POLICY STATEMENT TITLE
- Advancing Care Coordination through Episode Payment Models.

ORGANIZATION
- Centers for Medicare and Medicaid Services.

RELEASE DATE
- Final Rule: January 3, 2017; Delay Date: March 21, 2017; Cancellation Date: August 17, 2017.

POLICY CONTEXT
Payment reform is a tool to improve the quality and consistency of patient care while also reducing unnecessary costs. Cardiovascular disease draws attention for new payment models primarily because it accounts for >$200 billion in annual spending.1 One such model, Advancing Care Coordination through Episode Payment Models (EPM), was an initiative of the Centers for Medicare and Medicaid Services (CMS). These episode payments, also known as bundled payments, were designed to increase coordination, reduce unwarranted variation, and incentivize value-oriented care for patients with coronary artery disease. Providers would have been incentivized with an episode payment linked to specific quality benchmarks. However, after the change in administration in 2017, mandatory EPMs were first delayed and then cancelled. Here, we will focus on the design of the proposal, as well as factors that ultimately prevented implementation. Finally, we will review the future potential for the re-emergence of EPMs.

STRUCTURE OF THE PROGRAM
Originally, the EPM structure was to be implemented July 1, 2017, in phases from 2017 to 2021.2 After the change in administration after the November 2016 election, CMS extended the initiation date of the EPM to January 1, 2018, to allow time to review the policy for modifications.3 In August 2017, CMS proposed a rule to cancel the EPM.4 Enrollees in the initiative would have been hospitals in 98 metropolitan statistical areas, selected randomly from 293 eligible metropolitan statistical areas. Acute care hospitals within these metropolitan statistical areas would continue to receive fee-for-service payments for services beginning with an initial hospitalization for an acute myocardial infarction or coronary artery bypass surgery and extending 90
These changes on quality and value. More commonly, these early models lack the longevity of the EPMs within Medicare, they are likely to re-emerge. Evidence suggests that episode payment models decrease costs, most notably with the Medicare Participating Heart Bypass Center Demonstration, operating from 1991 to 1996, and the Geisinger Health System’s implementation of ProvenCareSM in 2006. In the former, hospitals were paid a single fee for all inpatient Medicare episodes of care. Overall inpatient Medicare costs decreased by 15.5%, and individual hospital costs decreased by a range of 2% to 23%. Similarly, ProvenCareSM resulted in an overall decrease in hospital costs by 5%. Interestingly, neither model demonstrated a substantial improvement in overall health outcomes.6 Similar findings were recently reported in the year 3 analysis of Bundled Payments for Care Improvement, a voluntary program designed to increase value by incentivizing care coordination via repayment models.7 Although these early models lack the longevity of the EPM model or the complexities associated with implementation across different health systems, they are evidence of the effects of policy changes on patients is influenced by unmeasured confounding and as such are prone to selection bias that limits confidence in our understanding of the effects of these policies.

**REASONS FOR THE PROGRAM’S DEMISE**

Although there are several factors that contributed to the cancellation of the mandatory EPM, the primary reason is likely the change in administration in January 2017.4 The director of the US Department of Health and Human Services at the time the EPMs were initially proposed for cancellation, Dr Tom Price, had previously criticized mandatory EPMs. In 2016, while a US congressman, he wrote a letter to CMS that stated that these models constituted “experimenting with Americans’ health” and that such models, while perhaps may be effective at cutting costs, did not engage stakeholders to ensure the “[preservation] and [enhancement] of the quality of care.” Instead, he called for a smaller scale test implementation, in which “no state, healthcare provider, or health insurer [has] any obligation to participate,” with a “[limitation] of the size and scope of CMMI demonstrations so they represent true tests rather than wholesale changes to the statute.”5 The reversal of the EPM rule for cardiac bundles seems to be representative of the shift away from mandatory bundled payment model participation and perhaps instead toward voluntary participation.

**FUTURE OF BUNDLED PAYMENT INITIATIVES**

Despite the hold on mandatory participation in cardiac EPMs within Medicare, they are likely to re-emerge. Evidence suggests that episode payment models decrease costs, most notably with the Medicare Participating Heart Bypass Center Demonstration, operating from 1991 to 1996, and the Geisinger Health System’s implementation of ProvenCareSM in 2006. In the former, hospitals were paid a single fee for all inpatient Medicare episodes of care. Overall inpatient Medicare costs decreased by 15.5%, and individual hospital costs decreased by a range of 2% to 23%. Similarly, ProvenCareSM resulted in an overall decrease in hospital costs by 5%. Interestingly, neither model demonstrated a substantial improvement in overall health outcomes.6 Similar findings were recently reported in the year 3 analysis of Bundled Payments for Care Improvement, a voluntary program designed to increase value by incentivizing care coordination via repayment models.7 Although these early models lack the longevity of the EPM model or the complexities associated with implementation across different health systems, they are
correlates with increased provider referrals, which
sessions attended. A CR incentive program would be
degree of benefit is proportional to the number of CR
reimbursement is likely to be a focus of both government
in the loss of incentives for CR use. Despite a mortality
of high procedural risk, or patient preference to avoid
2 MI, or in whom procedures were not offered because
of an AMI by administrative coding is complex, and the model does not
distinguish between ST-segment–elevation myocardial
infarction (MI) and non–ST-segment–elevation MI when
determining baseline reimbursement pricing. This may
have measurable effects on hospitals with different
acute condition bundles (such as congestive heart fail-
consider in future models. First, procedural bundles (such
as percutaneous coronary intervention or CABG) are
clearly defined to front-line clinicians, facilitating quality
improvement, since the patients are easily defined. In
acute condition bundles (such as congestive heart fail-
ure or AMI), however, there are fewer potential adverse
incentives, such as avoiding PCI for AMI to avoid trigger-
ing a bundled payment. However, for acute conditions,
eligible patients may be less clear and effective tactics
for quality improvement may be more heterogenous.
Although some conditions, such as procedurally
based admissions for PCI, lend themselves well to cat-
ergization in DRG coding, others are less straightforward.
For example, the definition of an AMI by admin-
istrative coding is complex, and the model does not
distinguish between ST-segment–elevation myocardial
infarction (AMI) and non–ST-segment–elevation MI when
determining baseline reimbursement pricing. This may
have measurable effects on hospitals with different
case mixes, such as referral centers for ST-segment–
elevation MI. The resulting adverse incentives may lead
to risk-averse behavior by hospitals, with selection bias
influencing treatment decisions within participating
hospitals. Predictive cost analysis models have dem-
strated that hospitals that care for sicker patients
with fewer financial means may perform worse in this
payment model. This could translate into further dis-
franchising vulnerable populations. Such effects will
require monitoring.
Furthermore, non–ST-segment–elevation MI can
be further divided into type 1 versus type 2 MIs, but
this type of granularity is not possible to assess with
administrative data. In our institution, more than half
of the financial penalties under the Hospital Readmis-
sions Reduction Program occurred in patients with type
2 MI, or in whom procedures were not offered because
of high procedural risk, or patient preference to avoid
revascularization. Patients with AMI not treated with
revascularization have higher use of postacute services
and more costs of care related to readmissions, and
treatment and outcomes of type 2 MIs remain vari-
able. New administrative billing codes, such as codes
for type 2 MI and excessive procedural risk, may address
these potential problems and may allow EPMs to estab-
lish more meaningful baseline prices.

CONCLUSIONS
Despite the reversal from CMS, we think that cardiac
EPMs are likely both to improve the quality of care and
improve value. Given the gaps in quality for patients
related to uneven use, the tremendous costs incurred by these patients, and unrelenting pressure on both government and private payers, we think that some forms of EPMs for cardiac care are likely to re-emerge soon. When they do, especially if they are not implemented with randomization, methodologically rigorous analysis will need to confirm that they improve clinical outcomes and reduce unwarranted costs without unintended consequences.

**ACKNOWLEDGMENTS**

We thank Keely MacMillan for helpful input.

**DISCLOSURES**

Dr Wasfy served (unpaid) on the Health Care Payment Learning and Action Network committee on cardiac episode payment, which provided recommendations to Centers for Medicare and Medicaid Services about episode payments for cardiac conditions. Dr Wasfy also reports a career development award from Harvard Catalyst and the National Institutes of Health (KL2 TR001100). The other author reports no conflicts.

**AFFILIATIONS**

From the Department of Medicine (K.E.B.) and Cardiology Division, Department of Medicine (J.H.W.), Massachusetts General Hospital, Harvard Medical School, Boston.

**FOOTNOTES**

*Circ Cardiovasc Qual Outcomes* is available at http://circoutcomes.ahajournals.org.

**REFERENCES**


2. Centers for Medicare & Medicaid Services (CMS). Medicare Program; Advancing Care Coordination Through Episode Payment Models (EPMs); Cardiac Rehabilitation Incentive Payment Model; and Changes to the Comprehensive Care for Joint Replacement Model. Fed Regist. 2017;82:180–651.

3. Centers for Medicare & Medicaid Services (CMS). Advancing Care Coordination Through Episode Payment Models (EPMs); Cardiac Rehabilitation Incentive Payment Model; and Changes to the Comprehensive Care for Joint Replacement Model; Delay of Effective Date. *Fed Regist*. 2017;82:14464–14466.


Introduction, Cancellation, and Future Promise of Medicare Cardiac Episode Payment Models
Kristin E. Bergethon and Jason H. Wasfy

_Circ Cardiovasc Qual Outcomes_. 2018;11:
doi: 10.1161/CIRCOUTCOMES.117.004345

_Circulation: Cardiovascular Quality and Outcomes_ is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231
Copyright © 2017 American Heart Association, Inc. All rights reserved.
Print ISSN: 1941-7705. Online ISSN: 1941-7713

The online version of this article, along with updated information and services, is located on the World Wide Web at:
http://circoutcomes.ahajournals.org/content/11/1/e004345

Permissions: Requests for permissions to reproduce figures, tables, or portions of articles originally published in _Circulation: Cardiovascular Quality and Outcomes_ can be obtained via RightsLink, a service of the Copyright Clearance Center, not the Editorial Office. Once the online version of the published article for which permission is being requested is located, click Request Permissions in the middle column of the Web page under Services. Further information about this process is available in the Permissions and Rights Question and Answer document.

Reprints: Information about reprints can be found online at:
http://www.lww.com/reprints

Subscriptions: Information about subscribing to _Circulation: Cardiovascular Quality and Outcomes_ is online at:
http://circoutcomes.ahajournals.org//subscriptions/