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Hot-Spotters Aren't "The Problem"...But They Are Emblematic of the Failure of U.S. Healthcare

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In his very influential article in the *New Yorker*, Atul Gawande shined a bright light on the small group of neediest patients who access the healthcare system extremely frequently.¹ These “frequent users” comprised only 1 % of the population in Camden, New Jersey, but accounted for about a third of all medical costs. Even so, their health outcomes were notoriously poor, implying that the system could do a far better job of taking care of them. One of the ways to help accomplish this, Gawande suggested, was through care management and coordination, something that is, unfortunately, generally inadequate in American medicine, and likely even less available for this most vulnerable group of patients.

In this issue of *JGIM*, Lee and colleagues explore healthcare utilization patterns among high-cost Medicare beneficiaries in the Cleveland Clinic Health System (CCHS).² Using an unusual methodology, their study produced results that are quantitatively different from, but qualitatively essentially the same as, those presented by Gawande. Frequent users comprise only about the same 1 % of the CCHS patient population, and account for an outsized proportion (in this case 15 %) of costs. Lee et al. also found that this group had markedly poor clinical outcomes, with substantially increased need for acute care services and (despite this) far greater than average mortality, even compared to others among the study’s high-cost population. Unlike Gawande, these authors choose not to highlight these striking problems among this small group of patients, but stress instead the fact that these frequent users—which Lee et al. call “hot-spotters”—account for only a minority of all healthcare costs. Because of this, they point out that even if it were possible to lower costs dramatically within this subgroup, our hugely bloated healthcare budget would not be greatly affected overall.

Although we believe that certain aspects of the methodology used in this study—and thus the precision of its conclusions—can be challenged, we have no doubt that the results are largely correct. Lee and colleagues confirm both that frequent healthcare users do very poorly despite incurring

a disproportionate share of costs, and that a majority of expenditures nevertheless come from other sources. They also identify various types of high-cost patients, and articulate that no single intervention will address their varied needs. If we want to impact overall healthcare spending substantially, therefore, we must, as the authors stress, look beyond the small group of hot-spotters.

IS ANY OF THIS A SURPRISE?

Who could doubt that no single intervention is likely to address the needs of all these high-cost patients? Indeed, we could argue that there are still other patients who do not fit neatly into Lee et al.’s five-cluster high-cost patient classification. For example, patients who suffer acute trauma, patients who require emergency inpatient dialysis, patients with multiple chronic conditions, and patients with serious mental illness (SMI) or terminal cancer have all been identified elsewhere as high-cost frequent users.³ But regardless of how high-cost patients are categorized, a multifaceted approach is surely required, as Lee et al. suggest, involving distinct interventions (e.g., violence prevention for trauma patients; coordinated medical, mental, and social services for patients with SMI; palliative care for terminal cancer patients) to address distinct health needs and their associated costs.^{3,4}

Lee et al. thus appropriately ask us to consider “a more comprehensive approach that addresses” other high-cost categories identified in their study. Clients receiving ambulatory cancer treatment, surgical joint replacement patients, and users of critical care, for example, are each clearly big-ticket users. But worthwhile as it may be to identify such high-cost centers, we believe that any effort to address unsustainable healthcare spending also—and perhaps first and foremost—has to tackle, in a systematic way, the issue of waste.⁵

There are a number of hugely inefficient and unethical costs in our current healthcare system. One-third of care provided in the U.S. is deemed to be excessive, resulting in over \$700 billion annually on care without health benefit to patients.⁵ Unnecessary testing and overtreatment persist, driven at least to some degree by conflict of interest and perverse incentives, despite their resultant harm to patients. Outrageous administrative complexities, pricing failures, and business models that prioritize doing more and more result in unjustifiable waste.⁵

Lee et al. and others document the high cost of cancer patients,^{2,3} and the extraordinary charges applied to an increasing number of cancer-related treatments may be a substantial contributor to this finding. The sipuleucel-T (Provenge) cancer vaccine, which costs over \$90,000 per patient and provides an average survival benefit of 4 months at best, and proton beam therapy, which has a \$120 million price tag despite unproven benefit, are prime examples of the need for waste reduction strategies throughout healthcare.^{6,7}

Ironically, over-treatment and under-treatment are Siamese twins in our largely profit-driven healthcare system, as each is applied selectively, depending on its economic effect in different patient populations. While this may not be done consciously, or on a patient-by-patient basis, it occurs *systematically*, because availability of care and use of resources are based in part on expected reimbursement. What makes this particularly dangerous is that both too little care and too much care not only ultimately increase healthcare spending, but also directly harm patients. It is estimated that fragmented systems with inadequate or nonexistent care coordination lead to \$25–45 billion annually in excess spending, largely due to complications, readmissions, and functional deterioration; this is especially true for chronically ill, vulnerable patients.⁵

It is also critical that we look at lost-opportunity costs and interventions outside traditional “healthcare” when we think about this. Imagine the benefit that could be achieved if so much wasted money were reallocated towards our nation’s teetering education system, the alleviation of poverty, or housing for the homeless. Investment in social services that address inequality and/or inadequacy of income, education, housing, nutrition, transportation, and employment can greatly improve health outcomes.^{8,9} The United States (US) spends much more per capita on health services versus social services than almost any other country, but the opposite approach—with greater investment in social services relative to health services—is associated with substantially better health outcomes. Not surprisingly, the US fares poorly on most population-based health outcomes compared to other Organization for Economic Cooperation and Development (OECD) countries.⁸ The same is true *within* the US, where states with a higher ratio of social to health spending have improved health outcomes across a broad spectrum of common illnesses, which in turn is likely to have an important beneficial impact on downstream medical expenditure.⁹ Any discussion of how to improve health outcomes, and/ or to lower related healthcare costs, must extend beyond the “healthcare system” itself; we believe that adequate investment in social services is critical to achieving both these goals.

Finally, we caution against focusing only, or even primarily, on cost reduction. After all, the primary goal of healthcare is not to save money, but to promote health and reduce suffering. Medicine should be a leader in addressing the medical, psychological, *and* social determinants of ill health. Many interventions, such as the Housing First program for homeless individuals with mental illness, may *not* be cost-saving, but

may still have immense patient and societal value.¹⁰ Conversely, the most effective way to reduce costs would be to provide no care at all!

Frequent users have substantially increased morbidity and mortality, and thus are clearly not well served by our healthcare system, despite the excessive costs they generate. Historically, initiatives focused on hot-spotters have targeted patients based largely on *medical* service utilization, neglecting consideration of psychosocial service utilization and risk factors that contribute to vulnerability. Care management and care coordination programs, if implemented effectively, can help address this. While this may ultimately prove to reduce costs, the primary value of such initiatives relates to engaging rather abandoning these patients, helping them navigate the healthcare system, and addressing both their medical and non-medical health needs.¹¹

These particular interventions are often aimed at hot-spotters, but many effective care management programs apply to a diverse spectrum of complex, high-cost patients.^{4,11} Such programs embrace the key role of care coordination and also customize interventions to match patient needs. They can result in improved patient-oriented outcomes and enhanced provider experience, as well as cost reduction.¹¹

Lee and colleagues’ exploration of differences among high-cost patients in order to identify effective cost-reduction strategies is clearly valuable. After all, by any account, our healthcare system has an egregious amount of waste, entailing care that is not value-added—and in many cases is harmful—to patients. At the same time, we need to acknowledge that many of the patients on whom we spend the most resources are complex, high-need, and vulnerable. Thus, even among this group, while cost-efficiency should never be ignored, the primary goal must be to provide the care best able to improve patient-oriented outcomes. Fortunately, these two goals are by no means incompatible.

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