



Eliminating Waste in Healthcare

Strategies to improve outcomes and reduce costs

by Ellen Martin

Editor's note: Awarded the 2014 Nightingale Scholarship by the ASQ Healthcare Division.

The United States spends more on healthcare than any other country in the world, yet higher spending has not resulted in better health. The most immediate opportunity for reducing healthcare costs is to eliminate waste, currently estimated to account for one-third of healthcare expenditures.¹ Waste is defined as healthcare services that do not add value or improve patient outcomes. Healthcare professionals are ethically obligated to provide the best care possible to individual patients and their families. At the same time, they must be good stewards of finite resources for future health needs.²

There are many causes of waste in healthcare, and an analysis of all potential improvement strategies is beyond the scope of this essay. The purpose of this paper is to explore two categories of waste that are influenced by clinical practice patterns—overtreatment and failure of care coordination—and describe promising strategies that have the potential to reduce wasteful spending and improve health outcomes simultaneously.

Part one: the toll of overtreatment

Overtreatment costs the healthcare system an estimated \$192 billion per year.³ Also known as overutilization or overuse, this issue affects millions of patients and is defined as “the provision of treatments that provide zero or negligible benefit to patients and potentially exposes them to risk of harm.”⁴ Eliminating overtreatment represents the quickest route to



improved care at lower costs.⁵ Complex, interrelated factors contribute to overtreatment, including: social expectations of physician-patient interactions, misaligned financial incentives and a medical culture prone to “do more.” Overtreatment poses a risk to patients who may be harmed by tests or treatments, such as radiation exposure from diagnostic testing or procedural complications. Treatments such as chemotherapy in advanced cancer may be burdensome to patients, negatively impact their quality of life and have little beneficial effect on survival.⁶

Some healthcare professionals maintain that overutilization is caused by patient factors, such as expectations and direct-to-consumer medical marketing. One well-documented example involves the overuse of antibiotics. It is common in the United States for people with colds to see their doctors to obtain antibiotics. Recent news coverage highlights the growing public health threat from antimicrobial resistance to a number of drugs. Despite the fact that physicians are aware of antibiotic overuse, physicians frequently feel compelled to satisfy patient expectations and accommodate requests for antibiotics.⁷ This situation illustrates the complex interaction of cultural norms and financial incentives. Patients and families expect that when an ill person goes to the doctor, the physician will provide “something” to improve the condition. Financial incentives also influence physician practice. Physician revenue depends on seeing as many office patients as possible. From a productivity perspective, it takes longer to explain why an antibiotic is not recommended than it takes to write a prescription.

One promising strategy to reduce overtreatment is the “Choosing Wisely” campaign, initiated by the American Board of Internal Medicine Foundation. This program was designed to facilitate dialogue between patients and physicians about healthcare choices. Medical



societies were challenged to identify five tests or procedures commonly overused in that specialty. This top-five list was described as a prescription for quickly saving money in that specialty while still maintaining high-quality care.⁸ The lists are designed as a frameworks to support individualized decision making born of conversations between physicians and patients and are used as needed based on each patient's unique circumstances. Physician leadership in decreasing overutilization demonstrates concern for patient care and ensures that future waste-reduction efforts are focused on the best interests of patients.

Part two: uncoordinated care

Another waste is the failure of care coordination, a common cause of emergency room visits and hospital readmissions. One in five discharged Medicare beneficiaries are rehospitalized within 30 days of hospital discharge. Unplanned rehospitalizations are estimated to cost the Medicare program \$17.4 billion each year.⁹ Since the advent of hospitalist programs in the late 1990s, primary care physicians are no longer involved in the care of their hospitalized patients and may not even be notified when one of their patients is hospitalized. Although inpatient and outpatient records are often exchanged, frequently, there are delays. Family caregivers are often asked to provide medical history and are expected to assume the roles of care coordinators and patient advocates.¹⁰ Failure of care coordination may result in duplicate diagnostic testing, medication errors and frustration among patients and caregivers.

The caregiver experience of navigating care transitions was eloquently summarized by a healthcare professional who cared for an ill spouse: “How can we expect not-yet-well people to suddenly begin managing all of the complex medical and personal issues that, just the day before, were being handled by an entire team of trained professionals?”¹¹



Many care coordination interventions have had a positive effect in bridging the gap between inpatient and outpatient care, especially during transitions from hospitals to homes. Two successful models include comprehensive discharge planning with early follow-up provided by advanced practice nurses¹² and preparation for self-management and support by trained transition coaches.¹³ An innovative program to engage family caregivers in post-acute care is the “Next Step in Care Campaign” of the United Hospital Fund.¹⁴ Family caregivers are vital to supporting patients after hospitalization. This program was designed to improve care coordination by teaching hospital staff how to recognize, train and support family caregivers. The campaign’s website, www.nextstepincare.org, includes information for family caregivers and healthcare providers: educational videos, checklists and questions to ask during physician visits. Innovations in primary care practices, such as patient-centered medical homes and guided care models, promote effective care coordination by ensuring that healthcare providers deliver holistic care based on an understanding of the patient and caregiver situation. This understanding promotes the positive, helping relationships that are the foundation of well-coordinated healthcare.¹⁵

The key to improving outcomes and reducing costs is eliminating waste. Awareness and education strategies can engage providers in conversations about healthcare system waste, but they are not sufficient to change clinical practices. Healthcare providers must work to increase health literacy and help patients and families consider the best treatment options for their unique situation. To ensure long-term stability of the healthcare system, industry leaders must build a high-reliability healthcare system centered on patients and focused on improving the health of populations. New technologies can facilitate communication, promote interprofessional collaboration and standardize key documentation elements so all providers



have access to a patient's physical, functional and mental health status. Standardized data elements can be used in aggregates to evaluate the impact of programs on population health and to inform policy decisions.

Ultimately, a fundamental shift in medical culture must occur to achieve significant reductions in overtreatment and improvements in care coordination. Health policy, congressional reports and regulations are needed that distinguish between acute care and post-acute care—word choices that indicate a hospital-centric bias. Clearly, the U.S. healthcare system is sub-optimized, as evidenced by healthcare spending that continues to spiral out of control. It is possible that lasting improvements can be achieved by shifting the heart of healthcare from acute, crisis-oriented care to community health and ambulatory care.

Healthcare is best when it is patient-centered and outcomes-oriented. Healthcare should promote autonomous and informed decision-making and facilitate care coordination among patients, families and healthcare providers. Systems changes that help patients and families make wise choices and streamline interactions across locations and levels of care simultaneously improve outcomes and reduce costs.

Ellen Martin is a doctoral student in the School of Nursing at the University of Texas—Austin, where she is studying nursing research. She is an education specialist at the Texas Association for Home Care and Hospice. A member of ASQ, Martin was the recipient of the \$2,000 [Nightingale Scholarship by the ASQ Healthcare Division](#) in 2014 for demonstrating an outstanding commitment to pursuing quality improvement in the healthcare field.



References

1. D.M. Berwick and A.D. Hackbarth "Eliminating Waste in U.S. Healthcare," *JAMA: The Journal Of The American Medical Association*, Vol. 307, No. 14, 2012, pp. 1,513-1,516.
2. H. Brody, "Medicine's Ethical Responsibility for Healthcare Reform—The Top-Five List," *The New England Journal Of Medicine*. Vol. 362, No. 4, 2010, pp. 283-285.
3. Berwick, "Eliminating Waste in U.S. Healthcare," see reference 1.
4. Joint Commission, "Proceedings from the National Summit on Overuse," National Summit on Overuse, Oakbrook Terrace, IL, Sept. 24, 2012.
5. M.R. Chassin, "Improving the Quality of Healthcare: What's Taking So Long?" *Health Affairs*, Vol. 32, No. 10, 2013, pp. 1,761-1,765.
6. A.M. Saito, M.B. Landrum, B.A. Neville, J.Z. Ayanian and C.C. Earle, "The Effect on Survival of Continuing Chemotherapy to Near Death," *BMC Palliative Care*, Vol. 10, No. 14, 2011.
7. E.C. Rich, T. Lake and C.S. Valenzano, "Paying Wisely: Reforming Incentives to Promote Evidence-Based Decisions at the Point of Care," Center for Healthcare Effectiveness, 2012.
8. Brody, "Medicine's Ethical Responsibility for Healthcare Reform—The Top-Five List," see reference 2.
9. S.F. Jencks, M.V. Williams and E.A. Coleman, "Rehospitalizations Among Patients in the Medicare Fee-For-Service Program," *The New England Journal Of Medicine*, Vol. 360, No. 14, 2009, pp. 1,418-1,428.



10. H.H. Pham, J.M. Grossman, G. Cohen and T. Bodenheimer, "Hospitalists and Care Transitions: The Divorce of Inpatient and Outpatient Care," *Health Affairs*, Vol. 27, No. 5, 2008, pp. 1,315-1,327.
11. B.A. Swan, "A Nurse Learns Firsthand That You May Fend for Yourself After a Hospital Stay," *Health Affairs*, Vol. 31, No. 11, 2013, pp. 2,579-2,582.
12. M.D. Naylor, D.A. Brooten, R.L. Campbell, G. Maislin, K.M. McCauley and J.S. Schwartz, "Transitional Care of Older Adults Hospitalized With Heart Failure: A Randomized, Controlled Trial," *Journal of the American Geriatrics Society*, Vol. 52, No. 5, 2004, pp. 675-684. (Published erratum appears in *Journal of the American Geriatrics Society*, Vol. 57, No. 7, p. 1,228.)
13. E.A. Coleman, C. Parry, S. Chalmers, S.J. Min, "The Care Transitions Intervention: Results of a Randomized Controlled Trial," *Archives of Internal Medicine*, Vol. 166, No. 17, 2006, pp. 1,822-1,828.
14. C. Levine, D.E. Halper, J.L. Rutberg and D.A. Gould, "Engaging Family Caregivers as Partners in Transitions," United Hospital Fund, 2013, pp. 1-54.
15. C. Boult, L. Reider, K. Frey, B. Leff, C.M. Boyd and J.L. Wolff JL, et. al., "Early Effects of Guided Care on the Quality of Healthcare for Multimorbid Older Persons: A Cluster-Randomized Controlled Trial," *Journals of Gerontology Series A: Biological Sciences and Medical Sciences*, Vol. 63A, No. 3, 2008, pp. 321-327.