COMMENTARY

Getting an "A": Report Cards for Reducing Health Care Waste

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The health care system in our country is facing a number of challenges. We spend close to $3 trillion, or 18% of our gross domestic product, on health care annually, with projections to reach an unsustainable 20% of our gross domestic product by 2020.[1] A good first step to reducing costs is eliminating waste because up to one third of medical expenditures constitute waste and rework.[1] Berwick and Hackbarth[1] prioritize cutting waste over the more traditional routes of cuts in care or coverage, "Here is a better idea: cut waste. That is a basic strategy for survival in most industries today, ie to keep processes, products, and services that actually help customers and systematically remove the elements of work that do not." Physicians have envisaged this lean strategy as a decrease in "low-value care," defined as health care services with little potential benefit or for which less expensive alternatives are available.[2] In addition to increasing costs, low-value care has the potential to harm patients, decreasing the quality of care. Therefore, eliminating low-value care has benefits on both sides of the value equation, defined as quality divided by costs.

Efforts to improve the health care delivery system and decrease waste are generally mediated through quality metrics. Although outcome measures exist, currently most quality measures are process measures. These process measures can target underuse, in which too little care has been provided (eg, failure to obtain an appropriate screening test); overuse, in which too much care has been provided (eg, prescribing antibiotics for a viral upper respiratory tract infection); or misuse, in which care has been provided incorrectly or a preventable complication occurs (eg, a delay in antibiotic therapy for bacterial pneumonia or a central line-associated bloodstream infection).[2,3] Key federal efforts to improve the health care delivery system include the creation of the National Quality Forum (NQF), and the Medicare Access and Children's Health Insurance Program Reauthorization Act. The NQF reviews and endorses quality measures with over 625 endorsed measures. The Medicare Access and Children's Health Insurance Program Reauthorization Act represents the federal government's attempt to incentivize quality through its quality program, including the Merit-based Incentive Payment System (MIPS), which ties payment to quality. The quality metrics contained in the MIPS are primarily process measures. Of the 271 quality measures for MIPS in 2017, ~15 (5.5%) can be classified as overuse measures, and only 3 of those apply directly to children: avoiding systemic antibiotics in otitis externa and in upper respiratory infections, and avoiding computerized tomography scans for mild head trauma (refer to https://qpp.cms.gov/mips/quality-measures). The majority of NQF measures are also process measures. Although NQF does not specifically track overuse measures, a brief review found ~20 (3%) NQF-endorsed measures address some aspect of overuse (Shantanu Agrawal, MD, MPhil, personal communication, 2017). This low rate of overuse measures found in the MIPS, and in the NQF catalog, compares to the

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rate in a national survey of pediatric quality measures. The results of the survey revealed that a majority of pediatric measures are process measures (59%), and only a minority of these process measures focused on overuse (13%), with the majority of existing measures focusing on underuse (77%) and remaining measures focusing on misuse (10%).[4]

In 2012, the American Board of Internal Medicine Foundation launched the Choosing Wisely Campaign (CWC) with the goal of reducing unnecessary medical tests and treatments, and encouraged medical societies to develop a list of tests or therapies that may be wasteful and have minimal impact on clinical care and outcomes for the patient. With this charge, the Society of Hospital Medicine (SHM) Pediatric Committee published 5 pediatric recommendations of unnecessary treatments, tests, or monitoring to be reduced: bronchodilator use for children with bronchiolitis, systemic steroids for children <2 years of age with lower respiratory tract infection, anti-reflux medications for gastroesophageal reflux in infants, chest radiography for children with uncomplicated asthma or bronchiolitis, and continuous pulse oximetry in children with acute respiratory illness (unless on supplemental oxygen).[5]

In this issue of *Hospital Pediatrics*, Reyes et al[6] describe the development of a novel "Report Card," which was developed by using the 5 pediatric recommendations from the SHM-CWC. The report card displays the hospital and similarly-matched peer performance, as well as the benchmark, for each of the 5 included metrics. The format allows for both visual and numeric comparison of both the peer group and the benchmark for each metric for the given hospital. Benchmarks for each metric were established by using the Achievable Benchmarks of Care (ABC) methodology to establish attainable goals. This ABC methodology has been previously used to establish realistic goals of care across different hospitals in different settings.[7–9] Reyes et al[6] used recommendations endorsed by the SHM-CWC group, and established an achievable goal for each metric across 32 hospitals participating in the Pediatric Health Information System (PHIS), which represents free-standing children's hospitals across the country. This report card may be available for all PHIS participating members so institutions can use these data to focus their quality improvement efforts where there are significant outliers. This report card is a novel opportunity to increase the awareness of the problem of overutilization and overtreatment in pediatrics.

The drivers and harms of overutilization and overtreatment in our current health care system are numerous. The financial incentive in a fee-for-service model encourages doing more: more tests, more treatment, more medications, more procedures. But other drivers exist beyond financial gain, such as the fear of litigation, differing cultural expectations, patient or parent demands, and the inability to grapple with diagnostic uncertainty.[10] Although there are multifactorial motivations pushing us toward overutilization and overtreatment, we cannot ignore that overuse can cause direct harm to the patient.[11] These harms vary and can be immediate or delayed, such as tachycardia from a bronchodilator, radiation exposure from a computerized tomography scan, or downstream interventions due to a false-positive result from an unnecessary blood culture. This conversation of overuse is linked to value-based care, and the metrics included in the report card are stepping us toward value-based care because they encourage a reduction in tests and medications in which there is little to no evidence of benefit.

The use of this PHIS report card with ABCs represents 1 of many attempts to address overuse and waste in medicine outside of the federal government. The CWC now comprises more than 500 specialty society recommendations. The not-for-profit groups Preventing Over-diagnosis and the Lown Foundation both have their fifth conference on overuse this year. The newly formed High Value Practice Academic Alliance, a consortium of academic institutions housed at Johns Hopkins School of Medicine, will hold its first research and education conference this year. The British Medical Journal oversees the Too Much Medicine initiative that combats over diagnosis and unnecessary care.[12] The *Journal of the American Medical Association* network and *Hospital Pediatrics* both publish a recurring series of commentaries addressing overuse, entitled "Less is More" and "Bending the Value Curve," respectively. "Bending the Value Curve," the University of Colorado's Do No Harm Project,[13] and the *Journal of the American Medical Association Internal Medicine*'s "Teachable Moments" series all require or encourage medical trainee authorship, attempting to instill these concepts in doctors when they are most receptive. Similarly, high value care curricula are now available for adult and pediatric medicine. The American Academy of Pediatrics' Value in Inpatient Pediatric (VIP) network is the only quality improvement network explicitly dedicated to addressing overuse, as evidenced by the conclusion of its mission statement "with a special focus on eliminating harm and waste caused by over utilization."[14,15] The VIP network comprises 354 pediatric hospitalists from over 200 hospitals, and has addressed 4 of the 5 SHM-CWC metrics in its projects. The majority of measures in every VIP project are overuse measures, which the network terms "value metrics," and this group has been successful in reducing unnecessary diagnostic tests and treatments for common inpatient conditions like bronchiolitis and pneumonia.[14,15]

In this edition of *Hospital Pediatrics*, Reyes et al[6] have operationalized a novel report card for recommendations endorsed by the CWC. Reducing waste in our current health care system is a complicated process, and the national quality agenda to improve our health care system is moving too slowly. We need both federal and local efforts to advocate for quality measurement based on evidence and science to see real progress. We applaud Reyes et al[6] for introducing a novel report card to help initiate local change to improve care for children by decreasing low-value care.

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