Paper 7700-2016

Medicare Payment Models: Past, present, and Future

Paul Gorrell, IMPAQ International LLC

ABSTRACT

When Medicare was first implemented in 1966 nearly half of all Americans 65 and older were without health insurance. Fifty years later only 2% lack health insurance. The difference, of course, is Medicare. Medicare now covers 55 million people, about 17% of the U.S. population, and is the single largest purchaser of personal health care. But despite this success the rising costs of health care in general, and Medicare in particular, have become a growing concern. Medicare policies are important not only because of the large numbers of beneficiaries, payers, and providers directly affected, but also because they affect private-sector policies as well. Analyses of these policies and their consequences are complicated not only by the effects of an aging population with changing cost drivers (e.g. less smoking, more obesity), but also by different Medicare payment models. For example, the average age of the Medicare population will initially decrease as the baby-boom generation reaches eligibility, but then increase with that generation. Because younger beneficiaries have lower costs, these changes will affect cost trends and patterns that need to be interpreted within the larger context of demographic shifts.

As noted below, when you consider that total Medicare outlays in 2015 totaled just under \$650 billion, and that the number of people age 65 and older in the U.S. will roughly double between 2010 (when the Affordable Care Act was passed) and 2050, the significance of the Medicare payment system cannot be overestimated.

INTRODUCTION

On June 30, 1966 President Lyndon Johnson gave an address which began, "Medicare begins tomorrow". For most of its history Medicare only had small, incremental changes. But the pace and scope of these changes increased significantly with the 2003 Medicare Prescription Drug, Improvement, and Modernization Act (MMA) and the signing of the Patient Protection and Affordable Care Act (ACA) in 2010. In this paper we present an overview of major aspects of Medicare payment models, including models currently being tested and evaluated. Evaluations of healthcare payment models not only involve cost analyses, but also the effects of these models on access to care and the quality of care received. It is interesting to note, as we approach the 50-year anniversary of President Johnson's address, that he pointed out that, "Medicare will succeed if older patients ... do not demand unnecessary hospital and medical services". Of course, from the current perspective of health services research we would add, 'And the health care system does not provide incentives for those unnecessary services'.

On March 3, 2016 the Centers for Medicare and Medicaid Services (CMS) announced that an ambitious goal, set only 14 months prior in January 2015, had been met. The goal was to shift the focus of reimbursement from quantity to quality by having "30 percent of Medicare payments through alternative payment models by the end of 2016". Before the ACA there were no payments made through alternative payment models, making the 30 percent figure all the more remarkable. But the reference to alternative payment models begs the question, "Alternative to what?" Almost universally alternative payment (and payment reform) refer to alternatives to the fee-for-service model we describe in the next section.

In addition to FFS this paper also describes two current approaches to payment reform, i.e. bundled payments and accountable care organizations. The discussion will highlight a number of important topics in health services research and policy analysis related not only to Medicare, but more generally to the emerging landscape of payment and care delivery models in the United States.

When you consider that total Medicare outlays in 2015 totaled just under \$650 billion, and that the number of people age 65 and older in the U.S. will roughly double between 2010 when the ACA was passed and 2050, the significance of the Medicare payment system cannot be overestimated.

FEE-FOR-SERVICE (FFS)

Beginning in 1966, Medicare offered health insurance to almost all Americans age 65 or older. Coverage consisted of hospital insurance (Part A) and supplemental medical insurance (Part B), and benefits mirrored those then available from Blue Cross and Blue Shield plans. A payroll tax paid by employees, employers, and the self-employed funded Part A, which was available without cost to all those 65 or older who were insured under the old age retirement and survivors program of title II of the Social Security Act. Beneficiaries who voluntarily enrolled in part B paid a monthly premium of \$3.00, which was estimated to be enough to fund 50 percent of part B costs, and federal general revenues covered the remainder. In 1972 Medicare benefits were extended to people under 65 who receive disability payments through social security and for people with end-stage renal disease [ESRD] who require dialysis or a kidney transplant.

The initial Medicare payment model was fee-for-service (FFS). Under FFS services are unbundled and paid for separately. In health care, it gives an incentive for physicians to provide more treatments because payment is dependent on the quantity of care, rather than quality of care. Similarly, when patients are shielded from paying (cost-sharing) by health insurance coverage, they are incentivized to welcome any medical service that might do some good. FFS is the dominant physician payment method in the United States, and it raises costs, discourages the efficiencies of integrated care, and a variety of reform efforts have been attempted, recommended, or initiated to reduce its influence (such as moving towards bundled payments and capitation).

In the health insurance and the health care industries, FFS occurs when doctors and other health care providers receive a fee for each service such as an office visit, test, procedure, or other health care service. Payments are issued retrospectively, after the services are provided. FFS is inflationary, raising health care costs. It creates a potential financial conflict of interest with patients, as it incentivizes overutilization—treatments with either an inappropriately excessive volume or cost. FFS does not incentivize physicians to withhold services. When bills are paid under FFS by a third party, patients (along with doctors) have no incentive to consider the cost of treatment. Patients can welcome services under third-party payers, because "when people are insulated from the cost of a desirable product or service, they use more". Evidence suggests primary care physicians who are paid under a FFS model tend to treat patients with more procedures than those paid under capitation or a salary.

FFS is often seen as a barrier to coordinated care, or integrated care—exemplified by the Mayo Clinic—because it rewards individual clinicians for performing separate treatments. FFS also does not pay providers to pay attention to the most costly patients, ones that could benefit from interventions that could make some hospital stays unnecessary. In the United States, FFS is familiar to doctors and patients, as it is the main payment method. When physicians cannot bill for a service, it serves as a disincentive to perform that service if other billable options exist. Electronic referral, when a specialist evaluates medical data (such as laboratory tests or photos) to diagnose a patient instead of seeing the patient in person, would often improve health care quality and lower costs.

Moving away from FFS towards pay for performance is generally thought to introduce quality and efficiency incentives, instead of solely rewarding quantity. In addition to the Mayo Clinic, other health care systems that serve as coordinated/integrated care alternatives to the FFS model include the central Pennsylvania Geisinger Health System (where the physicians, residents and fellows are paid a salary with the potential for bonuses depending upon patient performance), Utah's Intermountain Healthcare, the Cleveland Clinic, and Kaiser Permanente. Coordinated care can produce significant cost savings when compared to FFS programs. A goal of accountable care organizations (ACOs; see below) is to move from FFS to integrated care. ACOs, however, fit largely into a FFS framework, and do not abandon the model entirely. A more targeted move from FFS is the bundled payment model, described in the next section.

BUNDLED PAYMENTS

Bundled payment, also known as episode-based payment, is defined as the reimbursement of health care providers (such as hospitals and physicians) based on expected costs for clinically-defined episodes of care. It has been described as "a middle ground" between fee-for-service reimbursement (in which providers are paid for each service rendered to a patient) and capitation (in which providers are paid a "lump sum" per patient regardless of how many services the patient receives).

One initial impetus for bundled payments is that, in the mid-1980s, it was believed that Medicare's then-new hospital prospective payment system using diagnosis-related groups may have led to hospitals' discharging patients to post-hospital care (e.g., skilled nursing facilities) more quickly than appropriate in order to save money. It was therefore suggested that Medicare bundle payments for hospital and post-hospital care; however, despite favorable analyses of the idea, it had not been implemented as of 2009. One of the first bundled payment systems started in 1984 when The Texas Heart Institute began to charge flat fees for both hospital and physician services for cardiovascular surgeries. The system was generally thought to have reduced cost without lowering quality of care

In 1991, a "Medicare Participating Heart Bypass Center Demonstration" began in four hospitals across the United States; three other hospitals were added to the project in 1993, and the project concluded in 1996. In the demonstration, Medicare paid global inpatient hospital and physician rates for hospitalizations for coronary artery bypass surgery; the rates included any related readmissions. Among the published evaluations of the project were the following:

Throughout the 90s there were numerous variations on this theme. Then, in 2006-2007 the Geisinger Health System tested a "ProvenCare" model for coronary artery bypass surgery that included best practices, patient engagement, and "preoperative, inpatient, and postoperative care [e.g., rehospitalizations] within 90 days... packaged into a fixed price." The program received national attention including articles in the New York Times and the New England Journal of Medicine in mid-2007. An evaluation published in late 2007 showed that 117 patients who received "ProvenCare" had a significantly shorter total length of stay (resulting in 5% lower hospital charges), a greater likelihood of being discharged to home, and a lower readmission rate compared with 137 patients who received conventional care in 2005.

The Robert Wood Johnson Foundation gave grants beginning in 2007 for a bundled payment project called PROMETHEUS ("Provider payment Reform for Outcomes, Margins, Evidence, Transparency, Hassle-reduction, Excellence, Understandability and Sustainability") Payment. With support of the Commonwealth Fund, the project developed "evidence-informed case rates" for various conditions that are adjusted for severity and complexity of a patient's illness. The "evidence-informed case rates" are used to set budgets for episodes of care. If actual quarterly spending by health care providers is under budget, the providers receive a bonus; if actual quarterly spending is over budget, payment to the providers is partially withheld. The model is currently being tested in three pilot sites which are scheduled to end in 2011.

In mid-2008, the Medicare Payment Advisory Commission (MedPAC) made several recommendations along "a path to bundled payment." For one, it recommended approaches such as "virtual bundling" (under which providers would receive separate payments, but could also be subject to rewards or penalties based on the levels of expenditures). In addition, it recommended that a pilot program be established "to test the feasibility of actual bundled payment for services around hospitalization episodes for select conditions."

Just before the Medicare Payment Advisory Commission report was released, the Centers for Medicare and Medicaid Services announced a "Medicare Acute Care Episode (ACE) Demonstration" project for bundling payments for certain cardiovascular and orthopedic procedures. The bundling includes only hospital and physician charges, not post-discharge care; by 2009, five sites in Colorado, New Mexico, Oklahoma, and Texas had been selected for the project. In the project, hospitals give Medicare discounts of 1%-6% for the selected procedures, and Medicare beneficiaries receive a \$250–\$1,157 incentive to receive their procedures in the demonstration hospitals.

As of 2008, Geisinger's ProvenCare program had "attracted interest from Medicare officials and other top industry players" and had been expanded or was in the process of being expanded to hip replacement surgery, cataract surgery, percutaneous coronary intervention, bariatric surgery, lower back surgery, and perinatal care. Interest in Geisinger's experience intensified in 2009 when newsmedia reports claimed that it was a model for health care reforms to be proposed by President Barack Obama and when Obama himself mentioned Geisinger in two speeches.

As of 2010, provisions for bundled payments are included in both the Patient Protection and Affordable Care Act and the Affordable Health Care for America Act. The former bill establishes a national Medicare pilot program starting in 2013 with possible expansion in 2016, which is consistent with the Obama proposal. The latter bill requires "a plan to reform Medicare payments for post-acute services, including bundled payments."

Unlike fee-for-service, a bundled payment model is thought to discourage unnecessary care, encourages coordination across providers, and potentially improves quality. Unlike capitation, bundled payment does not penalize providers for caring for sicker patients. Bundling payment provides additional advantages to providers and patients alike, through removing inefficiency and redundancy from patient-care protocols; e.g. duplicate testing, delivering unnecessary care, and failing to adequately provide postoperative care.

This method of payment can also provide transparency for consumers by fixing pricing and publishing cost and outcomes data. Patients would then be able to choose a provider based on a comparison of real data, not word of mouth.

Although bundled payment models have a lot of intuitive appeal with respect to moving away from the FFS incentives to favor quantity over quality, there is still insufficient evidence to definitely state that bundled payments by themselves significantly lower costs. In addition, a recent study by Zuvekas & Cohen (2016) found that 95% of all physician office visits in the U.S. in 2013 (including Medicare, private, and Medicaid) were reimbursed under FFS.

In the next section we look at a different perspective on payment reform that is directly tied to quality of care, Accountable Care Organizations.

ACCOUNTABLE CARE ORGANIZATIONS

ACOs are healthcare organizations using a payment and care delivery model that ties provider reimbursements to quality metrics and reductions in the total cost of care for an assigned population of patients. A group of coordinated health care providers forms an ACO, which then provides care to a group of patients. The ACO may use a range of payment models (capitation, fee-for-service with asymmetric or symmetric shared savings, etc.). The ACO is accountable to the patients and the third-party payer for the quality, appropriateness and efficiency of the health care provided. Like the more-familiar HMO model, an ACO is held accountable for providing comprehensive health services to a population. The ACO-model builds on the Medicare Physician Group Practice Demonstration and the Medicare Health Care Quality Demonstration, established by the 2003 Medicare Prescription Drug, Improvement, and Modernization Act.

A typical ACO places a degree of financial responsibility on the providers in hopes of improving care management and limiting unnecessary expenditures while continuing to provide patients freedom to select their medical services. The success of the ACO model in fostering clinical excellence while simultaneously controlling costs depends on its ability to "incentivize hospitals, physicians, post-acute care facilities, and other providers involved to form linkages and facilitate coordination of care delivery." By increasing care coordination, ACOs can help reduce unnecessary medical care and improve health outcomes, leading to a decrease in utilization of acute care services. According to CMS estimates, ACO implementation as described in the Affordable Care Act is estimated to lead to an estimated median savings of \$470 million from 2012–2015

In 2011 the US Department of Health and Human Services (DHHS) proposed the initial set of guidelines for establishment of ACOs under the Medicare Shared Savings Program (Section 3022 of the ACA). These guidelines stipulate the necessary steps that voluntary groups of physicians, hospitals and other health care providers must complete in order to partake in ACOs. Section 3022 of the ACA authorized CMS to create the Medicare Shared Savings program (MSSP), which allows for the establishment of ACO contracts with Medicare.

According to the ACA, the MSSP "promotes accountability for a patient population and coordinates items and services under part A and B, and encourages investment in infrastructure and redesigned care processes for high quality and efficient service delivery." The existence of the Medicare Shared Savings Program ensures that ACOs are a permanent option under Medicare. However, the specifics of ACO contracts are left to the discretion of the Secretary of the Department of Health and Human Services, which allows the ACO design to evolve or devolve over time.

Under the program, ACOs are accountable for a minimum of 5,000 beneficiaries. The provider network is required to include sufficient primary care physicians to serve its beneficiary population. The ACO must define processes to promote evidence-based medicine and patient engagement, monitor and evaluate quality and cost measures, meet

patient-centeredness criteria and coordinate care across the care continuum. Prior to applying to MSSP, an ACO must establish appropriate legal and governance structures, cooperative clinical and administrative systems and a defined shared savings distribution method. Finally, the ACO may not participate in other shared savings programs during the period it participates the MSSP. An ACO may include ACO professionals (e.g., Doctors of Medicine (M.D.) or Doctors of Osteopathic Medicine (D.O.), physician assistants, nurse practitioners, clinical nurse specialists) in group practice arrangements, networks of individual practices of ACO professionals, partnerships or joint venture arrangements between hospitals and ACO professionals, hospitals employing ACO professionals, or other Medicare providers and suppliers as determined by the Secretary of Health and Human Services."

ACO's financial incentive payments will be determined by comparing the organization's annual incurred costs relative to CMS-established benchmarks. These benchmarks will be based on an estimation of the total Fee-for-Service expenditures associated with management of a beneficiary based on fee-for-service payment in the absence of an ACO. CMS will update benchmarks by the projected absolute amount of growth in national per capita expenditures as well as by beneficiary characteristics. CMS will also establish a minimum savings rate (MSR) that will be calculated as a percentage of the benchmark (2%) that ACO savings must exceed in order to qualify for shared savings. The MSR will account for normal variation in health care spending.

While Medicare will continue to offer a Fee-For-Service program, ACOs can chose one of two payment models (one-sided or two-sided model) based on the degree of risk and potential savings they prefer. Initially, a one-sided model ACO shared in savings for the first two years and savings or losses during the third year. The maximum sharing percentage for this model is 50%. In a two-sided model, ACOs shared in savings and losses for all three years. In both cases, the ACO savings must exceed 2% in order to qualify for shared savings. The maximum sharing percentage for this model is 60%. In both models there is a shared loss cap of 5% in the first year, 7.5% in the second year, and 10% in the third year. Aspects regarding financial risk and shared savings would be altered in the final regulations.

Under the new regulations, providers' financial incentives were increased. Under the one-sided model, providers have the opportunity to engage in ACOs and any savings above 2% without any financial risk throughout the three years. Under the two-sided model, providers will assume some financial risk but will be able to share in any savings that occur (no 2% benchmark before provider savings accrue). In addition, the quality measures required was also reduced from 65 to 33, decreasing the monitoring that many providers described as overwhelming. Community health centers and rural health clinics were also allowed to lead ACOs.

Incorporating DHHS final regulation adjustments on October 20, 2011, Section 3022 outlines the following requirements for ACOs:

- The ACO shall be willing to become accountable for the quality, cost, and overall care of the Medicare feefor-service beneficiaries assigned to it
- The ACO shall enter into an agreement with the Secretary to participate in the program for not less than a 3-year period
- The ACO shall have a formal legal structure that would allow the organization to receive and distribute payments for shared savings to participating providers of services and suppliers
- The ACO shall include primary care ACO professionals that are sufficient for the number of Medicare feefor-service beneficiaries assigned to the ACO under subsection
- At a minimum, the ACO shall have at least 5,000 such beneficiaries assigned to it in order to be eligible to participate in the ACO program
- The ACO shall define processes to promote evidence-based medicine and patient engagement, report on quality and cost measures, and coordinate care, such as through the use of telehealth, remote patient monitoring, and other such enabling technologies
- The ACO shall demonstrate to the Secretary that it meets patient-centeredness criteria specified by the Secretary, such as the use of patient and caregiver assessments or the use of individualized care plans
- The ACO participant cannot participate in other Medicare shared savings programs
- The ACO entity is responsible for distributing savings to participating entities

The ACO must have a process for evaluating the health needs of the population it serves

In an effort to lower healthcare costs, the CMS has introduced the one-sided and two-sided payment model, either of which the ACOs can choose to adopt. Under the March 2011 proposal, ACOs could choose the one-sided model, in which they would participate in shared savings for the first two years and assume shared losses in addition to the shared savings for the third year. In the two-sided model, ACOs would participate in both shared savings and losses for all three years. Although the ACO assumes less financial risk in the one-sided model compared to the two-sided model, ACOs have a maximum sharing rate of 50% in the one-sided model and a higher maximum sharing rate of 60% in the two-sided model, provided that the minimum shared savings rate threshold of 2% is reached. For both models, there is a shared loss cap that increases each year.

As noted above for bundled payment systems, there is still a lot to be evaluated with respect to ACOs. This is ongoing work. Crucial to this analysis is cost and quality data to ensure that ACOs are meeting their basic goal of lowering costs while maintaining high-quality healthcare. In the next section we discuss a program, the Qualified Entity Program, that seeks to make Medicare claims data available to a wider range of organizations for quality measurement and public reporting.

CMS QUALIFIED ENTITY PROGRAM

Beginning January 2012 section 10332 of the Affordable Care Act 9QE program) required that standardized extracts of Medicare claims data (Parts A, B, and D) be made available to "qualified entities" for the evaluation of the performance of providers of services and suppliers. The motivation for this was that,

- There were numerous emerging local and regional provider performance measurement efforts
- Despite National Quality Forum efforts, there was a lack of common measurement and reporting standards
- There was limited availability of Medicare data for performance measurement
- Many existing reports on provider performance were produced without an opportunity for provider review

Specifically the QE program authorized CMS to make Medicare data available for the purpose of provider performance measurement. This is one instance of a Federal government initiative to increase transparency and data availability, as well as timeliness of data.

Qualified entities (QEs) may use the data they receive through this program for the sole purpose of evaluating the performance of providers of services and suppliers, and to generate specified public reports. Qualified entities may receive data for one or more specified geographic areas and must pay a fee equal to the cost of making the data available. Congress also required that qualified entities combine the Medicare claims data from at least one other claims data source to evaluate the performance of providers of services and suppliers.

But what qualifies an organization to become a "qualified entity"? Any organization that will report provider performance data is eligible. Additional requirements include:

- Demonstrated experience calculating and reporting on performance measures
- Demonstrated ability to ensure the privacy and security of Medicare claims data
- Access to additional (non-Medicare) claims data

The last requirement relates to the fact that qualified entities must combine Medicare claims data with other claims data. In addition QEs must allow providers an opportunity to review results and make corrections before publicly reporting the information. One of the real benefits of participating in the QE program is timely access to Medicare data. In addition to State-level data for matching with other claims data, a 5% national sample file of Medicare claims is made available for benchmarking.

As with the National Quality Strategy the belief is that the sharing of Medicare data with QEs, and the resulting reports, will be an important driver of improving quality and reducing costs in Medicare, as well as for the healthcare system in general. Additionally, CMS believes this program will increase the transparency of provider and supplier performance, while ensuring beneficiary privacy.

The APCDs discussed above enable, among other things, providers to compare their performance with their peers. They have also increased the transparency of price and quality information for consumers. But APCD data can be incomplete without timely access to outpatient and pharmacy claims from Medicare's fee-for-service program, which together with inpatient services accounted for about 20 percent of all health care spending. That is now changing. The QE program addresses this need by making this Medicare claims data available to QEs for reporting.

The information on outpatient and pharmacy claims supplements inpatient claims data since most states mandate reporting of hospital discharge data for all patients. The new claims will allow those that receive them to explore the quality, costs, and resource use in ambulatory care settings, increasing the reliability of reporting on primary care or specialty care practices. This is because many chronic and expensive-to-treat conditions are more prevalent among the elderly and, without access to large volumes of data on Medicare beneficiaries, denominators are not large enough to accurately rate provider performance.

"We are quite excited because the program will make our reporting much more robust," says Mylia Christensen, executive director of the Oregon Health Care Quality Corp., one of the first set of QEs to receive provisional approval from CMS to participate in the program. The nonprofit will use the date to enhance its reporting on the quality and utilization of health care services, which had been based only on claims data from commercial health plans and the state's Medicaid program.

The Health Improvement Collaborative of Greater Cincinnati, another QE, uses Medicare data to explore the cost and utilization of ambulatory care in its region, with the ultimate goal of combining the claims information with clinical data. That "will let us see whether improvements made on the clinical side result in reduced costs—[and] see if we're meeting our goal of working toward the Triple Aim of improved care, improved health, and reduced costs," says Tim Salvage, the Collaborative's project manager for performance measures.

And while the qualified entities are required to use the data for public reporting on provider performance, there are limitations on the use of data for purposes other than public reporting. For example, physicians cannot drill down into the data to compare performance or inform their improvement efforts. Despite these limitations the QE program is an important step in an evolving effort to increase transparency while maintaining privacy and confidentiality. "With the Medicare data we can begin to look across the health system and raise questions about variation in care delivery—this is a first step in engaging physicians," says Denise Love, executive director of the National Association of Health Data Organizations (NAHDO).

The QE program, although important for the reasons discussed above, is just one of numerous Federal, State, and private initiatives aimed at further data transparency and public reporting with the goal of informing quality improvement and cost effectiveness efforts. We are well past the tipping point on the road to greater transparency, despite concerns about privacy and valid interpretations of the data. Continued efforts will involve patients both directly, as consumers of health care services, and indirectly as providers and plans seek improvements in order to build or maintain a reputation for high-quality health care delivery. Although beyond the scope of this paper, financial incentives will also play a role in this as quality measures are used in pay-for-performance programs.

In January 2016 CMS proposed rules that will expand access to analyses and data that will help providers, employers, and others make more informed decisions about care delivery. The new rules, as required by the Medicare Access and CHIP Reauthorization Act (MACRA), will allow organizations approved as qualified entities to confidentially share or sell analyses of Medicare and private sector claims data to providers, employers, and other groups who can use the data to support improved care. In addition, qualified entities will be allowed to provide or sell claims data to providers. The rule also includes strict privacy and security requirements for all entities receiving Medicare analyses

or data, as well as new annual reporting requirements. This initiative is part of a broader effort by the Obama Administration to create a health care system that delivers better care, spends dollars more wisely, and results in healthier people. The proposed rules, which still in the comment period, seek to enhance the current qualified entity program to allow innovative use of Medicare data for non-public uses while ensuring the privacy and security of beneficiary information.

SUMMARY

It is clear that the current healthcare landscape, and current models for reforming payment systems, represent a general move from FFS systems to some form of either capitated or bundled payment system. Moreover the emphasis on cost reduction, and the removal of incentives which reward quantity of care, has an important counterpart in quality measurement to ensure that lowering costs does not also lower quality.

Numerous models are currently being implemented and evaluated, and the next few years are likely to see additional studies to inform the current debate about cost and quality in healthcare—and in Medicare in particular.

The qualified entity program is one way in which CMS is working to provide additional data to inform cost-reduction and quality-improvement efforts. The information in the references given below provides a window into both current efforts to test new payment and care-delivery models, as well as provide indications of future directions healthcare reform is likely to take.

REFERENCES

The current landscape of healthcare reform and changes to Medicare payment models is defined by the ACA, which can be accessed at http://www.hhs.gov/healthcare/about-the-law/read-the-law/index.html

The CMS web site contains a broad set of reference materials for the topics included in this paper, including:

ACOs: https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/ACO/index.html

Bundled Payments for Care Inititaive (BPCI): https://innovation.cms.gov/initiatives/bundled-payments/

Innovation Models: https://innovation.cms.gov/initiatives/#views=models

Program Statistics: https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/CMSProgramStatistics/index.html

Qualified Entity Certification Program (QECP) for Medicare Data:

https://www.qemedicaredata.org/SitePages/home.aspx

Qualified Entity Program and the Medicare Access and CHIP Reauthorization Act (MACRA):

 $\frac{https://www.cms.gov/Newsroom/MediaReleaseDatabase/Press-releases/2016-Press-releases-items/2016-01-29.html}{}$

The Medicare Payment Advisory Commission (MedPAC) also has useful information about Medicare policy and payment systems, including:

Medicare Payment Basics: http://www.medpac.gov/-documents-/payment-basics

MedPAC Reports (including Reports to Congress): http://www.medpac.gov/-documents-/reports

ACKNOWLEDGMENTS

Thanks to my colleagues at IMPAQ International, LLC for their help and insights.

CONTACT INFORMATION

I'd appreciate comments or continued discussion of the many issues discussed in this paper.

Paul Gorrell IMPAQ International, LLC 1101 Vermont Avenue, NW Washington, DC 20005 pgorrell@impaqint.com

SAS and all other SAS Institute Inc. product or service names are registered trademarks or trademarks of SAS Institute Inc. in the USA and other countries. ® indicates USA registration.

Other brand and product names are trademarks of their respective companies.