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Value-Based Reimbursement: Mastering the Behemoth (Part Three of a Three Part Series)

Over the past twenty years, government and commercial payors and regulators in the U.S. have designed and implemented an increasing number of value-based reimbursement programs, displacing the traditional *fee-for-service* method of paying for healthcare services with a model that emphasizes reimbursing healthcare providers according to the *value*, rather than the *volume*, of services rendered.[1] As discussed in Part 2 of this three part series, this trend towards value-based reimbursement models has accelerated since the passage of the *Patient Protection and Affordable Care Act* (ACA) in 2010,[2] and announcements of landmark value-based reimbursement programs by federal regulators over the past year indicate that the increasing emphasis on value-based reimbursement will continue for the next several years. This *Health Capital Topics* article, the third and final installment of the *Value-Based Reimbursement Trends* series, will briefly examine some of the major announcements of value-based reimbursement programs over the past year, before proceeding discuss whether value-based reimbursement can provide high quality, cost efficient care without sacrificing accessibility, based on an examination of the relevant academic literature.

In March 2015, the *Centers for Medicare & Medicaid Services* (CMS) announced the *Next Generation Accountable Care Organization* (NGACO) model, building upon the successes of previous shared savings models, while also making some significant modifications to these models.[3] In addition to offering four different models of risk-sharing payment structures, the NGACO model also features a higher degree of shared savings than the levels utilized by previous federal *Accountable Care Organization* (ACO) programs, with providers retaining either 80% or 100% of any generated shared savings or losses, depending on the risk arrangement selected.[4] It should be noted that this degree of risk sharing is more in line with the Physician Group Practice Demonstration, an early CMS program testing the shared savings model, which utilized an 80% shared savings rate.[5]

In April 2015, Congress passed the *Medicare Access and CHIP Reauthorization Act of 2015* (MACRA).[6] Among its provisions, MACRA mandated a schedule of pre-determined annual updates to Medicare payments for physicians, which updates are modified based on a given provider's utilization of certain "*alternative payment models*" (APMs) (e.g., value-based reimbursement models, or reimbursement models that include risk sharing), in contrast to traditional fee-for-service payments.[7] In addition to provider incentives based on the use of APMs, MACRA also incentivizes providers through a *pay-for-performance* (P4P) program. Specifically, the law consolidates several value-based reimbursement programs established by the ACA into the *Merit-Based Incentive Payment System* (MIPS) in 2019, which will increase or decrease payments to providers based on certain performance metrics in the fields of:

(1) Quality;
(2) Efficiency;
(3) Meaningful use of electronic health records; and,
(4) Clinical practice improvement activities.[8]

On April 1, 2016, the CMS launched the *Comprehensive Care for Joint Replacement* (CJR) Model.[9] In brief, the CJR Model is a bundled payment program that holds hospitals accountable for *all* of the care associated with hip and knee replacement surgeries, in contrast to only holding hospitals responsible for the cost and quality of the inpatient stay associated with these surgeries.[10] The CJR Model is distinguished from other, earlier bundled payment initiatives through the CJR Model's use of quality metrics. As discussed in Part One of this series, earlier bundled payment programs typically did not tie provider reimbursement to measures of the cost or quality of care;[11] for example, the *Bundled Payment for Care Improvement Initiative*, a bundled payment program launched by the *Center for Medicare and Medicaid Innovation* in 2013, does not include a link between incentive payments and the quality of care that the targeted practitioners provide.[12] Comparatively, under the CJR Model, the targeted healthcare providers (in this case, short term acute care hospitals) must earn sufficiently high composite quality scores, which are calculated using quality metrics related to both patient satisfaction and complications in hip and knee replacement surgeries,[13] in order to receive *reconciliation payments* for reducing expenditures.[14]

The first two installments of this *Health Capital Topics* series, as well as the preceding paragraphs of this third installment, have detailed the chronology of the recent efforts to implement value-based reimbursement in the U.S. It is important to note that this iteration of healthcare reform, as it relates to reimbursement, is not the first time that a society has undertaken a systematic

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effort to establish a link between the value of healthcare services and the payment for said services; the Code of Hammurabi (circa 1750 B.C.E.) included differential rewards for physicians based on their performance.[15] As discussed in Part One of this series, the comparatively recent efforts to implement value-based reimbursement in the U.S. may be attributable, in part, to soaring healthcare expenditures, coupled with the poor performance by the U.S. on health outcomes, relative to other industrialized nations.[16]

In 1994, William Kissick proposed a conceptual framework for the problems of the U.S. healthcare system, which he termed the *Iron Triangle of Health Care*.[17] As described in Part One of this series, using this framework, Kissick argued that a society could not simultaneously improve upon three priorities of healthcare reform: (1) cost containment; (2) quality; and, (3) access to services.[18] In making his point, Kissick stated that "*Trade-offs are inevitable regardless of the size of the triangle. Call them resource allocation or rationing, they are choices our society must make.*"[19] It was in this environment that value-based reimbursement was presented as a potential solution to the woes of the U.S. healthcare system.[20] While he did not specifically utilize the term *"value-based reimbursement,"* Kissick remarked that others often proposed *"cost-effectiveness"* as a potential solution to the *Iron Triangle of Health Care*, due to its ability to deliver appropriate quality at the lowest possible cost.[21]

Given the expectation that value-based reimbursement could improve the performance of the modern U.S. healthcare system, and further given the present ubiquity of value-based reimbursement in the U.S., it is prudent to establish a robust understanding of the benefits that value-based reimbursement programs generate. Before embarking on a thorough analysis of the impact of value-based reimbursement (a topic that was briefly introduced in Part Two of this series), it is necessary to present an important caveat. Since the 1990s, the U.S. healthcare system has undergone myriad reforms, including, *but not limited to*, the dissemination of value-based reimbursement. Therefore, when considering recent changes in the performance of the U.S. healthcare system, it is important not to conflate: (1) trends that are *contemporaneous* with the implementation of value-based reimbursement; and, (2) trends that are *a result of* the implementation of value-based reimbursement.

There is a significant body of literature examining the impact of value-based reimbursement initiatives on the quality of care that providers offer, much of which specifically focuses on P4P programs. Generally, this body of literature does not present robust evidence that the implementation of value-based reimbursement models will lead to widespread improvements in quality of care.[22] Two studies published in the *New England Journal of Medicine* examined hospital participation in P4P programs, with one study finding no evidence that a hospital's participation in P4P improved overall patient mortality rates,[23] while the other study found that a hospital's participation in P4P led to improvements on certain quality metrics.[24] Further clouding the issue, a third study, found that hospital participation in P4P led to *initial* quality gains relative to non-P4P hospitals, but in the long term (i.e., five years), the performance of P4P participating hospitals and non-P4P hospitals was the same.[25] Overall, the literature regarding the impact of value-based reimbursement models on quality of care seems to indicate that P4P can generate quality improvement, but there is a great deal of variance among individual programs and metrics, such that overall quality improvement is typically small.[26]

The body of research on the impact of value-based reimbursement models on the cost of healthcare services is not as well developed as the literature pertaining to value-based reimbursement's impact on the quality of care; however, initial findings seem to confirm that P4P can have a positive impact on cost effectiveness.[27] For example, a 2006 case study examined the impact of P4P on the provision of diabetes care, and found that for every dollar invested, the program generated approximately two dollars in cost savings on average.[28]

With respect to the impact of value-based reimbursement models on patient access to healthcare services, it is important to keep in mind that, as discussed in Part Two of this series, very few recent value-based reimbursement initiatives include improvements in access to care as an explicit goal of the program.[29] Following the logic of Kissick's *Iron Triangle*, programs that attempt to improve upon both the cost and the quality of healthcare services may unintentionally sacrifice the third, patient access to care, in order to generate those improvements.[30] There is some evidence to suggest that this type of tradeoff happens in poorly designed value-based reimbursement programs; a 2006 literature review stressed that the design of performance metrics was of key importance, due to the fact that value-based reimbursement programs could generate unintended consequences in the form of providers avoiding the sickest patients, in order to avoid the increased risk and expense associated with treating these patients (a phenomenon referred to as "*adverse selection*").[31] However, a 2010 review of the literature on the outcomes of P4P programs found that these programs typically do not have a negative impact on the equity of, or access to, healthcare services.[32]

Given the findings of the impact of value-based reimbursement on the practice of healthcare, the question of whether value-based reimbursement is a viable solution to the problems of the U.S. healthcare system follows. Unfortunately, the answer to this question seems to be frustratingly indefinite – research indicates that the appropriate answer may be, *"not entirely,"* or perhaps, *"not yet."* Rigorous research has found that while value-based reimbursement initiatives *can* have beneficial impacts on cost and quality, there are significant limitations to the effectiveness of these programs, e.g.:

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(1) Value-based reimbursement programs will not generate the desired results if the measures are not designed to inherently preempt unintended consequences, such *adverse selection*;
(2) Value-based reimbursement programs can generate performance improvements, but the gains are short lived; or,
(3) Value-based reimbursement programs can generate performance improvements, but the advancements show dramatic variation among the metrics chosen, such that the overall gains are nominal.[33]

These results hint at the tantalizing possibility that value-based reimbursement *could* definitively elevate the practice of healthcare in the U.S. to a higher standard, if only the initiatives were designed and implemented with the specifications necessary to solve the healthcare industry's problems.

In 1994, presented with legislation purporting to reform the health system (at the time, relying upon tools such as managed competition, accountable health plans, and a national health board), Kissick speculated whether the proposed reforms could *"master"* the *Iron Triangle of Health Care*, and control the *"behemoth of the American health-care enterprise"*.[34] Over twenty years later, the modern U.S. healthcare system faces a similar problem. However, the question of whether value-based reimbursement can deliver healthcare that is high in quality, cost efficient, and accessible to the broad U.S. population may be, ultimately, irrelevant. As discussed in Part Two of this series, federal regulators have aggressively pursued the utilization of value-based reimbursement in the U.S., by designing and implementing dozens of value-based reimbursement programs, especially since the passage of the ACA.[35] Further, as discussed in the opening paragraphs of this article, this widespread dissemination of value-based reimbursement has continued up to the present day, and will likely continue for the next several years. Therefore, *regardless of whether value-based reimbursement can improve the provision of healthcare services*, a question that the current body of research has yet to fully answer, value-based reimbursement will undoubtedly become a fixture of how healthcare providers and facilities operate in the U.S.

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