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A Roadmap for Value-Based Payments

This article is the last of the "Imaging Value Chain" series, which began with a call to action to all radiologists to take a leadership role in shaping America's future health care system to focus strategically on what matters most to patients: value and outcomes [1]. As part of the ACR's Imaging 3.0™ initiative, radiologists have been encouraged to move beyond being simple image interpreters to becoming transformational leaders who align themselves with other key stakeholders to deliver enhanced value to patients through five key pillars: imaging appropriateness, quality, safety, efficiency, and patient satisfaction. We have used the value chain metaphor to help radiologists conceptualize success through innovative process reengineering using dedicated human and IT resources to facilitate the adoption of current evidenced-based best practices, all with the goal of delivering timely actionable information to requesting physicians and increasingly patients.

In this final article in the series, we address not only how this value creation can improve patient outcomes but how it can be used to advocate for fair and appropriate radiology reimbursement as payment systems rapidly evolve. Our discussion focuses first on the changing reimbursement landscape and then on data that can be mined from the imaging value chain reengineering process to advocate for value-based payments.

Although intense debate continues regarding the merits and longevity of the Patient Protection and Affordable Care Act (or "Obamacare"), overwhelming consensus has emerged from nearly all stakeholders that improved patient outcomes, enhanced patient experience, and reduced costs are now not only desirable but essential. Nearly all agree, however, that achieving these goals is an immensely complex and far from certain proposition. Yet given the cost savings and quality improvements that have been reported from both the initial pioneer accountable care organizations and the much larger Medicare Shared Savings Program, CMS, the largest payer in the United States, is determined to push forward with an ambitious, accelerated agenda of tying provider payments to measures of quality and value, with other payers following suit. CMS has therefore recently proposed expanding such alternative payment models (APMs), transitioning from our current system of relatively unrestricted fee-for-service (FFS) to payments that will be dependent on a range of quality metrics, as yet not fully defined. This transition may happen quite quickly; CMS is targeting that 85% of all FFS payments will be tied to quality or value metrics by the end of 2016, and that by the end of 2018, 50% of all health reimbursement will be structured through APMs [2]. Recent passage of the Medicare Access and

CHIP Reauthorization Act of 2015 (MACRA) has additionally heightened the focus on value-driven health care delivery. MACRA provides financial incentives for providers to deliver care through either APMs or by FFS payment adjustments through the Merit-Based Incentive Payment System (MIPS). Current value-based programs (specifically, the Physician Quality Reporting System, the value-based modifier, and the electronic health record program) will be all rolled into the new MIPS program, which will include four components: quality, resource use, meaningful use, and practice quality improvement. MACRA thus provides strong incentives for providers to engage in APMs or at the very least master quality performance measurement programs to avoid rate reductions under MIPS.

Procedure-based physicians (including radiologists) are widely believed to have benefited disproportionately from the unrestricted FFS system through increased imaging utilization in prior years. Although much of this increase can be justified, most agree that overutilization has also occurred, reducing imaging's overall contribution to value and patient outcomes. Payers have therefore attempted to prevent overuse through radiology benefit managers or other forms of "gatekeeping." More sophisticated and innovative providers now manage utilization through clinical
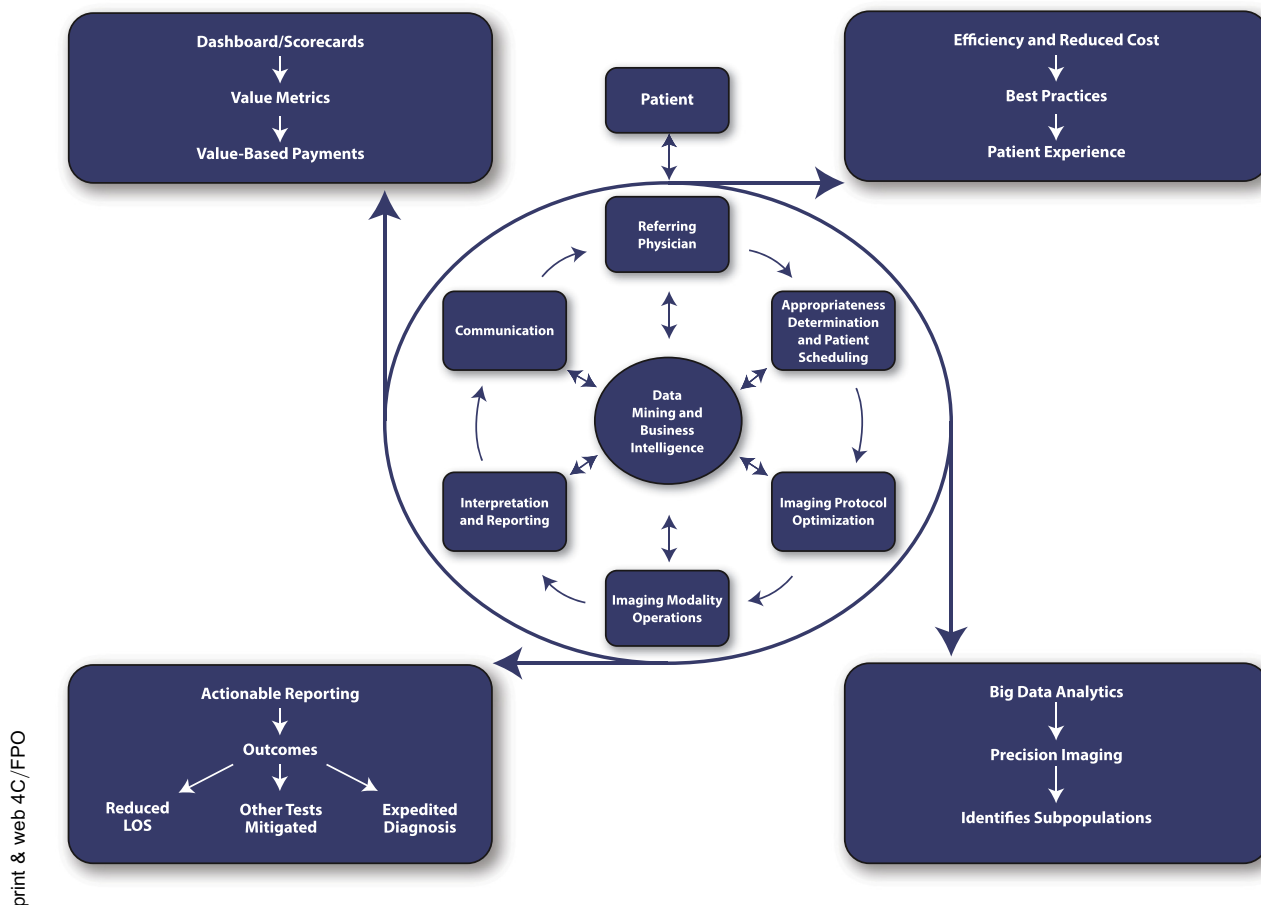
Fig 1. Schematic representation of Imaging Value Chain, Benefits, Outcomes and Value Outputs.

decision support tools, and CMS has mandated that beginning in 2017, imaging clinical decision support will be required for all Medicare patients.

Given that future payment models will, hopefully, be driven by both better patient outcomes and reduced cost, it thus behooves radiologists to identify which service elements are key drivers of each (or ideally both). If radiologists can define a key set of measurable parameters within their overall workflow that elucidate how and where value is created, such markers can then be used to advocate for meaningful payment on the basis of value under a variety of payment systems. We believe the previous 12 articles in this "Imaging Value Chain" series offer radiologists insight into how and where value is created within the

imaging workflow and work product (Fig. 1). As the concepts and recommendations highlighted in this series focus on value creation, we believe it provides a roadmap for success in the evolving value-based payment environment. To qualify for such payments, it will be critical to develop scorecards and dashboards that faithfully, dynamically, and numerically crystallize the added value in transparent and comprehensible display formats. Many of these value metrics are already available and reproducible today (eg, report turnaround time). We encourage readers, however, to pursue additional metrics proposed in the seventh article in this series [3], which in aggregate should demonstrate imaging's contribution to better patient outcomes.

In reality, however, the most important metrics (ie, those that matter most to patients) remain difficult to measure and thus the most elusive. Such metrics might include how an imaging examination contributed to a reduced length of hospital stay, how the use of imaging eliminated the need for more invasive and/or expensive procedures, how the examination results changed diagnosis or therapy, and whether patients and referring physicians were satisfied with both their experience and the radiology report. Yet for radiologists to truly understand how and where real value is created from the imaging value chain, sophisticated data analytic tools and mining methodologies must be developed that can seamlessly, faithfully, and dynamically present

outcome metrics. Some such metrics could be developed in the short term. For instance, most radiologists currently receive little feedback from their referring physicians as to whether individual radiology reports were found helpful. A simple "satisfaction" tool could be developed, electronically embedded into each report, through which the referrer (or perhaps even the patient) could score the usefulness, format, and precision of a report. Such real-time feedback could spur radiologists to strive for better reporting practices. Actionable and meaningful information, after all, is the radiologist's ultimate work product. More sophisticated tools will take longer to develop (eg, imaging's impact on the length of a hospital stay). However, such tools must be developed to demonstrate imaging's contribution to overall value, reduced cost, and patient outcomes. Armed with such information, radiologists can then more vociferously advocate for appropriate reimbursement under whatever new payment models evolve.

Over the past two years in this series, we have strived to provide a roadmap for radiologists to re-engineer their work product in a manner that promotes ever increasing value to referrers and patients. For such initiatives to be successful, however, radiologists must demonstrate how and where value is created. This will require time, energy, resources, and innovative thinking. Only through such efforts, however, will radiologists optimally recognize, realize, and share the consequences of their hard work and effort and, in doing so, ensure their long-term professional relevance and success.

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