Freestanding Emergency Departments: What Is Their Role in Emergency Care?

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Freestanding emergency departments (EDs), health care facilities that offer emergency care without being physically attached to a hospital, are becoming more common throughout the United States. Many individuals propose that these facilities can help alleviate the stress our current emergency care system faces and provide care to people with limited access to traditional hospital-based EDs. We reviewed the current literature on freestanding EDs to investigate whether these facilities are meeting those goals. We found that although they provide care that is generally similar in quality and cost to that of hospital-based EDs, freestanding EDs tend to cater to a more affluent patient population that already has access to health care instead of expanding care to underserved areas. This, coupled with a fragmented system of state-by-state regulation, leads us to recommend implementing more uniform licensing criteria from state to state, encouraging freestanding EDs to operate in more rural and underserved areas, and increasing price transparency. [Ann Emerg Med. 2019;74:325-331.]

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INTRODUCTION

Freestanding emergency departments (EDs) are changing the landscape of emergency care in the United States and are being considered around the world.[1] These facilities provide emergency care to patients while remaining physically distinct from a hospital, unlike a traditional hospital-based ED. Because they continue to expand, freestanding EDs have begun to receive more research interest and regulatory evaluation.

These facilities may help alleviate the stress faced by the emergency care system in this country. With ED visits increasing from 123 million to almost 137 million from 2008 to 2015,[2,3] freestanding EDs may help address crowding at traditional hospital-based EDs and improve access to care.[4] By siphoning lower-acuity patients, freestanding EDs may increase the efficiency of hospital-based EDs.[1] Work by Pines[5] suggested that freestanding EDs can also play a role in providing emergency care during natural disasters such as hurricanes.[5] They may be able to improve access to care for trauma patients in rural areas,[6] as well as maintain access to all types of emergency care in areas where critical access hospitals are closing because of financial problems.[7]

Freestanding EDs, however, face their fair share of criticisms. Many individuals worry that patients are mistaking freestanding EDs for cheaper urgent care centers, that freestanding EDs may be misleading patients about their insurance network status, and that these facilities may be exacerbating increasing medical costs.[8-12] This article will review the current literature on freestanding EDs, providing an overview of the current state of these facilities and their effects on traditional hospital-based EDs, and whether current freestanding EDs work to address the need for improved quality and access to emergency care services.

MATERIALS AND METHODS

We used a librarian-assisted review, searching the PubMed database with the search terms "freestanding emergency department," "freestanding emergency departments," "freestanding emergency center," "freestanding emergency centers," "FSED," "FSEDs," "FEC," "FECs," or "freestanding emergency" for articles in English published after 2000. This search resulted in 1,731 unique articles. A.J.A. reviewed the titles of these articles to exclude those that were not related to the care provided by freestanding EDs. The remaining 37 articles were reviewed in full, resulting in an additional 10 articles excluded as irrelevant to this review. This left 27 articles that were included in the review. Data presented at public meetings of the Medicare Payment Advisory Commission were also included. Additional sources such as news articles were referenced to illustrate examples or public concerns.

RESULTS

What are Freestanding Emergency Departments?

Currently, individual states regulate freestanding EDs. These regulations, if present at all, vary greatly from state to

state and no national standards exist to which freestanding EDs must adhere. The American College of Emergency Physicians (ACEP) has, however, produced a policy statement with recommendations for criteria that it believes all freestanding EDs should meet.[13] According to ACEP, facilities should be available to the public 24 hours a day, 7 days a week, 365 days per year; be staffed by qualified emergency physicians; have adequate staffing by qualified medical and nursing personnel to meet the written emergency procedures and needs anticipated by the facility; always be staffed by a registered nurse currently certified in advanced cardiac life support and pediatric advanced life support; have policies and procedures in place to transfer patients in need of a higher level of care to appropriate facilities; follow the intent of the Emergency Medical Treatment and Labor Act; and have the same standards as hospital-based EDs for quality improvement, medical leadership, medical directors, credentials, and referral policies.[13]

Currently, freestanding EDs fall into 2 categories. Off-campus emergency departments are affiliated with a larger medical center or hospital system. If that institution participates in Medicare, the off-campus ED faces the same Medicare Conditions of Participation as its parent hospital's on-campus ED, as long as the off-campus ED is within 35 miles of the affiliated hospital.[14] Independent freestanding emergency centers are owned by independent individuals or groups, not hospitals. They are not recognized as EDs by the Centers for Medicare & Medicaid Services (CMS) and therefore do not receive Medicare or Medicaid payments for the technical component of services.[14]

Both off-campus EDs and independent freestanding emergency centers have undergone massive growth in the past 10 years. In 2007, Sullivan et al[15] reported 80 operational freestanding EDs in the United States, with 91% of those being off-campus EDs and 9% independent freestanding emergency centers. In September 2015, the Medicare Payment Advisory Commission reported 559 operational freestanding EDs in the United States, with 69% of those being off-campus EDs and 31% independent freestanding emergency centers.[14] Schuur et al[16] also reported increased numbers of freestanding EDs in 2015, counting 360 freestanding EDs as of March 2015 and 400 as of December 2015, with 194 of those found in Texas, 38 in Ohio, and 25 in Colorado.[17] The Medicare Payment Advisory Commission reported between 550 and 600 operating freestanding EDs as of 2017.[18]

Patient Characteristics

Using the Emergency Severity Index to measure acuity (5 meaning lowest acuity and 1 meaning highest), Dayton et al[19] found that freestanding EDs treat a larger proportion of Emergency Severity Index level 3 and 4 cases than hospital-based EDs, although the latter treat more Emergency Severity Index level 5 cases. Of the 8 freestanding EDs in this study, 5 received ambulances. Simon et al[20] found similar results in a smaller study of 3 off-campus EDs that accept ambulances, using data from 2012 to 2013. A study by Burke et al[21] characterizing the same facilities and using data from 2014 to 2015 found the same breakdown of acuity levels, with freestanding EDs treating significantly fewer level 1, 2, and 5 patients while treating significantly more level 3 and 4 patients. Pediatric emergency patients showed a similar Emergency Severity Index level distribution between freestanding EDs and hospital-based EDs.[22] Simon et al[23] also found that patients at freestanding EDs were less likely to self-report a more serious condition and that they were more likely to be classified into a less resource-intensive Emergency Severity Index level (level 4 or 5). In regard to medical complaints, freestanding ED patients more often presented with injuries or respiratory symptoms and presented less often with chest or abdominal pain.[24] Pediatric patients at freestanding EDs had diagnoses similar to those observed at hospital-based EDs, but they had a larger proportion of rashes.[22]

Patient populations at freestanding and hospital-based EDs also show significant differences in regard to insurance coverage. In a study of 1 hospital-based ED and 3 associated off-campus EDs that used data from 2006 to 2013, off-campus ED patients were more likely to have private insurance, whereas hospital-based EDs treated a higher proportion of patients covered by Medicaid or Medicare or who self-paid (generally uninsured patients).[25] Additional work by Burke et al[21] characterizing the same facilities but using data from 2014 to 2015 found similar results, with more off-campus ED patients having private insurance (43% versus 20%) and more hospital-based ED patients having Medicaid (42% versus 25%), Medicare (30% versus 23%), or no insurance (6% versus 5.5%).

Freestanding ED patients are more likely to be non-Hispanic white, be employed, and have a higher education level.[23] Burke et al[21] found that freestanding ED patients were significantly more likely to be non-Hispanic white (86% versus 60%), whereas hospital-based ED patients were significantly more likely to be unemployed (51% versus 33%). Simon et al[26] found that of all trauma patients who required transfer at 2 Ohio off-campus EDs during a 4.5-year period, greater than 97% were white. Another study of patients admitted to the ICU from a hospital-based ED or from an associated off-campus ED found that patients admitted from an off-campus ED were

89.6% white compared with 70.8% of the patients admitted from the hospital-based ED.[27] Freestanding EDs treated more 24- to 44-year-olds and fewer 45- to 64-year-olds than hospital-based EDs,[24] whereas their pediatric patients tended to be older.[22] Freestanding ED patients also seem to have better access to medical care. They are more likely to have no ED visits in the past 12 months and are less likely to report having delayed care in the past 12 months.[23]

Factors Determining Location of Freestanding Emergency Departments

The locations in which freestanding EDs choose to open can provide some indication about whether these facilities are increasing access to care. Many of the proposed benefits of freestanding EDs derive from their ability to serve individuals who may not have easy or convenient access to a hospital-based ED.[4] Evaluating the markets in which freestanding EDs operate is vital to evaluating whether these freestanding EDs are fulfilling that role.

Are the populations freestanding EDs serve lacking access to care? In Texas, freestanding EDs tended to be located in zip codes with more annual physician visits, annual medical spending, physician offices, and hospital-based EDs, but in Ohio freestanding EDs tended to be located in zip codes with fewer hospital-based EDs.[16] In Ohio, freestanding EDs can only be off-campus ones, not independent freestanding emergency centers, which may increase patient access to emergency care, as well as allow parent hospitals to enter new markets. Texas freestanding EDs can open anywhere because Texas is not a certificate of need state, so they may be locating in these areas to provide an alternative to crowded hospital-based EDs for privately insured patients, who would provide these freestanding EDs a financially sustainable patient pool.

Overall, freestanding EDs tend to localize in areas with residents who have higher incomes and higher private insurance coverage. In Texas, Ohio, and Colorado, zip codes with freestanding EDs tend to have residents with higher annual incomes, higher rates of private insurance coverage, and a lower proportion of Medicaid coverage than zip codes without freestanding EDs.[16] Using public use microdata areas instead of zip codes, Dark et al[28] also found a positive association between household income and the presence of an independent freestanding emergency center. Off-campus EDs also tend to follow this trend because they are inclined to be operated by larger hospitals in high-income urban markets.[29]

The characteristics of the local health care market appear to strongly influence a hospital's decision to open its own off-campus ED. The presence of other off-campus EDs in the market increases the likelihood of a hospital's opening its own off-campus ED, possibly to compete against its rivals.[29] The presence of an independent freestanding emergency center in the market, however, decreases the likelihood of a hospital's operating its own off-campus ED, possibly because existing networking and transfer agreements with the independent freestanding emergency center already provide the hospital access to that market without the cost of operating its own off-campus ED.[29] In less competitive markets, hospitals are actually more likely to operate their own off-campus ED, possibly to maintain their market power in that monopolistic market by preempting the opening of competing facilities.[29] Off-campus EDs may also help balance a poor payer mix at the parent hospital, supporting the main campus while filling a need in that particular community.[30]

Quality of Care

In most metrics, freestanding EDs perform as well as if not better than hospital-based EDs, with some significant exceptions. Dayton et al[19] found that freestanding EDs tended to have higher patient satisfaction rates compared with hospital-based EDs. In the same study, the authors found that wait times, treatment times, and time to pain medication administration for long bone fractures were similar between freestanding EDs and hospital-based EDs. Pines et al[24] also found that freestanding EDs had shorter lengths of stays, lower hospital admission rates, and lower radiograph and ECG use. They found similar usage rates for ultrasonography, computed tomography, and laboratory testing compared with that for hospital-based EDs. Although this may indicate better care, it may also just reflect the lower acuity level of patients presenting at freestanding EDs. In a pilot study of Texas independent freestanding emergency centers, Dark et al[31] found that they had a significantly lower median ED length of stay (179 to 349 minutes) and significantly lower times for admission decision to ED departure for admitted patients (58 to 154 minutes), ED arrival to ED departure for discharged patients (61 to 144 minutes), and ED arrival to diagnostic evaluation (11 to 27 minutes), as well as a lower rate of leaving without being seen at freestanding EDs (0.29% to 2.4%).

When comparing admission rates for chronic obstructive pulmonary disease, chest pain, asthma, and congestive heart failure from a hospital-based ED and 2 associated off-campus EDs (staffed by the same physician population), Simon et al[32] found higher admission rates from the hospital-based ED (odds ratio 1.3), but that difference was

no longer statistically significant when adjusted for confounding factors.

Simon et al[33] found that at 2 freestanding EDs, only 78.7% of patients receiving a diagnosis of ST-segment elevation myocardial infarction met the American Heart Association's recommended door-to-balloon time (less than 90 minutes) between 2007 and 2012. That percentage was lower than that found by Krumholz et al[34] when they investigated all acute myocardial infarction patients reported by hospitals to CMS. In that study, the percentage of patients with door-to-balloon times less than 90 minutes exceeded 78.7% from 2008 onward, reaching 91.4% in 2010. This suggests that freestanding EDs may have poorer quality of care for higher-acuity conditions and is an area that requires more study. One criticism of the article by Simon et al,[33] however, could be that freestanding ED patients with ST-segment elevation myocardial infarction would be better categorized as transfer patients, and 2013 American Heart Association guidelines for transfer patients with ST-segment elevation myocardial infarction are door-to-balloon times less than 120 minutes.[35] This 120-minute metric was not measured in the study by Simon et al.[33]

In another study comparing patients admitted to the ICU from either a hospital-based ED or an associated freestanding ED, Simon et al[27] found that patients admitted from a freestanding ED had a significantly shorter inhospital length of stay, with a mean of 5 days compared with 7 days for patients admitted from the hospital-based ED. This may reflect better initial care at freestanding EDs or it may simply reflect the lower severity of cases treated at freestanding EDs compared with hospital-based EDs. However, the Charlson comorbidity index scores of the patients admitted from freestanding EDs were significantly higher than those of patients admitted from hospital-based EDs.[27] This finding may call into question the assumption that patients being treated at freestanding EDs, or at least critically ill patients, have less complicated disease than those treated at hospital-based EDs.

Price of Care

Freestanding EDs are similar in price to hospital-based EDs. The average price per visit at freestanding EDs was substantially lower than at hospital-based EDs in 2012 but has grown quickly and was comparable by 2015.[36] Ho et al[36] also found that prices for patients with the same clinical classifications software diagnosis code were on average almost 10 times higher at EDs (freestanding EDs and hospital-based EDs alike) than at urgent care centers, and prices for patients with the same procedure codes were 13 times higher at freestanding EDs versus urgent care centers. The prices measured in this study were defined as the total allowed amount, the total amount paid to the provider by the insurer and the patient together.[36] As discussed by Hsia et al,[37] by using this definition of price, this study demonstrates the direct financial effects of freestanding EDs to payers and patients.

As Schuur et al[38] argued, however, diagnosis codes may not fully capture the true nature of a patient's illness and therefore may be a misleading way to compare the level of care provided at the 3 kinds of facilities. This view has been expressed by freestanding ED executives as well.[39] Although the argument by Schuur et al[38] may be valid for diagnosis codes, the significant price differentials found by Ho et al[36] for procedure codes should not be influenced by illness severity. Another possible critique of the study by Ho et al[36] could be that the proprietary claims data used, obtained from a major health insurer, are not publicly available.[40] Schuur et al[38] also pointed out that a large portion of the price charged by EDs was from the facility fee, which reflects the indirect costs incurred by freestanding EDs because of more strict licensing requirements than those faced by urgent care centers in Texas.

Apart from direct price, freestanding EDs may affect overall medical expenditures in their area, possibly because of supplier-induced demand. Using data from 2003 to 2009, analysis by Patidar et al[41] found that every additional freestanding ED (both independent freestanding emergency centers and off-campus EDs) in a county was associated with an increase in the annual Medicare expenditure per beneficiary in that county of approximately $55. This increase does not come directly from freestanding ED prices, but instead reflects overall higher health care expenditures in areas with freestanding EDs. This result may also not fully capture the effect freestanding EDs may have on overall medical expenditures because Medicare currently reimburses only off-campus EDs and not independent freestanding emergency centers. The causality of the relationship between freestanding EDs and increased health care expenditure remains unclear. It may be that freestanding EDs influence nearby residents to use more health care services, but it may also be that they tend to locate in areas where residents are already inclined to use more health care.

Effects on Hospital-Based Emergency Departments

Freestanding EDs may have the potential to take some of the patient load that would otherwise crowd hospital-based EDs. Simon et al[42] studied the effects 2 freestanding EDs had on a nearby hospital-based ED and found that both the patient volume and admission rate decreased at

the hospital-based ED after the freestanding EDs opened. The same study, however, found that overall visits to the system (the hospital-based ED and the freestanding EDs combined) increased by 45%. Lawner et al[43] also found that after the opening of a freestanding ED, overall visits to it and nearby hospital-based EDs increased 15.8%. Dark et al[28] found no significant association between hospital-based ED wait times and the presence of nearby freestanding EDs, calling into question whether freestanding EDs actually alleviate crowding. Wait times at hospital-based EDs are likely multifactorial and largely dependent on the boarding of admitted patients,[44] so any diversion of new patients from hospital-based EDs to freestanding ones may only have a limited effect on hospital-based ED wait times.

Freestanding EDs not only affect the number of patients going to nearby hospital-based EDs but also may affect the type of patients that hospital-based EDs treat. Simon et al[25] found that after the opening of nearby freestanding EDs, one hospital-based ED saw their proportion of privately insured patients decrease by 13.9%.

Apart from other EDs, freestanding ones may also affect emergency medical services (EMS). A freestanding ED in Maryland was found to be associated with decreased calls, shorter advanced life support unit turnaround times, and shorter ambulance out-of-service intervals by providing more readily available access to care in a rural area of the state.[43] EMS may also need to determine whether transport to a freestanding ED is an appropriate decision or whether a patient is likely to need additional hospital resources and should be transported to a hospital-based ED instead. In a study of 2 county EMS agencies in Florida, Hwang et al[45] found that approximately 75% of patients transported to freestanding EDs did not require additional hospital resources, with 70% being discharged home.

Current Regulations

The policy landscape regulating freestanding EDs is limited and fragmented among the states in which they operate. Of the 32 states in which freestanding EDs operated in 2015, 22 had Emergency Medical Treatment and Labor Act–like regulations applicable to freestanding EDs, 17 had policy requirements specific for freestanding EDs, and 15 required that physicians on site be board certified or eligible for board certification in emergency medicine.[17] Only 2 states had policies fulfilling all 7 ACEP recommendations.[17] Only 14 states placed geographic restrictions on freestanding ED location, such as setting a maximum population of the service area or a minimum distance from the nearest hospital.[17]

LIMITATIONS

Our review of the literature has some important limitations. Because state licensing regulations govern freestanding ED existence, variation in those regulations may have a large influence on freestanding ED characteristics from state to state. One particularly important variation is whether a state will allow only off-campus EDs (such as Ohio) or will allow independent freestanding emergency centers to operate as well (such as Texas). Another important consideration is whether a state has a certificate of need law, which may affect where freestanding EDs can open. As of December 2015, 28 states had such laws.[17] This variation may limit the generalizability of some of the findings in the literature that focus on specific states.

DISCUSSION

Freestanding EDs have a role to play in the health care system. They have been used effectively to maintain access to care in rural areas where critical-access hospitals are difficult to maintain financially, such as in Arizona.[46] They can also be used to maintain access to emergency care in communities where hospitals are consolidating, such as in Illinois.[47] As referenced above, they demonstrate higher patient satisfaction than hospital-based EDs.[19] Physicians who work at freestanding EDs report a generally positive work environment, citing increased career longevity, better salary, fewer administrative hassles, and better patient interaction.[48] Other employees also report high satisfaction working at freestanding EDs.[47] Freestanding EDs may provide a reprieve for staff from the workload and stress associated with hospital-based EDs.[1] There is still room for improvement, however.

Freestanding EDs have the potential to offer quality of care comparable to that of hospital-based EDs more quickly and more conveniently, but they may require further regulation to maximize their value. Lawmakers should standardize the requirements that freestanding EDs must meet to operate. Because independent freestanding emergency centers are not currently recognized by CMS and therefore CMS cannot set national criteria for them, state licensing criteria should be standardized from state to state. The 7 ACEP recommendations provide a good list of minimum requirements that could be incorporated into model legislation.

To increase access to care, freestanding EDs should be accessible to individuals who do not have easy access to existing sources of emergency care. Currently, however, freestanding EDs tend to locate in areas in which patients have more resources to pay, areas that also tend to already

have adequate access to care. Encouraging freestanding ED operators to open facilities in more underserved areas can help maintain and expand access to these communities in a more financially feasible way than full-service hospitals can do.[49] This is complicated by the fact that, as of 2015, almost half of all freestanding EDs are in Texas.[17] Texas is not a certificate of need state, a fact that may promote freestanding EDs to open in profitable areas as opposed to in communities with the greatest need for health care access. This may also explain why 90% of independent freestanding emergency centers, which do not accept Medicare or Medicaid and therefore depend more on privately insured patients, are located in Texas, as of 2015.[14]

The argument that freestanding EDs can alleviate crowding in hospital-based EDs also faces problems. As discussed above, freestanding EDs generally treat relatively low-acuity patients, and low-acuity patients who are discharged have only a minor effect on hospital-based ED length of stay and wait times.[50]

Finally, increased price transparency should be implemented and enforced to help patients distinguish between freestanding EDs and alternative sources of acute, unscheduled care. Otherwise, freestanding EDs may only increase total health care expenditures without providing a significant gain in value.

To enhance the value of freestanding EDs in the United States, we recommend the following steps. First, state licensing criteria should be standardized from state to state. The 7 ACEP recommendations provide a good list of minimum requirements that could be incorporated into model legislation. Second, freestanding ED operators should be encouraged to open in areas that do not currently have easy access to emergency care, such as rural areas. Third, increased price transparency must be implemented and enforced to help patients distinguish between freestanding EDs and alternative sources of acute, unscheduled care. These 3 recommendations should help freestanding EDs reach their potential as valuable tools to expand access to quality emergency care.

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