

Virtual Mentor

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POLICY FORUM

Nonurgent Care in the Emergency Department—Bane or Boon?

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With more than 100 million patient visits annually, hospital emergency departments (EDs) are a major source of health care in the United States [1]. As their name indicates, the ostensible purpose of EDs is to provide prompt and expert medical treatment for urgent and emergent medical problems. In fact, however, patients seek care at EDs for a wide variety of illnesses and injuries, ranging in severity from catastrophic to minor. Of the 119.2 million ED patient visits reported to the National Ambulatory Medical Care Survey in 2006, for example, 5.1 percent were triaged as needing immediate attention, 10.8 percent as emergent, 36.6 percent as urgent, 22 percent as semi-urgent, and 12.1 percent as nonurgent [1]. (Triage status was not reported in the remaining 13.4 percent.)

Commentators over the years have decried the provision of nonurgent medical care in the ED, describing this practice as a “misuse” of hospital EDs and attributing several negative consequences to it, including crowding, increases in the cost of medical care, and reduction in its quality. I don’t think the situation is that simple. Some of the purported disadvantages of ED care for nonurgent conditions are not well documented, and this care provides clear benefits for several groups of patients, including those who lack ready access to care in other settings and those whose treatment preferences coincide with standard ED practices. ED care for routine conditions may not measure up to the ideal of a long-term relationship with a primary care provider, but given the present and probable future constraints on the U.S. health care system, ED care for patients with nonurgent medical conditions is likely to continue and in fact to increase. We would do well, therefore, to encourage and support hospitals in their efforts to provide high quality, cost-effective ED care for patients with a wide variety of medical conditions.

Nonurgent Care: Bane of the ED?

Major problems purportedly associated with nonurgent ER visits are ED crowding, high-cost care, and reduced quality of care. Let us consider each of these three problems in turn.

ED crowding. Over the past two decades, frequent crowding in hospital EDs has resulted in longer patient waiting times, decreased protection of patient privacy and confidentiality, and impaired patient evaluation and treatment [2-4]. The number of patients in an ED at any given time is a function of three variables: input (the number and types of patients seeking ED care), throughput (the process of care in the ED), and output (the movement of patients out of the ED) [5]. Early investigators blamed ED crowding on patients who were seeking care for nonemergent conditions [6].

More recent research, however, has identified *output*, not input factors, as the major cause of ED crowding. American College of Emergency Physicians President John McCabe summarized the current consensus in these words:

It should be noted that one of the “whipping boys” of the 1980s for emergency department overcrowding was the “unnecessary emergency department patient visit.” It was thought that patients arriving in the emergency department with simple complaints (e.g., ankle sprain, cold, medication prescription, refill, etc.) were clogging up the system and were the cause of emergency department overcrowding. This was not true then and it is not true now. Emergency department overcrowding occurs primarily when sick patients, evaluated by the emergency physician and admitted to the hospital, have no place to go and remain in the emergency department. It is mainly a symptom of an overcrowded hospital, not the result of “inappropriate” emergency department use [7].

Patients with minor conditions may wait longer for care in a crowded ED than in an uncrowded ED, but their actual evaluation and treatment is typically uncomplicated and brief. Instead, another group of patients, namely, patients waiting many hours in the ED for an inpatient hospital bed to become available, are the primary reason for ED crowding.

High-cost care. In a recent “Narrative Matters” article in the journal *Health Affairs*, physician-writer Jack Coulehan describes what he calls “the Great ER Caper,” his visit to the local ED to confirm a self-diagnosis of shingles that resulted in a \$9,000 bill [8, 9]. Coulehan’s report is just one illustration of the strong reputation EDs have as expensive providers of health care.

High ED charges can be attributed to several factors [10]. EDs have high fixed costs associated with 24-hour staffing and the need for a wide array of medical equipment to diagnose and treat all types of injuries and illness. Many ED patients are uninsured or covered by Medicaid, and ED charges may therefore reflect cost shifting to recoup the uncompensated costs of care for these patients. Further, insurance payment for patients admitted to the hospital after initial treatment in the ED usually takes the form of a “bundled” payment based on the patient’s diagnosis-related group (DRG), and that revenue may be credited entirely to inpatient units, thereby shortchanging the contribution to the ED for these patients’ care. Each of these factors may make treatment of nonurgent problems more costly for either the patient, the provider, or both, in an ED than in a primary care physician’s office.

Despite the widely held belief that ED care is too expensive, especially for nonurgent conditions, studies examining the cost of care in the ED are few and far between. A widely cited 1996 *New England Journal of Medicine* article by Robert M. Williams challenged the belief that ED visits for nonurgent conditions is not a cost-effective use of health care resources [11]. Williams estimated average charges, average costs, and marginal costs (defined as the extra cost for treating one additional patient) of

ED visits for urgent, semiurgent, and nonurgent conditions over a two-year period in six Michigan hospitals. For nonurgent visits, he reported that the average charge, adjusted to 2010 dollars [12], was \$186.76, the average cost was \$93.38, and the marginal cost was \$36.15. Williams argues that these costs are reasonable, especially for services provided at night and on weekends and holidays, when other care settings are generally unavailable. As long as the treatment capacity of the ED is not fully used (when, for example, there are available beds and waiting staff) the marginal cost, or the extra cost of treating an additional patient, will be low; caring for additional patients in that circumstance will produce economies of scale and reduce the average cost of an ED visit. Williams concludes that the additional revenue generated by nonurgent visits will help to defray the ED's significant fixed costs and therefore contribute to the social good of keeping EDs open and available for care at all times for all comers.

In articles published in 2005 and 2006, however, RAND corporation economists Anil Bamezai and Glenn Melnick challenged Williams' claim that the marginal cost of nonurgent care in the ED is relatively low [13,14]. Using data from 246 California hospitals for care provided from 1990 through 1998 and a complex statistical method for estimating average and marginal ED costs, Bamezai and Melnick estimated the "long run marginal cost" (allowing for changes in staffing and equipment levels over time in response to demand) of an ED outpatient visit, adjusted to 2010 dollars [12], at \$419.24, more than double the estimated \$192.26 marginal cost of visits to other outpatient units in these hospitals [13], and more than 12 times higher than Williams' estimate of the marginal cost \$36.15 for a nonurgent ED visit.

Bamezai and Melnick's analysis suggests a high cost for nonurgent ED care. Commentators Kellermann and Showstack, however, point out a "fundamental flaw" in this analysis [15, 16]. Bamezai and Melnick rely on public data reported by California hospitals for "outpatient ED visits," in other words, all ED visits that did not result in a patient's admission to the hospital. Equating this data with nonurgent ED visits incorrectly assumes that all patients not admitted from the ED into the hospital did not have urgent conditions and could have received adequate care in another outpatient setting. According to the most recent national survey data, only 12.8 percent of ED visits resulted in admission to the hospital and another 1.9 percent in transfer to another hospital, but at least 52.5 percent of ED visits were triaged as immediate, emergent, or urgent, and another 22 percent as semi-urgent [1]. As Kellerman points out, patients with more severe conditions are more costly to evaluate and treat, but most of these patients can still be discharged home from the ED.

Bamezai and Melnick may, therefore, offer an inflated estimate for the costs of nonurgent ED visits, but, as Showstack observes, the situation facing EDs today is significantly different from that of the 1990s [16]. ED crowding is a far more common occurrence, and so there is less "unused capacity" in EDs to "fill" by caring for patients with nonurgent conditions. Accommodating patients with minor conditions in a generally crowded ED may require additional staff and space at

additional expense. A more definitive answer to the complex question of the cost of nonurgent care in the ED awaits further study.

Reduced quality of care. According to Houston emergency physician Tim Seay, “the ER’s a bad place to get your primary care” [17]. Several common features of ED care may contribute to lower-quality care for nonurgent conditions. Perhaps most prominent among these features is the episodic nature of ED treatment. Because patients and physicians in the ED are typically strangers to one another and treatment is provided on a one-time basis with little or no follow-up, there is essentially no continuity of care and no opportunity to develop an ongoing therapeutic relationship. Neither is there an opportunity to gather detailed information about the patient’s medical history, values, and goals, to monitor chronic medical conditions over time, or to adjust treatments accordingly. An ongoing therapeutic relationship can make important contributions to the quality of medical care, but it is also worth noting that many patients have a need or preference for care that they can access without an appointment and at a time and place convenient to them. The continuing growth of “doc-in-the-box” walk-in urgent care centers is one obvious response to this preference.

Overtreatment may pose another threat to the quality of ED care for nonurgent conditions. Because they are expected to make an accurate diagnosis and provide effective treatment based on a single visit, emergency physicians may err on the side of doing too much rather than too little, for the benefit of the patient, for defensive reasons, or in response to patients’ explicit requests. Coulehan’s \$9,000 visit to the ED for a case of shingles, for example, included examinations by two specialist consultants (an ophthalmologist and a neurologist), two MRIs, and a CT study with contrast dye [8]. In addition to their costs, multiple diagnostic studies and more invasive treatments pose some additional risk of iatrogenic illness or injury. Some patients, however, clearly prefer a more aggressive approach to treatment and may request expensive diagnostic studies to reassure themselves that their symptoms are not early signs of a serious illness. Better provider and patient communication about the benefits and risks of treatment, malpractice reforms, and new reimbursement systems may help to reverse the ED tendency toward overtreatment.

Finally, the inconvenience of long waiting times for treatment also erodes the perceived quality of ED care for nonurgent conditions [18]. Depending on the number of incoming patients and the severity of their conditions, patients with minor problems may wait hours for treatment, as clinicians treat patients with emergent and urgent conditions first. In order to improve “front-end” processing of patients and decrease wait times, EDs are experimenting with a number of new strategies, including immediate assignment to a treatment bed, implementation of care protocols at the patient triage stage, a separate fast-track service line for nonurgent conditions, and electronic patient tracking systems [19]. Although outcomes data are still sparse, these strategies may help to decrease time spent in the ED and improve patient satisfaction.

Nonurgent Care: Boon to Some Patients

Even though caring for patients with nonurgent conditions does not appear to be the major contributor to the problem of ED crowding, it may be both more costly and of lesser quality than caring for these patients in other settings. For whom, then, can the care of a minor medical problem in the ED be considered a boon? The most obvious answer is that health care in the ED will be a boon for all those who have no other ready access to care. This has, for many years, been a very large number of people, including those who lack health insurance and those Medicaid patients who are unable to find a regular source of primary care. Only in the ED can these patients be assured that they will receive a screening exam, and, in most cases, treatment for their condition, regardless of their ability to pay.

It would be faint praise to claim that ED care for nonurgent conditions will be a boon *only* for those who have no other ready source of care. In fact, however, as noted above, at least some patients with health insurance appear to prefer the ED as a source of routine medical care. A meta-analysis of studies of frequent users of EDs (defined as those who make 4 or more ED visits per year), for example, found that these patients, who account for as many as 28 percent of all ED visits, are predominantly white and insured, most often by Medicare or Medicaid [20]. Some of these frequent users of EDs may not have ready access to primary care physicians. Some may value the availability of high-tech diagnostic and therapeutic services in the ED. Some may value the convenience of obtaining care during evening or weekend hours and be willing to accept longer wait times or may prefer a more anonymous encounter with caregivers for their minor medical problems. Still others may seek care in an ED because they are unable to determine whether an illness or injury requires prompt medical attention. Just because these ED users are insured and their conditions nonurgent, however, it does not necessarily follow that they don't belong in the ED. One study of children's nonurgent visits to EDs concluded that fully half of those visits were "highly appropriate" [21].

Conclusion

One might be tempted to predict that, with the gradual expansion of health insurance coverage under recently enacted federal health care reform legislation, newly insured patients will secure primary care "medical homes" and no longer need to rely on the ED for their routine medical care. In fact, however, ED visits for nonurgent conditions are likely to increase in the reformed health care system. Recall that the legislation provides no insurance benefits for the roughly 12 million undocumented immigrants who will continue to rely heavily on EDs for their health care. Moreover, more than half of the 31 million Americans who are expected to gain insurance under health reform will do so through a major expansion of federal-state Medicaid programs [22]. Given low levels of reimbursement for ED care under Medicaid, and the prospect of additional future cuts to control health care spending, primary care practices may become even less willing to accept new Medicaid patients than they now are. Early data suggest that, in the first year of Massachusetts' experiment with near-universal health insurance, the number of emergency department visits increased [23].

The 2010 health care reforms will, over the next several years, provide health insurance for the first time to millions of Americans. The legislation did not, however, mandate major changes in reimbursement or in delivery systems to increase reliance on primary care. For better or worse, therefore, EDs will remain the preferred or sole source of care for many, both citizens and noncitizens, both insured and uninsured. With anticipated increases in their overall number of patients and in the number of patients with health insurance, EDs should have a strong incentive to examine new strategies to provide timely and appropriate care for ED patients with nonurgent conditions.

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