MAYO CLINIC



# Rising Health Care Charges: A Red Herring in a Value-Based Health Care World?

See also page 995

In this issue of *Mayo Clinic Proceedings*, through an analysis of urologic surgical episodes of care across 392 hospitals, McClintock et al[1] found that although cost per hospital episode of care decreased 20% from 2005 to 2015, the charges for these episodes of care increased more than 25% during this same period. Hospitals with the highest charge to cost ratios were more likely to be safety net, nonteaching, urban, lower surgical volume, smaller, and located outside the Midwest. The methods used in this study meet the traditional criteria for internal validity. The sample of hospitals was the Premier Healthcare Database (Premier Inc), an all-payer database designed to measure health care quality and resource utilization that encompasses more than 700 acute care hospitals and 20% of annual discharges in the United States. This database represents the largest available inpatient resource utilization data resource in the United States and provides a reasonably generalizable sample in terms of the external validity of the study results. Included hospitals all had cost accounting systems, which provided more accurate cost data, whereas excluded hospitals had only cost to charge ratio data. However, the authors do not provide information about hospitals without cost accounting systems, including how they vary from hospitals with such systems. Although these inclusion and exclusion criteria make sense in the tradeoff of data availability vs generalizability, Pearl and Mackenzie[2] note the importance of examining the data-generating process because systematic exclusion of data can result in statistical associations that are biased from those in the overall population. The authors are correct in noting that time-driven activity-based costing, although a study limitation, provides an opportunity for improving our understanding of costs related to labor inputs and other resources. Furthermore, Porter[3] stressed the importance of understanding costs over the entire cycle of care in relation to 3 tiers of outcomes, including health and functional status, recovery, and sustainability. Thus, it is important to underscore that the cost component of the analysis by McClintock et al[1] is focused only on costs to the hospitals and not on the total health care system cost for an entire episode of care or the cost experienced by a given patient.

Although the study by McClintock et al[1] is the first secular trend analysis of costs and charges for surgical episodes of care, as described by the authors, a review of 2014 utilization and payment data from the Centers for Medicare and Medicaid Services,[4] which compared overall charges with total Medicare-allowable amount, yielded a median charge to payment ratio of 2.5, with the highest ratios in specialties for which there is the least ability to discriminate based on caregiver or network affiliation (ie, anesthesiology, pathology, or emergency medicine). An analysis of 2012 national Medicare data found that hospitals with a high cost to charge ratio were more likely for profit, system affiliated, urban, and nonteaching.[5]

If these findings are internally valid and externally generalizable, what are the implications and possible policy solutions? At first pass, a superficial view of the hospital cost to charge ratio quandary might suggest that this problem is a trivial one in a value-based health care world. These charges, as acknowledged by the authors, are merely asking prices, given that the true rate of reimbursement is often significantly lower and tied to either fixed or negotiated sums,[5] and in 2013, US hospitals were paid only 39% of the total amount billed to patients or their insurers.[6] Although third-party payers and, increasingly, accountable care



Mayo Clin Proc. ■ June 2019;94(6):946-948 ■ https://doi.org/10.1016/j.mayocp.2019.04.012
www.mayoclinicproceedings.org ■ 

organizations[7] are driving hospitals and physicians to accept in-network rates that may have little relation to actual officially listed charges, the findings of McClintock et al[1] have significant financial implications for the middle class uninsured who do not meet the criteria for financial assistance, those with high deductibles, and individuals receiving care that is either out of network or uncovered by their policy. Although considerable debate exists regarding the percentage of bankruptcies in the United States caused by medical expenses, with estimates ranging from 3%[8] to more than 60%,[9] there is no question that some segments of American society are disproportionately harmed by rising hospital charge trends. As described by McClintock et al,[1] these charge practices create other adverse effects,[10] including (1) higher overall spending, (2) cost shifting resulting in safety net hospitals having higher cost to charge ratios given that a disproportionate percentage of their patients are either uninsured or covered by Medicaid, (3) barriers to entry for potentially innovative insurers, and (4) inefficiencies in value-based care network management given that the resources devoted to managing out-of-network charge practices have little relationship to actual costs of care.

McClintock et al[1] make the standard economic argument that more price (and cost) transparency, ie, "sufficient usable information," is needed. The problem with this "economic approach" based on market information is that it assumes that the patient is making the decision related to selection of hospital facility for care. In reality in most circumstances, the patient's specialist physician often determines where the patient receives treatment based on factors such as (1) in what hospital that clinician is privileged, (2) whether the hospital is in-network, (3) whether the physician has a joint venture investment or some other financial linkage with a given hospital, and (4) workflow convenience for the physician in terms of the geographic proximity of the hospital location to the physician office location(s). Better understanding of pricing information by physicians will help patients make better shared decisions, typically within network. Physicians and patients must now have clinical and financial discussions when determining treatment plans if costs to the patient and the employer-sponsored health plan are to be reduced. Even with those discussions, much of the pricing will remain shrouded in the mystery of what actual reimbursement will be under both provider contracts and the employee's benefit plan.

In an era of value-based health care and with the possible current legal threats to the expanded health care access enabled by the Affordable Care Act, how important is the rise in hospital charges in the face of declining hospital costs? As reviewed recently by Glickman et al,[11] there is considerable evidence that health care costs across the United States were substantially lower in 2017 relative to 2017 cost estimates performed in 2010 associated with the Affordable Care Act. Nevertheless, health care per-capita spending in the United States in 2017 was still nearly $11,000 and nearly 30% more expensive than the country with the next most expensive health care expenditures. The $20,000 average family premium for employer-sponsored health insurance in the United States in 2018 was nearly one-third of the median household income.[12] In addition, in a 2018 Gallup poll, health care costs were viewed to be "the most urgent health care problem facing this country at the present time." Therefore, the fundamental problem for health care in the United States continues to be the cost of health care, not secular trends in rising health care charges. Certainly, the current hospital charge situation in the United States is economically inefficient in terms of the distortions among charges and costs and reimbursement as it is inequitable in its negative financial effects on specific segments of American society. However, these problems will likely diminish in importance with the continued evolution of value-based health care forces and extended health care coverage, with providers increasingly assuming the total cost-of-care financial risk.

Changing reimbursements and a focus on improving short- and long-term health care outcomes, as well as patient safety, under increased financial accountability, will frame the real value equation for health care delivery across the United States.

**David J. Ballard, MD, MSPH, PhD**
Mentice AB
Gothenburg, Sweden
Department of Health Policy and Management
UNC Gillings School of Public Health
The University of North Carolina at Chapel Hill

**Neil S. Fleming, PhD**
Center for Clinical Effectiveness
Baylor Health Care System
Dallas, TX
Robbins Institute for Health Policy and Leadership
Hankamer School of Business Baylor University
Waco, TX

**Potential Competing Interests:** Dr Ballard is on the board for Mentice AB. The other author reports no competing interests.

**Correspondence:** Address to David J. Ballard, MD, MSPH, PhD, Department of Health Policy and Management, UNC Gillings School of Public Health, The University of North Carolina at Chapel Hill, Chapel Hill, NC 27599 (david.joseph.ballard@gmail.com).

## REFERENCES

1. McClintock TR, Ye Wang Y, Shah MA, Mossanen M, Chung BI, Chang SL. Hospital charges for urologic surgery episodes of care are rising in spite of declining costs. *Mayo Clin Proc*. 2019;94(6):995-1002.
2. Pearl J, MacKenzie D. *The Book of Why: The New Science of Cause and Effect*. New York, NY: Basic Books; 2018.
3. Porter ME. What is the value in health care? *N Engl J Med*. 2010; 363(26):2477-2481.
4. Bai G, Anderson GF. Variation in the ratio of physician charges to Medicare payments by specialty and region. *JAMA*. 2017; 317(3):315-318.
5. Bai G, Anderson GF. Extreme markup: the fifty US hospitals with the highest charge-to-cost ratios. *Health Aff (Millwood)*. 2015;34(6):922-928.
6. American Hospital Association. *Hospital Statistics*. Chicago, IL: American Hospital Association; 2013.
7. Ballard DJ. The potential of Medicare accountable care organizations to transform the American health care marketplace: rhetoric and reality. *Mayo Clin Proc*. 2012;87(8):707-709.
8. Hamel L, Norton M, Pollitz K, Levitt L, Claxton G, Brodie M; Kaiser Family Foundation. The Burden of medical debt: results from the Kaiser Family Foundation/New York Times Medical Bills Survey. https://www.kff.org/health-costs/report/the-burden-of-medical-debt-results-from-the-kaiser-family-foundationnew-york-times-medical-bills-survey. Published January 5, 2016.
9. Himmelstein DU, Thorne D, Warren E, Woolhandler S. Medical bankruptcy in the United States, 2007: results of a national study. *Am J Med*. 2009;122(8):741-746.
10. Fuse Brown EC. Irrational hospital pricing. *Hous J Health Law Policy*. 2014;14:11.
11. Glickman A, DiMagno SSP, Emanuel EJ. Next phase in effective cost control in health care. *JAMA*. 2019;321(12):1151-1152.
12. Henry J. Kaiser Family Foundation. 2018 Employer Health Benefits Survey. https://www.kff.org/health-costs/report/2018-employer-health-benefits-survey/. Published October 3, 2018. Accessed March 29, 2019.