. It is a well-thought out process and plan with important players across the health system who are empowered to lead change and who will develop and implement redesign plans focused on strategic business alignments between the health system, physician, PAC and patients to ensure that they receive the best care possible. In order to do this there needs to be an administrative support team to ensure that all the pieces of the pie are being addressed, mapped out and modified along the way. Success will happen only if physicians and the health system work

together to provide quality care for their patients. Virtua did this by developing a redesign programme for its joint replacement programme, defining participating physician metrics and establishing an interdisciplinary committee to implement and monitor this new strategic clinical and financial plan.

#### **BACKGROUND**

Initially, CMS established a voluntary programme, BPCI, that consisted of four defined models (Table 1) linking payments for multiple services received during an episode of care.

Each of the models in BPCI offered different model participation. For instance, Model 1 was defined as in-patient stay in an acute care hospital (ACH) where CMS paid the provider a discounted rate based on the payment rates established under the In-patient Prospective Payment System (IPPS) but continued to pay physicians separately for their services under the Medicare Physician Fee Schedule (MPFS). Models 2 and 3 were retrospective payments where actual expenses were reconciled against a target price. Under these retrospective payment models, CMS continued to make fee-for-service (FFS) payments, and the total expenses for the episode were reconciled later against a bundled payment target price determined

by CMS. A payment or recoupment amount was then made by CMS if expenses exceeded the target price. For Model 4, CMS initiated a single, prospectively determined bundled payment to the hospital that captured all services furnished by the hospital, physicians and other practitioners during the episode of care. Model 1 participated in all MS-Diagnosis-Related Groups (DRGs), and in Models 2, 3 and 4 there were 48 clinical episodes that participants could choose from with a 30-, 60- or 90-day episode period. BPCI ran from 1 April 2016 to 30 September 2018.

From 1st October 2018, CMS initiated another new bundled payment programme, called Bundled Payments for Care Improvement Advanced (BPCI Advanced), which will run until 31 December 2023. This initiative has the basic elements of the original BPCI but aims to support healthcare providers practise innovation and care redesign, better coordination of care, improve quality and reduce expenses all while qualifying as an Advanced Alternate Payment Model (APM) for eligible clinicians. The BPCI Advanced offered a mandatory 90-day episode period, 29 in-patient episodes and three outpatient episodes.

The question of how, with the initial BPCI or BPCI Advanced, health systems navigate these new payment models is crucial to their ongoing success.

Table	1.	Initial	<b>BPCI</b>	models

	Model 1	Model 2	Model 3	Model 4
Episode	All DRGs; all acute patients	Selected DRGs; hospital plus post-acute period	Selected DRGs; post-acute period only	Selected DRGs; hospital plus read- missions
Services included in the bundle	All Part A services paid as part of the MS-DRG payment	All non-hospice Part A and Part B servic- es during the initial in-patient stay, post- acute period and readmissions	All non-hospice Part A and Part B services during the post-acute period and readmissions	All non-hospice Part A and Part B services (including the hospital and physician) during initial in-patient stay and readmissions
Payment	Retrospective	Retrospective	Retrospective	Prospective

#### STRATEGIC IMPLEMENTATION

CMS BPCI programme was introduced in 2015, when Virtua entered into the programme for the Major Lower Joint Replacement episode of care (DRG 469/470). This section outlines the steps to plan and implement a successful organisational structure not only to operationalise the programme but also to identify your organisational strengths.

BPCI is a retrospective ACH stay and PAC covering 30, 60 or 90-day episodes of care. CMS' target price calculation is based on historical claims and regional pricing. Virtua chose the joint replacement based on multiple factors and utilised a SWOT (strengths, weaknesses, opportunities, threats) analysis to determine the programme's strengths, weaknesses, opportunities and threats.

#### **Committee structure**

Virtua's journey began with executive leadership support and creation of a governance committee. The executive joint bundled committee included Senior Vice President (SVP) of Integrated Services, AVP of Orthopedic Service Line (co-chair), Director of Reimbursement (co-chair), Chief Medical Officer, VP of Finance, VP of Case Management and VP of Post-Acute Services. This committee approved all decisions in regard to implementation, financial approvals and review of quality outcomes. The Joint Bundled Steering committee consisted of AVP Ortho and Director of Reimbursement (co-chairs), Orthopedic Physician champion, Orthopedic Physicians, Medical Director for Surgical Services, nursing directors, AVP rehab services, PAC representation and case management. The committee had operational oversight, which included implementation of standardisation of clinical pathways across the continuum, education and quality/cost data review quarterly. A good committee structure is essential for keeping communication

lines open and making course corrections efficiently as all the right people around the table are engaged to make this programme work. Other adjunct members included home care, independent skilled nursing centres, emergency physicians and HIM (health information management). (See Org Structure)

#### **Episode of care**

Identifying at your institution your strong service lines looking at volume, clinical outcomes around readmission rates and post-acute utilisation. Virtua had recently opened a Joint Replacement Institute (JRI), which represented 75 per cent of its joint replacement volume. The institute had a co-management agreement with five surgeons and an orthopaedic medical director who had oversight of the programme. This provided Virtua with strong physician alignment, physician champions and significant volume with excellent outcomes. The remaining 25 per cent of the joint volume was located at another division, which consisted of four other surgeons, that had high post-acute admissions and longer length of stay, both at the hospital and at the skilled nursing facilities (SNF).

Using a SWOT tool, we identified an important strength to be physician alignment and commitment. This enabled Virtua to standardise evidence-based clinical practice, resulting in an 11 per cent increase in the rate of patients discharged to home. This is important to note as the post-acute settings have the highest cost impact on an episode. Our weakness and opportunity was the physicians that were not part of the JRI, the need to engage them to work together to adopt proven success clinical practices, and providing a multidisciplinary team to help with patient and family communication regarding pre and postoperative education.

Therefore, to determine your programme strengths you need to have the following

information on which to base a good decision and plan your next steps.

- Percentage of post-acute utilisation, including SNF, home care and in-patient rehabilitation facilities (IRF)
- Percentage of all-cause readmission rates and types of admission
- Percentage of complication rates and types of complications
- Current standard order sets and rehab clinical pathways to determine the level of care post-operatively
- Patient satisfaction regarding physician and staff communication
- Identified Physician Champion

The decision also has to include identifying the individual physicians' clinical outcomes and volume to help determine areas of threat to the success of the bundled programme. Virtua initiated a surgical process that provides each physician with his or her clinical scorecard. The scorecard goes out quarterly to each physician and includes financial and quality metrics. It also shares all the other surgeons' metrics. This transparency has helped reduce cost per case and has provided the opportunity to adopt best clinical practices.<sup>1</sup>

#### Develop care redesign model

Now that you have decided on the episode(s) of care that you will be embarking on, you need to determine the design model or action plan on how you can impact changes to reach your CMS target. CMS bundled focus is on the post-acute outcomes, but Virtua looked at the entire continuum from the time surgery was scheduled to the patients' 30 days post recovery. Previously, Virtua discharged patients, and the only follow-up to the patients was from the post-acute facilities or homecare, which led to a disjointed continuum of care. As we looked deeper into patient episodes, we identified opportunities to avoid unnecessary

readmissions and to lower post-acute length of stays.

On the basis of opportunities that were previously identified, Virtua implemented the following measures in its Care Redesign model:

- Nurse navigation of all joint patients from the pre-operative to the post-acute phase. Joint education classes for all patients, with a choice between in-class and video.
- Information provided to each patient regarding involvement in the CMS programme. This was a CMS requirement.
- Standardised pre- and post-joint order sets.
- Standardised comprehensive discharge instructions.
- Established physical therapy functional goals from acute care and PAC guidelines.
- Multidisciplinary team approach to standardise the expectation that our goal is to get the patient home.

#### **Determine support systems**

It is important to identify internal and external support systems to help navigate the CMS bundled programme. At the outset, taking the leap into the BPCI programme meant it was essential to participate in every webinar CMS provided to understand the structure of the programme and what was expected from CMS. The programme requirements were unclear, and it took multiple resources to obtain clarity. Outside vendors also provided clarity on the CMS BPCI programme requirements along with the expertise to interpret the claims data provided by CMS. Virtua decided that instead of using a thirdparty vendor to manage the entire bundled programme and take on some of the risk (known as a convener), it would work with a vendor to assist with analysis of the claims data and provide financial information on our costs versus the target cost. This information formed the basis for Virtua's quarterly reports that showed its total cost and detailed utilisation

of post-acute services. These reports were shared with the multidisciplinary team and assisted the team in making clinical decisions to improve the delivery of care. Some of the notable improvements were focused around appropriate utilisation of post-acute services, the length of stay at these facilities and readmission trends. This proved to be a very important decision, owing to highly successful management of the post-acute expenses and not having to share this with a third-party convener.<sup>2</sup>

## Physician gainsharing and alignment

Gainsharing is a result of coming in below the CMS target price for each beneficiary episode. Virtua realised through its analysis that the physician's engagement was important. The model care redesign that was identified to be successful needed the physicians buy-in. Virtua's decision to gainshare with orthopaedic physicians proved to be right. The executive committee brought the physicians together in the beginning and introduced the CMS bundled programme. Virtua was confident that their joint programme was strong and agreed to take on the risk in return for the physicians working together to make the necessary changes. If Virtua met their established target price, it would split any positive monies 50/50 (see example Figure 1) with the physicians that met or exceeded their established quality goals. If the adjusted total reconciliation amount was negative, Virtua was willing to take *all* the risk associated with not meeting the target pricing.

CMS required agreements to be made between the health system and the physician and recommended that each provider agreement include quality or clinical metrics to receive gainsharing. Virtua is a data-driven organisation and, in collaboration with the physicians, developed the following metrics and targets that were based on internal benchmarks.

For BPCI, Virtua established the following quality metrics:

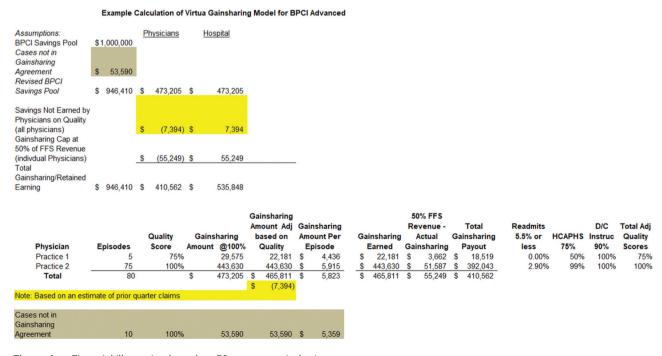


Figure 1: Financial illustration based on 50 per cent gainsharing

Neurology

Service Line Leader

Physician Champion

DRG's

Metrics

Current Committee

Structure

## **BPCI Advanced Oversight Committee**

Virtua CMS BPCI Executive
Committee

Orthopedics
Service Line Leader
Physician Champion

Cardiology
Service Line Leader
Physician Champion
Physician Champion
Physician Champion

DRG's

Metrics

Current Committee

Structure

Hospitalist/Emergency Docs Physician Champions

Episode Care Coordination Program Director / Analytics

DRG's

Metrics

Current Committee

Structure

# Figure 2: BPCI Advanced Oversight Committee

Pulmonary

Service Line Leader

Physician Champion

DRG's

Metrics

Current Committee

Structure

- 1. Readmission rate below 3.6 per cent
- 90 per cent utilisation of standardised discharge instructions
- 3. HCAPHS Communication to physician score 75 per cent or greater
- 4. 80 per cent attendance of all quarterly meetings, adherence to protocols and pathways

For BPCI Advanced, Medicare established mandatory quality metrics as follows: All clinical episodes:

- All-cause Hospital Readmission Measure (National Quality Forum (NQF) #1789)
- Advance Care Plan (NQF #0326)

Specific Clinical Episodes:

- Perioperative Care: Selection of Prophylactic Antibiotic: First or Second Generation Cephalosporin (NQF #0268)
- Hospital-Level Risk-Standardised Complication Rate (RSCR) Following

Elective Primary Total Hip Arthroplasty (THA) and/or Total Knee Arthroplasty (TKA) (NQF #1550)

DRG's

Metrics

Current Committee

Structure

Resources and

Stakeholders

SG2 consultant

1. Case Managers

2. PT 3. HIM 4. IBS

5. Post Acute (MMSNF) 6. PAC Network 7. Primary Care

8. Urgent Care

- Hospital 30-Day, All-Cause, Risk-Standardised Mortality Rate (RSMR) Following Coronary Artery Bypass Graft Surgery (NQF #2558)
- Excess Days in Acute Care after Hospitalisation for Acute Myocardial Infarction (NQF #2881)
- AHRQ Patient Safety Indicators (PSI 90)

#### Internal cost savings

As mentioned previously, the CMS programme was really focusing on the reduction of post-acute costs while still maintaining quality clinical outcomes. CMS also recognised that health systems might want to take this opportunity to reduce internal costs. Virtua had implemented a surgical products committee that was addressing implant and equipment costs. Physicians were engaged on this committee

to help reduce vendor costs, and a process was in place to approve new products. The internal cost savings could provide a further incentive to share with the surgeons.

CMS did, however, offer opportunities to help reduce costs. The three-day waiver option was one that Virtua used. This waiver allowed the patient to be discharged to an SNF without being held down to the mandatory 3-midnight stay in the hospital. Patients who were identified as needing SNF care could leave after day 2 and provided to reduce acute care length of stay. Other similar internal cost savings with gainsharing proved to be very successful in reducing cost per case through our scorecards, and sharing of complications and readmission through chart review to determine improvement opportunities. One example was that many patients were readmitted for bowel issues. The team implemented an action plan that included adjustment of the medication protocols, creating new education for patients, and initiating nurse discharge calls at 24-hour and three-day post-op to include bowel regimen. The team approach allowed for a quick evaluation and implementation to make the changes in patient care.

# Care coordination: Collaboration with post-acute services

Care coordination is essential to the success of bundle programmes and is one of the hardest to accomplish. Patients who are discharged from the acute care setting and who transition to a SNF or IRF have no incentive to follow protocols that will optimise the care and decrease length of stay. Virtua is continuing to work on care coordination today as a priority. It has

established a preferred provider network as a start. This brings together quality facilities that collaborate with hospitals to utilise pathways in the care of a CMS bundled patient. Virtua's provider network facilities are required to meet certain metrics, including the 5-star quality rating from CMS. A dashboard was established setting goals they need to meet to remain in the provider network. These include readmissions, SNF length of stay guidelines per diagnosis and complications. This, however, still does not solve the problem. Virtua has put in place a handoff from the nurse navigator to care coordinators that follow the patients for the next 90 days. The care coordinator, along with the patients, works with the SNFs and home care to ensure appropriate care delivery but still has no authority. The next step, which is to have our hospitalist and nurse practitioners follow our patients clinically in our network facilities, was implemented. Case managers have a star-rated tool to inform patients and their families and educating them those that have great clinical outcomes.<sup>3</sup>

#### FINANCIAL IMPACT

Despite all the strategic processes that are in place, financial decisions need to be made in order to determine how health systems will fare with this new payment model. Health systems need to ensure that any episodes they select can be managed. There is, however, an element that is unknown, namely, once a patient is discharged from the hospital the health system loses control over the patient's care. Virtua believed partnering with its physicians and post-acute facilities provided it with the best opportunity

Table 2: Bundled Metrics YTD 3Q 2018

Division	LOS 2014	LOS 2018 YTD	D/C Home 2014	D/C Home 2018 YTD
JRI	1.5	1.10	90%	92%
Marlton	4.0	2.10	48%	71%

to improve quality and lower the cost of care for each patient. Yet even with strong post-acute partners comes the unknown, and during the first performance period for BPCI Advanced came an awakening of sorts, especially with all the changes from the original BPCI and BPCI Advanced. One of the financial differences felt immediately was that up to 10 per cent of payments were at risk for quality performance. There was no quality component as previously stated in the original BPCI, and providers could determine their own metrics. With BPCI Advanced, however, CMS has mandated quality measures across all episodes and all downstream providers and suppliers. In addition, all bundles will be subject to all-cause readmissions and advanced care plan measures plus five other quality measures applied to select measures.

In addition, downside financial risk will be immediately effective. Previously, there was a phase-in, which safeguarded providers from the downside risk; however, with BPCI Advanced there is no transition period. Many hospitals, including Virtua, decided what DRGS they were participating in on the basis of this information. Our consultants provided us with data indicating they felt we could manage at least 18 DRGS within the new bundled program; however, Virtua finally decided on just three DRGS owing to the concern that it could not handle all the care coordination that was required.

Another aspect of the financial impact of BPCI Advanced compared with the original programme is how the target prices were set. The original programme provided targets at reconciliation based on a provider's historical spend and regional target prices. With BPCI Advanced, CMS will provide prospective preliminary targets before the start of each year, and benchmarks will be calculated on the basis of an adjusted case mix, regional peer pricing and historical CMS data. The targets will then be set 3 per cent lower than the benchmark. This could be a significantly lower target to achieve for providers in the

new BPCI Advanced programme than the original.

CMS first established target prices for each episode on the basis of historical claims, risk-adjusted them to account for any variations with the claims and then applied a 3 per cent discount to the benchmark prices to calculate a target for each episode that a health system selected. CMS has indicated that the target prices are 'intended to account for a hospital's traditional historical FFS expenses, their patient case mix, hospital trends and peer adjusted spending as well'. CMS will then complete semi-annual reconciliation and true-ups, while providers continue to bill Medicare under the normal billing system with the intent to lower the overall cost of care from start to finish.

BPCI Advanced payments are based on 'Medicare FFS payments with retrospective reconciliation based on comparing all actual non-excluded Medicare FFS expenditures for a Clinical Episode for which the Participant has committed to be held accountable to the final target price for that Clinical Episode, resulting in a Positive Reconciliation Amount or a Negative Reconciliation Amount. All Positive Reconciliation Amounts and Negative Reconciliation Amounts will be netted across all Clinical Episodes attributed to an Episode Initiator (EI), resulting in a Positive Total Reconciliation Amount or Negative Total Reconciliation Amount'. The positive or negative reconciliation amount for an EI is then adjusted on the basis of quality performance, and this results in an adjusted total reconciliation amount.<sup>4</sup>

With this new programme, CMS appears to be increasing the risk for providers while taking away some of the flexibility with mandatory rather than optional measures. While there seems to be some easier components, Virtua will need to closely monitor which episodes they chose and maintain them going forward.

During Virtua's final reconciliation from the original bundled programme and our first performance period for the new BPCI Advanced significant Our first performance period within the new BPCI Advanced figures did not amount to what we saw financially during the original bundled project — a difference of over US\$1.3m between the two programmes so far.

# CONCLUSION: FUTURE CONSIDERATIONS AND STRATEGIES

As healthcare continues to evolve, health systems need to be poised to adapt or risk being left behind with high costs and patients seeking better quality elsewhere. To ensure we are staying ahead of the curve in being able to adapt to any new payment model, we must continue to engage our administrative support committee, physicians, and post-acute facilities in aligning our objectives. We must ensure accountability for our strategic designs and embrace the new payment models set forth by CMS to provide the best quality of care while lowering our cost. By doing this we must invest time and money back into our infrastructure and oversight of care

coordination and make the best decisions possible and continue to monitor the financial impact and trending to determine opportunities and quantify any risks. With the right teams working together we can continue to improve the quality of care our patients receive and help control costs to keep pace with the changing healthcare environment.

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