This is the third in a five part series on the changes due to healthcare reform and their impact on imaging. Part III addresses new programs under delivery reforms.

Transforming the US healthcare system into value-based payment models will not happen overnight. This gradual migration into alternative payment models has been in play for two years, and healthcare providers remain tasked with traveling on the volume-based highway to ensure revenue to fund current operations. The reality is that most all providers will need to navigate both volume and value tracks as delivery transformation evolves.

As addressed in Parts I and II of this series, fee-for-service payment models have served as the foundation of the US healthcare system, which drives fragmentation. There are few, if no, incentives for providers to communicate or coordinate patient care. The reimbursement structure incents providers to focus on volume and profitability, not on the wellness of the plan member or patient. With no accountability for care services, providers have no reason to ensure that the population remains healthy. This lack of connectivity between providers forces patients to become their own advocates for care, the consequences of which include duplication of procedures, poor outcomes, and readmissions to hospitals, resulting in higher costs to all payers. Premiums escalate, and the cost to employers erodes operating income and diminishes global competitiveness. Purchasers of healthcare pay more for coverage, and their purchasing power diminishes in a way that has a trickle-down effect on other sectors of the economy.

There are several new delivery programs that are evolving from a federal, state and commercial perspective. The timeline in Figure 1 highlights key Medicare delivery programs that have launched as a result of the Affordable Care Act. The intent of these new health economic delivery/payment models is to put an end to the fragmented, volume-based healthcare systems. Through the creation of accountable care organization (ACO) hospital-based programs for inpatient value-based purchasing and reducing preventable readmissions, payment bundling for clinically defined episodes of care, and penalties for hospital-acquired conditions are enacted. The key goals of improving quality, reducing costs, and increasing patient satisfaction meet the goals of improving the overall value of the healthcare system. In most healthcare circles, it is better termed the “Triple Aim”—better health, better healthcare, at lower cost.

It is important to note that the electronic health record (EHR) will help to support the system architecture of these new models for care. The EHR will help to improve connectivity, care coordination,
patient engagement, and safety among a consortium of providers that will focus on improving the value of care, improving the health of patients, and reducing costs to the healthcare system.

**Electronic Health Records**

The American Recovery and Reinvestment Act (ARRA) of 2009 provided seed money to help support the development of EHRs for providers of Medicare and Medicaid services. Over $32 billion was appropriated to fund the Health Information Technology for Economic and Clinical Health (HITECH) Act. The intent of establishing the EHR was to create a common platform that would connect all providers and places of healthcare services to a centralized data repository that would enable care coordination, transitions, and management of patient care. Collection of data will enable providers to analyze the information and determine what is clinically cost-effective for patients. Because more than one-third of all healthcare services are considered medically unnecessary, the development of this system infrastructure will provide a patient rich database that will avoid duplicative testing and medication errors, and be used to develop evidence-based guidelines of care. EHR will also serve as a conduit that supports patient and provider engagement.

**Accountable Care Organizations**

ACOs were the first new Medicare delivery pilot program launched in an effort to improve value. An ACO is a provider-based organization that takes responsibility for ensuring the health needs of a defined population with a focus on prevention and wellness. The provider consortium’s key goals are improving health, patient experience, and reducing per capita cost of care. Three simple tenants: satisfaction, quality, and cost.

ACOs can take on several different forms. There is no set blueprint for how the ACO entity should be formed or who should participate. The overall goal is to ensure that the collaboration is composed of physicians whose main focus is to ensure the health and wellness of a defined population of beneficiaries while reducing cost.

ACOs are a shared risk model between payers and providers. In this case, the federal government and providers of Medicare services share risk, in which the ACO ensures that they will meet key quality and cost benchmarks. The ACO is composed of primary care physicians. Specialists, under most circumstances, are not included in an ACO. However, it is important for specialists to be linked with an ACO to ensure they provide a level of service that helps the ACO enterprise meet its cost and quality objectives.

In addition, imaging centers can market their services as a preferred provider that supports the charter of an ACO and delivers high value, clinically cost-effective services that result in patient satisfaction.

Again, one must be mindful of the importance of per capita cost of the population in which the ACO has assumed risk. Shared savings will be realized only if the care cooperative effectively meets cost and quality objectives. Again, the focus on cost is very important. Cost will continue to be seen as a key metric throughout all of these new delivery models, but the focus truly lies in the combination of the three components of quality, satisfaction, and cost.

While ACOs are meant to support the health and wellness initiatives of a population in an ambulatory setting, hospitals are tasked with improving the quality of care through programs focused on inpatient care.

**Hospital Inpatient Value-Based Purchasing**

Hospital Inpatient Value-Based Purchasing (HIVBP) incorporates four quality domains that contain subsets of reporting metrics. Metrics for this delivery program are selected from the Hospital Inpatient Quality Reporting (HIQR) initiative. For fiscal year 2015, 1.5% of a hospital’s total Medicare base inpatient payment is at stake. This represents $1.4 billion of total inpatient payments. Depending upon either the total quality score in relation to participants’ scores or the level of improvement over prior year’s performance, a hospital could potentially see an increase or decrease in its payments.

For 2015, there are four domains of quality that have been measured to determine the value-based conversion factor that will be based upon the hospital’s total performance score. These domains and weightings are as follows (see also Figure 2):

1. Clinical process of care: 13 measures (20%)
2. Patient experience: eight care dimensions rolled up from 27 patient experience questions (30%)
3. Outcomes: 30 day mortality rates for acute myocardial infarction (AMI), heart failure, and pneumonia (30%)
4. Efficiency: total Medicare spending per beneficiary (20%)

Information used in determining the hospital’s score is publicly available on the HospitalCompare.gov website. As the program continues to evolve and hospitals cap out various performance measures, the weighting of the domains changes and new domains are added that are focused more on measuring patient outcomes and cost. The spending per beneficiary is a new metric that CMS has been monitoring for the past couple of years and it takes into account all Medicare Part A and B spending that surrounds a patient’s episode of care. Even without participating in payment bundling programs, this metric requires the hospital to drive facility and physician integration. Hospital administration must be engaged with the physician community to ensure that care provided is appropriate and necessary. Once the HIVBP program is fully implemented, hospitals could either increase or lose base inpatient payments by 2%.
Penalties for Excessive Readmissions Program

The other value-based program that ties quality and performance to reimbursement is the Penalties for Excessive Readmissions program. Each year, it is estimated that Medicare spends up to $20 billion for 30 day all cause, inpatient readmissions. What this translates into is that one in every five Medicare inpatient stays results in a readmission within a 30 day window. In an effort to improve transitions of care, patient engagement, and coordination post-discharge, the ACA incorporated this provision to improve quality of care. Providers are held accountable for their inpatient care services.

Beginning October 1, 2015, there are five inpatient measures that determine a hospital’s penalty if it fails to exceed risk adjusted readmission rates that are specific to a facility’s predicted range. This data accumulates over the course of a three year period. The potential loss to a facility with high rates of readmission will be 3% off the total Medicare inpatient payments.

For FY15, the list of measures is as follows:

- Heart Failure (HF)
- Acute Myocardial Infarction (AMI)
- Pneumonia (PN)
- Total Knee or Hip Arthroplasty (TKA/THA)
- Chronic Obstructive Pulmonary Disorder (COPD)

For fiscal year 2015, hospitals’ base inpatient reimbursement payments from Medicare can be reduced by 4.5%, based upon HIVBP and readmission scores. When both inpatient delivery programs are fully phased in by 2017, potential reimbursement exposure is 5% of total base inpatient payments.

There are a couple of points of consideration to take into account. Data is publicly reported on HospitalCompare.gov, commercial payers that contract with these hospitals can leverage these performance results during negotiations, and poor performance could result in a loss of a commercial contract and covered lives that would impact utilization. These programs created by CMS are a means to hold participating providers accountable for the healthcare services that the federal government purchases on behalf of taxpayers. Simply put, Medicare no longer pays for healthcare services on a transactional basis.

As these programs evolve, hospitals can anticipate an increase in the number of readmission measures included in the program. Transitions of care and care integration between the hospital, physicians, home health agencies, sub-acute care facilities and ACOs become mission critical in order to mitigate risk or exposure to payment penalties.

Bundled Payments for Care Improvement

Bundled Payments for Care Improvement (BPCI) is the latest value-based delivery reform program that encapsulates all components of quality-based reimbursement. The care model incorporates cost and quality components from ACOs, inpatient value-based purchasing, readmission penalties, and hospital acquired conditions. The backbone of the payment model can be best supported through the appropriate use of EHRs, which allow for all participating providers to be actively engaged in the care and management of the clinically defined population.

Initially, the program was framed within the context of Section 3023 of the ACA as a national pilot program on payment bundling. The law focused initially on eight high cost and high volume applicable conditions. The program was set to launch by no later than January 1, 2013. The national pilot program for payment bundling under Section 3023, however, has been delayed. Consequently, the Centers for Medicare and Medicaid Innovation (CMMI) launched the parallel initiative known as BPCI.
Payment bundling is a means to align and integrate facility, physician, and post-acute care services to ensure well executed patient management. It is the fusion of Medicare Parts A and B. One payment to the legal entity for all services provides for a clinically defined episode of care.

Under BPCI, there are four tracks that providers can elect to apply to CMMI for participation. See Figure 3. As of February 1, 2014, there are 450 provider organizations participating in this program. The program covers 167 inpatient MS-DRGs, which represent 73.4% of Medicare inpatient admissions. This program will provide the greatest opportunity to bend the cost curve. The first three retrospective models will have minimal disruption to the healthcare system. Facility and physician will continue to submit claims for payment under the current fee-for-service model for Parts A and B. Payments are reconciled to the benchmark payment set in the contract. Rates determined are inclusive of any readmissions. It will be very important for providers to ensure that patients maintain wellness post-discharge, as the cost incurred at another facility for all-cause readmission could erode the profitability of the payment bundle.

Payment bundling will have a profound effect within the medical imaging community. As providers elect to participate in any of the four payment models, the utilization of imaging services will be monitored to ensure that the right test is appropriate for the right ailment at the right place of service. These episode-based payment models elevate the role of the radiologist from a passive order taker to an active participant in the clinical decision making processes in the redesign and reengineering of the care pathway.

### Conclusion

Delivery models will continue to evolve as the healthcare sector migrates to quality-based reimbursement or value-based models of care. The intricate design of each delivery program adheres to specific cost and quality metrics that create a forced collision between physician, facility, and sub-acute care providers that places the patient at the center of the care cycle. The leveraging of data collected through EHRs will serve as the repository that will guide providers in regard to what is or is not clinically appropriate to advance patient care. The end result of care integration and appropriate use of health services will elevate the patient experience and establish the foundation for a high performing healthcare sector.

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**Figure 3 - BPCI Payment Models**