Reducing Emergency Department Utilization: Is This the Answer?

The article “Non–Emergency Department (ED) Interventions to Reduce ED Utilization: A Systematic Review,” published in this issue of Academic Emergency Medicine, highlights how little we know about effective strategies to reduce emergency department (ED) use. This review focuses on studies that address the very broad question of what non–ED-based interventions might work to coax, divert, educate, or change people—who in theory may be able to seek care elsewhere—away from an ED setting. The studies compiled and synthesized by its authors represent the definitive studies in the current literature, yet most rate quite low on quality according to the Grading of Recommendations Assessment, Development, and Evaluation (GRADE) assessment. They are often biased or poorly designed or make unsupported conclusions. They describe interventions implemented in a variety of settings, including other countries, for a wide range of patients from children to adults, and the interventions targeted had extremely varied outcomes with lack of generalizability (e.g., ED use for ear pain).

The extreme heterogeneity of the studies included in this review makes any unified take-home message difficult to digest. It confirms that we do not know which types of non-ED interventions are effective at reducing ED use. This is due in part to the studies’ lack of scientific rigor.

While some studies in varying categories did show reductions in ED use, follow-up periods were often limited to 3 to 6 months; stronger studies with longer follow-up periods did not find significant ED use reductions. Given that we expect some regression to the mean with no intervention, inadequate follow-up periods, and a lack of appropriate controls leave us wanting better confirmation that these findings were true and lasting. Many studies analyzed data from single centers. Little has been published on ED “loyalty” making it difficult to quantify exactly how much of the population visits more than one ED. However, without data that can account for systemwide ED use, we must assume that some visits are being missed. Especially for smaller studies, which comprise most of this review, failure to account for the entirety of ED use in the study population could have a significant effect on results. Additionally, some studies that examined secondary outcomes found significant changes in non-ED services use. Higher use of other services resulting from averted or diverted ED use will result in some degree of cost shifting. Thus, while ED visits and ED-specific costs may decrease, care is not necessarily less costly. It is also not clear that patients will be more satisfied or care will be delivered more efficiently.

Given the deficiencies in this body of literature, one might question the approach employed by the studies included. In their conclusion, the authors posit “future studies should attempt to reduce confounding through robust design … and should measure unintended consequences of increased demand for other types of health care services, health outcomes, and financial effects.”

We would take this a step further. Rather than continuing to study which interventions, ED or non-ED based, might work to reduce ED utilization, we should be asking a different set of questions. Given the current state of health care (international settings not withstanding), research should focus on how we can more rationally align payments and incentives, develop and spread innovative information technology (IT) solutions, and alter delivery system structure to reduce overall expenditures and improve the experience of care for patients and providers. Increasingly, there will be opportunities to measure the effect of changes to our health care delivery system process and structure (e.g., creation of accountable care organizations, expansion of primary care capacity in a given region, incentive payments for improved health care outcomes for patients or providers, use of IT solutions to bridge data gaps across regions). Outcomes should include, but not be limited to, the effect of such changes on emergency department use—regardless of where interventions originate.

Broadening the focus of emergency medicine health services research will allow us to demonstrate the broad effects of our practice—effects that have been highlighted in some recent high-impact studies—beyond merely the ED itself. This will help to solidify the indispensable nature of the emergency care system for the scientific community and the health and social care system at large.

A recent report by the RAND Corporation highlighted the critical role EDs and emergency providers...
play in hospital admissions, which have increased from 2003 to 2009. This builds on other research highlighting the increased percentage of outpatient visits and admissions occurring through the ED. In the studies by RAND and Kocher et al., a greater proportion of these admissions now occur via the ED, likely in large part because, as the RAND study also reports, the majority of patients were directed to the ED after contacting primary care providers. This underscores the RAND report’s point that “that primary care physicians are increasingly relying on EDs to evaluate and, if necessary, hospitalize their sickest and most complex patients.” The financial effects of this ambulatory-ED interplay are not insignificant: a hospital stay can be exponentially more costly than an ED or outpatient visit. Just as importantly, ED visits that result in discharge are integral to patients’ outpatient courses, offering critical test results and observations contained in the medical record that can aid ambulatory providers and assist in coordinating care for millions of patients across the nation.

It is increasingly clear that diverting “nonemergency” visits may not be feasible and may be a less efficient use of our health care resources that risks optimal patient outcomes. The majority of visits may not be appropriate at all, given current limitations in outpatient capacity, the 24/7 need to address medical issues, and the urgent nature of most visits, especially for vulnerable populations. ED use has been on the rise and continues to increase, accounting for 11% of all outpatient visits. We would argue that this increase in use is not due purely to a lack of alternative sources of care, but is due to the high-quality care delivered by emergency providers in the ED setting. And, if health systems are designed to promote appropriate and timely communication between primary care physicians and emergency providers around low-acuity ED visits for patients engaged in primary care, efficiency could actually increase by leaving more room for primary care physicians to spend on time intensive activities such as counseling and prevention with their patients. Instead of research narrowly focused on reducing ED use, efforts should concentrate on expanding capacity elsewhere in the system in ways that matter to patients, increasing care coordination between EDs and other settings, and reexamining the scope of care and services EDs can provide. To do otherwise would be to undervalue ED care.

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