Hospital-Based Emergency Departments: Background and Policy Considerations

Elayne J. Heisler
Specialist in Health Services

Nancy Leigh Tyler
Research Associate

December 8, 2014
Summary

Hospital-based Emergency Departments (EDs) are required to stabilize patients with emergent conditions regardless of the patients’ ability to pay as a requirement of the Emergency Medical Treatment and Active Labor Act (EMTALA). Given this requirement, EDs play an important part in the health care safety net by serving the uninsured, the underserved, and those enrolled in Medicaid. Open 24 hours a day, EDs provide emergency care, urgent care, primary care, and behavioral health care services in communities where these services are unavailable or unavailable after hours. EDs also play a key role during emergencies, such as natural disasters.

Some EDs are challenged to provide effective care. For example, EDs provide a disproportionate amount of health care to the U.S. population, in general, and to the safety net population, in particular. Specifically, while 4% of all U.S. physicians are ED physicians, they are the treating physicians in 28% of all acute care visits. Some EDs face financial challenges. ED services are costly both to payers, because services provided in an ED are more costly than those provided in community-based settings, and to hospitals, because operating an ED has high fixed costs and because if patients enter with an emergent condition, hospitals are required by EMTALA to stabilize the patient regardless of the patient’s ability to pay.

As providers of uncompensated safety net care, some EDs are crowded, in part because hospitals lack staff or inpatient beds to transfer patients from the ED, and in part because of the large number of patients who seek care in the ED because care is unavailable or inaccessible in the community. Crowded conditions have resulted in some patients experiencing long wait times, which, at times, delays access to care and results in worse health outcomes. In addition, hospitals, particularly those in urban areas, are regularly diverting ambulances because they are too crowded to accept new patients.

This report describes EDs and the role they play in the health care delivery system. It also discusses the federal role and interest in supporting emergency care. The federal government is the largest payer for overall health care, through the Medicare and Medicaid programs. Also, the federal government has made investments in emergency preparedness, programs and efforts that support the health care safety net, and health care access in general. Given these investments, Congress may be interested in EDs because a well-functioning ED system is necessary to provide surge capacity in an emergency. The function of the ED system, in turn, reflects its surrounding community’s access to health care services; therefore, understanding the use of EDs, evaluating whether such use is appropriate, and examining strategies employed to reduce inappropriate use may all be of policy interest.

This report discusses three commonly identified and interrelated challenges that EDs face: (1) crowding in EDs, (2) providing repeat care to a subset of patients who are frequent users, and (3) providing care to a large population who have behavioral health conditions when an ED lacks the appropriate resources to provide such treatment. Finally, this report concludes with some policy options that Congress might consider to improve ED functioning and reduce payer costs. This report focuses on EDs that are available to the general population; as such, it does not include EDs operated by the Departments of Defense or Veterans Affairs or those operated by the Indian Health Service.
# Contents

Introduction...................................................................................................................................... 1

EDs and Health Care Delivery........................................................................................................ 4
  EDs Fill Gaps in Available Care............................................................................................... 5
  EDs Provide Care to Safety Net Populations ........................................................................ 5
  EDs Provide Behavioral Health Care .................................................................................... 6
  EDs May Not Be Used Appropriately .................................................................................... 7
  EDs Provide Primary Care ...................................................................................................... 8
  EDs Are a Gateway for Inpatient Admissions .................................................................... 9
  The ACA May Affect ED Use ............................................................................................... 10
  New Types of Health Care Facilities May Change the EDs’ Role ................................... 11

Federal Regulation and Support of ED Services ....................................................................... 12
  Emergency Medical Treatment and Active Labor Act (EMTALA) ..................................... 13
  Tax-Exempt Hospitals and Charity Care .............................................................................. 14
  Coverage of Emergency Care and Federal Insurance Programs ...................................... 15
  Federal Support for Uncompensated Care .......................................................................... 15
  Emergency Preparedness ...................................................................................................... 16
  Trauma Care ......................................................................................................................... 17
  Healthcare Safety Net .......................................................................................................... 17
  Behavioral Health Support ..................................................................................................... 18
  Care Coordination ............................................................................................................... 18
  Research ................................................................................................................................ 19

Selected Issues Affecting EDs ...................................................................................................... 19
  Crowding ................................................................................................................................... 19
    Causes of Crowding .............................................................................................................. 20
    The Effects of Crowding ...................................................................................................... 24
    Strategies That May Reduce Crowding ............................................................................. 27
  Frequent ED Users .................................................................................................................. 28
    Strategies That Target Frequent Users ............................................................................... 30
  Behavioral Health Care in EDs ............................................................................................. 32
    Causes of Increased Behavioral Health Treatment in EDs ............................................. 32
    Effects of Treating Behavioral Health Care in an ED ....................................................... 33
    Strategies to Reduce ED Use for Behavioral Health Conditions .................................... 34

Policy Levers Available to Congress .......................................................................................... 34
  Oversight .................................................................................................................................. 35
  Changes to Federal Program Requirements ......................................................................... 35
  Directed Spending ................................................................................................................... 36
    Spending and Reimbursement Through Mandatory Programs .................................... 36
    Spending Through Discretionary Programs ................................................................... 37
  Changes to Statutory Mandates .............................................................................................. 38
  Watchful Waiting .................................................................................................................... 39

Concluding Observations............................................................................................................ 40
Figures
Figure 1. Input-Throughput-Output Model of Emergency Care

Tables
Table 1. Emergency Department Visits
Table 2. Three Types of Frequent ED Users

Contacts
Author Contact Information
Introduction

Emergency departments (EDs) play an important public health role during emergencies and on a regular basis by providing access to emergency care to all patients regardless of their ability to pay (see Text Box 1). Although the original intent of EDs was to provide emergency care, this role has expanded, as patients often seek care in an ED when services are unavailable or inaccessible in the community. Federal law guarantees access to emergency services under the Emergency Medical Treatment and Active Labor Act (EMTALA), which requires that hospitals screen all patients who enter their ED and stabilize those with emergent conditions regardless of the patients’ insurance status. Hospitals that fail to do so can be excluded from the Medicare program. As a consequence of EMTALA, hospitals with EDs must provide emergency care, which may be un- or under compensated (i.e., the hospital may not recover any or all of the cost of treatment). Specifically, more than 40% of all ED visits are for individuals who are uninsured or enrolled in Medicaid, two types of patients where hospitals provide care that is un- or under compensated.

Text Box 1: Emergency Department
(as defined in the Emergency Medical Treatment and Active Labor Act or EMTALA)

<table>
<thead>
<tr>
<th>... any department or facility of the hospital, regardless of whether it is located on or off the main hospital campus, that meets at least one of the following requirements: (1) licensed by the state in which it is located as an emergency room or department (2) advertised to the public as treating emergent conditions without prior appointment, (3) in the previous calendar year, at least one-third of the outpatient visits were for the treatment of emergency medical conditions on an urgent basis without requiring an appointment.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source: Adapted from 42 C.F.R. §489.24 (b)</td>
</tr>
</tbody>
</table>

EDs provide a disproportionate amount of health care to the U.S. population. Specifically, the 4% of physicians who staff EDs are the treating physician in 28% of all acute care visits, and these visits disproportionately involve patients with more dangerous or worrisome symptoms, such as chest pain, respiratory complaints, and abdominal pain. From 1992 to 2012, the number of ED visits grew faster than the U.S. population. This occurred for a number of reasons, including the immediate access to diagnostic resources that EDs provide and community-level declines in access to primary or behavioral health care, which have occurred at the same time as population-level increases in rates of chronic conditions (see Table 1).

---

2 CRS Report RS22738, EMTALA: Access to Emergency Medical Care. Note that hospitals bill patients and attempt to recover the cost of treatment, and hospitals are not required to provide care to patients who present to EDs with conditions that do not require immediate treatment (i.e., non-emergent conditions).
4 Acute care visits are those for short-term treatment for an injury, illness, or an urgent medical condition. By contrast, 20% of acute care visits were handled by a specialty physician, who account for 60% of the physician workforce. Stephen R. Pitts et al., “Where Americans Get Acute Care: Increasingly, It’s Not at Their Doctor’s Office.” Health Affairs, vol. 29, no. 9 (September 2010), pp. 1620-1629.
5 Ibid.
EDs also provide a significant amount of care to safety net populations. EDs handle two-thirds of acute care visits for the uninsured and one half of the acute care visits of people enrolled in Medicaid or the State Children’s Health Insurance Program (CHIP). In some cases, EDs are the appropriate site for care, but, in other cases, non-emergent patients seek care in an ED because they lack an alternative source of care. This occurs for a number of reasons, including the patients’ insurance status, their relationship to a regular provider, and their ability to secure a timely appointment with that provider. The use of EDs to provide nonemergency care can be costly to payers because services provided in an ED are generally more expensive than those provided in community-based settings. ED services are more expensive, because, for example, EDs have higher fixed costs (in terms of space and staffing), its physicians may order additional tests or laboratory work, and because hospital charges are generally higher than those charged by physician’s offices.

As a result of increased ED use and declining financial support for providing this volume of care, the Institute of Medicine, in a series of three reports published in 2006, declared that ED care was “at a breaking point.” Subsequent work by the Government Accountability Office (GAO) confirmed that these challenges persisted and found that EDs were crowded, that they diverted ambulances because they were unable to accept new patients, and that patients often experienced long waits for care. Although recent changes to health care delivery and financing (e.g., the growth of retail clinics and increases in the number of people who are insured because of the

---

### Table 1. Emergency Department Visits

<table>
<thead>
<tr>
<th>Year</th>
<th>ED Visits (millions)</th>
<th>ED Visits (per 1,000 population)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>90.8</td>
<td>356</td>
</tr>
<tr>
<td>2002</td>
<td>110.0</td>
<td>382</td>
</tr>
<tr>
<td>2012</td>
<td>133.2</td>
<td>424</td>
</tr>
</tbody>
</table>

**Source:** American Hospital Association, TrendWatch Chartbook 2014, Table 3.3 Emergency Department Visits, Emergency Department Visits per 1,000 and Number of Emergency Departments, 1992-2012, http://www.aha.org/research/reports/tw/chartbook/index.shtml.

---

9 Studies have found that ED services can be three to five times more costly than similar services provided in a community-based setting. For discussion, see R.M. Coffey, Emergency Department Use for Mental Health and Substance Use Disorders, U.S. Agency for Healthcare Research and Quality (AHRQ), Rockville, MD, August 23, 2010, http://www.hcup-us.ahrq.gov/reports/ED_Multivar_Rpt_Revision_Final072010.pdf, p. 3.
12 It is not yet clear whether the growth of retail clinics and urgent care centers will alleviate crowding and thereby enhance ED function. See “New Types of Health Care Facilities May Change the EDs’ Role” in this report.
Patient Protection and Affordable Care Act\textsuperscript{13} may improve ED operations for some hospitals, EDs—particularly those in urban area—remain crowded.\textsuperscript{14} It is also possible that some policy changes may have unintended consequences increasing ED use or further straining ED finances.\textsuperscript{15}

The federal government is interested in the availability of ED services and their appropriate use for several reasons, including its role as a payer of health care services, its role in supporting emergency preparedness, and its role in supporting the health care safety net. The federal government is the largest health care payer, through the Medicare and Medicaid programs,\textsuperscript{16} and as such, the availability, use, and costs of ED services may be of interest to policy makers.\textsuperscript{17} Also, the federal government has made investments in emergency preparedness,\textsuperscript{18} programs and efforts that support the health care safety net, and efforts that support health care access in general.\textsuperscript{19} Given these investments, Congress may be interested in EDs because a well-functioning ED system is necessary to provide surge capacity in an emergency. The function of the ED system, in turn, often reflects its surrounding community’s access to health care services; therefore, understanding the use of EDs, evaluating whether such use is appropriate, and examining strategies employed to reduce inappropriate use may all be of policy interest.

This report describes EDs, the role they play in the health care delivery system, and current federal involvement in supporting EDs.\textsuperscript{20} It then discusses the causes and consequences of three commonly identified and interrelated challenges that EDs face: (1) crowding, (2) providing repeat care to a subset of patients who are frequent users, and (3) providing care to a large population who have behavioral health conditions when an ED lacks the appropriate resources to provide such treatment. The report concludes with policy options that Congress may consider to potentially improve ED functioning and reduce payer costs.

\begin{footnotesize}
\textsuperscript{13} The Patient Protection and Affordable Care Act (ACA, P.L. 111-148, as amended) expanded insurance coverage, which has reduced the number of people who are uninsured. For more information, see the CRS series of ACA Reports at http://www.crs.gov/pages/subissue.aspx?clid=3746&parentid=13&preview=False. It is not clear what the effect of the ACA will be on ED use; see discussion in “The ACA May Affect ED Use” in this report.
\textsuperscript{14} GAO-09-347.
\textsuperscript{15} For example, one study found that expanding Medicaid coverage increased ED use among those who were newly Medicaid eligible. See Sarah L. Taubman et al., “Medicaid Increases Emergency-Department Use: Evidence from Oregon’s Health Insurance Experiment,” Science, vol. 343, no. 6 (January 17, 2014), pp. 263-268.
\textsuperscript{16} Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group, Year 2012. For descriptions of Medicare and Medicaid, see CRS Report R40425, Medicare Primer.
\textsuperscript{19} See, for example, the federal health center program described in CRS Report R42433, Federal Health Centers, and programs that the federal government administers through the Health Resources and Services Administration, described in CRS Report R43304, Public Health Service Agencies: Overview and Funding.
\textsuperscript{20} This report focuses on emergency departments (EDs) that are available to the general population; as such, it does not include EDs that are operated by the Departments of Defense or Veterans Affairs or those operated by the Indian Health Service.
\end{footnotesize}
EDs and Health Care Delivery

EDs play a role in the U.S. health care system that has expanded beyond their original purpose of providing emergency care. EDs are increasingly relied upon to fill gaps in available care by providing after-hours care, by providing care to the safety net population, and by providing behavioral health care when such care is not otherwise available. EDs are also increasingly providing types of care that have traditionally been provided by primary care providers (PCPs), such as conducting diagnostic testing (e.g., blood testing) and coordinating chronic care (e.g., care to manage a chronic disease such as diabetes). The role of an ED within a hospital has also changed, as EDs, instead of PCPs, increasingly drive hospital admissions, an important source of hospital revenue. This section provides an overview of the expanded role of EDs. All EDs provide similar types of care, but they may see different patient populations depending on their location (e.g., rural areas versus urban areas), and the services offered, as some EDs may offer specialized services such as trauma or burn care.21

EDs generally provide three types of care: (1) emergency care, (2) unscheduled urgent care, and (3) safety net care (see Text Box 2).

Emergency care is the primary and original mission of EDs. Unscheduled urgent care may be used to treat an acute problem or the acute exacerbation of a chronic health problem. EDs may provide safety net care because patients have financial or other barriers that prevent them from accessing care from other components of the health care system.22 Primary and behavioral health care are often provided in an ED as a result of either unscheduled urgent care or as part of an ED’s safety net function. In both these cases, it is not optimal to provide these services in an ED.

Text Box 2: Three Types of Care Commonly Provided by Emergency Departments

1. **Emergency Care**: the treatment of seriously ill or injured patients who require immediate stabilizing treatment.

2. **Unscheduled Urgent Care**: care provided for acute problems or acute exacerbation of chronic problems, generally because there is inadequate capacity in other parts of the health care system.

3. **Safety Net Care**: care provided to vulnerable populations who experience barriers that prevent them from accessing care from other parts of the health care system. As a consequence, this population uses EDs regularly for care, typically because cost or barriers to access prevent them from obtaining care in other settings.


---

21 Trauma care is provided at trauma centers, which are specialized hospitals with the staffing, resources, and equipment needed to treat severely injured patients. They provide specialized care beyond that of an ED. Not all hospitals with EDs are trauma centers, but most trauma centers have EDs. See Centers for Disease Control and Prevention, “Access to Trauma Care: Getting the Right Care, at the Right Place, at the Right Time,” August 24, 2010, http://www.cdc.gov/traumacare/access_trauma.html.

EDs Fill Gaps in Available Care

ED use reflects the health needs of the surrounding community and the gaps in care available because EDs provide care to those with few alternate options. Given this, some ED visits may be considered “resource sensitive” and preventable if appropriate community-based resources are available. Community-based resources encompass all types of health care, including primary care, laboratory testing, medical imaging, care provided to treat behavioral health conditions (e.g., care provided to treat mental health and substance use), and all types of specialty care (e.g., orthopedics). Community-based care may be constrained because care is completely unavailable, or is unavailable at certain times, for people with certain types of insurance, or for people who lack insurance. This may occur because a number of areas have provider shortages. The federal government designates primary care health professional shortage areas and makes a number of programs available to alleviate these shortages. Still, there are approximately 6,100 areas designated as having too few primary care providers. ED use may also be driven by the hours that physician offices are open, as EDs are often a source of after-hours care. For example, one study found that 75% of children’s ED visits in 2012 occurred at night or on a weekend—hours when physicians offices are traditionally closed—and that this was the most common reason children visited an ED for non-emergent conditions, regardless of insurance status.

EDs may be filling gaps in certain communities; but EDs may also be actively seeking patients, particularly those with private insurance coverage who are being treated for uncomplicated medical conditions. As noted, ED care is more expensive for payors than is care provided in outpatient settings, in part, because hospitals receive higher reimbursements from payors to support the higher fix costs of an ED. Given these higher reimbursement rates, hospitals can generate revenue through the ED. In these instances EDs may be filling gaps, but these gaps could have been filled in ways that are less expensive to payers.

EDs Provide Care to Safety Net Populations

ED use is also driven by the availability of community-based health service providers that accept safety net populations, such as the uninsured or Medicaid beneficiaries. For example, some physicians do not participate in Medicaid, and some Medicaid beneficiaries report barriers to accessing physician services. This may also be true for uninsured individuals with few options

---


24 CRS Report R42029, Physician Supply and the Affordable Care Act.

25 U.S. Department of Health and Human Services, Health Resources and Services Administration, “Shortage Designation: Health Professional Shortage Areas & Medically Underserved Areas/Populations,” http://www.hrsa.gov/shortage/index.html. Approximately 4,000 areas have been designated as having shortages of mental health providers.


29 Peter J. Cunningham and Ann S. O’Malley, “Do Reimbursement Delays Discourage Medicaid Participation by Physicians?” Health Affairs, vol. 28, no. 1 (November 18, 2008), pp. w17-w28; Heidi Allen, Bill J. Wright, and (continued...)
except self-pay for visits, which may not be financially feasible. Communities that have federal health centers—federally funded safety net facilities that are required to provide primary and some specialty and dental care to all individuals regardless of their ability to pay—have lower ED use.\textsuperscript{30} Although health centers may employ strategies to reduce ED use,\textsuperscript{31} they may be limited in their ability to do so because they are generally not open after hours and many may be operating at or above capacity.\textsuperscript{32} Still, facilities that target the safety net population can reduce ED use, which demonstrates that some ED use is resource-sensitive.

EDs Provide Behavioral Health Care

EDs may fill gaps when needed behavioral health services are unavailable. Patients use EDs for behavioral health care because there may be few other options, because there are shortages of behavioral health providers. Specifically, there are approximately 4,000 areas designated as mental health professional shortage areas and more than half of U.S. counties do not have a practicing behavioral health provider.\textsuperscript{33} In addition to provider shortages, there are also shortages of inpatient treatment options for patients who require longer-term treatment.\textsuperscript{34} This occurs, in part, because a number of states have decreased funding for inpatient psychiatric care.\textsuperscript{35} Patients with mental health conditions may also be brought to an ED by law enforcement when the person is causing a disturbance that law enforcement or other emergency personnel determine requires medical intervention. Although such episodes may be acute, they may not necessarily be best addressed in an ED. Some EDs may lack the services or staff necessary to provide behavioral health care and even in cases when EDs do not lack capacity, providing care to this population is resource intensive. This is particularly the case for patients with both behavioral health conditions and acute or chronic health conditions.\textsuperscript{36} A study conducted by the Agency for Healthcare

(...continued)


\textsuperscript{30} CRS Report R42433, \textit{Federal Health Centers}.


\textsuperscript{35} Peter J. Cunningham, Kelly McKenzie, and Erin Fries Taylor, “The Struggle to Provide Community-Based Care to Low-Income People with Serious Mental Illness,” \textit{Health Affairs}, vol. 25, no.3 (2006), pp. 694-705. It is possible that as some states implement the ACA’s Medicaid expansion, mental health services may become more accessible.

Research and Quality (AHRQ) and the Substance Abuse and Mental Health Services Administration (SAMHSA) found that individuals with mental health and/or substance use disorders that impaired their functioning were more likely to have multiple ED visits during the course of a year (to treat both physical and behavioral health conditions). This was particularly true for individuals who had co-occurring chronic conditions such as diabetes.

EDs May Not Be Used Appropriately

In part because of the ED’s role as a gap filler, conventional wisdom holds that some ED visits are inappropriate when patients use EDs for minor ailments or for convenience. Although some ED visits are inappropriate (i.e., these visits are to treat conditions that could have been treated in an outpatient setting), researchers have found that this generally occurs because people have few other treatment options or because they were referred to an ED by a health care provider. This is particular true for Medicaid enrollees, where public (and policy maker) perceptions are that Medicaid enrollees misuse EDs. However, the data do not suggest this because EDs more often evaluated Medicaid enrollees as having an urgent or semi-urgent complaint than were privately insured patients seen in the ED. Although Medicaid enrollees use EDs at higher rates than people who are privately insured or uninsured, much of this use can be explained by the higher rates of chronic conditions among Medicaid enrollees, or by Medicaid enrollees’ difficulties in securing an appointment with another provider. Because they lack access to other providers, uninsured individuals may use EDs for health conditions that could have been treated in an outpatient setting (e.g., diabetes), but were not because of access issues.

Some of the contention that patients use EDs unnecessarily may be an artifact of the terminology that EDs use to classify visits. EDs use the Emergency Severity Index (ESI) to triage patients, which uses the term “non-urgent” to indicate that wait times should not exceed 24 hours. “Non-urgent” complaints do not equate to “unnecessary” complaints. The ESI system categorizes complaints based on needed resources, physical assessment, and risk factors and may classify

38 Anna S. Sommers, Ellyn R. Boukus, and Emily Carrier, Dispelling Myths About Emergency Department Use: Majority of Medicaid Visits are for Urgent or More Serious Symptoms, Center for Studying Health System Change, No. 23, Washington, DC, July 2012.
40 Ibid.
41 As a result of this perception and in an attempt to reduce non-emergency ED use, some state Medicaid programs have instituted copayments for non-emergency ED use. See Medicaid and CHIP Payment Advisory Commission, MAC Facts, Key Findings on Medicaid and CHIP: Revisiting Emergency Department Use in Medicaid, Washington, DC, July 2014.
42 Urgent refers to conditions assessed to need an evaluation within one hour and semi-urgent refers to conditions needing an evaluation between one and two hours. See Anna S. Sommers, Ellyn R. Boukus, and Emily Carrier, Dispelling Myths About Emergency Department Use: Majority of Medicaid Visits are for Urgent or More Serious Symptoms, Center for Studying Health System Change, No. 23, Washington, DC, July 2012.
44 GAO-09-347.
visits as “non-urgent” based on the severity of the complaint. However, it is often difficult to determine prospectively whether a complaint is non-urgent. Patients may present to EDs with a complaint that they perceive as a true emergency, for instance, receiving an uncomplicated bite from a feral animal. Most people, even educated clinicians, recognize this condition as requiring prompt care; however, because the bite is uncomplicated, it is categorized as “non-urgent.” This coding system makes it difficult to determine whether EDs are being used inappropriately because some cases classified as non-urgent may have seemed urgent when the patient presented to the ED.

EDs Provide Primary Care

In addition to filling gaps in available primary care, EDs are also taking on some of the role that primary care providers (PCPs) once filled by evaluating and managing chronic illnesses, particularly for older adults. Patients with chronic illnesses may require rapid evaluation and possible treatment; therefore, PCPs and other providers are increasingly referring these patients to EDs. Medical advances have expanded the scope of illnesses treatable in the ED setting because EDs generally offer a number of diagnostic tests that are not readily or simultaneously available in other settings. This expanded diagnostic role of EDs occurs in part for clinical reasons, but it is also driven by administrative factors such as a patient’s ability to secure a timely visit with a physician that is included in the patient’s insurance plan. The decision to admit a patient to a hospital after rapid diagnostic testing is increasingly being made by an ED physician, which offsets a 24% decline in admissions from PCPs.

Though EDs have resources to evaluate patients with chronic illnesses, PCPs are better equipped to manage these patients in the long-term. In general, EDs are not designed to manage chronic illness, and ED provision of this type of care may be detrimental to patients. ED providers do not generally have the patient’s full medical records—although increased use of electronic health records could change this—and given the nature of an ED environment, providers face frequent interruptions and are often rushed because of incoming emergencies. This may mean that patients who seek primary care in an ED can receive lower-quality care and are at greater risk of experiencing a medical error than if the care was received in a more appropriate setting. Such unintended consequences, may, in turn, create a feedback loop where these patients require additional ED care.

---

45 Stephen Pitts et al., “National Trends in Emergency Department Occupancy, 2001 to 2008: Effect of Inpatient Admissions Versus Emergency Department Practice Intensity,” *Annals of Emergency Medicine*, vol. 60, no. 6 (December 2012). Some experts have also speculated that the use of EDs to manage chronic illness will increase as the population ages. Institute of Medicine of the National Academies, *Hospital-Based Emergency Care: At the Breaking Point* (Washington, DC: National Academies Press, 2006).

46 RANDHealth ED Report.

47 Ibid.

48 Ibid. Hospitals have some control over these administrative factors (e.g., they contract with certain physicians who, in turn, only contract with certain insurance plans) and some hospitals promote ED referrals as a way of increasing inpatient admissions. See discussion in “EDs Are a Gateway for Inpatient Admissions.”


50 There is evidence that medical errors in EDs are linked to interruptions, which are more common in an ED setting. See Carey D. Chisholm et al., “A Task Analysis of Emergency Activities in Academic and Community Settings,” *Annals of Emergency Medicine*, vol. 58, no. 2 (January 31, 2011), pp. 117-122.
EDs Are a Gateway for Inpatient Admissions

Generally, EDs are considered to be costly for a hospital because they have high fixed costs related to their emergency capacities, which may not be used on a daily basis. However, depending on a hospital’s payer mix, EDs may generate revenue for a hospital because they drive inpatient admissions. Specifically, between 2003 and 2009, the total number of hospital admissions increased driven primarily by a 20% increase in non-elective admissions from EDs. Even in cases where an ED visit does not result in an admission, ED visits for individuals who are privately insured can be profitable. This is particularly true when EDs are treating uncomplicated conditions that could have been treated in an outpatient setting. However, ED visits may not be profitable with other payers; outpatient visits for those enrolled in Medicare or Medicaid or who are uninsured may yield reimbursement rates that are lower than the hospital’s costs. Despite the potential of such losses, EDs can be profitable overall because of their link to admission; as a consequence, some hospitals have expanded ED services or have created free-standing emergency rooms. Some hospitals are also anticipating that EDs will become revenue generating with the ACA’s expansion of private insurance coverage. Although EDs may be profitable for a hospital, particularly when EDs are used to treat uncomplicated conditions, such ED care is generally costly to payors because care could be provided at a lower cost in an outpatient setting.

With 15% of ED visits resulting in admissions, these admissions compose nearly half of all hospital admissions and over two-thirds of all non-elective admissions. ED visits that result in admission are particularly common for Medicare beneficiaries. In 2010, sixty percent of ED visits by Medicare beneficiaries resulted in a hospital admission. Although ED visits represent a large percentage of all acute care visits, they account for 2% of all Medicare costs. This outcome

---

52 Hospital admissions are comprised of two types: non-elective admissions and elective admissions. Non-elective admissions refer to medically necessary admissions to treat unscheduled events, such as a heart attack. Elective admissions are generally procedures that are medically necessary; however, they are planned (e.g., a knee replacement).
56 Studies have found that ED services can be three to five times more costly than similar services provided in a community-based setting. For discussion, see R.M. Coffey, Emergency Department Use for Mental Health and Substance Use Disorders, U.S. Agency for Healthcare Research and Quality (AHRQ), Rockville, MD, August 23, 2010, http://www.hcup-us.ahrq.gov/reports/ED_Multivar_Rpt_Revision_Final072010.pdf, p. 3.
58 RANDHealth ED Report.
60 ED visits account for 2% of costs for Medicare beneficiaries and account for 4% of total Medicaid spending; see Jeffrey M. Gonzalez, National Health Care Expenses in the U.S. Civilian Noninstitutionalized Population, 2011, (continued...)
occurs partially because when Medicare beneficiaries are admitted after an ED visit, the payment for ED services is included within Medicare’s payment for inpatient services. As ED visits for Medicare beneficiaries are more likely to result in an admission, total ED costs are generally underestimated.

The ACA May Affect ED Use

The implementation of the Affordable Care Act (ACA) may have a number of effects on the use of EDs and their finances, although these effects vary by hospital and depend on the patients they treat. The ACA is generally expected to increase hospital reimbursements for emergency care because fewer people will be uninsured and therefore seeking uncompensated care in an ED. However, insurance coverage rates are expected to vary, in part, because some states will not implement the ACA Medicaid expansion. In states that have implemented the ACA Medicaid expansion, the effects of the ACA are more pronounced because a larger share of the population has gained insurance coverage. Specifically, hospitals in these states report that their expenditures on uncompensated care have decreased since the ACA was implemented. In states that did not implement the ACA Medicaid expansion, these declines have not occurred, but these hospitals are still subject to a number of ACA-related payment reductions that were enacted, in part, because it was expected that the law would decrease the amount of uncompensated care that hospitals would provide. Hospitals that see payment reductions, without concurrent increases in collections, may be further strained by the ACA.
The effects of the ACA on ED use are not yet clear. It is possible that the law may decrease ED use, may slow the rate of ED growth, or keep the growth of ED use comparable to the growth that would have occurred without changes.\(^{68}\) Or it may decrease ED use for certain groups, as one study of ED use by young adults found.\(^{69}\) However, it is possible that the law may increase ED use; researchers have found that ED use is higher among the newly insured and that ED use increased for those who became Medicaid-eligible in Oregon, a state that had previously implemented a Medicaid expansion.\(^{70}\) Such increases in ED use could be temporary, as people with unmet needs seek care once they gain coverage, but then use drops as their health care needs are met.\(^{71}\) ACA could also mean that ED patients are sicker than the ones ED treated prior to the law; as was found in a study of ED use in Massachusetts, a state that enacted health reforms prior to the ACA.\(^{72}\) Although the full effects of the ACA on ED use are not yet known, use will likely vary by state, and may change over time. In addition, there are concerns that some people newly eligible for Medicaid may not be able to secure timely access to primary care or specialty care providers, and may continue to seek care in the ED.\(^{73}\)

**New Types of Health Care Facilities May Change the EDs’ Role**

Three new outpatient health care options may change the role of the ED by filling gaps in outpatient and after-hours care. Retail clinics provide unscheduled routine primary care; and may provide some access to care for non-emergency conditions for individuals who are able to pay for such services. Similarly, urgent care clinics provide unscheduled and after-hours access to care for a larger range of services. Hospitals may also choose to operate free-standing emergency rooms that function like an ED, but are not located on hospital grounds. These facilities, if operated by a hospital, would be subject to EMTALA. Other entities—such as private investment groups or ED physicians—have also opened free-standing emergency rooms, which are not subject to EMTALA\(^ {74}\) (see *Text Box 3*). Although these options have the potential to enhance ED

(...continued)


\(^{69}\) Tina Hernandez-Boussard, “Emergency Department Use: The Affordable Care Act Reduces Emergency Department Use by Young Adults: Evidence from Three States,” *Health Affairs*, vol. 33 (September 2014), pp. 1648-1654.


function by lessening the EDs’ role as a gap filler, it is also possible that their growth may adversely affect EDs, because these facilities tend to be located in areas where patients have high rates of private insurance and these facilities are not required to accept all patients, and therefore, may limit their patients to those with private insurance, a potential source of revenue to EDs. As such, these new provide types could draw insured patients from traditional EDs, making the remaining patients disproportionately uninsured or on Medicaid, which could strain EDs’ finances.75

Text Box 3: Retail Clinics, Urgent Care Clinics, and Free Standing EDs

Retail Clinics provide quick care for routine medical complaints (e.g., bronchitis). They generally lack access to laboratories, x-rays, or diagnostic equipment. They are located in a retail location, such as a pharmacy, and may be affiliated with a hospital or health system. They are most often staffed by a nurse practitioner or a physician assistant and generally require the patient (or the patient’s insurance) to pay the cost of services and often require payment at the time that services are rendered.

Urgent Care Clinics are generally free-standing physicians’ offices that offer extended hours and on-site access to laboratory testing, x-rays, and other diagnostic equipment. They offer more services than are available at a retail clinic (e.g., they can treat fractures). They generally require the patient (or the patient’s insurance) to pay the cost of services and often require payment at the time that services are rendered.

Free-Standing Emergency Rooms provide services similar to the care available in an ED, but without the co-located hospital available for admission or certain surgeries. These facilities, unless operated by a hospital, are generally not subject to EMTALA, and are not required to accept Medicare and Medicaid reimbursements. As such, they may disproportionately serve patients with private insurance. Many free-standing EDs have transfer agreements with hospitals and some are operated by the hospitals they refer patients to (thereby increasing admissions for patients with private insurance at the referral hospital).


Federal Regulation and Support of ED Services

The federal government both regulates and supports ED services by (1) requiring hospitals with EDs to provide certain emergency services, (2) reimbursing for emergency services provided to individuals enrolled in federal insurance programs, (3) requiring certain private insurance plans to include coverage of emergency health services, and (4) providing funds to hospitals to defray the

(...continued)


cost of providing uncompensated care. The federal government also supports hospital preparedness as part of its emergency preparedness activities, and supports the broader health care delivery system in ways that might reduce inappropriate ED use. Specifically, it supports health care safety net facilities, behavioral health care, and efforts to increase care coordination to reduce ED use for individuals with chronic conditions. Examples of federal involvement in hospital-based emergency care are discussed below.76

Emergency Medical Treatment and Active Labor Act (EMTALA)

The federal government requires—as a condition of Medicare participation—that hospitals with dedicated EDs screen and provide treatment to patients with emergent conditions regardless of a patient’s ability to pay.77 This requirement is set forth in the Emergency Medical Treatment and Active Labor Act (EMTALA), which was enacted in 1986 as part of the Consolidated Omnibus Budget Reconciliation Act of 1985 (P.L. 99-272). EMTALA was enacted in response to controversies that arose when patients died because some hospitals refused emergency services to uninsured patients as a way of reducing the amount of uncompensated care the hospitals provided. This practice is known as “dumping.”78 EMTALA requires that patients be medically evaluated—through an appropriate medical screening exam (MSE)—and that patients be transferred to a hospital that can provide necessary services if the screening hospital is unable to provide appropriate care.

Hospitals have discretion about the types of specialty physicians they have available on-call.79 If a hospital lacks an appropriate on-call physician to treat a particular patient it may transfer the patient to a facility that has an appropriate physician available.80 A number of hospitals have difficulty in recruiting specialists to provide ED on-call coverage. For a number of reasons, specialty physicians may not want to take ED call. One reason is liability risk (or perceptions of that risk). Individual physicians are not subject to EMTALA; instead, hospitals are and may be sued by private individuals who are injured as a result of a hospital not meeting its EMTALA requirements.81 Physicians cannot be sued for injuries incurred as a result of an EMTALA violation, but may be liable for injuries to ED patients that result from errors or negligence on the part of the treating physician.82 Physicians may perceive this liability to be high and may feel at a greater risk when treating ED patients because they often treat these patients quickly, without complete knowledge of their underlying medical conditions. Specialty physicians may also not

---

76 The federal government also supports emergency medical services through the Department of Transportation; however, this support focuses on emergencies outside the hospital, which is beyond the scope of this report. For more information on these programs, see “Emergency Medical Services: National Highway and Transportation Safety Administration, (NHTSA),” at http://www.ems.gov/educationstandards.htm.
77 Hospital-based EDs are required to provide care per EMTALA; however, the act only refers to stabilizing procedures and not to all services available within an ED or within a hospital in general. Some hospitals provide necessary treatment as dictated and transfer patients to other facilities for a variety of reasons: insurance, specialty needs, patient request, or bed availability.
79 Letter from Director, Survey and Certification Group, Center for Medicaid and Medicare Services to Associate Regional Administrators, Division of Medicaid and State Operations, Region I-X, June 13, 2002, On-Call Requirements - EMTALA.
80 Ibid.
81 CRS Report RS22738, EMTALA: Access to Emergency Medical Care.
82 Ibid.
wish to take ED call because, if they do, they are required—under the hospital’s EMTALA requirement—to respond within a designated time frame or face a fine ($50,000) and possible exclusion from the Medicare program. The lack of specialty physicians willing to take ED call may have a larger impact on health care access. Some hospitals are unable to secure specialty physicians—a particular issue for high-risk specialties (e.g., neurosurgery)—and have to close their ED or divert patients to other hospitals with these specialists. This may create a feedback loop whereby patients do not seek care at these hospitals because the hospital does not offer the full range of services, which may make it difficult for the hospital to remain open.

Although EMTALA permits hospitals to bill patients who receive care as a result of the requirement, EMTALA has created the perception to some patients that EDs are a source of free care for the uninsured and that EDs must provide full treatment to patients even if they present with non-emergent conditions. These perceptions, in turn, may drive ED use for the uninsured, as ED use is often used for non-acute, non-emergent conditions by uninsured individuals. In addition, though hospitals bill uninsured patients, the amounts that hospitals receive from uninsured patients are generally less than those received from insured patients. In some cases, the uninsured may be billed at higher rates than those billed to insurers; however, not all uninsured individuals will pay for services because some are unable to do so, and because some hospitals have indigent-care programs that provide free or reduced care.

**Tax-Exempt Hospitals and Charity Care**

Not all hospitals have EDs, although some states require hospitals to have an ED to be licensed. In states without this requirement, the entity that operates the hospital determines whether or not a hospital has an ED. Specifically, hospitals that are not-for-profit or those operated by state and local governments are more likely to have an ED—nearly all these types of hospitals have an ED, whereas only two-thirds of investor-owned hospitals do. Not-for-profit and state and local hospitals operate EDs and provide charity care (i.e., uncompensated care) as part of their missions. In addition, the ACA requires that hospitals that have tax-exempt status meet a

---

83 42 C.F.R. §489.20(r)(2) does not define a specific time, instead it requires that a hospital define available providers.
84 CRS Report RS22738, *EMTALA: Access to Emergency Medical Care*.
88 Glenn A. Melnick and Katya Fonkych, “Hospital Pricing and the Uninsured: Do the Uninsured Pay Higher Prices?” *Health Affairs*, vol. 27, no. 2 (March 2008), pp. w116–w122.
91 Ibid.
“community benefit standard,” although this can be satisfied in a number of ways; some hospitals do so by providing free or reduced care.92

**Coverage of Emergency Care and Federal Insurance Programs**

The federal government finances care provided to beneficiaries enrolled in Medicare, Medicaid, and CHIP. Under each of these programs, emergency services are a covered benefit. As such, beneficiaries are eligible to receive services in EDs with hospitals receiving reimbursements that vary by the services provided, the program providing reimbursements, and the location and type of hospital providing services.93 Emergency health services are also considered to be an “essential health benefit” under the ACA. As such, non-grandfathered private insurance plans offered through the nongroup and small group markets must cover emergency services.94 Together, Medicare, Medicaid, CHIP, and private insurance plans offered through ACA exchanges provide insurance coverage to approximately 120 million people or approximately 37% of the U.S. population.95

**Federal Support for Uncompensated Care**

The costs associated with hospitals providing uncompensated care have been defrayed by three federal sources: Medicare disproportionate share hospital (DSH) payments, Medicaid DSH payments, and payments for undocumented immigrants. Through the Medicare and Medicaid programs, the federal government provides DSH payments to hospitals that treat large numbers of low-income patients. Although these payments can be used to support uncompensated care provided by an ED, in some cases they are not. Instead, in some states DSH payments are used to defray uncompensated inpatient care costs or all of the uncompensated care that a hospital provides.96 The ACA, because it was expected to reduce the size of the uninsured population, included changes to Medicare and Medicaid DSH payments. Subsequent laws have amended Medicaid DSH payment reductions and delayed these reductions until FY2017.97

Hospitals also receive reimbursements for some emergency care provided to unauthorized aliens, nonimmigrants and legal permanent residents who are not eligible for Medicaid because, for the

---


94 CRS Report R42069, *Private Health Insurance Market Reforms in the Affordable Care Act (ACA).* For discussion of grandfathered plans, see CRS Report R41166, *Grandfathered Health Plans Under the Patient Protection and Affordable Care Act (ACA).*


97 For more information on Medicaid DSH payments, see CRS Report R42865, *Medicaid Disproportionate Share Hospital Payments.* For information on ACA changes to Medicare DSH payments, see CRS Report R41196, *Medicare Provisions in the Patient Protection and Affordable Care Act (PPACA): Summary and Timeline.*
latter, there is a five-year waiting period before legal permanent residents are eligible for Medicaid. These reimbursements are for services that qualify as “Emergency Medicaid,” and cover services from emergency providers (including hospitals, but also including emergency transport) that treat an emergency or services for a pregnant woman that are related to her pregnancy (including prenatal care, labor, delivery, and post-partum care). “Emergency Medicaid” is not available for all of the conditions for which people seek treatment in an ED, nor are these funds available for services provided to all unauthorized aliens, nonimmigrants, or legal permanent residents; “Emergency Medicaid” funds are only available for services provided to individuals who would have otherwise qualified for Medicaid, which, unless a state has implemented the Medicaid expansion, does not include childless adults.

In addition to reimbursements available from Medicaid, from FY2005 to FY2008, the federal government allotted annual funding to states for certain emergency care provided to undocumented aliens. The federal funding was allotted to the six states with the highest number of undocumented alien apprehensions receiving one-third of total funding. States, in turn, provide or have provided funding to hospitals, physicians, and ambulance service providers for emergency services provided to eligible patients. Although funding has not been allotted since FY2008, some states still have funds remaining from their allocation. As of May 2014, twenty-nine states have exhausted their allocation under this program, so new claims for services are not being accepted in these states. Although this funding source is or was available, for some hospitals it may not represent full reimbursement for care provided. This occurs in part because it is difficult to determine a particular hospital’s need for these funds because hospitals do not ask about a patient’s immigration status when providing care.

Emergency Preparedness

The federal government supports hospital emergency preparedness through the Hospital Preparedness Program administered by the HHS Assistant Secretary for Preparedness and Response (ASPR). The program began in FY2002, and funding for the program peaked in FY2003 with an appropriation of $515 million; funding since that time has declined by nearly 50% as the program’s FY2014 appropriation was $255 million. The program awards grants to support the ability of communities and hospitals to provide surge capacity during a public health emergency. Although these grants do not support day-to-day ED operations, support to strengthen medical surge capacity may include the development of processes to enhance ED operations so that hospitals have the capacity to surge during an emergency.

---

98 CRS Report R43561, Treatment of Noncitizens Under the Affordable Care Act.
100 The expansion of Medicaid in the ACA permitted states to cover childless adults, but not all states have elected to expand their Medicaid programs. See CRS Report R43564, The ACA Medicaid Expansion.
102 CRS analysis of HHS annual “Budget in Brief” and congressional budget justification documents, http://dhhs.gov/asfr/ob/dcbudget; for more information about this program.
103 U.S. Department of Health and Human Services, Assistant Secretary for Preparedness and Response, “Public Health (continued...)”
Trauma Care

ASPR also has authority to award grants to support trauma care, although these grants have not been funded. Trauma care is a specific type of care, provided in designated centers that provide more intensive services than those that are traditionally available in an ED. Trauma centers are distinct from EDs, but generally trauma centers will also have an ED. In the absence of a designated trauma center, EDs provide care to severely injured patients until they can be transferred to an appropriate trauma center. Given issues of ED crowding, funding to support designated trauma centers may mean that EDs would provide less trauma care prior to a transfer, which could free up ED resources.

Healthcare Safety Net

The federal government supports general health infrastructure, including the health care safety net. This support is not specifically related to emergency care, but has the potential to reduce ED use by reducing the ED’s need to fill health system gaps. Determining whether or not this occurs is difficult as these programs do not directly aim to reduce ED use. For example, HHS’s Health Resources and Services Administration (HRSA) supports the development of the health care workforce, focusing particularly on providers who care for disadvantaged populations. Such support does not focus on reducing ED use, but may reduce the need for some resource-sensitive ED use. In an effort more focused on reducing ED use, HRSA awards grants to support federal health centers that provide primary care, dental care, and behavioral health care to all individuals regardless of their ability to pay. Research has found that these health centers reduce ED use, in particular, for conditions that could have been treated in an outpatient setting (e.g., asthma).

The Centers for Medicare & Medicaid Services (CMS), the agency that administers the Medicare, Medicaid, and CHIP programs, has awarded funds to states as part of its $50 million Emergency Room Diversion Grant Program. The program seeks to increase the number of community health centers, extend the hours at existing centers, and better coordinate care as part of CMS’s efforts to reduce ED use among Medicaid beneficiaries. Grants were awarded to 20 states from FY2006 through FY2009.

(...continued)


106 See, for example, descriptions of HRSA programs to support primary care in CRS Report R43177, Health Workforce Programs in Title VII of the Public Health Service Act, and U.S. Department of Health and Human Services, “National Health Service Corps,” http://nhsc.hrsa.gov/. The National Health Service Corps provides scholarship and loan repayment to primary care and behavioral health providers, among others, who provide care in health professional shortage areas.


Behavioral Health Support

EDs provide behavioral health care services because these services are often unavailable in the community. County-level data suggest that counties with available behavioral health outpatient options have lower ED use for behavioral health conditions.\textsuperscript{110} The federal government, through SAMSHA, supports efforts to increase access to behavioral health care; though such support is not specifically related to emergency care, SAMHSA programs might reduce ED use. Specifically, SAMHSA support includes formula and competitive grants to states and territories to support community-based mental health and substance abuse treatment and prevention services.\textsuperscript{111} Competitive grants to support these services are available to other entities, including private organizations and local communities. SAMHSA also provides technical assistance and workforce support. Given that provider shortages limit access to behavioral health care such support could help ensure that behavioral health services are available.\textsuperscript{112}

CMS has also awarded funds to states to test whether reimbursing certain psychiatric facilities to which Medicaid payments have traditionally been prohibited would reduce Medicaid costs for psychiatric patients.\textsuperscript{113} These prohibited facilities are called Institutions for Mental Disease (IMDs); they are inpatient facilities that have more than 16 beds and a patient roster in which more than half of the patients have severe mental illness. Traditionally, Medicaid has not been able to reimburse these facilities for services they provide to Medicaid beneficiaries between the ages of 22 and 64.\textsuperscript{114} Some experts believe that the exclusion increases ED use.\textsuperscript{115} This CMS-funded demonstration will examine health care costs overall, but given high ED use for behavioral health care conditions, this demonstration could provide information about whether reimbursing these facilities lowers ED use.

Care Coordination

The federal government also supports care coordination through medical homes, accountable care organizations, and other mechanisms.\textsuperscript{116} Care coordination generally aims to improve health and reduce costs by preventing the exacerbations of chronic conditions that may necessitate an ED visit. A number of ongoing federal initiatives are administered by CMS, and as such, these initiatives focus on coordinating care as a way of reducing costs for beneficiaries of these programs. As discussed further below, a number of these initiatives include efforts to reduce ED use.

\begin{itemize}
\item \textsuperscript{111} CRS Report R43681, \textit{SAMHSA FY2015 Budget Request and Funding History: A Fact Sheet}.
\item \textsuperscript{112} CRS Report R43255, \textit{The Mental Health Workforce: A Primer}.
\item \textsuperscript{114} CRS Report R43328, \textit{Medicaid Coverage of Long-Term Services and Supports}.
\item \textsuperscript{115} National Alliance on Mental Illness, “Policy Topics: Background Information on IMD Exclusion,” http://www.nami.org/Template.cfm?Section=Issue_Spotlights&template=/ContentManagement/ContentDisplay.cfm&ContentID=44050.
\item \textsuperscript{116} For more information, see “Federally Supported Care Coordination Models” in this report.
\end{itemize}
Research

The federal government supports medical research primarily through the National Institutes of Health (NIH). Within the NIH, it supports the NIH’s Office of Emergency Care Research (OECR). This office aims to coordinate emergency care related research across the various NIH institutes and centers. A number of institutes within the NIH support emergency care research, generally in the context of a given disease or population that the institute focuses on (e.g., the National Heart, Lung, and Blood Institute supports research on cardiac emergency care and/or the National Institute on Aging supports research on emergency care for older adults). OECR serves a broader coordination function and attempts to identify funding opportunities related to emergency care and/or those related to treating emergent medical conditions. It does not directly fund research grants. This NIH office is relatively new; it began in 2012 as a result of NIH efforts that followed up on the IOM emergency care reports.

Selected Issues Affecting EDs

Nationwide, EDs have developed different strategies to deliver the care most appropriate to their respective communities. Despite differences, EDs generally face three common challenges to their ability to effectively provide care: (1) they are crowded, (2) they must provide repeat care to frequent users who could be more effectively treated in other settings, and (3) they must provide (or attempt to provide) care to patients with behavioral health conditions. Not all EDs will face these challenges because many of these concerns are related to the population that the ED serves. Hospitals that serve patients who have greater access to health care because they are privately insured or have Medicare coverage may not experience these challenges. Some hospitals have also developed strategies that have alleviated these concerns, or have implemented some of the strategies noted below. Still a number of EDs face these three challenges, which are defined and discussed below.

Crowding

Crowding is a situation in which the need for services exceeds an ED’s capacity to provide these services. It often entails patients experiencing long wait times and/or being treated or monitored in non-treatment areas (e.g., hallways). Generally, crowding reflects dysfunctions in the health care system. At the same time, crowding is also a symptom of other issues facing health care delivery, such as a lack of primary care health providers and the need for hospital facilities to handle surges in emergency care due to increased community health needs.

120 Institute of Medicine of the National Academies, Hospital-Based Emergency Care: At the Breaking Point (Washington, DC: National Academies Press, 2006); Institute of Medicine of the National Academies, Emergency Medical Services: At the Crossroads (Washington, DC: National Academies Press, 2006); and Institute of Medicine of the National Academies, Hospital-Based Emergency Care for Children: Growing Pains (Washington, DC: National Academies Press, 2006).
121 Brent R. Asplin et al., “A Conceptual Model of Emergency Department Crowding,” Annals of Emergency (continued...)
care system; although it seems like an ED problem, it is actually a systemic problem. As discussed, EDs fill gaps in the health care system. In some communities, or for some populations, EDs may be the only available health care option. This gap-filling role, coupled with fewer available EDs, has resulted in crowded conditions at the remaining available EDs. Research shows that crowding reduces access to timely care by causing EDs to divert ambulances and by contributing to long wait times, in some cases so long that patients choose to leave without being seen (LWBS). Diverted ambulances and patients who LWBS typically travel to the next closest ED; this may cause another ED to become crowded, in turn, causing a domino effect among the area’s remaining EDs. Crowding also reduces a hospital’s capacity to absorb surges in patient volume, both daily and in the event of a public health emergency.

Crowding occurs disproportionately in hospitals in urban areas, (referred to as metropolitan statistical areas [MSAs]), which make up two-thirds of all hospitals and provide 85% of all ED care. Crowding is particularly common in MSAs where the growth in the health care infrastructure has not kept pace with population growth. Hospitals in MSAs are more crowded; as a result, they divert more ambulances and have longer wait times. MSA hospitals generally treat patients in their adjacent areas, and may also receive patients from further away because they offer specialty services (e.g., trauma or burn care). Under EMTALA, hospitals offering such specialty services must accept transferred patients requiring this care; hospitals have to accept these patients even if their EDs are already crowded, which may further increase crowding.

Causes of Crowding

Crowding results from a number of health system factors; specifically, it is a symptom of the mismatch in the larger supply and demand of health care services. ED crowding is often

(...continued)

122 Elaine Rabin et al., “Solutions to Emergency Department ‘Boarding’ and Crowding Are Underused and May Need to Be Legislated,” Health Affairs, vol. 31, no. 8 (2012), pp.1757-1766. In some cases, hospital or ED inefficiencies cause or contribute to crowding. A number of the potential solutions presented below include hospital-level efficiencies that aim to reduce ED crowding. Still, in GAO’s 2009 report, they noted that some hospitals have implemented strategies to reduce crowding, but that crowding persisted despite some hospital’s efforts. See GAO-09-347.


124 GAO-09-347. In 2012, there were 575 fewer EDs than were available in 1992. See American Hospital Association, TrendWatch Chartbook 2014, Table 3.3 Emergency Department Visits, Emergency Department Visits per 1,000 and Number of Emergency Departments, 1992-2012, http://www.aha.org/research/reports/tw/chartbook/index.shtml.

125 GAO-09-347.


127 Ibid.

128 GAO-09-34. Hospitals in MSAs also have high rates of nursing vacancies, which may increase their need to board patients, because they lack the nursing staff to care for additional inpatients. See, for example, Catharine W. Burt, and Linda F. McCaig, Centers for Disease Control and Prevention, National Center for Health Statistics, Staffing, Capacity, and Ambulance Diversion in Emergency Departments. Emergency Departments: United States, 2003–04, No. 376, Hyattsville, MD, September 27, 2006, http://www.cdc.gov/nchs/data/ad/ad376.pdf.


examined through the “input-throughput-output model,” which helps identify factors from the perspective of an ED\textsuperscript{131} (see Figure 1). Although the model presents a number of factors that cause crowding; boarding—where hospitals keep admitted patients in an ED until a bed is available—is generally considered to be the primary cause of crowding.\textsuperscript{132} Hospitals may board admitted patients because they lack inpatient beds or because they lack nursing staff to care for additional admitted patients.\textsuperscript{133} In some cases, hospitals may have inpatient beds available, but these beds may be reserved for patients with particular conditions (because nurses and other staff are trained to care for patients with particular ailments) or may be reserved for elective surgical procedures, resulting in a situation where a person is boarded in an ED even though the hospital has a physical bed available.\textsuperscript{134} Admitted patients may be boarded in an ED for hours or days. Generally, patients who are boarded have worse outcomes, including higher death rates and longer lengths of stay.\textsuperscript{135} Boarded patients, by virtue of requiring an inpatient admission, are often the sickest patients in an ED; as such, their presence further exacerbates crowding because they consume ED resources that would otherwise be available for incoming emergencies. Although boarding is the primary cause of crowding, a number of health system changes could alleviate crowding, as the “input-throughput-output model” indicates.\textsuperscript{136}


\textsuperscript{132} Elaine Rabin et al., “Solutions to Emergency Department ‘Boarding’ and Crowding Are Underused and May Need to Be Legislated,” \textit{Health Affairs}, vol. 31, no. 8 (2012), pp.1757-1766. Despite public perceptions otherwise, inappropriate use is not a major contributor to crowding. See Adrian Boyle, et al., “Emergency Department Crowding: Time for Interventions and Policy Evaluations.” \textit{Emergency Medicine International}, Volume 2012, (2012). Hospitals face financial pressures to operate at or close to capacity; as such, they attempt to schedule elective surgical procedures to assure that most or all inpatient beds are full. See GAO-09-347.


\textsuperscript{135} Ibid.

Figure 1. Input-Throughput-Output Model of Emergency Care

**Input**
- Emergency care
  - Seriously ill and injured patients from the community
  - Referral of patients with emergency conditions
- Unscheduled urgent care
  - Lack of capacity for unscheduled care in the ambulatory care system
  - Desire for immediate care (e.g., convenience, conflicts with job, family duties)
- Safety net care
  - Vulnerable populations (e.g., Medicaid beneficiaries, the uninsured)
  - Access barriers (e.g., financial, transportation, insurance, lack of usual source of care)

**Throughput**
- Patient arrives at ED
- Triage and room placement
- Diagnostic evaluation and ED treatment
- ED boarding of inpatients

**Output**
- Leaves without treatment complete
- Patient disposition
  - Transfer to other facility (e.g., skilled nursing, referral hospital)
- Ambulatory care system
  - Lack of access to follow-up care
  - Lack of available staffed inpatient beds
  - Admit to hospital

**Acute Care System**

**Input**

Input is any condition, event, or system characteristic that contributes to the demand for emergency care, unscheduled urgent care, or safety net care.\(^{137}\) The demand for ED care depends on the volume of patients requiring emergency care and the volume of patients who are seeking care in the ED because it is after-hours or because they lack another source of care (e.g., safety net patients).\(^{138}\) When the ambulatory care system is unable to provide the community with these kinds of services, people turn to the ED, thereby increasing demand.

**Throughput**

Throughput factors are events that influence a patient’s length of stay (LOS) in an ED. A person’s LOS is the length of time from arrival to discharge and involves two phases: (1) triage and room placement, and (2) diagnostic testing, ED treatment, and discharge.\(^{139}\) Throughput factors, for example, are the number of CT scans, laboratory tests, and medications a person will need; whether the ED physician will have to consult a specialist; or how long it takes to see a physician initially. The model includes boarding in the throughput phase because it occurs within the ED and affects department operations; however, boarding results from a shortage of inpatient beds and should be considered separately from throughput factors that are under the control of the ED. The health of the population that the ED serves may also affect throughput. For example, as the population ages, ED patients may require more care to manage chronic conditions, including specialty care, which some EDs have difficulty obtaining.\(^{140}\)

**Output**

Output refers to the disposition of a patient from an ED, including hospital admission, transfer to another facility, patient discharge, or patient death. It also refers to the ability of the ambulatory care system to provide appropriate care after a person leaves an ED. A hospital’s available capacity determines whether an ED can transfer admitted ED patients to the inpatient unit. When a hospital lacks available beds or inpatient nursing staff, the ED will keep the patient (i.e., board the patient), either in hallway beds or in the rooms, which may reduce the capacity to receive incoming ambulances and patients.

Inpatient bed availability varies by hospital and by specialty. Some hospitals reserve medical inpatient beds for elective surgical procedures, even when its ED is holding patients.\(^{141}\) Hospitals

---

\(^{137}\) Ibid.


\(^{139}\) ED treatments are any treatments that patients require to treat their acute problem. Treatments are not necessarily activities, such as sutures or splint application; treatments also include consultations or a physician’s decision to admit, transfer, or discharge. See, Brent R. Asplin et al., “A Conceptual Model of Emergency Department Crowding,” Annals of Emergency Medicine, vol. 42, no. 2 (August 2003), pp. 173-180. Discharge refers to “discharge out of the ED” whether the discharge is to another hospital department, another facility, discharged to home, or death. See, GAO-09-347.

\(^{140}\) Stephen R. Pitts et al., “Where Americans Get Acute Care: Increasingly, It’s Not at Their Doctor’s Office.” *Health Affairs*, vol. 29, no. 9 (September 2010), pp. 1620-1629.

\(^{141}\) GAO-09-347.
have a number of financial incentives to reserve beds for these procedures, including the higher reimbursement rate for certain elective procedures and the guarantee of being paid for elective procedures because insurance coverage is checked before procedures are scheduled. As such, some hospitals have incentives to make sure that beds are filled and attempt to schedule surgeries to do so, meaning that few beds will be unoccupied and available for ED patients.

Shortages of beds in particular specialties may disproportionally affect crowding and the outcomes of ED patients. Shortages of beds in psychiatric units may be a particular contributor to crowding, as behavioral health patients are boarded on average twice as long as those waiting for hospital beds. Given that behavioral health patients are generally resource intensive, their boarding may disproportionally contribute to crowding. Shortages of intensive care unit (ICU) beds are a particular concern for ED patients who require such care. These patients are particularly vulnerable, the number of these patients has increased, and they have higher mortality rates when they are not promptly moved to the ICU setting.

The Effects of Crowding

Crowding affects the health care delivery system at multiple levels. Specifically, it affects patients, hospitals, and payers. It does so primarily through increased costs and adverse health outcomes because treatment is delayed or forgone.

Effects on Patients

Crowding reduces access to critical ED care by delaying the time in which patients are able to receive treatment, which may affect patient health. Specifically, for some conditions treatment must occur during a critical period or there will be adverse outcomes. Some of the symptoms of crowding, such as LWBS, ambulance diversion, and boarding also have specific effects on patients’ health. For example, patients who LWBS would not be evaluated for a medical emergency that could have been prevented. Crowding may cause an ED to initiate ambulance diversion, which affects both the patient and the community. Ambulance diversion extends the patient’s length of time in the ambulance, the length of time to see a physician, and the length of time before the ambulance can respond to other emergencies. Boarding can have particular

---

143 For example, GAO found that hospitals’ attempts to fill all inpatient beds contributes to crowding. See GAO-09-347.
147 Not all ambulances are able to be diverted. If a patient requires immediate life sustaining treatment diversion requests are not honored.
148 Nancy Stephens Donatelli, Jennifer Gregorwicz, and Joan Somes, “Extended ED Stay of the Older Adult Results in (continued...)
health effects on elderly patients, who generally have worse outcomes when compared to patients with similar characteristics who were not boarded.\textsuperscript{149} Finally, when patients are admitted to a unit or a physician’s service, it is expected that they will receive a specific combination of treatments; however, an ED may not have the appropriate equipment or staff who know how to perform these specific combinations of treatments. Inpatient units have specialized staff, strict nurse-to-patient ratios, and daily routines—all of which aim to provide the appropriate standard of care to meet a patient’s needs.

**Effects on Hospitals**

Crowding, in general, and boarding, in particular, affect hospital finances by reducing ED and inpatient volume and decreasing revenue earned from serving additional patients. Each time an ambulance is diverted or patient LWBS, hospitals lose an opportunity to bill. One study on a single hospital calculated that reducing wait times by 120 minutes or less could increase revenue nearly $4 million dollars over the course of a year. It also found that moving boarded patients to inpatient beds within two hours increased the annual “functional treatment capacity” of an ED by 10,397 hours, or 433 days.\textsuperscript{150} Boarding also increases length of stay; for example, one study found that patients who board for over 24 hours experienced a 12\% longer hospital stay.\textsuperscript{151} When hospitals are paid under a fixed-payment scheme (such as are used by Medicare),\textsuperscript{152} it is in the hospital’s financial interest to reduce the length of stay so that the patient’s costs do not exceed the predetermined payment amount, as the hospital must absorb the additional costs.

Hospitals may also wish to reduce crowding and ED wait times to attract patients. Some hospitals—particularly those trying to attract private insured patients—will publicly advertise wait times as part of their marketing.\textsuperscript{153} In addition, CMS publicly reports certain hospital-level quality data, including measures related to ED wait times and some that are affected by ED crowding, (e.g., measures related to pain management and timely antibiotic administration).\textsuperscript{154} Prospective patients can use these data to select a hospital that has better ED outcomes and shorter wait times.\textsuperscript{155} Some of these ED measures are also linked to Medicare payment under the

\textit{(...continued)}


\textsuperscript{149} Elaine Rabin et al., “Solutions to Emergency Department ‘Boarding’ and Crowding Are Underused and May Need to Be Legislated,” *Health Affairs*, vol. 31, no. 8 (2012), pp.1757-1766.


\textsuperscript{152} CRS Report R40425, *Medicare Primer*.


\textsuperscript{155} CMS collects data that allows patients to compare a number of measures of hospital care, including those related to wait times in EDs, such as the time elapsed between when the patient enters the ED and receives a diagnostic evaluation and receives pain medication, if indicated. CMS also collects data on the number of patients who leave without being seen. See Centers for Medicare & Medicaid Services, “Data.Medicare.gov, Timely and Effective Care-Hospital,” http://www.medicare.gov/hospitalcompare/About/Timely-Effective-Care.html. It is not clear the extent to (continued...)}
Crowding may also be costly to hospitals because it can contribute to hospital-level nursing shortages. EDs often have more difficulty filling staff vacancies due to the intensity of emergency care. Crowding can exacerbate this issue because it could increase staff turnover among ED nurses, leaving the hospital with more vacancies to fill. It may also leave hospitals with a more junior nursing staff because more experienced staff may be more likely to leave. Researchers have found that increased patient-care demands push experienced staff to leave their jobs, in part, because of decreased job satisfaction, but also because some staff may fear that conditions are jeopardizing patient safety and are putting them at risk of losing their licenses (physicians may also have liability concerns because of these increased patient care demands). Such concerns would also apply to ED physicians and may make it difficult for some hospitals to recruit and retain their services. The effect of crowding on staffing and staff turnover also adds to a hospital’s financial pressures, because it is costly to recruit staff and new staff requires training—for example, new ED nurses require months of training to obtain the basic skills needed to deliver ED care.

**Effects on Payers**

Crowding may increase health care costs for payers. It may also have particular costs for the Medicare program, because it is the largest payer for inpatient care. As crowding can delay treatment, it increases the likelihood that patients will experience adverse events—an injury that results from medical intervention and not the patient’s underlying medical condition—which are more common in older adults. Adverse events are costly to payers because they often require

(...continued)

which patients are using these data; however, applications are publicly available for patients to access these data. See, for example, Lena Groeger, Mike Tigias, and Sisi Wei, “ER Wait Watcher: Which Emergency Room Will See You the Fastest?” at http://projects.propublica.org/emergency/.


additional medical treatment beyond the original medical condition that caused the patient to seek care in the ED.\textsuperscript{164}

**Strategies That May Reduce Crowding**

A number of strategies may reduce crowding; generally, such strategies focus on ways that hospitals can reduce boarding by increasing the number of inpatient beds available.\textsuperscript{165} For example, hospitals may consider the following strategies:

- Moving boarders to inpatient halls: doing so places boarded patients in a quieter, less crowded, and a better-staffed setting that has been shown to be safe. It also frees up emergency department beds and can expedite the patient being placed in a proper inpatient bed.

- Undertaking active bed management, by appointing a single person to track beds (e.g., a “bed czar”), by using a computer system to track beds, or other methods to address system-level bottlenecks.

- Using “reverse triage,” which employs a system designed for creating capacity during disasters by discharging patients who have a low need for an inpatient bed.

- Smoothing elective surgical schedules by distributing procedures evenly over the week to decrease peaks in demand for inpatient beds and the need to cancel procedures because beds are not available.

- Implementing the “four hour rule”: this rule, implemented in the United Kingdom and Western Australia, requires EDs to evaluate, treat, discharge, or admit patients in four hours or less.\textsuperscript{166} Although this policy reduces boarding, some have raised concerns that it may reduce the quality of care because it encourages EDs and hospitals to discharge patients early, when it may not be medically appropriate.\textsuperscript{167}

A number of current programs may also reduce boarding. For example, in 2012, CMS required hospitals to report data related to boarding and ED length of stay. The public reporting of these data and their inclusion in some CMS quality programs may provide hospitals with incentives to reduce crowding. The Medicare program requires that hospitals meet certain conditions to participate in the Medicare program (called conditions of participation).\textsuperscript{168} One of these conditions is that hospitals must be accredited, although hospitals can choose to be accredited by

\textsuperscript{164} Adverse events may be complications from being in a hospital, such as falls, or they may be more serious conditions that result from a delay in treatment, such as when delayed antibiotic administration leads to sepsis. In some instances, hospitals will not be paid by Medicare for conditions that Medicare patients acquire when hospitalized (i.e., for certain hospital-acquired conditions). See https://www.cms.gov/hospitalacqcond/06_hospital-acquired_conditions.asp.

\textsuperscript{165} Unless otherwise specified, information in this section is from Elaine Rabin et al., “Solutions to Emergency Department ‘Boarding’ and Crowding Are Underused and May Need to Be Legislated,” Health Affairs, vol. 31, no. 8 (2012), pp.1757-1766.

\textsuperscript{166} David Mountain, “Introduction of a 4-hour rule in Western Australian Emergency Departments.” Emergency Medicine Australasia, vol. 22 no. 5 (October 2010), pp. 374-378.


\textsuperscript{168} Social Security Act §1865; 42 U.S.C. §1395bb.
a state regulatory organization, often hospitals will seek to be accredited by the Joint Commission,\textsuperscript{169} which accredits and certifies health care organizations. The Joint Commission adopted requirements—effective January 1, 2014—that hospitals address boarding for the purposes of accreditation.\textsuperscript{170} Both CMS’s and the Joint Commission’s changes are new, so the full effects are not yet known, but both policy changes may incentivize hospitals to reduce crowding.\textsuperscript{171}

### Frequent ED Users

Another issue affecting ED care is that of frequent ED users. Although no formal definition exists, for purposes of this report, a frequent user is an individual who uses an ED multiple times a year.\textsuperscript{172} Frequent users represent a small number of ED users overall, but account for a high number of total ED visits. One study, for example, estimated that frequent users (defined in the study as individuals with three or more visits annually) represented 29\% of all ED users but 60.4\% of all ED visits.\textsuperscript{173} Although most frequent ED users have high rates of chronic conditions, anecdotal evidence and media reports have fueled a misconception that frequent ED users are a disadvantaged population who unnecessarily use EDs for conditions that could be treated in an ambulatory setting.\textsuperscript{174} Frequent users are a concern for policy makers because (1) they contribute to crowding; (2) they increase costs for payers, including government payers; and (3) their ED use may reflect poor care coordination in other settings (e.g., they lack primary care or coordinated primary and specialty care to manage their asthma and seek care at an ED for an asthma attack).

Frequent users are not a monolithic group; as such, policy options need to target the different types of frequent users.\textsuperscript{175} Frequent ED users can be divided into three broad sub-categories, based on utilization patterns: frequent non-emergent users (i.e., people who use EDs frequently to treat conditions that do not require emergency care), high-cost health system users, and very frequent ED users. The causes of ED visits differ by the three types as do the policy levers that could be employed to reduce the number of frequent visits (see Table 2).

---

\textsuperscript{169} For more information, see The Joint Commission, “Hospital Accreditation,” http://www.jointcommission.org/accreditation/hospitals.aspx.


\textsuperscript{172} Frequent users are also called “super utilizers”; these terms are used interchangeably in this report.


\textsuperscript{174} Ibid.

\textsuperscript{175} However some frequent users share similarities such as being in poor health and having chronic conditions. A subset of frequent users are also disabled; among those with 15 or more annual ED visits, nearly two-thirds had a history of serious mental illness and substance use. See Medicaid and CHIP Payment Advisory Commission, MAC Facts, Key Findings on Medicaid and CHIP: Revisiting Emergency Department Use in Medicaid, Washington, DC, July 2014.
### Table 2. Three Types of Frequent ED Users

<table>
<thead>
<tr>
<th>Type</th>
<th>Characteristics of Frequent ED Users</th>
<th>Consequences and Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Frequent Non-emergent Users</strong></td>
<td>• have barriers to primary care&lt;br&gt;• most have private insurance and a regular PCP&lt;br&gt;• lack access to afterhours care&lt;br&gt;• have lower rates of chronic illness than other frequent ED users</td>
<td>• costly to payers because care provided in an ED is more expensive than care provided in an ambulatory setting&lt;br&gt;• health system changes to improve access can reduce the number of these users and the number of visits per user</td>
</tr>
<tr>
<td><strong>High-Cost Health System Users</strong></td>
<td>• tend to “shop” for providers&lt;br&gt;• visit EDs between four and nine time per year&lt;br&gt;• have substantial burdens of chronic illness (which increases as the number of visits increase)&lt;br&gt;• consider themselves to be in fair-to-poor health or are severely disabled&lt;br&gt;• are more likely to be between the ages of 25 and 44, or older than 64&lt;br&gt;• have high rates of underlying substance use or mental illness; however, treatment for these conditions represents a small share of visits&lt;br&gt;• most visits are for injuries, hypertension, heart conditions, pneumonia or bronchitis, and mental disorders&lt;br&gt;• are likely to arrive in an ambulance</td>
<td>• most expensive of the three types of frequent ED users because they are more likely to require more expensive inpatient care&lt;br&gt;• policies that encourage care coordination can reduce this type of use&lt;br&gt;• policies that target these users may also need to include social and economic issues that may present barriers to accessing health care</td>
</tr>
<tr>
<td><strong>Very Frequent ED Users</strong></td>
<td>• have 10 or more visits per year&lt;br&gt;• are less likely to have a regular PCP&lt;br&gt;• visit multiple EDs&lt;br&gt;• make up a very small portion of all ED users&lt;br&gt;• more likely to be male&lt;br&gt;• have high rates of disability and/or have multiple chronic illnesses&lt;br&gt;• visit often for substance use or mental illness&lt;br&gt;• have complex medical, mental, economic factors contributing to ED use, such as homelessness or serious mental illness.&lt;br&gt;• high rates of current or previous substance abuse, mental illness, or both</td>
<td>• users are costly, but are less likely to be admitted than the high-cost health system users&lt;br&gt;• policies that encourage care coordination can reduce this type of use, but these patients have low provider loyalty, which needs to be accounted for when designing programs&lt;br&gt;• policies that target these users may also need to include social and economic issues that may present barriers to accessing health care</td>
</tr>
</tbody>
</table>

Strategies That Target Frequent Users

As Table 2 demonstrates, changes to the ambulatory care system to make care more accessible and coordinated can reduce frequent ED use. Such strategies include adding additional providers, opening or expanding outpatient care settings (e.g., retail clinics; see “New Types of Health Care Facilities May Change the EDs’ Role”), increasing provider hours, creating or expanding nurse advice lines, and expanding or initiating health education campaigns that encourage appropriate ED use. Other strategies seek to prevent the need for ED use by managing chronic conditions, coordinating care across providers, and more frequently monitoring patients. These strategies may also include analytic tools (e.g., electronic health records) to share data across providers.

In attempts to control costs, CMS has initiated programs that focus on Medicare or Medicaid beneficiaries who are frequent health system users. CMS calls these “super-utilizer” programs. These programs do not necessarily focus on high-ED users, but may include High-Cost Health System Users and the Very Frequent ED Users because these users are expensive. Specifically, chronically ill individuals account for 5% of the total population but nearly half of all health care spending. This pattern of concentrated spending also occurs among Medicaid beneficiaries, where 1% of the Medicaid population is responsible for 22% of the spending. Although not all of this spending occurs in EDs, EDs are a gateway for hospital admissions, where the bulk of this spending occurs. As such, managing chronic conditions so that ED visits are avoided may reduce costs. CMS is undertaking initiatives focused on super-utilizers, as are private payers and providers, such as hospitals. Though specific programs employed to target super-users vary, they generally involve methods to target the most appropriate program participants by trying to identify participants who exhibit characteristics that are consistent with having high-cost, preventable health care use.

Payment Methods

A number of new payment models are being tested as a way to control costs; because they include incentives to coordinate care, they may also reduce frequent users. Under a fee-for-service

---

178 For example, some state Medicaid programs have chosen to use their Medicaid data systems to track frequent users and have received federal matching funds to support necessary data enhancements. This program is authorized in Sec. 1903(a)(3) of the Social Security Act.
180 Patients may also be targeted for inclusion in super utilizer programs because they have frequent ED visits, are referred to the program by medical personnel, they have costly underlying medical conditions (e.g., cancer), or they have sociodemographic characteristics consistent with high use, among others.
181 Some state Medicaid programs have also tried to reduce ED use by instituting copayments for non-emergency ED use. The effects of these copayments on reducing ED use are mixed because it is difficult to identify non-emergency use prospectively. See Medicaid and CHIP Payment Advisory Commission, MAC Facts, Key Findings on Medicaid and CHIP: Revisiting Emergency Department Use in Medicaid, Washington, DC, July 2014.
payment scheme, providers receive additional compensation for providing additional care, which may incentivize providing additional services to frequent users rather than coordinating care and seeking to prevent ED use for this group. Under alternate payment models that reward care coordination or provide incentives to achieve certain performance targets, providers lack such incentives. A number of the strategies undertaken to reduce super-users involve testing new payment methods (see **Text Box 4**).

**Text Box 4: Example Payment Models**

- **Case Management Payment:** Fixed payment per-member-per-month to fund care coordination.
- **Multi-Payer Case Management Payment:** Payment for care coordination from the respective payer for each patient.
- **Per-Episode of Care Payment for Program Services:** Payment for each episode of care that is based on complexity of the patient.
- **Per-Member Per-Month:** A payment to a managed care organization that is used to fund both medical and behavioral health services that is adjusted to account for the patient’s health status.
- **Shared Savings for Total Cost of Care:** A generally time-limited capitated payment to an agency to provide care to a group of patients. If the cost of providing care is less than the capitated payment, the agency gets a portion of the savings.


**Federally Supported Care Coordination Models**

The federal government has provided explicit support for the Medicare program and for state Medicaid programs to develop care coordination programs, that may, among other policy goals, reduce the number of super-utilizers by managing chronic conditions to reduce the number of times these patients seek ED care. Such federal support includes the following examples:

- **Accountable Care Organizations (ACOs)** are groups of health care providers that join together to provide coordinated care to a group of Medicare beneficiaries in exchange for a share of any savings realized from coordinating such care.\(^{182}\) ACOs are eligible for shared savings if the Medicare spending for assigned beneficiaries falls below a historical benchmark and if they meet certain quality benchmarks.

- **Bundled Payment for Care Improvement Initiative (BPCI):** Selected health care organizations participate in a new payment model where the health care organizations are reimbursed for episodes of care. These payment arrangements aim to provide high-quality coordinated care.\(^{183}\)

- **Medicaid Health Homes:** States may receive a higher Federal Medical Assistance Percentage (FMAP)—the percentage of the state’s Medicaid program

---

\(^{182}\) ACOs (Shared Savings Program) were established in Section 1899; (42 U.S.C. §1395jjj of the Social Security Act (SSA)). See CMS, “What’s an ACO?” http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/ACO/index.html?redirect=/ACO.

that the federal government pays\textsuperscript{184} to support interdisciplinary care provided by the health home team.\textsuperscript{185}

- **Targeted Case Management:** States may add a Targeted Case Management (TCM) service to their Medicaid program to enhance existing health home or managed care models.\textsuperscript{186}

### Behavioral Health Care in EDs

EDs face two distinct behavioral health care challenges. The first is that EDs may be ill-equipped to treat patients who are primarily seeking care to treat a behavioral health condition. The second is that an increasing number of patients with physical health conditions also have behavioral health conditions, which makes treating their physical ailments more difficult.\textsuperscript{187} In general, EDs are strained to provide the former and are challenged in providing the latter because these cases are resource-intensive and exacerbate already crowded conditions. The number of behavioral health-only visits has also increased rapidly, with the number of these visits growing at a rate four times higher than the growth in non-behavioral health visits.\textsuperscript{188} Mental health and substance use disorders are generally not appropriate to treat in an ED because they are not acute conditions; instead, they require treatment and monitoring over time, which is not in concert with the type of services that EDs are designed to provide.\textsuperscript{189} The major exception to this is an acute episode: either an acute psychiatric episode or an overdose or adverse drug reaction for individuals with substance use issues. These cases often present in an ED; they may be symptomatic of uncontrolled behavioral health conditions, but often an ED is the proper site of care in these instances.

### Causes of Increased Behavioral Health Treatment in EDs

Generally, patients with behavioral health conditions present in an ED because of insufficient community resources available to manage the patients’ needs. A number of communities have shortages of mental health and substance abuse services. Such shortages may also be underestimated because rates of both behavioral health conditions are underreported.\textsuperscript{190} Community level conditions such as increases in drug use in certain communities (e.g., the recent...
increases in heroin use in certain communities) may also affect ED use for behavioral health conditions, as individuals who overdose or have adverse drug reactions may present to EDs.  

Insurance coverage may also contribute to behavioral health conditions being seen in EDs. An AHRQ/SAMSHA study found that uninsured individuals with behavioral health conditions were most likely to have had multiple ED visits during the course of a year. Among those seen in the ED, these individuals were least likely to be admitted. This study also found that the likelihood of admission varied by patient characteristics (such as demographic characteristics), insurance status, and the size of the hospital (larger hospitals offered more specialty services and were more likely to admit patients). The use of an ED to provide behavioral health care, in particular for the uninsured population, may also contribute to the financial constraints that EDs face, as some of this care may be uncompensated.

Effects of Treating Behavioral Health Care in an ED

One of the major effects of treating behavioral health care in an ED is crowding. This occurs because EDs that lack behavioral health resources may board these patients while waiting to transfer them to an appropriate facility. Such facilities are in short supply; therefore, some behavioral health patients may end up waiting in an ED for hours and often days for an available bed. Patients with behavioral health conditions may also contribute to crowding because they may be more difficult to care for, thus requiring more staff resources than a patient without a behavioral health condition. Being treated in an ED may also be particularly stressful for individuals with certain mental health conditions because EDs by their very nature are chaotic. This might exacerbate certain mental health conditions. Treating these behavioral health patients in an ED may also be challenging because EDs lack many of the services that these patients need. For example, behavioral health patients often require consults from specialists (e.g., psychiatrists) who may not be on-site so patients must wait in the ED for such consults. Or EDs may not have needed detoxification services.

Treating behavioral health care in an ED could also contribute to crowding because emergency room procedures to triage patients with psychiatric conditions are less well-developed than those used to triage patients with physical ailments, which may complicate and delay treatment for patients. Research has also found that ED providers do not feel comfortable providing care to

---

191 CRS Insight IN10032, U.S. Opioid Epidemic: The Role of Heroin.
emergency psychiatric patients, have received less training to do so, and believe that these patients may be more violent to ED staff.196

Strategies to Reduce ED Use for Behavioral Health Conditions

The availability of community behavioral health treatment can reduce the use of EDs for patients. For example, an AHRQ-SAMSHA study found that counties with community mental health centers had fewer ED visits for mental health conditions, as did counties with inpatient psychiatric and chemical dependency treatment facilities, which had fewer ED visits for people with behavioral health conditions.197 Hospitals themselves can make inpatient psychiatric beds available or can create relationships with chemical dependency treatment facilities to which they can discharge ED patients with behavioral health conditions. Programs that seek to increase access to behavioral health care (see “Behavioral Health Support”) can also reduce ED use.

Insurance coverage may also influence ED use for behavioral health services. For example, some treatment facilities do not accept Medicaid patients, so Medicaid patients often have fewer treatment options and may present to an ED. The implementation of the ACA, which requires behavioral health coverage by some private insurance plans,198 coupled with federal parity requirements, should increase coverage for behavioral health conditions.199 Increased coverage if coupled with access to community level providers could reduce ED use for behavioral health conditions because conditions would be better managed. It is unclear whether this would occur because federal parity requirements do not require all plans to include behavioral health coverage200 and because provider shortages may prevent individuals who gain coverage to access behavioral health care services.201

Policy Levers Available to Congress

To alleviate some of the issues raised regarding emergency care, Congress might consider using various policy levers, including (1) oversight, (2) reimbursement changes to federal programs, (3) directed spending, (4) changes to statutory mandates, and (5) watchful waiting. Congress may also consider a combination of these levers. The discussion below is not exhaustive, but it


198 Certain plans that existed prior to the ACA are not subject to these requirements; see CRS Report R43048, *Overview of Private Health Insurance Provisions in the Patient Protection and Affordable Care Act (ACA)*.

199 CRS Report R41768, *Mental Health Parity and Mandated Coverage of Mental Health and Substance Use Disorder Services After the ACA*.

200 Ibid.

201 See discussion of mental health professional shortage areas in CRS Report R43255, *The Mental Health Workforce: A Primer*. 
represents options that Congress may consider to address some of the emergency care concerns raised in this report.

Oversight

Congress has oversight of executive branch agencies, which it may leverage to improve ED operations. For example, it could conduct oversight hearings on topics related to ED care, or it could investigate the efforts of involved federal agencies to improve ED care. Congress has used its oversight in this area in the past; for example, it has commissioned GAO reports in this area. Congress may consider holding a hearing (or a series of hearings) on topics related to ED care. Congress may also consider requesting a report or reports in this area, to be undertaken by the involved federal agencies (e.g., CMS, SAMSHA), GAO, or another entity. Such oversight might motivate HHS to address some of the considerations discussed in this report, even in the absence of other congressional activity.

Changes to Federal Program Requirements

As mentioned, hospitals must meet certain conditions, including being accredited by the Joint Commission or another entity, to participate in the Medicare program (called conditions of participation). Medicare can influence hospital processes by amending its conditions of participation and requiring the Joint Commission to accredit hospitals based on this amended criteria. For example, as part of its accrediting process, the Joint Commission requires that hospitals develop procedures for boarding, including the boarding of psychiatric patients. To improve ED function, the Medicare program could encourage (or require) the Joint Commission to amend its accreditation criteria to encourage or require hospital-level changes that would affect ED flow, such as placing a cap on the number of elective admissions a hospital can have when the ED is boarding patients, or requiring that hospitals smooth their elective surgery schedule so that surgeries are scheduled throughout the week instead of clustered on certain days.

Medicare could also consider amending its conditions of participation to improve ED functioning in emergencies. This strategy is currently under consideration as CMS proposed, in December of 2013, to strengthen emergency preparedness requirements for all Medicare and Medicaid participating hospitals. The new conditions of participation would require hospitals to have emergency preparedness programs and emergency preparedness plans.

---

202 GAO-09-347.
204 Social Security Act §1865; 42 U.S.C. §1395bb.
Directed Spending

Congress may consider providing funding to support programs or payments that may alleviate ED delivery issues. Congress could do so either through entitlement programs, such as Medicare and Medicaid, or through discretionary programs. In some cases, statutory changes may be required to create new programs or to extend funding in cases where authorized funding has expired.

Spending and Reimbursement Through Mandatory Programs

A number of the challenges that EDs face are financial. As such, the federal government may consider whether hospitals require additional funding to support ED services or whether current funding sources (e.g., Medicare and Medicaid reimbursements) are sufficient. For example, some hospitals provide uncompensated care to individuals who are not eligible for Medicaid because of their immigration status. Though funds had been appropriated to defray the cost of this care, they have not been appropriated since FY2010; however, hospitals may be able to discharge some of their ED spending for those ineligible for Medicaid because of their immigration status through “Emergency Medicaid.” Congress could consider whether “Emergency Medicaid” is sufficient or could consider appropriating targeted funds to support hospitals that provide high volume of uncompensated care to undocumented immigrants, similar to the program that existed until FY2010. Congress could also consider the current system of DSH payments and whether such payments are sufficient and/or whether these payments are adequately targeted so that the hospitals with the highest burdens of uncompensated care receive these payments. Congress could consider whether a different funding source that provides explicit funding for emergency care under EMTALA is warranted, as an expert group that reviewed EMTALA requirements recommended. As discussed, efforts to prevent ED use may lower costs; as such, Congress may wish to consider whether past efforts—such as the Emergency Room Diversion Grant program—that aim to reduce ED use by increasing the services available to Medicaid beneficiaries were successful at reducing ED use and whether such efforts should be continued and/or expanded. Congress may also wish to examine whether current efforts that seek to reduce ED use by coordinating care and preventing exacerbations of chronic conditions are sufficient and if such efforts should be expanded.

Congress may also consider changes to reimbursement policies in federal programs that affect ED functioning. For example, Emergency Medical Services (EMS) brings patients to an ED who could have been stabilized elsewhere because, in some cases, EMS systems are not reimbursed unless the patient is brought to a hospital. This reimbursement policy may create incentives to

208 42 C.F.R. §440.255 “Limited services available to certain aliens.”

209 Centers for Medicare & Medicaid Services, Extract of Final Report of the Emergency Medical Treatment and Labor Act Technical Advisory Group to the Secretary of the U.S. Department of Health and Human Services, Washington, DC, April 2, 2008, https://www.cms.gov/Regulations-and-Guidance/Legislation/EMTALA/downloads/EMTALA_Final_Report_Summary.pdf. The ACA authorized a program that would provide funding to trauma centers based on the amount of uncompensated care that its ED provides. This program has not received appropriations; if appropriations were to be made available, the program would not provide funds to EDs that do not have trauma centers. For more information about this program, see CRS Report R41278, Public Health, Workforce, Quality, and Related Provisions in ACA: Summary and Timeline.

transport patients to an ED in instances when it may not be medically necessary to do so.\textsuperscript{211} Experts suggest that changes to reimbursement policy could mean that fewer patients are transported to EDs, thereby reducing ED crowding and lowering costs in general.\textsuperscript{212}

Some have suggested that Medicaid psychiatric hospitals reimbursement policies constrain the supply of available psychiatric beds and that those reimbursement policies should be amended.\textsuperscript{213} Medicaid prohibits payment to Institutions for Mental Disease (IMDs) for services rendered to adults between the ages of 22 and 64.\textsuperscript{214} IMDs are inpatient facilities with more than 16 beds and a patient roster in which more than half of the patients have severe mental illness. Some suggest that this exclusion makes it difficult to obtain care for individuals in this age range with Medicaid coverage.\textsuperscript{215} The Medicaid IMD exclusion may contribute to ED crowding in two ways: (1) it constrains treatment options, leading individuals to seek care in an ED, and (2) once an individual seeks care in the ED, it constrains discharge options, which may lead to boarding.

\textbf{Spending Through Discretionary Programs}

Hospitals face a number of challenges related to providing primary and behavioral health care in part because of provider shortages. The federal government makes investments in supporting primary care both at the facility and at the provider level. Options could be considered to target these investments in areas where EDs are particularly crowded or where ED use for primary care is particularly common. Similar strategies could be employed for targeting federal behavioral health investments. Some recent evidence suggests that urgent care centers that focus on treating the mentally ill have reduced ED use in certain areas;\textsuperscript{216} policy makers could evaluate whether such centers could be expanded and whether federal investments are needed to do so.

ED use is also particularly common among the homeless population, which often lacks other sources of care or may have untreated behavioral health care needs. Although the federal government supports health centers for the homeless,\textsuperscript{217} some homeless individuals may seek care in EDs or may be brought to EDs by law enforcement during a psychiatric episode. Research on frequent users has found that homelessness is an underlying cause of frequent ED use.\textsuperscript{218} Congress may consider, as a way of reducing ED use (and associated costs), providing additional resources to support health care for the homeless or by providing resources to better coordinate health and social services.

\textsuperscript{212} Ibid.
\textsuperscript{213} National Alliance on Mental Illness, “Policy Topics: Background Information on IMD Exclusion,” http://www.nami.org/Template.cfm?Section=Issue_Spotlights&template=/ContentManagement/ContentDisplay.cfm&ContentID=44050.
\textsuperscript{214} Ibid and CRS Report R43328, \textit{Medicaid Coverage of Long-Term Services and Supports}, by Kirsten J. Colello.
\textsuperscript{215} Ibid.
\textsuperscript{217} For more information, see CRS Report R42433, \textit{Federal Health Centers}.
In addition to specific funding to hospitals for services provided, Congress could consider providing support for emergency care research or the emergency care workforce. Currently the NIH has the Office of Emergency Care Research (OECR) to coordinate emergency care research. This office does not have dedicated funding to support general research on emergency care. Instead, NIH/OECR coordinates research on emergency care needed to treat specific diseases or populations. As such, there is little support for research that focuses on emergency care as a system; such research may be useful to develop policies or procedures that could alleviate ED delivery system concerns. Congress may also wish to consider whether the current emergency care workforce is sufficient; and if Congress determines that it is not, it may wish to consider providing support to develop and sustain the emergency care workforce.

Congress may also consider appropriating funds to support the development of crowding quality measures. At present, a number of measures are used to quantify crowding, such as the Emergency Department Work Index, or ED occupancy rate; CMS also collects data on similar measures such as LWBS, and “time spent in the ED before being sent home,” but these measures do not reflect the full scope of crowding because they do not reflect the full input-throughput-output model of crowding.

Changes to Statutory Mandates

EMTALA is the major federal statutory mandate that governs ED care. As such, Congress may consider a number of statutory changes to EMTALA that could improve the flow of ED patients. Specifically, it could consider implementing a number of recommendations made by the EMTALA Technical Advisory Group (TAG) to the HHS Secretary in 2007. The TAG made the following recommendations, which could address some of the issues raised in this report:

- Require hospitals with specialized behavioral health capabilities, to accept the transfer of patients who are gravely disabled or a danger to themselves or others.

---


220 Section 1251 of the Public Health Service Act authorizes funding for residency training in emergency medicine; authorization for these grants expired in FY2012 and this program is not currently funded. In addition, the ACA authorized a program to train physicians in trauma care, which is more specific than emergency care. For a description of this program, see CRS Report R41278, Public Health, Workforce, Quality, and Related Provisions in ACA: Summary and Timeline.


222 For more information and measures, see Centers for Medicare & Medicaid Services, “Data.Medicare.gov, Timely and Effective Care-Hospital,” http://www.medicare.gov/hospitalcompare/About/Timely-Effective-Care.html.

223 A number of state laws also regulate emergency care.

224 Section 945 of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (P.L. 108-173) required the HHS Secretary to establish a technical advisory group (TAG) to advise the Secretary about issues related to the regulation and implementation of EMTALA. The group’s charter expired in 2007.

or who have an emergent medical condition, if the receiving hospital has the resources and capacity to provide appropriate care.

- Amend the EMTALA statute to include liability protection for hospitals, physicians, and other licensed independent practitioners who provide services to patients as part of the hospital’s EMTALA requirement. Others have suggested providing broader liability protections that are not exclusive to providers serving under the hospital’s EMTALA requirements, but that would apply to EMTALA care (see Text Box 5).

- Require that hospitals and medical staff develop and revise an annual plan for on-call coverage that includes, at a minimum, evaluation of the following factors: (1) advertised and licensed hospital capabilities and services provided, (2) community demand for ED services as determined by ED visits, (3) transfers out of hospital for emergency services, (4) physician resources, and (5) past call plan performance.

In addition to the TAG’s recommendation, Congress may also consider amending the EMTALA statute or the regulations that implement EMTALA to specify that if an ED does not have the capacity to take on additional patients, but the hospital has available inpatient capacity, the inpatient unit must board the patients who would have otherwise been boarded in the ED.226

Watchful Waiting

Watchful waiting is an option that is always available to Congress. If, for example, Congress determines that many of the challenges that EDs face are driven by the uninsured population or by fragmented care in the delivery system, Congress may consider waiting to see whether the implementation of the ACA’s insurance expansion or the ACA’s care coordination initiatives alleviate some or all of the current challenges. For this or a number of other reasons, Congress may allow the situation to unfold without further congressional involvement.

---

226 Some facilities have instituted policies that place ED boarding patients in the hallways of inpatient units; although this is not an ideal solution, it frees up ED resources to receive incoming ambulances, and the patients who are boarded in the inpatient unit receive care from inpatient care staff. For more information, see Elaine Rabin et al., “Solutions to Emergency Department ‘Boarding’ and Crowding Are Underused and May Need to Be Legislated,” *Health Affairs*, vol. 31, no. 8 (2012), pp.1757-1766.
Concluding Observations

Improving how EDs function will require system-wide changes in health care delivery, as ED care is affected by a number of factors in the health care delivery system beyond an ED’s control. Doing so may have the corollary benefit of reducing health care costs, because ED care is more costly than providing similar treatment in an outpatient setting. In addition, the current delivery challenges that EDs face increase costs because they delay patients’ access to timely services. A number of health system factors affect ED care, including insurance coverage; the availability of inpatient hospital care; and the availability of outpatient providers, in general, after hours, and their willingness to accept particular insurance types. Several of these health system factors are in flux, and how such changes play out may improve or harm ED function. For example, the growth of urgent care, retail clinics, and efforts to expand access to insurance and better coordinate care may improve ED operations, but these changes may have unintended consequences and may not affect all EDs equally. Delivery system changes are also occurring in the midst of population-level changes, which may increase the need for ED services because the population is aging with higher rates of chronic disease. Taken together, the issue of ED use and its functioning may require monitoring because a number of the variables that affect it are evolving.

Author Contact Information

Elayne J. Heisler
Specialist in Health Services
eheisler@crs.loc.gov, 7-4453

Nancy Leigh Tyler
Research Associate
ntyler@crs.loc.gov, 7-4118