

# Time to Focus on Improving Emergency Department Value Rather Than Discouraging Emergency Department Visits

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Submission history: Submitted July 30, 2013; Revision received July 31, 2013; Accepted August 1, 2013

Electronically published October 9, 2013

Full text available through open access at [http://escholarship.org/uc/uciem\\_westjem](http://escholarship.org/uc/uciem_westjem)

DOI: 10.5811/westjem.2013.8.19100

[West J Emerg Med. 2013;14(6):617–618.]

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Recently policymakers, payers, and the media have focused attention on avoiding ‘inappropriate’ or ‘unnecessary’ emergency department visits.<sup>1</sup> Some states and payers have tried to institute co-pays or deny coverage for visits deemed to be non urgent with the goal of decreasing unnecessary emergency department (ED) visits.<sup>2,3</sup> The discussion is predicated upon the ‘common knowledge’ that by diverting unnecessary ED visits, substantial healthcare spending will be avoided. This ‘common knowledge’ is wrong.

Many of the frequently used methodologies to classify ED visits are based on the NYU ED algorithm, developed in the late 1990s to classify ED use.<sup>4</sup> Using expert opinion, charts were reviewed to determine if a particular visit was urgent. The algorithm was constructed to generate a probability that a particular discharge diagnosis results from a non-emergent visit. According to NYU, the algorithm was “not intended as a triage tool or a mechanism to determine whether ED use in a specific case is ‘appropriate.’” Since the ultimate discharge diagnosis is not known at the time the patient makes the decision to visit the ED, classification based on the discharge diagnosis cannot be used to guide patients’ decision as to whether or not to use the ED.

Raven et al<sup>2</sup> analyzed data from the 2009 National Hospital Ambulatory Medical Care Survey (NHAMCS) using a modified NYU ED algorithm. They modified the algorithm to predict non-emergent visits based upon chief complaint. They constructed the modification to increase the likelihood that the “classification system would identify only nonemergency ED visits.” Only 6.3% of ED visits were categorized as non-emergent, with 304 chief complaints identified as markers for primary-care treatable visits. But even with their conservative algorithm, these same chief complaints accounted for 89% of all visits, including patients with critical illnesses. Their analysis shows it is not possible to identify patients based on chief complaint because identical chief complaints lead to different discharge diagnoses, some of which get categorized preventable and some emergent.

Even assuming it is possible to prospectively identify and divert non-urgent patients from the ED, achieving substantial system savings is unlikely, as care is still required. In this issue, Honigman et al<sup>1</sup> analyzed another approach to classify ED visits. They analyzed the interventions and ancillary testing patients required based upon triage classification. A level 5 triage classification is considered non-urgent and means the triage nurse assesses that a care delay of up to 24 hours will not have adverse medical consequences. Using NHAMCS data from 2006-2009, Honigman et al found that 10.1% were triaged as non-urgent. However, these non-urgent patients had a high rate of ancillary testing and interventions suggesting “that healthcare services are needed even for the lowest acuity visit and calls into question the designation of a non-urgent ED visits as being ‘unnecessary.’” Fortunately, the marginal cost of an additional non-urgent ED visit is quite low. In 1996, Williams<sup>5</sup> found the marginal cost of a non-urgent ED visit was \$24, as compared to an average non-urgent cost of \$124 and an average cost for all visits of \$383.

The United States government reports that only 3.8% of healthcare spending is in the ED.<sup>6</sup> Completely eliminating the costs associated with the 10.1% of non-urgent visits in the NHAMCS 2006-2009 data set could at best save a fraction of a percent of the healthcare dollar. But Honigman et al demonstrate that these patients do require testing and treatments. So diverting them from the ED simply shifts the cost elsewhere, rather than achieving system savings. Some argue that costs are higher in the ED than in the office. But patients presenting in the ED are more likely to have higher acuity and more serious ultimate diagnoses than office patients with identical chief complaints. For example, the patient with chest pain caused by a myocardial infarction is more likely to present to the ED, and the patient with musculoskeletal chest pain is more likely to present to an office.<sup>7</sup> Office based practitioners commonly refer higher risk patients to the ED for an expedited evaluation, especially after hours.<sup>8</sup> For these reasons, comparing ED costs to office costs is not valid. Patients with identical

chief complaints and identical diagnoses treated in EDs are not equivalent to those treated in offices and are reasonably expected to require more expensive evaluations. Nevertheless, improving access to alternative sites of care allows patients self identifying as lower acuity to visit clinics without risking diverting patients from needed care.

So what can emergency physicians (EPs) do to save the healthcare system money? Smolowitz et al<sup>8</sup> suggest that instead of focusing on the relatively low savings that could be achieved by diverting non-urgent patients from the ED, greater savings can be achieved by avoiding admissions and improved care coordination. For example, they estimate that “it would require diverting more than 80 patients with pharyngitis to save the money equivalent to a single avoided hospitalization.” A recent Rand report<sup>9</sup> found that EPs determine the need for admission about 50% of the time. Since inpatient costs comprise 31% of all health spending, even small decreases in admission costs will have substantial impact. EPs, by directing efficient care during the ED stay, can prevent or shorten hospital admissions. Rand reports “early evidence” that “EDs are already having a positive impact by constraining the growth of admissions” for preventable admissions.

Focusing on non-admitted patient visits also holds promise. An example are the practice guidelines Washington EPs developed when faced with threatened Medicaid denial of payment for visits retrospectively deemed non-emergent based upon discharge diagnosis.<sup>3,10</sup> Washington EPs and EDs successfully developed and implemented a program projected to save \$31 million in the first year by improving care coordination and better access to care, especially for frequent ED users. This project demonstrates the effectiveness of broad implementation of practice guidelines, coordinating care with alternative sites of care for frequent ED users.

It is time for emergency care providers and healthcare systems to develop and implement further strategies to improve the value of the care EDs provide to our communities. Techniques to achieve and measure this value are challenging given the complex interactions within the healthcare system. Fortunately, EPs are expert at making quick decisions with incomplete information, and we must use those skills to adjust our practices. By improving the value of the care delivered in the ED, there will be less motivation for policymakers and payers to adopt dangerous and ineffective policies diverting patients away from the ED.

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*Conflicts of Interest:* By the WestJEM article submission agreement, all authors are required to disclose all affiliations, funding sources and financial or management relationships that could be perceived as potential sources of bias. The author discloses that he is the President of the California Chapter of the American College of Emergency Physicians.

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