Variation in Pediatric Care at US Hospitals

The Centers for Medicare and Medicaid Services recently released information regarding the amount hospitals charge for various treatments and conditions as part of the Obama administration’s effort to make our health care system more accountable and affordable.1 These data demonstrate wide variation in charges among institutions for the care of common inpatient conditions; differences that cannot be accounted for by regional differences in cost of living.

Three articles in this month’s issue of *Pediatrics* demonstrate the widespread variation in resource utilization among children cared for in children’s hospitals in the United States. Tieder et al observed wide variation in the care provided to children hospitalized with diabetic ketoacidosis, as well as differences among hospitals in resource utilization, length of stay, costs, and rates of readmission.2 Another article in this month’s issue of *Pediatrics* by Florin observed significant variation in the management of children with pneumonia cared for in the emergency department (ED) setting.3 Adjusting for the severity of illness, EDs that use less diagnostic testing and resources have lower hospitalization rates, without a corresponding increase in ED revisits. Lastly, Knapp et al showed regional variation in the use of chest radiography among children with asthma cared for in US EDs.4 These studies, which demonstrate variation in care with common conditions, present an opportunity for physicians and hospitals to evaluate the care they provide to reduce unnecessary, or low-value, diagnostic testing and to improve patient care.

Health care is in a crisis. Currently, the United States spends ∼18% of Gross Domestic Product on health care, and federal health care costs are the largest contributor to national debt. There are over 5700 hospitals in the United States and the total expense for these institutions was over $770 billion in 2011.5 There has never been a more important time or a greater societal mandate to reduce health care costs than right now.

Reduction in the variability of health care is an important, early step in reducing health care costs. The delivery of high-value care is contingent upon having the best information to make care decisions. Accordingly, evidence-based guidelines for diagnosis and treatment can improve the reproducibility and standardization of care. Once established, guidelines can provide a platform to measure quality and serve as a vehicle for deliberate enhancements in practice across large systems of care.

Reduction in care variability has many other tangible benefits as well. Decreasing variability in care can result in decreased resource utilization and more efficient use of time, space, and personnel. This in turn can reduce clinician stress and increase patient satisfaction.

So, despite the overwhelming benefit from reducing variability in health care, a tremendous amount of variation still exists. This invites several questions. Why is there so much variation? For diseases such as pneumonia or diabetic ketoacidosis, why is there not a universally

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ABBREVIATION
ED—emergency department

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accepted standard of care? If evidence exists, what are the factors that prevent physicians from adopting a “best-care strategy”? Do we truly believe that there is too much variation in the clinical manifestations of diseases among individual patients to expect physicians and hospital systems to provide similar care to all patients? We do not believe this is so.

Many clinicians believe experience trumps evidence-based literature in guiding management decisions. The argument that “I do not practice cookbook medicine” still resonates with many practitioners. To the contrary, evidence-based guidelines are not protocolized medicine. As long as physicians care for individual patients, they will need to adapt management decisions based on a complex integration of details and experience that can still ensure the best care for that specific patient. There are times this care appropriately deviates from a standard guideline. However, this does not mean that many (or even most) individuals cannot be treated according to guidelines for many common conditions. As practitioners, we need to use evidence-based guidelines to reduce unnecessary variation in care.

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Fee-for-service health care models, which have been the predominant system to date, will soon be replaced by accountable care organizations. The modality by which physicians and hospitals are reimbursed will rapidly change to a system rewarding quality and cost-efficient care. Within these models, physicians must strive to find the optimal way to manage specific diseases, as variation in the systems will most often lead to increasing cost. As such, physicians and health care systems must be willing to adopt best practices for the management of common conditions.
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