

## Waste in the US Health Care System—Insights For Vision Health

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In 1998, the Institute of Medicine defined 3 problems in health care quality: underuse, misuse, and overuse.<sup>1</sup> The Institute of Medicine Committee on Better Care at Lower Costs estimated that in 2009, about 30% (or roughly \$750 billion) was wasted on excessive administrative expenses, fraud, unnecessary services, and other causes.<sup>2</sup> This fueled efforts to

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identify duplicative and unnecessary costs and separate low-value care from high-value care. In 2012, Berwick and Hackbarth<sup>3</sup> pointed out that the best strategy to reduce costs and still meet the needs of the public for high-quality care was to reduce waste, estimating that the lower end of potential savings was more than 20% of total health care spending. An analysis<sup>4</sup> of 2014 medical claims in Virginia found that a high volume of low-value services (costing \$538 or less) accounted for the bulk of unnecessary costs.

In this issue of *JAMA*, Shrank et al<sup>5</sup> report on the levels of waste in 6 major domains, including failure of care delivery, failure of care coordination, overtreatment or low-value care, pricing failure, fraud and abuse, and administrative complexity, updating the Institute of Medicine and the Berwick-Hackbarth reports. The authors have concluded that the estimated costs of waste ranged from \$760 billion to \$935 billion, which constitutes about one-quarter of all health care costs, and that savings from reducing waste could save about \$191 billion to \$282 billion. From our perspective, what are the key insights for those in vision care?

Several of these 6 domains may be areas in which ophthalmologists and optometrists can work to reduce the costs of care without adversely affecting the quality of care or patient outcomes. First and most directly, reduction of overtreatment or low-value care could be associated with substantial savings. Berwick and Hackbarth<sup>3</sup> defined overtreatment as “the waste that comes from subjecting patients to care that, according to sound science and the patients’ own preferences, cannot possibly help them—care rooted in outmoded habits, supply-driven behaviors, and ignoring science.”<sup>3(p1514)</sup> Driving the use of more tests and treatments includes factors of direct-to-consumer advertising, the mentality that more is better rather than that less is more, and medicolegal liability concerns, which have been described as “the perfect storm of overutilization.”<sup>6(p2789)</sup> The negative consequences of overuse of medical tests and treatments not only encompass costs but also potential physical impairments in the form of complications or adverse effects, psychological effects of anxiety or stress, treatment burden, disruption of social relationships to attend medical appointments and adhere to management, and possible dissatisfaction with health care or mistrust.<sup>7</sup>

The nexus of the discussion and policymaking on overtreatment or low-value care and the choice of different similar options remains patient-centered care. It involves a dialogue between the patient and her or his physician. Applying shared decision-making in which clinicians and patients together assess the best available evidence in considering options can best select and carry out well-informed preferences.<sup>8</sup> The patient determines what constitutes high-value care in their situation, given information about the choices, risks, benefits, and costs. For example, patients have exercised their vote for value-based care by paying out of pocket for services, such as premium intraocular lenses or cosmetic procedures.

Medicine and ophthalmology have initiated evidence-based efforts to target these areas. In 2012, the American Academy of Ophthalmology announced that they were joining in the Choosing Wisely campaign, an effort to encourage conversations between patients and physicians to reduce unnecessary tests and procedures and choose care supported by evidence, free from harm, and not duplicative of tests or procedures received already.<sup>9</sup> The Academy identified 5 recommendations on potential tests and treatments for which the necessity should be questioned and conversations spurred with patients on what is appropriate for their individual situation. These 5 ideas were routine preoperative medical tests, routine imaging for patients without signs or symptoms of eye disease, antibiotics for adenoviral conjunctivitis, routine antibiotics for eye injections, and punctal plugs for mild dry eye. Overall, the Choosing Wisely campaign has worked with 80 partners, including the National Business Coalition on Health and the Pacific Group on Health, and 70 consumer organizations, including the American Association of Retired Persons and Consumers Union, and has published 550 recommendations and distributed materials to millions of consumers.

Second, in addition to low-value care, the concept of pricing failure is also potentially pertinent to the ophthalmology specialty. This is defined as the waste that comes as prices migrate far from those expected in well-functioning markets (that is, the actual costs of production plus a fair profit). For example, because of the absence of effective transparency and competitive markets, US prices for diagnostic procedures, such as magnetic resonance imaging and computed tomographic scans, are several more times than identical procedures in other countries. Eye care as a specialty has among the highest rates of use of branded medications when generic medications are available.<sup>10</sup> In addition, the Comparison of Age-Related Macular Degeneration Treatments Trials (CAT) trial demonstrated that generic bevacizumab resulted in noninferior visual acuity outcomes compared with ranibizumab when administered monthly for 2 years.<sup>11</sup>

Third, failure of care coordination in visits among different specialists for second opinions or difficulties in emergency department coverage for eye care results in additional, potentially repetitive testing or visits. Newer approaches to enhanced care with fewer visits would help address this factor. For example, initiatives in electronic health have the potential to enhance the efficiency of care and reduce waste from unnecessary repetitive testing and visits.

Finally, there is an area that is more challenging to categorize in a time of rapid innovation. Are new tests or approaches truly transformative or incremental? Is the value received sufficient to justify the costs involved? A prime example is in the area of genetic diseases for testing and treatment. The potential is tremendous, but the promise has not yet been fulfilled for many eye diseases, particularly complex diseases. The American Academy of Ophthalmology has cautioned that un-

til clinical trials demonstrate benefit, routine genetic testing of patients with complex eye diseases is not warranted.<sup>12</sup>

As the US health care system works to provide eye (and all other health) care to many who do not currently use beneficial care, the obligation to identify savings from the reduction of waste should be central to clinicians' ability to meet goals. To be successful, we recommend continuing to engage with patients to determine what value is to each patient. By engaging with patients on value-based care, ophthalmologists not only are practicing patient-centered care but also are saving costs, even potentially across other waste categories, including administrative complexity and failure of care delivery.<sup>5</sup> We believe ophthalmologists and patients together can help address waste in the health care system by appraising the value of care and spending health care dollars and resources wisely.

#### ARTICLE INFORMATION

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