

FELLOWS-IN-TRAINING & EARLY CAREER PAGE

Educating the MACRA-Ready Cardiologist

Developing Competencies in Value-Based Cardiovascular Medicine



Srinath Adusumalli, MD,^{a,b,c} Paul N. Fiorilli, MD,^{b,c} Matthew D. Saybolt, MD^c

*“If you always do what you’ve always done,
you always get what you’ve always gotten.”*

—Jessie Potter (1)

The Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) is considered to be one of the largest changes to Medicare physician reimbursement since its launch in 1965. Private insurers are likely to follow Medicare’s example, if they have not already, with similar policies changing the focus of physician reimbursement from the volume of care delivered to the value of care delivered. This shift will likely have a significant effect on the incipient careers of fellows-in-training (FITs) as well as early career professionals, regardless of practice setting. Despite the enormous effect MACRA is poised to have on the practice of American medicine, there has been little published on how FITs should be trained for the shift from volume- to value-based care. This paper aims to lay out a path forward to prepare FITs for this transition using the domains of MACRA and accompanying competencies as a skeleton.

WHAT IS MACRA?

MACRA is a law that was enacted in 2015 with bipartisan, bicameral support as well as the backing of many medical societies, including the American College of Cardiology (ACC) (2). It is separate from the Patient Protection and Affordable Care Act and in large part will not be affected by changes that could affect the

Affordable Care Act in the future (3). MACRA is based on the central tenet of rewarding clinicians for delivering high-quality, low-cost, and high-value (quality/cost) care. The most impactful portion of the MACRA legislation (Figure 1) in the shift from volume- to value-based care is the Quality Payment Program (QPP). There are 2 arms of the QPP—the Merit-based Incentive Payment Program (MIPS) and Advanced Alternative Payment Models (APMs). Although clinicians can choose to participate in either program arm, the majority of clinicians will choose, at least initially, to participate in MIPS (4), and it will thus be the focus of this paper. As of January 2017, clinician performance in the following MIPS components will determine Medicare reimbursement amounts to be distributed starting in January 2019: 1) quality; 2) improvement activities; 3) advancing care information (ACI); and 4) cost. A MIPS composite score will be generated on the basis of those domains with the potential for extra credit for exceptional performers. Performance will be ascertained through a variety of avenues including Medicare claims, electronic health record (EHR) data, and reporting through qualified registries. For the 2017 transitional year, clinicians will be able to “pick their pace” and choose to submit a subset of metrics or participate in MIPS for part of the calendar year (5). What competencies should all FITs develop (analogous to ACC COCATS [Core Cardiovascular Training Statement] Level I) (6) to excel in the world of MIPS and value-based health care delivery?

COMPETENCY 1: UNDERSTAND HOW TO MEASURE AND IMPROVE QUALITY OF CARE

The majority (60% of the 2017 MIPS composite score) will be determined by the quality of care delivered as determined through quality metrics. FITs need to understand both the metrics included in the quality domain of MIPS as well as strategies needed to improve

From the ^aCenter for Healthcare Improvement and Patient Safety, Hospital of the University of Pennsylvania, Philadelphia, Pennsylvania; ^bCardiovascular Outcomes, Quality, and Evaluative Research Center, Leonard Davis Institute of Health Economics, University of Pennsylvania, Philadelphia, Pennsylvania; and the ^cDivision of Cardiovascular Medicine, Hospital of the University of Pennsylvania, Philadelphia, Pennsylvania. The authors have reported that they have no relationships relevant to the contents of this paper to disclose.

individual- or practice-level performance. As a first step, training programs should work with their parent divisions/departments to identify the quality metrics that will be reported to Medicare by their institutions as part of MIPS. For reference, many can be found (along with their specifications/methodology, evidence base, and filters applicable to cardiovascular medicine) on the Centers for Medicare & Medicaid Services web site or on third-party sites like DynaMed Plus. Training programs should educate fellows on the types of quality metrics and the methodology of their creation. Once metrics are identified, performance on those measures should be shared with FITs in real time, potentially in the form of a personalized dashboard. Many EHR platforms have the capability of automating the creation of such a dashboard. Additionally, this type of reporting fulfills training program requirements with regard to quality assessment and improvement set forth by the Accreditation Council for Graduate Medical Education (7).

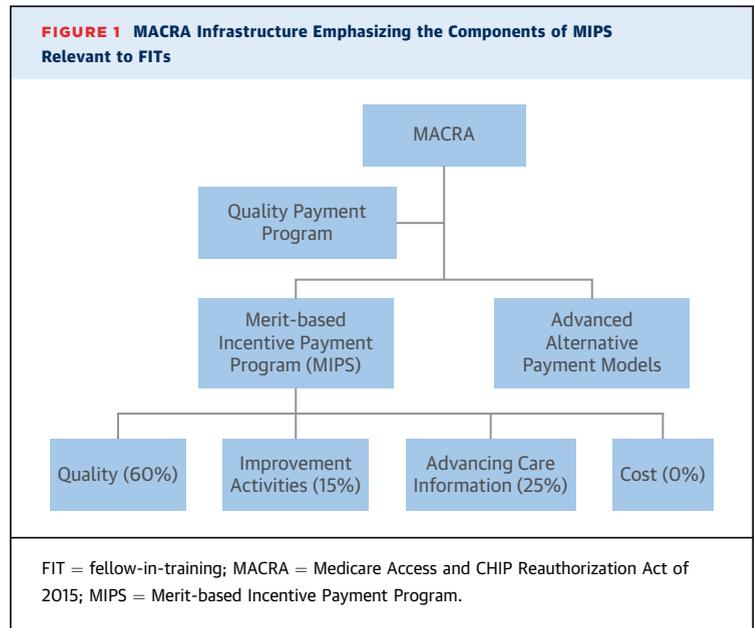
After FITs understand their baseline performance on quality metrics, they should receive training on the methodology needed to improve their performance. Applying these skills after training will provide credit for the improvement activities portion of MIPS (15% of the 2017 MIPS composite score). This training could focus on educating FITs on the following.

1. Local health system QI infrastructure
2. Lean Six Sigma improvement concepts
3. Plan-do-study-act cycles
4. Quality improvement tools such as Pareto charts, Ishikawa diagrams, and Gantt charts
5. Conducting root cause analyses while preparing and delivering mortality and morbidity conferences
6. Analyzing changes in quality metrics using tools such as run and statistical process control charts

For those FITs who are based at institutions that utilize the ACC's National Cardiovascular Data Registry PINNACLE registry (the largest cardiovascular medicine outpatient quality improvement registry), FITs should obtain and review relevant data from PINNACLE that relate to improving the health of their population of patients. This may help prepare FITs to acquire credit for several improvement activities (8,9). FITs should next be able utilize health information technology to receive credit for and improve the quality of care they are delivering.

COMPETENCY 2: BECOME PROFICIENT IN UTILIZING HEALTH INFORMATION TECHNOLOGY

In preparation for excelling in the MIPS domain of ACI (25% of the 2017 MIPS composite score), FITs should



learn how to leverage their local EHR technology in a standardized fashion both to meet ACI requirements as well as to document and receive appropriate credit for the work done toward other MIPS domains. This includes working toward such best practices as the following.

1. Documenting in structured, computable fields or templates in the EHR
2. E-prescribing medications
3. Using the EHR to create after-visit summaries and letters to be sent electronically to referring providers
4. Using the EHR to retrieve clinical information from outside providers
5. Encouraging and engaging patients in utilizing online EHR patient portals
6. Documenting review/reconciliation of clinical information (i.e., medication reconciliation)

Given that EHRs in many institutions still have much room to improve with regard to workflow, FITs should actively engage in optimizing their local EHR with appropriate note templates, order sets, and default options. This type of work lays the foundation for managing costs of care.

COMPETENCY 3: BE MINDFUL OF THE COST OF CARE DELIVERED

Although the cost of care will not initially influence MIPS Medicare reimbursement, it will be added in the future, thus making it important that FITs learn to

practice with an eye toward cost and appropriate resource use. In cardiovascular medicine, the ACC in conjunction with the American Heart Association and other subspecialty groups have created numerous sets of appropriate use criteria that FITs should be familiar with and use as guidelines in clinical practice. This is increasingly important as another piece of legislation, the Protecting Access to Medicare Act of 2014, requires clinicians to utilize appropriate use criteria and associated clinical decision support systems when ordering advanced imaging tests.

The aforementioned competencies apply to all FITs; however, there exist several options for those who wish to obtain advanced competency in value-based health care.

ADVANCED COMPETENCY: BECOME A LEADER IN VALUE-BASED HEALTH CARE DELIVERY

For FITs who wish to develop additional skills and knowledge in value-based health care delivery (similar to COCATS Level II/III competency), the ACC has a tremendous online library of information on MACRA, the QPP, and MIPS. FITs can also turn to their state ACC chapters for additional resources and for speakers willing to give talks on MACRA and its implications. Additionally, there are numerous sessions that FITs can attend, such as the ACC Legislative Conference, the ACC Cardiovascular Summit and Leadership Forum, the Institute for Healthcare Improvement National Forum, and the Association of American Medical Colleges' Integrating Quality meeting, to learn about and meet others who are interested in value-based health care delivery. FITs also can become involved with ACC groups such as

the MACRA Task Force and the Informatics and Health Information Technology Task Force working on MACRA implementation. Finally, for those interested in an immersive experience (analogous to COCATS Level III competency), FITs can obtain advanced training in the skills referenced in the preceding text through online courses as well as dedicated 1- to 2-year quality improvement and patient safety fellowships cataloged by the Association of American Medical Colleges (10).

The shift from volume- to value-based health care is in motion and will occur over the course of the careers of today's FITs. This paper has laid out both basic and advanced competencies needed for success in a value-based environment. It is imperative that FITs and their training programs are attentive to these changes. Furthermore, they should adapt fellowship educational activities appropriately to develop these competencies, thereby positioning FITs to succeed in this new paradigm of health care delivery.

ACKNOWLEDGMENTS The authors thank the fellows and faculty members in the Division of Cardiovascular Medicine at the Hospital of the University of Pennsylvania, including Drs. Thomas P. Cappola, Victor A. Ferrari, Bram J. Geller, Peter W. Groeneveld, Daniel M. Kolansky, Paul J. Mather, Jennifer S. Myers, Michael P. Riley, and Frank E. Silvestry, for their inspiration and support in the creation of this paper.

ADDRESS FOR CORRESPONDENCE: Dr. Srinath Adusumalli, Hospital of the University of Pennsylvania, 3400 Civic Center Boulevard, Room 11-126, Perelman Center for Advanced Medicine South Tower, Philadelphia, Pennsylvania 19104. E-mail: Srinath.Adusumalli@uphs.upenn.edu.

REFERENCES

1. Doyle CC, Mieder W, Shapiro FR. *The Dictionary of Modern Proverbs*. New Haven: Yale University Press, 2012.
2. American College of Cardiology. MACRA: frequently asked questions. Available at: <https://www.acc.org/tools-and-practice-support/advocacy-at-the-acc/macra-information-hub/macra-frequently-asked-questions>. Accessed January 2, 2017.
3. American College of Cardiology. Post-election response from ACC leadership. Available at: <http://www.acc.org/latest-in-cardiology/articles/2016/12/01/14/01/post-election-response-from-acc-leadership/>. Accessed January 3, 2017.
4. Clough JD, McClellan M. Implementing MACRA: implications for physicians and for physician leadership. *JAMA* 2016;315:2397-8.
5. American College of Cardiology. CMS says "pick your pace" for MACRA quality payment program participation in 2017. Available at: <http://www.acc.org/latest-in-cardiology/articles/2016/09/09/08/04/cms-says-pick-your-pace-for-macra-quality-payment-program-participation-in-2017>. Accessed June 12, 2017.
6. Halperin JL, Williams ES, Fuster V. COCATS 4 introduction. *J Am Coll Cardiol* 2015;65:1724-33.
7. Accreditation Council for Graduate Medical Education. Common program requirements. Available at: <http://www.acgme.org/What-We-Do/Accreditation/Common-Program-Requirements>. Accessed April 22, 2017.
8. American College of Cardiology. MIPS: improvement activities. Available at: <https://www.acc.org/tools-and-practice-support/advocacy-at-the-acc/macra-information-hub/issue-briefs/improvement-activities>. Accessed January 5, 2017.
9. Frederick MA, Singh T, Salami S, Oetgen WJ, Rosman HS. First steps: exploring use of a prospective, office-based registry as the foundation for quality improvement in cardiology training. *J Grad Med Educ* 2013;5:694-9.
10. Association of American Medical Colleges. Faculty development resources. Available at: <https://www.aamc.org/initiatives/cei/te4q/267686/general.html>. Accessed May 16, 2016.

RESPONSE: Physicians—Young and Old— Need to Educate Themselves for MACRA

Howard Walpole, MD, MBA

Northeast Georgia Health System, Gainesville, Georgia

E-mail: bo.walpole@nghs.com

The transition from the current fee-for-service reimbursement model to a value-based model, of which MACRA is the catalyst, is the greatest paradigm shift in the U.S. health care industry in the last 50 years. I am encouraged by Dr. Adusumalli and colleagues' recognition of the repercussions of MACRA on their generation. However, all physicians—from the most recently trained to the most senior partners and department chiefs—will feel the disruptive effects of this sea change. This change is not occurring due to a new advancement in medical science, but as a result of the devastating economic effects of spiraling health care costs in the United States. Health care accounted for approximately 17.8% of the U.S. gross domestic product, approximately \$3.2 trillion in 2015 (1). Health care costs have become one of the major drags on the American economy and are considered unsustainable by economic experts, regardless of political affiliation. A reimbursement system based on high-quality, appropriate medical care for the lowest cost is being implemented via the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) as a basis for reducing this cost spiral (2).

MACRA is a detail-laden law that dictates how physicians and other health care providers will be reimbursed for the care they render to Medicare patients. Dr. Adusumalli and colleagues have written a succinct overview of this convoluted law, the details of which are still being refined. Their statement that cost is not a component for 2017 data is correct. The law adds cost as 1 of the components beginning in 2018, accounting for 10% of the 2018

MIPS composite score and increasing to 30% by 2019 (3). It is also important to realize that MIPS is a zero-sum game: bonuses paid to high-performing providers will come from penalties paid by others. Thus, as more providers improve their performance, the number of dollars available for distribution among the winners will decrease. MACRA also poses economic risks for health care systems, as well as practitioners. According to a recently published study by the RAND Corporation, hospitals' Medicare revenue could drop by \$250 billion by 2030 or it could increase by \$32 billion, depending on the amount of risk physicians choose to accept under MACRA (4).

The challenge for fellows-in-training and early career cardiologists is how to obtain adequate training in the new skillsets required to succeed in a value-based health care system. Academic faculty and senior cardiologists are frequently no better educated in these concepts than their fellows and new partners. The medical education establishment must rapidly gain adequate expertise in these concepts to prepare their young colleagues for this new world. Dr. Adusumalli and colleagues provide several venues from which physicians can obtain this education. As mentioned previously, this process continues to evolve; it will be a marathon, not a sprint. Competencies in leadership, teamwork, and collaboration with other participants within the health care arena are equally important. Big data and analytics is another growing field that may provide a competitive advantage in a value-based world (5).

REFERENCES

1. Martin AB, Hartman M, Washington B, Catlin A, for the National Health Expenditure Accounts Team. National health spending: faster growth in 2015 as coverage expands and utilization increases. *Health Affairs* 2017; 36:1166-76.
2. H.R.2-Medicare Access and CHIP Reauthorization Act of 2015. 114th Congress (2015-2016). Available at: <https://www.congress.gov/bill/114th-congress/house-bill/2/text>. Accessed June 8, 2017.
3. Toone K, Burton N, Muhlestein D. MACRA in 2017: Overview, Impact & Strategic Considerations of the Quality Payment Program. Leavitt Partners white paper. Salt Lake City, UT: Leavitt Partners, 2017.
4. Hussey PS, Liu JL, White C. The Medicare Access and Reauthorization Act: effects on Medicare payment policy and spending. *Health Affairs* 2016; 36:697-705.
5. Optum. Make the most of MACRA: learn ins and outs of Medicare's new program. Optum white paper. Available at: <https://www.optum.com/resources/library/macra-quality-payment-program.html>. Accessed June 19, 2017.