

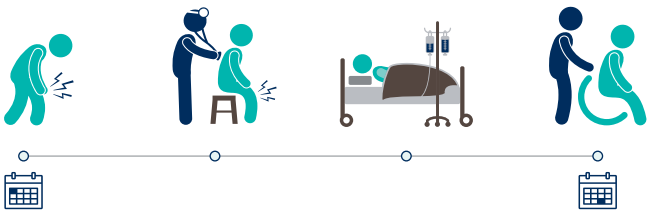


# IHPI BRIEF: UNDERSTANDING & ANALYZING Episodes OF CARE (EOC)



## DEFINING EPISODES OF CARE (EOC)

EoC begin with a healthcare “event,” such as a knee replacement surgery, and extend throughout a window of time when a patient receives healthcare services following that event.

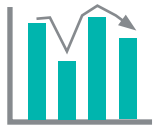


## HOW ARE EPISODES OF CARE DATA USED?

EoC data are relevant for developing and updating healthcare payment policies such as:

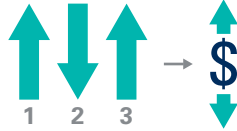
- Bundled payments
- MACRA – Medicare Access and CHIP Reauthorization Act
- MIPS – Merit-based Incentive Payment System
- APMs – Alternative Payment Models

## TAKEAWAYS FROM OUR RESEARCH ON SURGICAL EoC



### 1 Large payment variations exist in Medicare payments for EoC.

Medicare payments can vary 40–60% for the same surgery.



### 2 Payment variation is predominantly driven by five factors:

- Procedure(s) performed
- Complications
- Patient complexity
- Post acute care use
- Readmissions



### 3 Drivers of payment variation differ across hospitals.

Hospitals need access to comprehensive data on their own EoCs to address variations.



### 4 Patient complexity causes differences in bonuses and penalties that hospitals may receive.

Patient complexity includes factors like age, health conditions, or socioeconomic status.

## WHAT DOES ALL OF THIS MEAN FOR POLICY DISCUSSIONS?

As the Centers for Medicare & Medicaid Services (CMS) continues to pursue payment reform around episodes of care, several factors should be considered:

- These programs should incorporate risk adjustment to account for hospitals that care for complex patients.
- CMS should provide all hospitals access to EoC data so they can evaluate ways to improve care and decrease unnecessary costs.
- For each clinical condition in an EoC, CMS should tailor the payment incentives to the specific sources of variation in that condition.
- CMS should continually evaluate payment variation and rebalance incentives/payments when needed.



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## **EoC STUDIES BY OUR MEMBERS:**

### **Episode-based Payment Variation for Urologic Cancer Surgery**

Ellimoottil C, Li J, Ye Z, Dupree JM, Min HS, Kaye D, Herrel LA, Miller DC.

*Urology*. 2018 Jan;111:78-85.

PMID: 29051001 [doi.org/10.1016/j.urology.2017.08.053](https://doi.org/10.1016/j.urology.2017.08.053)

### **Drivers of Payment Variation in 90-Day Coronary Artery Bypass Grafting Episodes**

Guduguntla V, Syrjamaki JD, Ellimoottil C, Miller DC, Prager RL, Norton EC, Theurer P, Likosky DS, Dupree JM.

*JAMA Surg*. 2018 Jan 1;153(1):14-19.

PMID: 28832865 [doi.org/10.1377/hlthaff.2017.0940](https://doi.org/10.1377/hlthaff.2017.0940)

### **Risk Adjustment May Lessen Penalties On Hospitals Treating Complex Cardiac Patients Under Medicare's Bundled Payments**

Markovitz AA, Ellimoottil C, Sukul D, Mullangi S, Chen LM, Nallamothu BK, Ryan AM.

*Health Aff (Millwood)*. 2017 Dec;36(12):2165-2174.

PMID: 29200351 [doi.org/10.1001/jamasurg.2017.2881](https://doi.org/10.1001/jamasurg.2017.2881)

### **Implications of the Definition of an Episode of Care Used in the Comprehensive Care for Joint Replacement Model**

Ellimoottil C, Ryan AM, Hou H, Dupree JM, Hallstrom B, Miller DC.

*JAMA Surg*. 2017 Jan 1;152(1):49-54.

PMID:27682525 [doi.org/10.1001/jamasurg.2016.3098](https://doi.org/10.1001/jamasurg.2016.3098)

### **Identifying Drivers of Episode Cost Variation With Radical Prostatectomy**

Herrel LA, Syrjamaki JD, Linsell SM, Miller DC, Dupree JM.

*Urology*. 2016 Nov;97:105-110.

PMID: 27496300 [doi.org/10.1016/j.urology.2016.05.071](https://doi.org/10.1016/j.urology.2016.05.071)

### **Medicare's New Bundled Payment For Joint Replacement May Penalize Hospitals That Treat Medically Complex Patients**

Ellimoottil C, Ryan AM, Hou H, Dupree J, Hallstrom B, Miller DC.

*Health Aff (Millwood)*. 2016 Sep 1;35(9):1651-7.

PMID: 27605647 [doi.org/10.1377/hlthaff.2016.0263](https://doi.org/10.1377/hlthaff.2016.0263)

### **Medicare's Bundled Payments for Care Improvement initiative: expanding enrollment suggests potential for large impact**

Chen LM, Meara E, Birkmeyer JD.

*Am J Manag Care*. 2015 Nov;21(11):814-20.

PMID: 26633254

### **Variations in Medicare payments for episodes of spine surgery**

Schoenfeld AJ, Harris MB, Liu H, Birkmeyer JD.

*Spine J*. 2014 Dec 1;14(12):2793-8.

PMID: 25017141 [doi.org/10.1016/j.spinee.2014.07.002](https://doi.org/10.1016/j.spinee.2014.07.002)

### **Large variations in Medicare payments for surgery highlight savings potential from bundled payment programs**

Miller DC, Gust C, Dimick JB, Birkmeyer N, Skinner J, Birkmeyer JD.

*Health Aff (Millwood)*. 2011 Nov;30(11):2107-15.

PMID: 22068403 [doi.org/10.1377/hlthaff.2011.0783](https://doi.org/10.1377/hlthaff.2011.0783)

**For more information**, please contact Eileen Kostanecki, IHPI's Director of Policy Engagement & External Relations, at [ekostan@umich.edu](mailto:ekostan@umich.edu) or 202-554-0578.

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