



Emergency Medicine
Advocacy
HANDBOOK
4th Edition



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The *Emergency Medicine Advocacy Handbook* is important because the practice of medicine is a business — yet there are fewer and fewer business models that put the physician at the center of the decision-making process. Therefore, participation in the legislative and policymaking arena is absolutely essential to delivering the highest level of patient care.

We are pleased to help provide a key resource to create an informed, proactive voice for emergency medicine.

With best wishes,

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Preface to the Fourth Edition

Eight years ago a plucky group of young residents believed that every resident should be educated about the importance of health policy and determined to do something about it by writing the first edition of the *EMRA Advocacy Handbook*. Now as an aged attending, nothing has diminished my belief that advocacy is at the core of what we do as emergency physicians. If anything, the past decade has stoked the fires of passionate advocacy in many physicians.

If we, the house of medicine, are to survive and thrive in this evolving health care world, we must once more take up the mantle of leadership. With constant barrages of attack from regulators, insurers, well-meaning hospital administrators, and a lay public that demands low cost with high technology results, the challenges that we face are real. Merely clocking in and out on our shifts is not enough. Every day we advocate for our patients in our clinical shifts, and now we must carry that forward into the rest of our practices.

The role of health care navigator and ardent champion of the health care resources is one that emergency medicine physicians were born to play. We care for everyone, regardless of ability, providing care in a resource-deprived setting. When my 400 bed hospital did not have ophthalmologists on staff, the ED providers stepped in to cover the need for inpatient consults. When the State Legislature looked for savings in the health care system, they came to the ED providers as the canary in the coal mine of health care to help them find savings. When insurers ask where dollars can be saved, they often start with the ED, but rapidly find with education that it is the complex medical patients that we help manage that cost the system. At the intersection of the changes that are happening in health care lies the emergency department.

We must rise to the occasion. We must be knowledgeable and passionate advocates as emergency physicians. When others say it cannot be done, we show them every day what is possible. When others point fingers to the ED as the source of all waste, we generate solutions that fix problems, not blame providers or patients. We are the creative, hard-working, backbone of the health care system that is always there, no matter the time of day or ability to pay.

I hope you find this handbook to be a valuable resource in your advocacy, and I hope it inspires you to make it a regular part of your medical practice. I look forward to seeing you out there on the advocacy trail.

Nathan R. Schlicher, MD, JD, FACEP

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ACCESS TO COVERAGE/CARE

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Access to coverage and care in the United States has grown increasingly complex in the past century.

As the cost of health care increased, the country gradually shifted from individual responsibility for compensation of health services to private and public payer systems. Furthermore, recent health care reform has expanded options alongside increased regulations for users, payers, and providers, leading to more economic stakeholders in this evolving health care reimbursement landscape. The Patient Protection and Affordable Care Act, also known as the Affordable Care Act (ACA), or colloquially as Obamacare, is a federal statute signed into law on March 23, 2010. It requires that most legal residents of the United States must have “minimal essential coverage” or pay a penalty, but it has also expanded coverage options to assist in compliance. As a provider, understanding these various systems is paramount to both practice as well as advocacy.

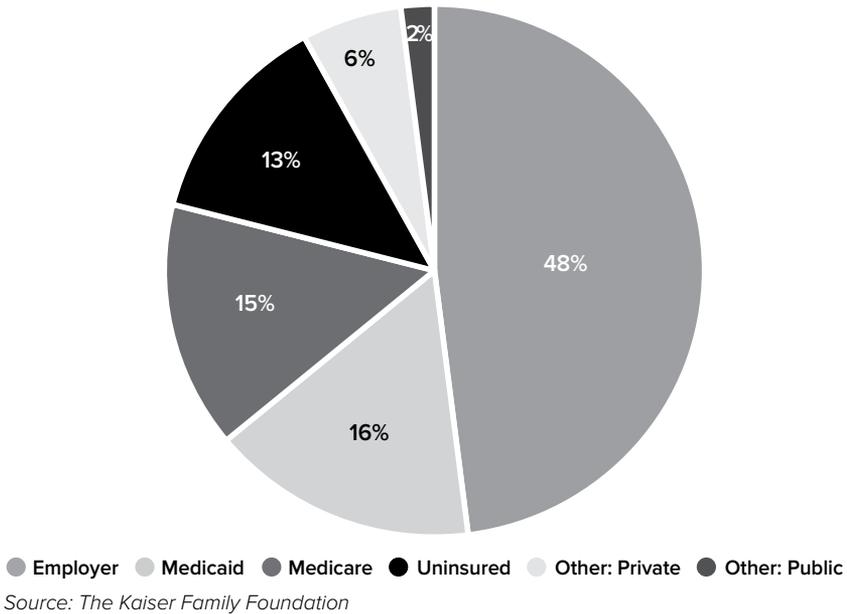
Many patients have health insurance but still lack access to care. Advocate for policies to close this gap.

Private

The private insurance market operates to make a profit by diversifying risk of coverage as well as sharing costs with their insured population. Individuals or their employers pay fixed monthly premiums, while insurers cover the cost of most of the beneficiaries’ preventive care and other health care expenses up to a certain set limit. Cost-sharing mechanisms aimed at reducing and redirecting care include beneficiaries being responsible for the initial portion or a certain percentage of costs (deductibles), as well as per visit/procedure payments (copayments).

In 2014, 90% of Americans were insured, with 55% covered by some private insurance, mostly employer-purchased programs.¹

FIGURE 1. Health Insurance Coverage in America



Employer-Purchased Programs

Wage control laws in World War II led to employer-based insurance programs marketed as “benefits” to recruit competitive candidates.³ These programs expanded after the war, growing in popularity because businesses could provide a form of tax-free compensation to employees and employees could pay pre-tax health care costs. Various models of health insurance, ranging from capitation to health maintenance organizations (HMOs) to preferred provider organization (PPOs) plans, developed during this period, setting the stage for our current options — as well as leading to health care reform.

Individual Plans

Prior to the implementation of the ACA, a very small proportion of Americans were covered by direct-purchase or individual insurance; however, that rate has steadily been increasing to 6% in 2014, especially through the development of state-based marketplace exchanges.¹ One of the major reasons for the development of the ACA was the lack of affordable insurance available to individuals. During the recession, this problem became more evident as more individuals became part-time employees, losing their health benefits.²⁴ Without the ability to negotiate insurance rates on the scale of the employer or union plans, individuals faced high premiums and high deductibles with significant limits to the kind of health care they could access as well as discrimination against pre-existing conditions. The ACA created

third-party markets through the health insurance exchanges, increasing access to affordable coverage for individuals who did not have coverage through their employers. Approximately 10 million people were insured through the exchanges by June 2015.²⁵

Public

Government coverage has been steadily expanding since Medicare and Medicaid were created in 1965. As the ACA is being implemented, 33% of all individuals with health insurance have some type of public coverage (Figure 1). While only one-third of the total population is government-insured, government dollars made up nearly half of the \$2.9 trillion in U.S. health expenditures in 2013, and \$1.8 trillion in 2014, not including tax-breaks for employer-purchased health insurance.^{5,4} Coverage is provided via a variety of organizations and funding streams. The Centers for Medicare & Medicaid Services (CMS), a federal agency that is a branch of the Department of Health and Human Services (HHS), runs the nationwide Medicare Program and monitors Medicaid and Children's Health Insurance Programs (CHIPs) offered by each state.

Medicare

In 1965, Pres. Lyndon B. Johnson signed a law creating Medicare and Medicaid, profoundly changing the landscape of American medicine. Medicare is the most influential player in our nation's health care: It sets national standards for hospital and physician reimbursement rates, funds the majority of graduate medical education, and is the second largest provider of health insurance nationally, after Medicaid, covering 55 million Americans in 2015.²⁶ Beneficiaries include people 65 and older, the disabled, and people with end-stage renal disease. Prior to 1965, half of older Americans had no health insurance; by 1970, 97% were covered. The number of Medicare beneficiaries increased from 19 million in 1965 and is expected to reach 81 million by 2030.⁷

Medicare consists of 4 separate parts:

- Part A covers hospital inpatient services and skilled nursing care.
- Part B covers outpatient, ED visits, and physician services.
- Part C Medicare Advantage is a managed care program that gives beneficiaries the option to have private insurance coverage, which the government pays for in fixed premiums.
- Medicare Part D was added in 2006 to cover prescription medications.

Beneficiaries can either enroll in privately run plans to cover prescription drug costs through part D, or enroll in Medicare Advantage plans that include prescription coverage.

Funding for Medicare comes from mandatory contributions by both employees and employers, premiums and co-payments paid by beneficiaries, and general tax revenues. In 2014, the total Medicare expenditures were \$597 billion, which accounted for 14% of the federal budget.⁸

Once contentious, Medicare quickly became sacred. Beneficiaries, given their power as a voting bloc, have made it politically difficult to alter or reduce Medicare benefits. Rapidly-rising health care costs and an aging population will continue to put pressure on the government to limit expenses, but competing political pressures will remain to expand coverage for new medical treatments.

Medicaid

Medicaid was enacted almost as an afterthought to Medicare to provide medical coverage to the poor. Initially intended to supplement existing state entitlement programs, Medicaid covers the largest percentage of the insured in the U.S. and is the tool most used by the federal and state governments to expand health care coverage. While Medicare is largely funded by the federal government, Medicaid is administered by the individual states and funded from both state and matching federal funds. States must meet national standards to receive federal funds, but each state sets its own regulations. This has created, in essence, 50 different programs.

Medicaid's role is immense, covering more than 66 million beneficiaries in 2015 at a cost of \$449 billion.²⁴ It provided coverage for almost 33 million children, as well as many adult beneficiaries, including more than 10 million disabled Americans.⁹ The program has grown due to rising health care costs and through the expansion by 2014 ACA reforms. The Congressional Budget Office (CBO) estimates that ACA reforms will add 11 million beneficiaries to Medicaid and CHIP by 2021.¹⁰

The ACA was intended to provide expansion of Medicaid in all of the states, allowing any U.S. citizen living in a household with an income of less than 138% of the federal poverty level to qualify for Medicaid, and providing states with federal subsidies to offer that coverage. However, the politically controversial nature of the ACA quickly led to a Supreme Court challenge to this program. In 2012, in a milestone act for health care reform, the Supreme Court upheld the ACA as constitutional, describing the requirement for individuals to have coverage and associated tax penalty as within the purview of Congress.²⁸ However, the Supreme Court also ruled the federal government could not "coercively" dictate state policies on Medicaid.²⁷ Although the federal government retained the ability to incentivize states to expand Medicaid eligibility, the Supreme Court ruled the federal government could not penalize states for choosing not to participate.²⁸ The Supreme Court's decision has created state-by-state variability in access to care across the United States, with many states choosing not to adopt the ACA's expansion of Medicaid.²⁹ (Figure 1) States that failed to adopt the Medicaid expansion have disproportionately high numbers of uninsured patients, as low-income individuals in those states do not have access to public health insurance or subsidies for private health insurance through the exchanges.

CHIP — The Children’s Health Insurance Program

CHIP was signed into law in 1997 to provide health insurance to children (and in some states, their parents) of families whose incomes are too high to qualify for Medicaid, but who cannot afford private coverage. CHIP is administered by the state as either part of its existing Medicaid program or separately; the federal government provides matching funds to states similar to Medicaid. CHIP covered more than 8 million children in 2013.⁹

Other Programs

About 4.4% of the U.S. population has some type of military health insurance.¹¹ Current military personnel and their families receive coverage through Tricare, a health care program of the US Department of Defense. Depending on a variety of factors, veterans and their families are eligible for coverage under the Tricare program and/or the Veteran Affairs Healthcare (VAH) system, which had a 2015 budget of nearly \$56 billion.¹² Also of note, the Indian Health Service serves about 2 million Native American and Alaskan Native people and had a federally subsidized budget of \$4.3 billion in 2012.¹³

Patient Access to Providers

One of the key goals of the ACA is to improve access to healthcare. Despite rates of private and public insurance coverage rising, availability of health care providers remains a national issue, and the distribution of access among the different insurance types is not equal.¹⁴ Numerous studies have found that a distinct difference remains between Medicaid, Medicare, and CHIP patients versus privately insured patients in their ability to establish access to health care.¹⁴⁻¹⁷ This issue can indirectly affect emergency department use because patients have no limit to access under EMTALA. One study found that up to 90% of health care providers accept new patients with private insurance, but less than 75% accept new patients with public coverage.¹⁴ Children with public insurance were also twice as likely to be declined as a new patient compared to privately insured children.¹⁴

The Kaiser Family Foundation found more promising data for Medicare patients showing that 96% of Medicare patients have a usual source of primary care and 90% are able to schedule timely appointments for both routine and specialty care, and only a small number of Medicare patients who sought a new primary physician had problems finding one (2%).¹⁵ In this study, access for Medicare patients was comparable with privately insured adults ages 50-64. The 2012 National Electronic Health Records Survey revealed that 91% of non-pediatric physicians accept new Medicare patients, which is the same rate as those with private insurance.¹⁵ Studies suggest, however, that the overall physician acceptance rate of new Medicare patients is related to local market factors and differs by state, specialty, size of practice, and medical degree.¹⁵

Medicaid and CHIP.¹⁸ The majority of uninsured individuals reported they were unable to obtain insurance due to inability to afford health care coverage, and most of them fell into the low to moderate income range.²⁰ Those below the poverty level, however, were at the greatest risk of being uninsured.²⁰ The Kaiser Commission on Medicaid and the Uninsured found that about 80% of the uninsured population were members of working families, holding blue collar jobs, who were still unable to afford the employer-sponsored coverage or did not have any access to it.²¹ They also found that the uninsured rate was higher amongst minorities. Kaiser Family Foundation reports that 79% of uninsured individuals were U.S. citizens, native or naturalized. The remaining 21% are non-citizens, including undocumented immigrants and legal immigrants who have been in the US for less than 5 years, and are thus ineligible for federally funded health coverage. While the number of uninsured is slowly decreasing with the implementation of the ACA, studies project that even in 2018, 29 million individuals will remain uninsured.²²

The ACA will have decreased the number of uninsured by 26 million Americans from 2013 to 2018 (projected).²² This decrease can be attributed predominantly to coverage gains by low income individuals and people of color, particularly in Medicaid expansion states.²³ Hispanics and blacks were responsible for the largest decrease in the uninsured population among the various ethnic groups between 2013 and 2014.²³ While gains are being made in healthcare coverage for minorities and low income individuals, these groups are still at higher risk than non-Hispanic whites for being uninsured in the future. Forty percent of the U.S. population are minorities, yet they are responsible for more than half of the uninsured in the U.S.²³ People of color, non-citizens, and low income individuals are at the highest risk for being uninsured and will likely therefore remain in the projected 29 million uninsured in 2018 without ongoing efforts to expand coverage.

WHAT'S THE ASK?

- Know the facts in your state! Has your state expanded Medicaid? What is your statewide uninsured rate? Educate your lawmakers about these important factors.
- Educate yourself about programs to enroll qualifying patients in health insurance in your area. Refer an uninsured patient to get covered on your next shift!
- Many patients have health insurance coverage but still lack access to physicians and providers. Advocate for policies that will improve access to providers – including programs to increase available providers in rural and low-income areas, and increased reimbursement for public insurance programs. ★

With thanks to William Fleischman, MD, for his authorship of a previous version of this chapter.

ADDITIONAL RESOURCES

- *ACEP Practice Resources on ED Crowding*: <http://www.acep.org/practres.aspx?id=32050>
- *Urgent Matters Toolkit*, SUNY Stony Brook Emergency Department Full Capacity Protocol. Robert Wood Johnson Foundation, 2006: <http://www.rwjf.org/pr/product.jsp?id=56493>
- Hospitalovercrowding.com website by Peter Viccellio, MD, of SUNY Stony Brook, sponsored by the Emergency Medicine Foundation: <http://hospitalovercrowding.com>
- Henry J. Kaiser Family Foundation Health Reform Source, <http://healthreform.kff.org>
- Association of American Medical Colleges Health Care Reform and Physician Workforce Resources: <http://aamc.org>



UTILIZATION OF EMERGENCY SERVICES

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Utilization of the emergency department has become a major talking point among hospitals, health care systems, politicians, ACEP, and consumers alike.

It has been the target of legislation (EMTALA, the ACA, etc.), and emergency providers are at the forefront of this discussion, not only as those who see patients but also as those who know how often our services are used and by whom. According to the Centers for Disease Control & Prevention (CDC), 136.3 million Americans visit EDs annually, and there has been an increase in the per-capita rate of ED visits every year from 1997-2009.¹ More than half of the acute unscheduled care visits for patients with Medicaid/Children’s Health Insurance Program and more than two-thirds of acute unscheduled care visits for the uninsured are provided by EDs.³ This increase in ED use for acute unscheduled care has occurred despite a 12.7% decline in the number of hospital-based EDs between 1991-2011.⁴ Twenty-eight percent of all acute care visits in the U.S. are staffed by ED physicians (representing just 4% of the national physician workforce).³

Help gauge the need for legislation by reporting changes in ED volumes and payment types.

EDs have evolved since their creation from a room staffed by part-time rotating community doctors and trainees, to independent departments that play an increasing role in the management of complex, high-acuity patients and as the hospital’s “front door.” EDs now serve as a safety net for patients who are unable to obtain access to health care providers elsewhere. This change is reflected in the diversity of care provided in EDs as demonstrated by subspecialized ED settings, including psychiatric EDs, geriatric EDs, cancer EDs, and ED-based observation units.

The 24-hour availability of EDs, coupled with the regulations surrounding EMTALA, ensures that everyone — regardless of ability to pay — can access acute care. This contrasts with care provided by primary care physicians that is restricted

by office hours, insurance coverage, and established patient relationships. Many factors — including EMTALA, the nation’s changing demographics, a shortage of primary care physicians, and the increasing complexity of care provided in acute care settings — have led to an increasing patient volume seen in emergency departments nationwide. Patients presenting to EDs today represent an older population with increasingly complicated chronic medical conditions. Consequently, EDs now represent a “central staging area for acutely ill patients, for the use of diagnostic technology, and for decisions about hospital admission, all of which makes ED care increasing complex.”⁵

The changing nature of primary care also has led to an increase in ED utilization. In the acute setting, PCPs often refer patients to an ED, viewing it as the safest and easiest course of action for their patients. Other factors cited in ED referrals included the excessive time required to directly admit a patient, patients’ self-referral to EDs, decreasing number of PCPs with hospital privileges, and unfamiliarity with partners’ patients in a group practice.⁶ The resources found in an ED are increasingly being leveraged by outpatient providers to perform “accelerated diagnostic workups of patients with potentially serious problems.”⁶⁻⁸ These multiple factors have helped contribute to a 24% decrease (from 8 million to 6.1 million) from 2003-2009 in the number of non-elective direct admissions and a resultant 9% increase in admissions from the ED (from 15.9 million to 17.3 million) reported in the Healthcare Cost and Utilization Project Nationwide Inpatient Sample.⁶ ED admissions now account for approximately half of all hospital admissions nationwide.⁶ Emergency physicians thus have a significant impact on health care spending, given the average admission costs 10 times as much as the average ED visit and hospital admissions represent approximately one-third of annual health care spending.⁹

Expected Changes with the ACA

When the ACA passed in 2010, there was significant speculation about how this legislation would impact ED utilization. One survey of emergency physicians found that after the implementation of the ACA, 46% perceived increases in their visit volumes, 86% expected ED visits to continue to increase, and 51% expected reimbursement to decrease.¹⁰ Prior to the ACA, numerous peer-reviewed studies had shown increases in ED utilization after expansion of state-offered health benefits/insurance programs, and emergency physicians believe the ACA would have the same results on a nationwide scale.^{11, 13-14} Policymakers involved in designing the ACA hoped its passage would provide increased access to primary care providers, with the assumption this would cause substitution of emergency care with primary care. Although improved rates of insurance coverage are designed to improve access to primary care, less than half of Americans with a PCP have access to that physician during night and weekend hours, when the majority of acute unscheduled care occurs.¹² A 2011 survey by the CDC revealed that among adults who visited an ED, approximately 80% reported a lack of access to other providers, with almost half stating their doctor’s office was not open.⁷

One study showed that shortly after the passage of the ACA, states choosing to expand Medicaid had experienced a 5.6% increase in ED visits compared with just a 1.8% increase in non-expansion states.¹³ Another study analyzing California's extension of coverage to low-income adults in advance of the ACA Medicaid expansion showed a large spike in ED usage the first year, but this increased usage leveled off after 18 months¹⁴. The authors of this study characterized this trend as "pent-up demand" from patients who had no insurance prior to the expansion¹⁶. Various other studies showed a wide variation in reporting of increased or decreased ED use after the implementation of the ACA.^{11, 13-14}

The designers of the ACA hoped that expansion of Medicaid and health insurance coverage would decrease the severity of illness of patients presenting to the ED (ie, acuity), since patients with adequate health insurance would have timely treatment for their chronic illnesses from their primary care providers, preventing severe exacerbations of their illnesses that could lead to a high acuity ED visit. We do not yet have definitive data on the impact of the ACA on ED visit acuity. A study by the Commonwealth Fund reported that the number of patients having delayed health care needs due to cost (which can lead to more high-acuity ED visits), had declined by 17.5% over the first year of ACA implementation, a first in the past decade.¹⁵ More than half of respondents to a survey performed by ACEP believed the ACA would have no impact in overall visit acuity.¹⁰ Reports from the first two quarters of Medicaid enrollees accessing care during Colorado's expansion of the program revealed a 10% increase in the case-mix index for Medicaid patients, indicating that the newly covered Medicaid population has more complex needs and conditions on average than the previous Medicaid population. This would suggest that new Medicaid enrollees so far are a sicker population and thus more likely to have high-acuity ED visits.¹³

ED visit data on patients who have purchased coverage through the new health insurance marketplaces created by the ACA is not yet available. However, we know that 85% of these patients are choosing high deductible plans.¹⁶ This may lead to delayed presentations to the ED, thus higher acuity,¹¹ as cost concerns prevent them from accessing appropriate preventive and routine health care. Like early Medicaid enrollees, those who took advantage of marketplace plans may represent a sick population due to previously untreated health needs.¹¹

We do not yet know how the ACA will impact ED profit margins. One study projected that ED profit margins will be higher under the ACA in coming years.¹⁷ A report from more than 400 hospitals in 30 states found that in states where they had expanded Medicaid, Medicaid charges had increased by 29%, uninsured charges by 25%, and charity care had decreased by 30%, which led to small increases in profit margins. These changes were not witnessed in non-expansion states.¹⁸ These results have led some to believe that initial implementation of the ACA has and will continue to lead favorable changes in payer mixes, because of the transition of noninsured patients to Medicaid or private insurance¹¹. If this

proves to be true, it will be interesting to see how emergency physician groups and hospitals react in trying to recruit newly insured patients to their EDs.

Over the next few years, significant health services research will need to be able to be performed to analyze the impact of the ACA on emergency departments, including changes in the overall number of ED visits, the acuity of those visits, and their impact on the bottom line for ED providers and hospitals.

WHAT'S THE ASK?

1. We ask all emergency physicians to take an active role in advocating at local and federal levels for all patients to have insurance coverage so they can receive the care they desperately need.
2. Also, we ask each emergency physician to take part in the process by reporting changes in payment types of the patients they evaluate, as well as any changes in their ED volumes as the ACA continues to be implemented. Doing so will give the EM community, local and federal officials, and organizations like ACEP the information they need to determine the impact of the ACA and the need for additional legislative proposals in the future. ★



THE IMPACT OF EMTALA

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The Emergency Medical Treatment and Active Labor Act (EMTALA), originally designed to protect patients from inappropriate transfers and “dumping,” has grown to be the basis of the safety net of the American health care system. But EMTALA has been described as the largest unfunded federal mandate in health care. EMTALA’s effect on the nation’s emergency care system itself is huge, with direct costs for uncompensated care to physicians about \$4.2 billion.¹

Ask Congress to pass legislation that reduces the liability cost and cost of care to uninsured patients.

The Law

In 1986, EMTALA went into effect as part of the Consolidated Omnibus Reconciliation Act (COBRA) of 1985.² It established 3 main obligations on the part of all hospitals that receive Medicare funding and maintain an emergency department (ED):³

1. For any person who comes to a hospital emergency department, “the hospital must provide for an appropriate medical screening examination...to determine whether or not an emergency medical condition exists.”
2. If an emergency medical condition exists, the hospital must “stabilize the medical condition” within its facilities or initiate an “appropriate transfer” to a facility capable of treating the patient.
3. Hospitals with more specialized capabilities are obligated to accept appropriate transfers of patients if they have the capacity to treat the patients.

Under EMTALA, these three things must be done and should not be delayed to investigate a patient’s insurance status or ability to pay.⁴ EMTALA compliance is regulated by the Centers for Medicare and Medicaid (CMS), a division of the U.S. Department of Health and Human Services (HHS). Touted as a necessary consumer protection law, EMTALA initially was embraced by the public. Unfortunately, EMTALA has no underlying mechanism to secure funding, leaving emergency care providers and hospitals responsible for shouldering the costs of care provided under the mandate.

Medical Screening Examinations

Any person who arrives at an emergency department and requests examination or treatment for a medical condition *must* be provided a *medical screening examination* (MSE) “within the hospital’s capability of the hospital’s emergency department, including ancillary services routinely available,... to determine whether or not an underlying emergency medical condition exists.” (42 C.F.R. § 489.24(a)(1)(ii))⁵

Current provisions allow a hospital’s board of directors to designate members of their health care team to perform the MSE.⁵ Generally, the MSE is performed by a physician, an advanced practice provider, or a nurse. The triage process alone does *not* meet the requirement of the MSE.⁵ To satisfy this provision, the examination must be of sufficient detail to uncover an underlying emergency medical condition after a good faith effort. There is no outline specifying what this examination must entail, affording some discretion to the examiner to exercise his or her medical judgment.

In 2003, HHS broadened the definition of a patient presenting to an emergency department to include patients arriving on a “hospital campus.”⁶ This is defined as the physical area up to 250 yards from the main hospital building, including parking lots, driveways, sidewalks, administrative entrances, and areas that may bypass the emergency department, such as labor and delivery. Outpatient treatment areas located at satellite facilities that do not provide emergency services, such as walk-in clinics and urgent care facilities, do *not* fall under the umbrella of EMTALA law.⁷

The Stabilization Requirement

Like the screening requirement, the *stabilization requirement* applies to all Medicare-participating hospitals with dedicated emergency departments. For the stabilization requirement to apply, identification of an *emergency medical condition is required*.⁸ The definition of an *emergency medical condition*, by statute, is:⁹

“a medical condition manifesting itself by acute symptoms of sufficient severity (including severe pain) such that the absence of immediate medical attention could reasonably be expected to result in placing the individual’s health (or the health of an unborn child) in serious jeopardy, serious impairment to bodily functions, or serious dysfunction of bodily organs; or with respect to a pregnant woman who is having contractions that there is inadequate time to effect a safe transfer to another hospital before delivery, or that transfer may pose a threat to the health or safety of the woman or the unborn child.”

Federal regulations define an individual as stabilized when there is a reasonable assurance that no material deterioration would result from that individual’s transfer or discharge from the hospital or, in the case of women in labor, after

delivery of the child and placenta.¹⁰ The physician and the hospital have no EMTALA obligations once a patient has been stabilized, and the patient may be discharged or transferred accordingly, as appropriate for the medical condition.¹¹ Ensuring a patient is stabilized requires that, within reasonable medical certainty, no material deterioration in the patient's condition should occur during transfer or upon discharge from the hospital. The MSE also must be performed in good faith and without fraudulent intent.

Under the stabilization requirement, if a hospital performed an adequate MSE but failed to accurately detect an individual's emergency condition, the hospital may not have violated EMTALA's provisions even if they released the patient without adequate treatment.¹² The hospital still may be civilly liable to the individual, however, based upon state medical malpractice law, if the failure to detect an emergency condition was due to negligence during the screening exam.¹³

EMTALA's applicability to patients admitted to the hospital has also come into question. Previously, the 4th, 9th, and 11th circuit courts have held that a hospital has no stabilization duties that are enforceable under EMTALA once an individual has been admitted. However, in 2009, the U.S. Court of Appeals for the 6th Circuit held that the mere admission of an individual who presented to the emergency department, without further treatment, fails to satisfy the stabilization requirement of EMTALA.¹⁴ The defendant hospital petitioned the Supreme Court for review, but the Court declined to hear the case. Subsequently, in February 2012, HHS reiterated its interpretation of EMTALA, ruling that it does not apply to the inpatient setting, even if a patient remains unstable upon admission.¹⁵ At time of printing, this issue continues to be contended in district courts (*Bryson v. Miford* Reg'l 2014. *James v. Jefferson* Reg'l 2012).

Appropriate Transfers

EMTALA requires a hospital to provide an "appropriate transfer" to another medical facility if a higher level of care or specialized treatment is necessary to stabilize a patient. The receiving hospital must accept such a transfer when it can provide these services, regardless of a patient's insurance status or ability to pay. In addition, a patient may be transferred only if a physician certifies that the medical benefits expected from the transfer outweigh the risks, or if a patient makes a request in writing after being informed of the risks and benefits associated with the transfer. In either case, all of the following also must apply:⁶

1. The patient has been treated and stabilized as far as possible within the capabilities of the transferring hospital.
2. The transferring hospital must continue providing care en-route, with the appropriate personnel and medical equipment to minimize risk.
3. The receiving hospital has been contacted and agrees to accept the transfer.
4. The receiving hospital has the facilities, personnel and equipment to provide necessary treatment.
5. Copies of the medical records accompany the patient.

According to statute, a patient is considered stable if the treating physician determines that s/he will have no material deterioration during transfer between facilities. Receiving hospitals must report perceived violations of the “appropriate transfer” clause in EMTALA to HHS, CMS, or an appropriate state agency. Unanticipated adverse outcomes or deterioration do not typically constitute an EMTALA violation.⁶ Given the severity of the penalties involved, most hospitals include EMTALA language in transfer forms to avoid the possibility that a retrospective review of a case might be interpreted as a violation.

The Penalties

An EMTALA violation may result in termination of a hospital’s or physician’s Medicare Provider Agreement in extreme circumstances. Other penalties include fines to the hospital and individual physician, each up to \$50,000 per incident, as well as civil action. Furthermore, receiving facilities may sue transferring hospitals to recover damages and fiscal losses suffered as a result of an inappropriate transfer. Receiving hospitals themselves may be subject to misdemeanor charges if they fail to report EMTALA violations.

Investigation of EMTALA violations is initiated by complaints, and EMTALA does include “whistleblower” protections for hospital personnel who report violations. The Office of Inspector General for HHS and CMS is responsible for such investigations; currently, there is a 2-year statute of limitations for civil enforcement of any violation. Citation for a CMS EMTALA violation does not require any legal conviction or adverse outcome and is not typically covered by standard malpractice insurance plans.

Treating or transferring hospitals can be found liable when their providers or policies cause EMTALA violations. On-call physician specialists who fail to come to the emergency department after having been called by an emergency physician also may also be found in violation of EMTALA.¹⁶ However, hospitals are not considered in violation of EMTALA if a patient refuses the MSE or stabilizing treatment so long as there was no coercion and all reasonable measures are taken to secure documentation from the patient or someone acting on his/her behalf.

Expanding Patient Population and Burden

Although in spirit EMTALA was intended to support the rights of the individual indigent patient, the unanticipated consequences of the law have resulted in decreased access to care for many. These consequences include heavy monetary implications to hospitals providing a large volume of uncompensated care. For many smaller and urban hospitals, this burden has been so great as to cause closure.¹⁷ From 1991–2011, EDs closed at greater rates than hospitals. Specifically, there were 5,108 EDs operating in 1991, and by 2011 that number had dropped to 4,461 — a loss of 647 EDs (12.7%) nationwide.¹⁸ Additionally, EDs have suffered from being the main health care safety net for our nation. Because of the growth

in both the number of ED visits and, until recently, the growing uninsured population, EDs are under increasing financial pressures and suffering from overcrowding.¹⁹

Emergency physicians have benefited from securing some compensation from the 32 million newly insured Americans under the Affordable Care Act, who otherwise would have received uncompensated care under EMTALA. Since the coverage provisions of the ACA took effect, about 16.4 million uninsured people have gained insurance.²⁰ This computes to a drop in the uninsured rate from 20.3% to 13.2%.

Still, the ACA does not directly address EMTALA-related care, and emergency physicians continue to provide uncompensated care to the 23 million Americans who remain uninsured. In the 18 states not expanding Medicaid, there is a higher amount of uncompensated care still being delivered, since these states have a higher percentage of uninsured citizens.²¹

Liability Reform

Emergency physicians and our on-call specialist colleagues care for patients with serious illnesses and injuries, with little knowledge of their medical history and little time to build a therapeutic relationship. For these reasons, we are at higher risk for liability while serving in the ED and providing EMTALA-mandated care.

This has been a major concern of emergency physicians since the introduction of EMTALA. At the federal level, the American College of Emergency Physicians (ACEP) has repeatedly helped to introduce legislation addressing these liability issues, such as H.R. 836, the “Health Care Safety Net Enhancement Act of 2015.” In its current form, this would extend liability coverage to emergency physicians under the Public Health Safety Act, which would insure them as federal employees with “sovereign immunity.”²² This legislation would help to ensure that services of emergency physicians and our on-call colleagues will always be available to patients who need them.

WHAT'S THE ASK?

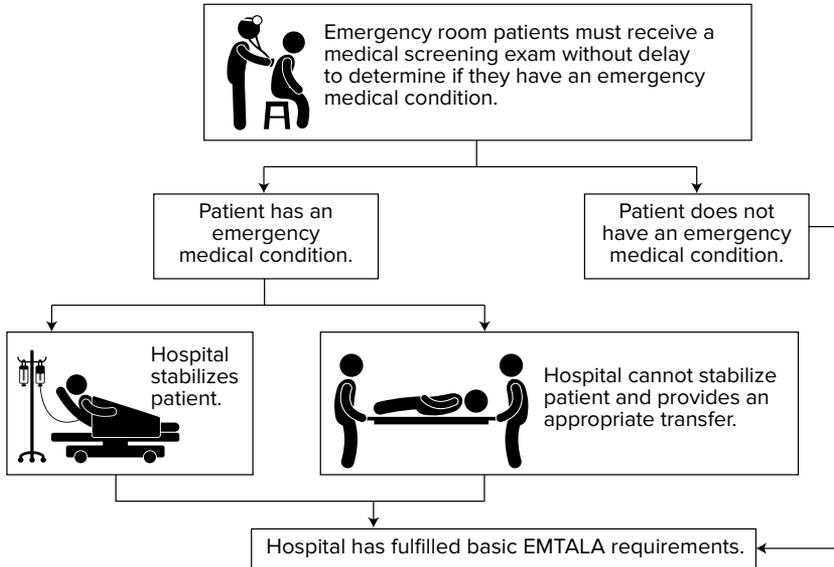
The purpose of EMTALA is to ensure equal treatment for any person seeking emergency care. Emergency physicians are proud to serve the public 24 hours a day, 7 days a week, regardless of an individual’s insurance coverage or ability to pay. We serve as the national health care safety net and embrace public trust in treating all who come our way. Nevertheless, EMTALA has shifted public health responsibilities onto hospitals and physicians in the emergency department. It does not require health insurance companies, the federal government, or individuals to pay for any mandated services.

Emergency physicians and their on-call colleagues are working to establish a mechanism to secure funding and/or limit liability for the providers of EMTALA-mandated services. State-level attempts to retroactively deem care provided

under the EMTALA mandate to have been non-emergent, thus not meriting reimbursement (under Medicaid or other state health plans) to the providers of care, will exacerbate the strain associated with EMTALA. Failure to protect the safety net will result in further deterioration of a system already in crisis.

Going forward, it is on us as emergency physicians to continue to ask Congress to pass legislation that reduces the liability cost and cost of care to uninsured patients. ★

FIGURE. Basic EMTALA Requirements



Reprinted from The Emergency Medical Treatment and Labor Act: The Enforcement Process. Department of Health and Human Services, Office of the Inspector General. The Emergency Medical Treatment and Labor Act. The Enforcement Process (2001) Publication OEI-09-98-00221, January.

Adapted from Clinical Pediatric Emergency Medicine, 2003



EMERGENCY DEPARTMENT CROWDING AND BOARDING

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Emergency department crowding is an important issue because of the deleterious effects of crowding on the quality of health care provided for patients.

Crowding has been linked with an increased ED length-of-stay¹ and delays in acute care²⁻⁵ and resuscitative efforts for patients.⁶ When a patient has been admitted to a hospital but physically remains in the emergency department without being transferred to an inpatient unit, this is known as “boarding.” Boarding is one of the most influential contributors to crowding and has negative effects on both the patients who are boarding and the patients who are initially presenting to the ED while boarders are in the department.

Patients who are boarding in the ED require staff time for patient care, family communication, and documentation.¹ These demands on the ED staff time compete with the time required for the care of other patients. Additionally, for the patients who are boarding, remaining in the emergency department for a prolonged period of time is associated with a delay in definitive testing and an increase in short-term mortality, overall hospital length of stay, and associated costs. Increased boarding times have also been associated with a greater number of medical errors and increased patient dissatisfaction.⁷⁻¹⁰

Increased ED crowding has also adversely affected access to care, as indicated by the increasing “left-without-being-seen” (LWBS) rate. From 1994-2006, there was a 33% growth in wait times and a tripling of the number of patients who LWBS.¹¹ Patients who leave without being seen are often suffering from medical emergencies. One study found that 46% of the patients who LWBS had conditions requiring prompt medical evaluation. In addition, 11% of those LWBS were subsequently hospitalized, with some patients requiring more extensive and costly care than they would have if they had been evaluated at the time of initial

Visit the Hospital Compare website to see how your workplace fares on measures related to crowding and boarding.

presentation.¹² A larger LWBS population places an unnecessary cost burden on the systemic level in addition to the detrimental effect it has on the individual health level.

Potential Solutions to ED Overcrowding

There are many approaches to reducing the damaging effects of ED overcrowding. ACEP has put forth solutions to help with boarding.¹³

Solution #1. Moving Admitted Patients out of the Emergency Department

First is to move admitted patients out of the emergency department to inpatient areas. With each unit taking a small number of patients, the burden of boarding is more evenly spread, thus enabling the emergency department to better care for emergencies.

Several innovative programs have sought to create locations to allow admitted patients to move out of their ED bed while awaiting an official inpatient bed, such as inpatient beds placed either in the hallways or in specialized units.¹⁴ One study found that by creating an “express admit unit” they were able to move boarded patients quickly out of the emergency department, decrease length of stay times, and reduce the left without being seen rates.¹⁵

There have been solutions to boarding that include implementing rapid admission orders. This allows for patients in the emergency department to go directly to a bed with orders placed by the Emergency physician prior to being seen by the admission team.¹⁴ One study found a decreased length of stay, decreased ambulance diversion and increased emergency department census.¹⁶

Solution #2. Optimizing Operations to Guide Change

Simulations of emergency department operations have been used to develop models to check the effectiveness and quantify potential gains. One study measured outcomes before and after simulation improvement recommendations were implemented. The barriers to throughput were found to be: insufficient physicians during peak hours, the slow process of admitting patients to inpatient floors, and laboratory and radiology test turnaround times. Addition of a physician resulted in an almost 18% reduction in the ED Main discharged patient length of stay.¹⁷

Research shows that timely departure of inpatients from the hospital can significantly improve the flow of patients in emergency departments by making more inpatient beds available to incoming admitted emergency patients.^{14,18} The “Urgent Matters” report from 2012 also recommends the establishment of a bed management center, including a simplified bed request pathway and an electronic bed board for automated bed tracking.¹⁴

In a recent article,¹⁹ the development of a centralized Patient Flow Management Center allowed for decreased boarding time, quicker bed assignment time, fewer number of patient walkouts, fewer ambulance diversions and increased number of transfers. The hospital system studied paired with multiple facilities to create a bed management system. Ambulance, helicopter services and dispatchers were all in sync. A single technology platform was introduced, and used by an effective team including critical care nurses, medical directors and nurse managers. Daily bed meetings with nurse managers and charge nurses also helped this system to improve efficiency and patient care.

Solution #3. Developing Alternative Sites for Low-Acuity Visits

Recent changes in health care delivery and financing, including the growth of retail clinics, urgent care centers and free-standing emergency rooms, have allowed for more access to care for a subgroup of the population.²⁰ Telemedicine, which can take the form of emails, phone calls, or Web-based chats, also provides an alternative site of care.²¹ In addition to locations physically separated from the hospital, many emergency departments have added a “fast-track” to help move patients with low-acuity chief complaints through the ED more quickly.²² These alternatives can help improve ED efficiency by decreasing the number of low-acuity visits.

Solution #4. Increasing Patient Access to Care and Promoting Health

This includes targeting vulnerable patients and improving the safety net, helping to connect high-need patients with their primary care provider for their chronic needs. There are also sites which utilize community health care providers to visit patients in their homes.²³ One study found that by creating a clinic for their homeless population in Chicago, one hospital was able to reduce ED visits by 24%.²⁴

Promoting health is not an easy task. But providing patients with education and working hard to help manage chronic disease should ultimately decrease low acuity visits to the emergency department. Emergency departments who have hired case managers for patients with chronic disease have found a decline in the number of visits from this sub-group of patients.²⁵ Follow-up calls to patients have also proven beneficial to decrease the number of return visits.²⁶ (*Case management programs are further discussed in a subsequent chapter.*)

Measuring Crowding and Boarding

There are a large number of timestamps and intervals that can be measured in the ED to help improve quality and efficiency. Key metrics include:²⁷

- A. Measures of volume.** Total admissions, ED visits, and total completed patient transport jobs per month (patients transported out of the department).
- B. Measures of process failure resulting from overcrowding in the ED.** Ambulance diversion (hours/month), LWBS (percentage of ED visits), and boarding hours (hours per month)

C. Process cycle times. ED door-to-provider time (median time from patient arrival in the ED to evaluation by a medical provider, minutes), nursing pull time (mean time from a clean and ready bed assigned to patient occupying that bed, which includes nursing handoff, in minutes), mean patient transport total trip time (minutes), mean Environmental Services (EVS) response time (time from bed reported dirty to cleaning commenced, in minutes), mean EVS turn time (time from bed reported dirty to cleaning completed, in minutes), and mean bed request to assign time (minutes)

By gathering process cycle times, emergency medicine administrators will be able to analyze data to determine where there are patient flow issues in the department. Once the barriers to flow are identified, interventions to improve efficiency and decrease crowding and boarding can be initiated. However, these interventions can be expensive and require hospitals to devote resources to this problem.

In 2013 and 2014, the Centers for Medicare & Medicaid Services first began tracking the following quality measures related to crowding and boarding:²⁸

- Patient median time from ED arrival to ED departure for discharged patients
- Door-to-diagnostic evaluation by a qualified medical professional
- Patient left before being seen
- Median time from ED arrival to ED departure for admitted patients
- Median time from admit decision time to time of ED departure for admitted patients

Hospitals are now required to track and report these metrics in order to receive full reimbursement for Medicare patients, and the metrics are publicly reported on the Hospital Compare website. The Joint Commission also began addressing boarding in their accreditation requirements in 2014.²⁹ Both of these programs are relatively new, and results are not yet certain. However, public and regulatory attention to metrics like these encourages hospitals to provide EDs with the necessary resources to improve patient care by improving flow and decreasing boarding.

WHAT'S THE ASK?

1. Visit the Hospital Compare website to see how your workplace fares on measures related to crowding and boarding.
2. Educate your legislators and hospital administrators about the clinically important impact of boarding and crowding on patient care.
3. Advocate for programs in your hospital to decrease boarding and improve patient flow. ★



NON-EMERGENT VISITS AND CHALLENGES TO THE PRUDENT LAYPERSON

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The “prudent layperson” standard evolved from the insurance environment of the 1980s and 1990s, at a time when private insurers would frequently require prior authorization for emergency department visits.

In the event of an emergency, patients were expected to contact their insurance carrier prior to going to the ED to request coverage for their visit. Those who did not were frequently denied coverage if their final diagnosis was deemed to be “non-emergent.”¹ Understandably, this practice led to fear among patients of the potentially financially devastating consequences of an ED visit and discouraged patients from visiting the ED even in the event of life threatening emergencies.

Emergency physicians must remain vigilant of legislation that uses pre-established lists of discharge diagnoses to determine reimbursement.

In response, states began implementing the prudent layperson standard, beginning with Maryland in 1993.² The standard defined an emergency medical condition as:

“ a medical condition manifesting itself by acute symptoms of sufficient severity (including severe pain) such that a prudent layperson, who possess an average knowledge of health and medicine, could reasonably expect the absence of immediate medical attention to result in placing the health of the individual (or, with respect to a pregnant woman, the health of the woman or her unborn child) in serious jeopardy, serious impairment to bodily functions, or serious dysfunction of any bodily organ or part.”³

The insurance company must reimburse for emergency services when the patients' presenting symptoms meet this standard for defining a medical emergency, regardless of their ultimate diagnosis. If the patient's chest pain turns out to be only acid reflux and not a heart attack, the ED visit is still covered, since a prudent layperson could reasonably expect that chest pain requires immediate medical care. The standard was quickly adopted by multiple states and later by Medicare and Medicaid in the Balanced Budget Act of 1997.⁴ In 1999, it was extended to all federal employees. ACEP campaigned for years to integrate the prudent layperson standard as a universal standard for ED visits and was ultimately successful in 2010 with the passage of the Affordable Care Act, which adopted the prudent layperson standard as the standard for emergency coverage for nearly all medical plans.⁵

Under the prudent layperson standard, insured patients are protected and provided appropriate insurance coverage for ED care when they feel they are having a medical emergency. However, many insurers and policymakers still question the necessity of some emergency department visits.

Unnecessary ED visits are frequently cited as a cause of rising health care costs in the United States. Current data, however, suggest that of the \$2.4 trillion spent nationally on health care, ED visits account for around 2% of the total cost.⁶ The claim that many ED visits are unnecessary is also under debate, as a report from the Centers for Disease Control and Prevention demonstrated that 92% of all ED visits are for medical conditions requiring treatment within the first 2 hours. The number of patients presenting to the ED for non-urgent complaints has been in steady decline over recent years, from 13.9% in 2005 to 8% from the most recent data in 2011. It should be noted that the CDC defines a non-urgent visit as a medical condition requiring treatment within 2-24 hrs.⁷ This by no means suggests it is inappropriate for these patients to seek care at an ED. Many patients who develop concerning symptoms at 5 p.m. on a Friday would not be able to attain adequate care by waiting until Monday to see their primary doctor. Presenting to the ED in this circumstance is not only reasonable, but often represents the best means by which to attain the appropriate care.

Despite this available data on the medical necessity of the vast majority of ED visits, many states still see emergency care as a growing expense and are seeking measures to reduce ED visits. One particularly noteworthy example was enacted in Washington state. In 2011, the Washington State Healthcare Authority drew criticism for attempting to cut Medicaid spending by limiting reimbursement for ED visits to 3 visits per year for any condition deemed to be "non-urgent." Contrary to the precedent set by the prudent layperson standard, the list of non-urgent complaints was based on final diagnosis rather than presenting symptoms. Additionally, the list of final diagnoses included such emergent medical conditions as chest pain, vaginal bleeding in pregnancy, and seizures. After fighting to block

the regulation, a joint effort lead by Washington state’s ACEP chapter led to the creation of the “ER is for Emergencies Program.” This program specifically aimed to reduce costs by creating the “7 best practices” program, which was implemented by all hospitals in the state. The program included patient education regarding appropriate ED use, development of care plans with coordinated case management for frequent users of EMS and EDs, implementation of narcotics guidelines to reduce drug-seeking behavior by patients, and the creation of a health information exchange called the Emergency Department Information Exchange (EDIE). By sharing information in EDs across the state, this ACEP-led effort allowed Washington State Medicaid to save \$34 million in the first year and decrease visits for controlled substance by 25%, all while protecting the rights of patients established by the prudent layperson standard.⁸

FIGURE 1. Seven Best Practices

- 1 Implement patient data exchange system (ie, EDIE)
- 2 Identify Patient Review and Coordination (PRC) clients, (ie, high utilizers)
- 3 Develop PRC client care plans
- 4 Provide patient education (discharge instructions, including appropriate ED utilization)
- 5 Adopt narcotics guidelines
- 6 Enroll providers in Prescription Monitoring Program
- 7 Implement utilization feedback reports to providers

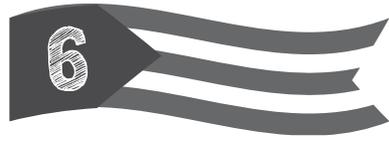
Source: Washington State Health Care Authority

Other states have also faced challenges to the prudent layperson standard. In 2011, Kentucky Spirit, a managed care organization (MCO), attempted to institute a new policy declaring that it would only reimburse \$50 for any ED visit in which the final diagnosis did not meet a predetermined list of emergency medical conditions.⁹ Similar legislation in Louisiana sought to pay hospitals and providers a \$50 “triage fee” for ED visits for “non-emergent” conditions, rather than providing appropriate reimbursement for an ED visit, where the definition of “non-emergent” was based on a patient’s final diagnosis.¹⁰ In Pennsylvania, a 2014 draft of the “Healthy Pennsylvania” program proposed that part of determining an individual’s insurance premium would be based on “appropriate use of ER services.” The bill did not specify what criteria would be used to determine which visits are appropriate, nor did it specify how it would distinguish between “emergent” and “non-emergent” conditions.¹¹

Given ongoing budget difficulties in many states, the trend of attempting to save health care dollars by limiting reimbursement for “non-urgent” visits is likely to continue. It is critical that emergency physicians are educated about the pitfalls to this approach and also about alternative, safe methods of achieving cost savings for insurers.

WHAT'S THE ASK?

Emergency departments remain a vital part of the health care system, providing a safety net for millions of Americans. Despite the claims of some politicians, EDs are able to provide highly specialized care for emergent patients at relatively low costs. The prudent layperson standard is vital to maintaining an environment of patient-centered care where patients can feel secure in seeking emergency care, without fear of reprisal if their final diagnosis is not considered an “emergency” in the eyes of their health care provider. Nonetheless, rising health care costs and myths about the high cost of emergency care will likely spur future attempts to circumvent the prudent layperson standard. Emergency physicians must remain vigilant of legislation that uses pre-established lists of discharge diagnoses to determine reimbursement. Such policies create an unsafe environment for patients and undermine the crucial role EDs play in the health care system. ★



HIGH COST, HIGH NEED: PATIENTS WITH FREQUENT ED VISITS

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Frequent flyers, super-users, or super-utilizers — terms used interchangeably — are individuals who have multiple emergency department visits and hospital admissions in a year. While no standard definition for the number of ED visits that qualifies a patient as a frequent flyer exists, four or more ED visits per year is most commonly used as a threshold. Others define super users as those who visit the ED beyond reasonable use, greater than one ED visit per year or as those who have a number of visits higher than the 99th percentile of ED visits.¹ While frequent flyers represent a small percentage of the total patients that visit emergency departments, they constitute a disproportionate percentage of annual visits.^{2,3} Even the highest frequency ED users, with 20 or more ED visits per year, make up a tiny fraction of patients and result approximately 1% of total ED visits.^{4,5}

Dispel the misconceptions regarding frequent flyer demographics, and extol the successful programs that have already demonstrated improved outcomes and costs.

Super users are an important group of patients because they affect emergency department crowding, recidivism, can burden EMS resources and increase health care costs.⁵ The reasons patients become super-utilizers are multi-factorial and may be a result of poorly coordinated primary care, lack of or limited primary care options, psychiatric and chronic disease burden and socioeconomic factors. Research aimed at understanding characteristics of super users may help case managers, physicians, health care centers as well as local, state and national policy makers develop solutions that better serve these individuals needs for frequent medical care.^{2,6}

Although regional characteristics may vary, national statistics have generally disproved common misconceptions about those with frequent ED visits. Often, the homeless, uninsured, minorities and those presenting inappropriately or with non-urgent complaints are associated with recurrent emergency department visits, but studies have shown otherwise. In general, it has been found that patients with frequent ED visits are more likely to be insured, white, female, and have chronic medical problems.^{7,8,9} Of the frequent users presenting to the ED only about 10% are due to non-urgent conditions.¹⁰ According to a study in 2006, 84% of super users were insured. Of those patients, 81% reported having a source of primary care.^{1,5}

Pediatric patients with frequent ED visits have higher rates of mental illness, substance abuse and chronic disease. In one study, 61% of pediatric frequent flyer patients self reported poor physical health and 50% self reported poor mental health. Chronic illnesses such as diabetes, hypertension, sickle cell, asthma, COPD, renal disease and chronic pain are some of the most common conditions afflicting frequent ED users. The prevalence of chronic disease in super users leads to higher acuity, hospital admissions and mortality when compared to patients that occasionally visit the emergency department.¹

The Congressional Research Service established some broad categories of the frequent flyer population based on their utilization patterns, which may reveal potential solutions:⁴

Frequent non-emergent users — consists mostly of those with private insurance and access to a primary care physician. They may have barriers to accessing their primary care resources and typically have less chronic illness. Improving access to primary care may help reduce the number of ED visits from this group.

High cost health system users — defined as patients with 4-9 ED visits per year. Patients in this group have a high burden of chronic disease, may shop for providers, are more likely to be severely disabled and have underlying mental illness or substance abuse problems. Due to their underlying illnesses, this group is the most expensive for the health care system as they are most likely to require hospitalization after their ED visit.

Very Frequent ED users — make up a small portion of ED patients, but have more than 10 ED visits per year. They are more likely to be male and typically made up of patients with higher rates of disability. This group has complex medical and social factors, including higher rates of mental illness, substance abuse and homelessness. They are less likely to require hospital admission and thus are less expensive for the healthcare system.

Overall, improving coordination of primary care and removing socioeconomic barriers to primary health care access could help decrease the number of ED visits for many of these patients.⁴

How Can We Improve?

One of the main tenets of the Affordable Care Act is to move from a fee-for-service (FFS) based payment model, in which payment is rendered for individual patient encounters, towards new alternative payment models (APMs). Whereas FFS tends to reward increased volume of services, APMs aim to reimburse based on improved quality of services and better population health in the hopes that better overall health of the population will lead to reduced payer costs. Traditionally, this responsibility has been granted to primary care specialties, and has not been the purview of emergency medicine. However, several landmark, emergency medicine based programs have been developed in various parts of the country with impressive results.

FIGURE 1. Initiative to Improve ED Utilization

| | Maryland | Washington | Seattle | Kaiser Permanente |
|--|-----------------------------|----------------------------|---|---|
| Higher Utilizer Case Mgmt. | ✓ | ✓ | ✓ | ✓ |
| Standardized Mgmt. Plans | Low-risk chest pain pathway | Narcotics Rx guidelines | | |
| Telephone Availability of Providers | Patient call-back program | | Nurse consultant line | KP OnCall |
| Follow-up Planning | Comprehensive Care Clinic | | | In Network Providers |
| Centralized Database of Patient info | CRISP | Rx drug monitoring program | | HealthConnect; Emergency Prospective Review Program |
| Education on Health Care Venue | | 'ER is for Emergencies' | 'Care Begins with You' | |
| Hospital Feedback | | ✓ | | |
| Financial Incentives for Preventive Case | | | \$100 incentive for 3 preventive actions | |
| Financial Incentives for Health Care Venue | | | Increased co-pay for ED compared with urgent care | |

University of Maryland Upper Chesapeake Health

In 2010, Maryland implemented the Total Patient Revenue payment reform. Under this model, the 10 participating hospitals received fixed dollar payments to cover both inpatient and outpatient hospital-based care, independent of the current year's volume. Given this fixed budget, hospitals were incentivized to increase efficiency and provide alternatives to unnecessary ED utilization.

Washington State’s “ER is for Emergencies” Program

In 2012, Washington State Medicaid made a proposal to reduce acute health care spending through limiting payment to 3 ED visits per year. Amid social and political backlash, a response was offered by the Washington Chapter – American College of Emergency Physicians (WA-ACEP), the Washington State Medical Association, and the Washington State Hospital Association. The program, “ER is for Emergencies” aimed to reduce Medicaid cost through decreasing unnecessary ED utilization and drug-seeking behavior. While these interventions required significant financial investment on the front end, the results speak for themselves: a savings of 34 million dollars for Washington State Medicaid Program in just the first year and a decrease in their patient ED visits by 10%.¹¹

Seattle Group Health/SEIU Healthcare Effort

In a separate effort in the Seattle area of Washington State, a nonprofit that provides health care and insurance, Group Health Cooperative of Puget Sound, joined forces with SEIU Healthcare NW Health Benefits Trust, which specifically serves home health care workers, to reduce ED use by targeting their most expensive beneficiaries. Of note, these 13,500 patients lived and worked in varying locations, were disproportionately middle-aged, minority females with multiple comorbidities, and had primary languages other than English — a demographic in which behavior is considered exceptionally difficult to change as per health policy experts. Despite this, the program was able to reduce emergency room use among these patients by 27% over four years.¹²

Kaiser Permanente California

Kaiser Permanente–California (KP California) is a health care delivery system that has integrated the finances of an insurance branch, a physician branch, and a facility branch, such that each branch shares the gains and subsidizes the losses of the other. Whereas in other markets, these entities may be at odds with one another, this program demonstrates how coordination of efforts among all of those involved in health care delivery can improve patient outcomes and allow for shared savings. Thus, KP California boasts a 40% lower ED utilization rate and a modest improvement in admission rate (13.2% vs 15.3%) when compared with the rest of the country.¹³

These programs remarkably reduce acute care costs while still improving outcomes by attacking acute care use from multiple angles. First and foremost is the **prevention of acute health problems**. Whether this means better management of chronic diseases, vaccinations against preventable communicable diseases, or public health education, the bottom line is prevention. Second is the formation of **less expensive alternatives to ED care**, such as rapid outpatient referral programs and urgent care centers. Lastly, and maybe the most obvious way to cut costs, is **improving the efficiency of our traditional ED workflow**

through better data systems like electronic medical records (EMR), standardization of clinical care pathways, and an evidence based plan to safely reduce utilization of high cost services, like CT scans.

Prevention of Acute Health Problems

- The unifying theme among all of these programs is the initiation of **case management** systems, which seem to provide the trifecta of prevention, increasing use of alternative care venues, and improving ED efficiency. High cost, frequent users of the EDs are identified by case managers, after which a multidisciplinary team develops an individual care plan tailored to each patient's needs. In some cases, as with the University of Maryland Upper Chesapeake Health, these plans were integrated into the EMR to make this information immediately available to treating providers. KP also employs the Emergency Prospective Review Program, a call center staffed with KP EPs and nurses who coordinate care of KP patients who happen to be seeking care at outside hospitals. Importantly, not all case management programs have demonstrated improved costs.¹⁴ Less successful programs may suffer from poor clinician buy-in in the case management goals, lack of focused interventions, poorly defined financial goals, inexperienced case managers, or lack of incentive to reduce spending.¹⁵ The success of case management in these examples may lie in its integration of preventive care with increased availability of alternate ED venues and streamlining the ED care of these patients.
- In the Group Health — SEIU program, Seattle's home health care workers are offered a \$100 cash incentive to encourage patients to empower themselves with health literacy and proactive, healthy behaviors. Workers receive the **financial incentive** if they enroll in MyGroupHealth, a web based program that allows patients to email doctors, order prescriptions, and access their own health information and health resources. They must also complete a health risk assessment and attend preventive primary care and dental appointments.

Creating and encouraging less expensive alternatives to ED care

- **Increased provider availability** to patients for advice on where to go and what to do about their acute health problems seems to save money. KP OnCall is Kaiser's resource to patients which provides advice for home management strategies and makes recommendations regarding appropriate care settings, whether it be immediate ED evaluation, direct specialist referral, or next day appointments with primary care. Seattle's reform included a similar nursing consultant line available to patients 24 hours per day. Upper Chesapeake made EP's more available to patients and more involved in ensuring follow up by offering payment for follow up phone calls to at least 2 discharged patients per shift.¹⁶
- While "appropriate" ED use is a slightly more controversial topic, both Washington programs implemented **educational campaigns** to assist patient in choosing the health care setting most suited to their current health care needs. For example, Seattle's "Care Begins With You" program utilizes workers' required recertification course as a venue for viewing an informational video aimed at educating patients regarding appropriate uses of the emergency department.

- Seattle’s program also **financially incentivizes** alternate care venue use through an increased co-pay for an ED visit of \$200, while maintaining urgent care copay at \$15.
- Upper Chesapeake offers patients visits in their Comprehensive Care Clinic, a hospital-funded clinic for patients without a PCP, for **guaranteed follow-up** after ED or hospital admissions in order to bridge them to a primary care relationship and prevent bounce-backs or relapses in chronic conditions.

Improving efficiency of traditional ED workflow

- Centralized databases of shared patient information seem to be another pillar of success when it comes to improved outcomes and decreased costs. Upper Chesapeake Health participates in Chesapeake Regional Information System for our Patients (CRISP) which centralizes health information, such as previous ED visits and imaging results, from much of the Maryland & DC region. As a result of these interventions at Upper Chesapeake, opiate prescriptions and overall cost of hospital-based encounters of traditionally high-cost patients have halved. HealthConnect® is Kaiser Permanente’s EMR, which similarly centralizes patient information from all participating hospitals, but unique to this resource is that its information is even available to outside providers through a call center.
- **Standardized management plans** for certain groups of patients have been shown to improve ED efficiency for common complaints or frequent users. For instance, Upper Chesapeake instituted a low risk chest pain pathway that safely decreased chest pain admissions and increased utilization of outpatient risk stratification.
- Kaiser Permanente takes a slightly different stance on ED efficiency. Rather than focusing on ED throughput time, they allow providers to provide **more comprehensive ED care**. This is aimed at avoiding admission for studies that if completed in the ER, could result in the discharge of an otherwise stable patient.

WHAT’S THE ASK?

Frequent flyers are a reality of EDs everywhere, but their demographics are not always what we might have assumed. In some form, their integration into our current health care system is failing. Using the actual evidence that exists on this population and current available resources, how can you improve their outcomes? How could the experience of those working to improve health care delivery in Upper Chesapeake, Seattle, and Kaiser Permanente direct changes in your institution, city or state? Join your hospital’s Quality and Improvement Committee and present these principles. Partner with your social workers and case managers to devise frequent flyer plans for the top users of your department. Take an extra minute to educate your patient on their health condition, proper follow up, and appropriate ED use. Call primary care doctors to arrange outpatient work ups or ensure follow up of an acute condition. When interacting with your representatives, teach them about the misconceptions regarding frequent flyer demographics and the successful programs that have already demonstrated improved outcomes and costs. Impart your own experiences with implementing change at your hospital and in your community, and challenge them to improve the availability and affordability of care for these high-risk patients on a more widespread level. ★



INTRODUCTION TO PAYMENT

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Historically, physician reimbursement has been based on quantifiable metrics such as the number of patients seen and procedures performed. Currently, the health care landscape is experiencing a shift in payment models, with insurers tying reimbursement to quality measures and value-based purchasing. This chapter will serve to outline the traditional payment process, to describe historical Medicare reimbursement, and to provide a basic background on reimbursement models from private payers.

As payment models continue to evolve, it's important for physicians to take part in designing new methods of reimbursement.

The Traditional Payment Process

The core of physician reimbursement is based on documentation and the codes that are generated from the chart. Professional coders sift through the physician's chart, and based only on the documentation provided, assign specific codes used by payers to determine reimbursement. The coders use the Current Procedural Terminology (CPT) code set to bill for the services and procedures provided to a patient. CPT is created and updated by the American Medical Association CPT Advisory Committee, which is composed of a member from each specialty society. The CPT code set includes codes for evaluation and management, critical care, observation services, and specific procedures.^{1,2} CMS and private insurers, under this traditional payment process, reimburse solely based on the CPT codes provided by the billing services.

Evaluation and Management (E/M) codes describe the cognitive work that is involved in taking care of a patient. These are derived directly from a patient's chart and based on numerous factors, including: history, physical exam, complexity of medical decision-making (MDM), counseling, coordination of care, nature of presenting problem, and time. History, physical exam, and MDM are the key components that determine the appropriate E/M code, with the MDM illustrating to the coders the complexity of the patient encounter.³ There is a relatively small

number of E/M codes used in the ED, and the most commonly used are codes 99281-99285 (sometimes referred to as level 1 through level 5 charts), with the higher numbers representing more complex patient care and subsequently higher reimbursement. The criteria and extent of service needed to generate certain E/M codes is outlined in Table 1, in addition to the total physician reimbursement rates for each code. How this rate is determined is outlined later in the chapter.²

TABLE 1. Understanding E/M Codes

| E/M Code | History | Exam | MDM | Total Physician Reimbursement from CMS (based on 2015 RVU & CF) |
|----------|-----------------|-----------------|---------------------|---|
| 99281 | Problem-focused | Problem-focused | Straightforward | \$21.20 |
| 99282 | Expanded | Expanded | Low complexity | \$41.68 |
| 99283 | Expanded | Expanded | Moderate complexity | \$62.88 |
| 99284 | Detailed | Detailed | Moderate complexity | \$119.66 |
| 99285 | Comprehensive | Comprehensive | High complexity | \$177.15 |

Extent of service in this case refers to the content of your history, review of systems and physical exam. A 99281 code would require only a chief complaint (CC), brief HPI, and limited exam of the affected part to qualify. An example of this may be suture removal for a patient who had sutures placed at an outside facility. Table 2 outlines what is needed to meet the extent of service requirements.²

TABLE 2. Meeting Extent of Service Requirements

| Extent of Service | History | Physical Exam |
|------------------------|---|--|
| Problem Focused | CC, brief HPI | Limited exam of affected part |
| Expanded | CC, brief HPI, problem pertinent review of systems (ROS) | Limited exam of affected part, and other symptomatic or related organ system |
| Detailed | Extended HPI, extend review of systems (2-9), pertinent past, family, and/or social history | Extended exam of the above (2-7) |
| Comprehensive | Extended HPI, complete review of systems (10 +), complete past, family, and social history | General multisystem exam OR complete exam of a single organ system (8 or more) |

The complexity of medical decision-making is determined by 3 components: the number of diagnoses and management options considered; data and testing reviewed; and potential risk of complications, morbidity, and mortality to the patient. This is outlined in Table 3.²

TABLE 3. Assessing Medical Decision-Making

| Complexity | # of Diagnosis and Management Options | Amount and/or Complexity of Data to be Reviewed | Risk of Complications and/or Morbidity and Mortality |
|----------------------------|--|--|---|
| Straightforward | Minimal | Minimal/None | Minimal |
| Low Complexity | Limited | Limited | Low |
| Moderate Complexity | Multiple | Moderate | Moderate |
| High Complexity | Extensive | Extensive | High |

These CPT codes generated by physician services are assigned a relative value unit (RVU) that ultimately determines the reimbursement rate. RVUs are allocated by the Relative Value Update Committee (RUC), which is also comprised of representatives from each specialty. The RUC uses the Resource Based Relative Value Scale to determine the RVUs for each specific service and is responsible for making recommendations on the value of these codes to CMS. Assignment of RVUs must be done in a budget neutral manner, as there is only a finite amount of federal money assigned to physician reimbursement. This means increasing the RVU for one specialty/procedure may result in a decrease in the RVU for another specialty/procedure, ultimately affecting their respective reimbursement.

The RVU is assigned based on 3 components:

1. The value of physician work (WORK)
2. The value of practice expense (PE)
3. The amount of professional liability insurance for the particular service (PLI)

These 3 components ultimately make up the RVU formula:

- $(\text{Work RVU} \times \text{Work GPCI}) + (\text{PE RVU} \times \text{PE GPCI}) + (\text{PLI RVU} \times \text{PLI GPCI}) = \text{Total RVU}$
- $\text{Payment} = \text{Total RVU} \times \text{CF}$

The physician work component accounts for about 48% of the total RVU for each service. Work is determined based on the time it takes to perform the service, skill and physical effort, mental effort and judgment, and stress due to the potential risk to the patient. The PE component accounts for an additional 48% on average, with the PLI accounting for 4%.⁴ The PE component will be less of an RVU factor for hospital based specialties, such as EM, given lack of operating expenses as compared to private outpatient facilities.

There is also a geographical practice cost index (GPCI) that adjusts for cost differences based on location. The GPCI adjusts for cost differences in all 3 areas of the total RVU formula — physician work, practice expense, and professional liability. For example, the GPCI component of practice expense takes into account the cost of rent between 2 different cities, and would apply a higher modifying factor to the more expensive location. An area of the country with an exceptionally

costly malpractice environment would also receive a higher modifying GPCI factor for the PLI component. Physician work has been a topic of debate, because it is determined based on the specific encounter or procedure itself and is not necessarily influenced by geographical factors. CMS currently applies a modifier to physician work that is determined based on variations in compensation for similar professions. For example, if an engineer makes more money in a certain city in comparison to another, a higher modifier would be applied to the physician work component of the formula in the area of higher wages.⁵ This final RVU is then multiplied by a conversion factor (CF), which is set each year by CMS and ultimately determines the dollar amount in payment received. The CF for 2015 was set at \$35.9335 and was based on the Medicare Economic Index (MEI), an expenditure target (performance adjustment), and miscellaneous adjustments including those for budget neutrality.^{6,7} These factors, specifically the performance adjustment, have been historically tied to the Sustainable Growth Rate (SGR) and served as a way for CMS to adjust reimbursement if actual expenditures exceeded the allowed budget.

RVUs are directly generated into dollar amounts. This can be demonstrated using the example of drainage of a simple abscess. If the RUC determined the RVU for this procedure was 2.72 RVUs, and the CF is set at \$35.9335, this would result in a reimbursement rate of \$97.74 ($2.72 \times \35.9335).

Historical Medicare Reimbursement

Medicare has historically reimbursed physicians by a fee-for-service model. This type of model focused on volume, patient visits, and procedures, but did not include quality measures or reimburse based on value. Currently both CMS and private insurers are shifting toward a reimbursement model that rewards physicians for providing value and meeting certain quality metrics. The new models include a value-based modifier that will take into account the value of the care furnished by physicians compared to the cost of care provided.⁸ Physicians across many specialties have been actively involved in the development of these alternative payment models and have worked to ensure this will account for differences in patient populations and differences in care among specialties. These new systems of payment represent a significant change from the historical model and will be discussed further in future chapters.

A huge component of the previous Medicare reimbursement system was Medicare's Sustainable Growth Rate (SGR). Initially, the SGR was passed into law in the Balanced Budget Act of 1997 as a way of controlling rising medical costs by linking reimbursement rates to the gross domestic product (GDP). The goal was to ensure the annual increase in expense per Medicare beneficiary did not exceed growth in the economy as measured by per-capita GDP.^{9,10} However, tying reimbursement to the GDP failed to account for the actual cost of health care expenses because it

did not consider the rising costs of increased utilization or increasing complexity of patients. This was the fatal flaw of the SGR.

The SGR included provisions for a conversion factor that would adjust payments to physicians annually. The idea behind this was if payments the previous year had exceeded the per-capita GDP, the conversion factor could be decreased the following year to account for this excess, thus cutting reimbursement. Each year this adjustment could be suspended or adjusted by Congress, and as scheduled cuts became increasingly drastic due to medical costs rising faster than the GDP, Congress repeatedly implemented legislation known as a “doc fix.” This “doc fix” was a temporary act of Congress to postpone the annual Medicare payment cuts to physicians — thus increasing the debt owed to the SGR the following year. This was done 17 times over the past 12 years, resulting in almost \$170 billion dollars being spent by Congress in short-term patches to avoid these unsustainable cuts.^{9,10}

The SGR formula as reported by CMS was based on overall economy growth, costs, number of Medicare beneficiaries, and changes in law, but again failed to account for utilization rate. As the overall percentage of elderly patients continued to rise and individuals with significant comorbidities continued to live longer, their increased utilization rates served as the driving force behind rising medical expenses and made the proposed cuts with the SGR unsustainable given the level of care and quantity of care being delivered throughout the country.

After 12 years of looming reimbursement cuts, Congress finally repealed the flawed SGR in April 2015 with the signing of the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) by President Barack Obama. MACRA established a stable physician reimbursement update of 0.5% annually until 2019, when the rates will be maintained and additional payment adjustments will be available by meeting certain quality measures.¹⁰ MACRA marks an important transition in Medicare reimbursement from being a solely fee-for-service model to one that will now attempt to reward value and quality measures. There is still a significant amount that is unknown about this new methodology and how it will apply to emergency medicine, but the emergency medicine community and ACEP are actively following and involved in the process.

Private Payer Reimbursement

Private insurance companies are not required to reimburse physicians based on the RVU and SGR modalities that traditionally drove Medicare payments. While many of them do still utilize FFS models, there has been a move toward more innovative reimbursement measures that attempt to reward quality, cost-efficiency, and encourage coordination of care between providers.

Although the FFS model is the historical means of reimbursement, private insurers often negotiate their own rates, contracting with both physician groups and hospitals. These agreed upon rates may be a percentage of what is actually billed

and are the reason private insurance companies have “in network” providers. The agreed upon rates often fluctuate with changes in CMS pricing. For example, if the payment for an abscess drainage is decreased by CMS, then the private insurers will typically follow suit. Additionally, there is significant price variation between hospitals and insurers since, unlike CMS, pricing determination is impacted by external free market factors and is subject to geographical indexes in addition to concentration of both providers and insurers.^{11,12}

Additional payment models will be discussed in upcoming chapters and include bundled payments for episodes of care, capitation models, value-based payment models, and Accountable Care Organizations. Many of these models are based on sum payments, which would involve a predetermined payment amount for a patient in a given time period, a specific procedure or hospital stay. This reflects a significant variation from the fee for service model.¹²⁻¹⁵

Conclusion

The repeal of the SGR was a large step forward in payment reform; however, much is still unknown about the future of physician reimbursement. The fee-for-service model will continue to exist to an extent, but as CMS and private insurance companies move toward value-based purchasing, it is unclear what role this traditional payment method will play, and how emergency medicine reimbursement will be included. Ultimately, understanding the foundation of these traditional models and the current payment environment is integral in providing meaningful reform and understanding it moving forward.

WHAT'S THE ASK?

1. Stay informed about payment structures. Physician reimbursement has historically been a fee-for-service model that ties pay directly to services performed. Medicare reimbursement was tied to the disastrous SGR formula, which was repealed in April 2015 thanks to persistent advocacy by physicians like you!
2. As payment models continue to evolve, it will be important for young physicians to be involved in designing these new methods of reimbursement. ★



REFORMING FEE-FOR-SERVICE — PAY-FOR-PERFORMANCE

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Health care expenditures in the U.S. have grown exponentially over the past 30 years.¹ This growth surpassed that of many European countries; however, in the U.S., outcomes such as life expectancy are lagging.² An often criticized driver of this explosive growth in health care costs is the Fee-for-Service (FFS) model of payment that rewards quantity rather than quality of care. Under FFS, reimbursement rates are tied to how much a provider does in terms of tests, procedures, or seeing more patients, regardless of the indication, outcome, or patient satisfaction. This payment system has contributed to wide variation in health care spending and costs. The Dartmouth Atlas Project noted a 2.5-fold variation in Medicare spending across the country, even after adjusting for local prices and population health, with no difference in health outcomes.³ In recent years, CMS took the stance that payment should be linked to value rather than volume, and implemented a number of programs aimed at increasing value and containing health care costs. Bundling payments for episodes of care and implementing pay-for-performance are two overarching strategies to achieve this goal. Pay-for-performance in this context means rewarding providers or groups for meeting quality measures, as well as short- and long-term outcome measures. In this chapter, we will discuss the shift toward value-based purchasing, the proliferation of quality measures, and how the repeal of the Sustainable Growth Rate (SGR) impacts the use of quality measures. Accountable care organizations (ACOs) and patient-centered medical homes are community level and longitudinal ways to align quality and outcomes to payment that will be covered in later chapters as well.

We must take an active role in defining measures that are accurate, fair, and meaningfully influence outcomes that matter to patients.

Value-Based Purchasing as a Guide to Reforming FFS

In an effort to shift payment from volume to value, CMS adopted the concept of value-based purchasing (VBP).^{4,5} Central to VBP is the use of quality measures as well as outcome data to incentivize quality care and contain costs. Providers must report on how they perform on consensus-based quality measures and will

be reimbursed accordingly. The term “providers” includes individual physicians as well as physician groups, care organizations, and hospitals (as part of a Hospital Value-Based Purchasing, or HVBP, program). Another component of VBP is the use of electronic health records (EHRs) to support collection and reporting of quality measure data and improve coordination of care. EHRs should also promote beneficiary access to information about their care, provide a means to compare quality and outcome metrics across providers or groups, and increase transparency. Additionally, all of this must be accomplished while ensuring that beneficiaries can still get the care when and where they need it in the most cost-effective manner. That is a lofty goal given the vast number of stakeholders involved. Essentially, CMS wants to collaborate with providers and payers to implement each of these goals to form a larger framework of affordable, quality care for individuals and communities.

The Proliferation of Quality Measures

CMS recognized early on that one way to reform the FFS system was to incentivize the use and reporting of quality measures. The Hospital Quality Initiative (HQI) was rolled out shortly after publication of two reports from the Institute of Medicine (IOM): “To Err is Human” in 1999 and “Crossing the Quality Chasm” in 2001. The goal of the HQI is to support and stimulate quality care by collecting and distributing objective and easy-to-understand data on hospital and provider performance across a number of domains.

Initially, there were no incentives to report on these domains, and providers did not have guidance about what they should be reporting. In 2003, with the passage of the Medicare Prescription Drug, Improvement, and Modernization Act, a “starter set” of 10 quality measures was defined. After the Physician Quality Reporting Initiative (PQRI) was launched in 2007, the number of quality measures had increased to 74.⁶ Quality measures are not specifically developed by CMS but through organizations, advocacy groups, or medical specialty societies. The National Quality Forum (NQF), Physician Consortium for Performance Improvement (PCPI), and the National Committee for Quality Assurance (NCQA) are the largest of these organizations. With the passage of Medicare Access and CHIP Reauthorization Act (MACRA) in 2015, the number of specialty specific quality measures continues to expand.

Quality Reporting Programs

Quality metrics are meant to standardize and compare the quality and delivery of care while taking the context of care into account. As such, quality measures were developed for providers and groups as well as hospital inpatient and outpatient settings. Reporting performance on these quality measures allows for comparison and transparency and is an essential part of VBP. The main quality reporting programs are the Physician Quality Reporting System (PQRS), the Hospital Inpatient Quality Reporting (IQR), and the Hospital Outpatient Quality Reporting (OQR) programs.

PQRS, initially PQRI, focuses on reporting by physicians and groups. Under PQRI, providers were rewarded for reporting performance of quality measures. As this system became PQRS, failure to report was penalized, signaling a shift to pay-for-performance.⁷ Starting in 2015, providers or groups not satisfactorily reporting data faced negative payment adjustment for Medicare covered services. To avoid penalty, providers must report their performance on 9 measures over 3 National Quality Strategy (NQS) domains for at least 50% of patients. They must also report 2 outcome measures or 1 outcome and 1 other type of measure related to resource use, patient experience, efficiency, or patient safety.⁶ There are several reporting options available. Reporting can be done through the PQRS Registry at CMS, through Medicare Part B claims via a provider's NPI number, with direct certified electronic health record technology (CEHRT), through a CEHRT submission vendor, or through a CMS-approved qualified clinical data registry (QCDR). ACEP has developed the Clinical Emergency Data Registry (CEDR) as a means for emergency physicians to comply with this reporting process in a specialty-specific way. CEDR will be covered in more detail in a later chapter.

The Hospital Inpatient Quality Reporting (IQR) and the Hospital Outpatient Quality Reporting (OQR) are similar to the PQRS, but they focus on hospital systems. CMS and private payers use 5 factors to determine hospital quality based on reporting: patient experience as reflected in the Consumer Assessment of Healthcare Providers and Systems (CAHPS) survey, mortality rates, readmission rates, hospital safety score, and process quality. Hospitals must also meet reporting requirements in 4 domains related to quality measures: administration, data collection and submission, validation, and publication of performance on quality measures. If these requirements are not met, then hospitals could face 2% point reduction in annual payment update (APU). To promote transparency, CMS publishes how each hospital performs through the "Hospital Compare" website. This public site allows beneficiaries to make decisions about how and where they access care based on the hospitals' quality metrics. Emergency department quality measures reported include: door to doctor time, time to pain meds for long bone fractures, CT for stroke read within 45 minutes, admission decision time to inpatient bed time, median length of stay (LOS) in the ED, median LOS for admitted patients, and ED volume. Quality metrics for stroke and myocardial infarction, as well as communication and consumer assessment, are also reported.⁷ Additionally, as part of the Hospital Readmission Reduction Program (HRRP) under the ACA, hospitals can see up to a 3% reduction in reimbursement if their 30 day readmission rates for pneumonia, heart failure, and acute myocardial infarction exceed the target rates.⁸

There are a number of parallels between PQRS, IQR, and OQR, but they are measured independently. IQR/OQR quality measures can affect hospital reimbursement but not individual physician reimbursement. The emergency department, as the front door to the hospital, straddles the inpatient and outpatient settings. This is an important point to remember as emergency physicians are directly affected by hospital policy geared toward meeting the IQR and OQR metrics.

The End of the SGR and Impact on Quality Measures

The passage of MACRA in 2015 marked a key moment in the reform of physician payment from traditional fee-for-service reimbursement to payment based on the quality and cost of care provided.

Beginning In 2019, 3 current Medicare pay-for-performance programs (PQRS, Value Based Modifier (VBM) and EHR Meaningful Use (EHR MU)), will be consolidated into a new incentive payment program called Merit-Based Incentive Payment System (MIPS). Under MIPS, providers will receive an annual composite performance score of 0 to 100 based on four categories of metrics (metrics for 2019 have yet to be developed).

TABLE 1. Merit-Based Incentive Payment System

| Categories | Points | Metrics |
|---|--------|---|
| Quality | 30 | Published annually in the final measures list developed under the methodology specified below. In addition to measures used in the existing quality performance programs (PQRS, VBM, EHR MU), the Secretary would solicit recommended measures and fund professional organizations and others to develop additional measures. |
| Resource use | 30 | Measures used in the current VBM program |
| EHR Meaningful Use | 25 | Professionals who report quality measures through certified EHR systems for the MIPS quality category are deemed to meet the meaningful use clinical quality measure component |
| Clinical Practice Improvement Activities | 15 | Gives credit to professionals working to improve their practices and facilitates future participation in APMs; the menu of recognized activities will be established in collaboration with professionals |

Payments will be adjusted based on a provider’s composite score relative to an annual performance benchmark (either the mean or median of the composite performance scores for all MIPS eligible professionals). Providers with a MIPS composite score below the threshold will have their payments reduced. Likewise, providers with high composite scores will receive their positive payment adjustments. These positive and negative reward incentives are set to escalate (Table 2).

TABLE 2. MIPS Payment Adjustment

| | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026+ |
|-------------------|-------|--|-------|------|------|------|--------|------|-------|
| Base MIPS | 0.5% | Base Conversion Factor Update of 0.0 each year | | | | | | | 0.25% |
| Adjustment | +/-4% | +/-5% | +/-7% | | | | +/- 9% | | |

MACRA links fee-for-service payment to cost and quality metrics. As such, provider payments will increasingly vary based on the quality and efficiency, rather than the just the volume, of care provided.

Challenges and Controversy

Despite broad agreement over the concept of paying providers based on value rather than volume, there is considerable controversy on how exactly to measure value and to implement incentive payments based on the measurements. There are 3 major arguments over pay-for-performance programs.

- **Immature Measures**

Critics argue that the current state of performance metrics does not accurately account for a physician's contribution to producing value because current metrics rely too heavily on indicators that are easy to measure. Metrics that meaningfully capture value do not yet exist, in part because the core competencies of some specialties do not easily lend themselves to measurement. For example, current PQRS measures for emergency care include only process measures; current metrics do not capture key aspects of emergency care, which involve diagnostic investigation of undifferentiated complaints (eg, chest pain and abdominal pain) and clinical decision-making based on limited information (eg, does this patient need a workup for acute coronary syndrome, pulmonary embolism, or both?).⁹ Yet because we lack metrics for these skills and characteristics, PQRS measures include performing an ECG on atraumatic chest pain patients, an ultrasound on pregnant patients with abdominal pain, and giving Rhogam for Rh-negative pregnant women at risk of fetal blood exposure. Process measures such as these have a role in measuring value; however, taken alone, they fail to account for the value of emergency care.

- **Inadequate Risk Adjustment**

There is a large body of evidence showing that a patient's sociodemographic factors (eg, age, race, primary language, education, income) influence outcomes — and therefore also affect outcome performance measures for physicians. Organizations such as the NQF have argued that performance measures should be risk-adjusted for patients' sociodemographic factors to ensure that physicians taking care of vulnerable populations are not financially penalized for factors outside their control. Critics of pay-for-performance argue that the current state of risk-adjustment science is not yet sophisticated enough to be confident in the fairness of performance metrics. As such, inadequate risk adjustment potentially poses 2 harmful unintended consequences: 1) It provides a perverse incentive for physicians to avoid taking care of disadvantaged patients, and 2) It may exacerbate health disparities by depriving providers of the resources they need to provide quality care to disadvantaged patients.

- **Motivation**

Assuming there were better metrics, it seems like paying physicians based on their performance on these measures should be able to change their behavior to produce better clinical results. However, behavioral science literature challenges the notion that financial incentives can improve performance on cognitively complex tasks (eg, clinical medicine).¹⁰ Tackling complex tasks seems to require sources of intrinsic motivation — such as purpose, mastery, or altruism — that are common among physicians.¹¹ When financial rewards are applied to complex tasks, however, these financial incentives can actually undermine, or “crowd out,” intrinsic motivation.¹² So rewarding physicians based on particular performance measures risks sapping their intrinsic motivation to provide high-quality care in general rather than on just a few activities being measured.

WHAT'S THE ASK?

1. **ACEP has been proactive in developing quality measures relevant to emergency medicine. As emergency physicians, we must be proactive and involved when leaders establish policies that will affect our patients and our practices.**

VBP assumes that physicians will change their practice based on quality measures and incentives, and that this change in behavior will translate to better care and add value to the system. More value sounds good — but who defines value in this context? Value should be patient-centered and focused on better outcomes — but do the quality measures used in the VBP model actually translate to better outcomes? Many of the reportable quality measures are actually process measures. While process measures can be an important tool to increase efficiency in a system, they are not a substitute for assessing outcomes. Increased efficiency can add value to the system, but the real value in health care is measured by improvements in morbidity and mortality. Additionally, are the current quality measures relevant to how emergency medicine is practiced?

Another aspect of this equation is the patient as consumer of health care. Consumers want the most value for their health care dollars, and they define that value on their own terms. Patients want the best care available, but putting a price tag on health is challenging. It is unrealistic for a patient to try to choose the “best” provider they feel will give them the best outcome for their health care dollars in the face of an acute, life-altering illness. The challenge will be to define quality measures that are patient-centered, evidence-based, and relevant to the practice of emergency medicine.

2. **Emergency physicians must take an active role in defining measures that are accurate, fair, and meaningfully influence outcomes that matter to patients.**

Quality measures are playing a larger role in physician reimbursement, and this trend is unlikely to change in the foreseeable future. Therefore, it is imperative for emergency physicians to help define the measures that will ultimately determine payment. ★



DELIVERY SYSTEM REFORM

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Every discussion of health care reform is underpinned by the concern that the cost of health care is growing at an unsustainable rate. As the Baby Boomer generation continues to retire, keeping Medicare solvent is a constant concern. The Affordable Care Act attempts to address this by incentivizing increased value in health care by rewarding groups of practitioners for decreasing costs while improving quality. It's within this environment that the Accountable Care Organization (ACO) was constructed.

As ACOs and bundled payments become the norm, emergency physicians must be present during negotiations to ensure that the voice of our specialty is heard.

Accountable Care Organizations

The ACA established a new model of payments for practitioners who currently receive fee-for-service payments. Reducing costs would not be beneficial if the quality of the care dwindled, and therefore quality of care needed to be highlighted. Reform to the Medicare system would be centered on quality, with financial incentives for practitioners to reduce costs. If a group of practitioners can reduce costs, they will be allowed to receive a percentage of the savings they accrue. It is the ACO that provides the framework for the cooperation of the practitioners.

According to Medicare, ACOs are “groups of doctors, hospitals, and other health care providers, who come together voluntarily to give coordinated high quality care to their Medicare patients.”¹ The only requirement for involvement in the ACO is that all parties must be allowed to accept payments from Medicare. From the patient’s perspective, an ACO is just another acronym that does little to change their interaction with the medical industry. ACOs are non-binding. Unlike HMOs, patients are not restricted to see only physicians and practitioners within their ACO in order for their Medicare to cover the costs. ACOs have a much greater impact on providers than patients. The incentive for the practitioner within an ACO is to reduce the growth of the health care costs and to provide better quality care to

patients. To gauge that quality of care, CMS has instituted specific measures for ACOs. If an ACO can provide higher quality care (as demonstrated by the quality measures) and reduce costs, the entire ACO will be able to “share” in those cost savings.^{1,2}

ACOs have changed the model of coordinated care. They have made interdisciplinary groups part of the same pool of payment, hoping to connect reimbursement with increased value of care provided. It has not yet been determined how emergency medicine will fit into this new model.³ This offers both opportunity and risk: We can create our niche and solidify our standing in the institution or risk ceding our stature, voice, and reimbursement to those without EM forefront in their minds. All of these changes will continue to force the emergency physician to be involved in the conversation with larger and larger entities. The changing nature of the payment system forces us to become involved on a higher level — we are no longer able to simply work our clinical shifts. We must be at the table when decisions about payment and reimbursement are made within our institutions and professional groups to ensure the continued relevancy and stature of our specialty.

Bundled Payments

The concept of bundled payments, and specifically the Bundled Payments for Care Improvement (BPCI) initiative, is part of a long effort to align incentives for hospitals and providers to increase quality and decrease the cost of healthcare. The BPCI has been going through multiple phases spearheaded by CMS. Participants in the BPCI, such as hospitals, physicians groups, or nursing homes, choose among four payment models.⁴ These payment models define an episode of care, a time course, and a payment structure. An “episode of care” represents all the services provided for the patient during a specified period of time for a particular diagnosis related group, or DRG, such as a CHF exacerbation or a knee replacement. There are three retrospective payment models and one prospective model. The retrospective structure works by comparing the historical cost of a particular episode of care with the amount actually spent for the patient visit. The hospital or organization is paid by Medicare at an agreed upon 1-3% discount from historical costs, and at the end of the episode of care, the actual cost of the episode is compared with the historical cost. If there is a cost savings, the hospital and providers receive a portion of the savings, called a “gainshare.” If the actual visit exceeds the historical cost, the hospital must pay a portion of the difference back to CMS. In the prospective model, CMS pays the hospital a prospectively determined amount of money to be used for the entirety of the episode, encompassing all payments to providers, the entire inpatient stay, and any readmissions.

TABLE 1. Outline of the Four Models

| Categories | Model 1 | Model 2 | Model 3 | Model 4 |
|--|--|---|---|---|
| Episode | All DRGs; all acute patients | Selected DRGs; hospital plus post-acute period | Selected DRGs; post-acute period only | Selected DRGs; hospital plus readmissions |
| Services included in the bundle | All Part A services paid as part of the MS-DRG payment | All non-hospice Part A and B services during initial inpatient stay, post-acute period and readmissions | All non-hospice Part A and B services during post-acute period and readmissions | All non-hospice Part A and B services (including the hospital and physician) during initial inpatient stay and readmissions |
| Payment | Retrospective | Retrospective | Retrospective | Prospective |

From the BPCI Fact Sheet

Model 1.

The episode of care is defined as the acute care hospital stay only, and all 48 DRGs are included. Medicare continues to pay the hospitals and physicians separately, under the established payment system. This model was included in “Phase 1” of the BCPI initiative.

Model 2.

The episode of care includes the acute care hospital stay, any post acute period care, and any readmissions, for 30, 60, or 90 days as defined by negotiation between CMS and the hospital. Also, this encompasses a selection of DRGs the hospital chooses.

Model 3.

Only the post-acute care period is included, and also includes only selected DRGs as defined by the organization. The time period is also 30, 60, or 90 days and negotiated with Medicare.

Model 4.

The prospective model includes the hospital stay and any readmissions. Medicare pays the hospital a prospectively determined bundled payment to encompass all services provided — by the hospital, physicians, or other practitioners.⁵

According to a Lewin Group analysis of the bundled payment program, initial results showed that Model 2 bundled payments decreased expensive skilled nursing facilities stays and increased less expensive home health agency utilization.⁶ In addition, readmissions were decreased under Model 2 in comparison to standard Medicare reimbursements, but ED visits without hospitalization increased proportionately.

These new payment systems impact emergency medicine in several ways. After a bundled payment system is implemented, we know that ED visits after the initial hospitalization usually remain stable (for example, in the Lewin Group analysis of bundled payments and from a study evaluating ED visits from Massachusetts after

the implementation of their “Alternative Quality Contract,” similar to Model 4).⁶ Emergency physicians will thus be under further pressure to keep readmissions to a minimum while continuing to see recently hospitalized patients with complications. This necessitates greater coordination and services available in the ED. As the ACEP ACO Information paper states, “emergency medicine may need to diversify the options for management of patients evaluated in the ED who are not admitted as inpatients.” This includes creating observations units, restructuring traditional outpatient services such as Holter monitors, and allocating resources for follow-up calls, coordination of home health agencies, or rehab referrals.⁷ In addition, the Medicare models will pay a lump sum to either the hospital or appointed outpatient physician group.⁴ The allocation of the reward is left up to the awardee. The distribution of the reward is dependent on the institution. Emergency physicians must be involved during these negotiations at an institutional level to ensure adequate reimbursement, as their fee-for-service reimbursement for these patients may disappear. Groups of emergency physicians contracting with hospitals will want to ensure they are joining an efficient and productive hospital group and that they are fairly included in gainshare allocation.

Health Care Consolidation

There has been a trend towards consolidation in the health care industry, occurring primarily through hospital mergers, the development of ACOs, and the buy-out of physician practices by hospital systems. Consolidation in the marketplace since 2010 is at its highest levels in the past decade, with the number of hospital mergers doubling between 2009 and 2012.⁸ Data also indicates that the percentage of physicians employed by an integrated delivery system increased from 24% to 54% between 2004 and 2012.⁸ In emergency medicine, there has been a noted trend for large physician contracting groups to purchase smaller groups, increasing the size of their national physician and hospital bases.

The ACA is working to change incentives for providers by moving from a fee-for-service model to a value-based reimbursement model encompassing bundled payments, capitation arrangements and ACO/shared savings models. Within this new paradigm that attempts to pay hospitals and physicians for value, it becomes extremely challenging for small independent groups and individual hospitals to deliver the necessary degree of care integration. Additionally, the level of documentation required to meet quality and value metrics for appropriate reimbursement is difficult for groups that lack large-scale infrastructure. Given the amount of human and financial investment required to achieve this outcome, consolidation is often a more appealing option for smaller groups and institutions. Current regulatory and market conditions offer unprecedented levels of uncertainty in terms of reimbursement and technology demands for small physician groups. According to health care investors, this uncertainty has driven physician groups to move towards acquisition.⁹

Given the politics of health care reform, there are parties arguing both for and against consolidation. Proponents' case rests on 3 broad arguments: that large institutions offer more integrated care, that high-volume systems have superior outcomes, and that large hospitals and hospital systems are more financially equipped to make the necessary investments to improve the quality of care. Additionally, the synergies of a large multi-specialty practice group tied with a hospital system are thought to improve care through the easy sharing of data and patient information, as well as the expansion of the referral network available to patients. On the other end of the spectrum, opponents argue that when it comes to health care, bigger is not always better and that consolidation does not necessarily lead to an integrated system. They note the ability of smaller organizations to behave more nimbly and implement safety measures such as surgical checklists more effectively when dealing with a less bureaucratic system. It is also suggested that hospital consolidation has led to an increase in the price of care of up to 20% while showing decreased quality of care delivered.¹⁰

Emergency physicians may benefit from practice consolidation due to their access to larger hospital networks, the financial security of a large corporation, and the ability to benefit from the greater reimbursement negotiation power of a larger group. Additionally, as physician groups are now called on to report quality metrics and build IT systems, doctors in smaller EM groups are left to handle these tasks on their own in their off-time, due to lack of management and administrative infrastructure. Acquisition by large staffing groups has become increasingly appealing to physicians, as they can then focus on clinical practice rather than having to invest the capital to become adept at navigating the regulatory reporting requirements. Opponents of consolidation in EM physician practices argue that physician ownership of practices is essential to ensure that incentives are aligned to provide good patient care rather than to maximize profits, which is a concern of relinquishing control of a practice to non-clinicians.

WHAT'S THE ASK?

The landscape of health care delivery is changing rapidly. Payment models and practice structures may be drastically different in the coming decades. As ACOs become more prevalent and bundled payments become the norm, emergency physicians must be present during negotiations to ensure that the voice of our specialty is heard. During the transition toward ACOs and other alternative payment models, emergency physicians collectively need to demonstrate the important role of emergency medicine in structured, multi-specialty payment systems.

Additionally, as we are expected to both cooperate in an integrated system and to decrease readmissions, EM physicians must argue institutionally for further resources for the ED to provide ancillary support to patient care and coordination.

As health care institutions experience the pressures of consolidation, emergency physicians may increasingly find ourselves working for large corporations and investors rather than physician-owned groups. Maintaining a strong presence in practice management and ownership is imperative to ensuring the next generation of emergency physicians can stand on the foundation the pioneers of the specialty built. In this transformative time, we must ensure that the best interests of patients and physicians are preserved. ★



BIG DATA IN EM PAYMENT

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With the development of electronic medical records, access to information like wait times, medications given, labs, and imaging ordered became readily available. This created an opportunity to track quality of care, and in 2007 the Centers for Medicare & Medicaid Services created the Physician Quality Reporting Incentive (PQRI), with the main goal of improving the care provided to patients.¹ The Affordable Care Act changed the PQRI into the Physician Quality Reporting System (PQRS). In previous years, the PQRS would pay a 0.5% bonus incentive to physicians and physician groups that met the quality metrics; however, in 2015, the program changed from a bonus incentive to a negative payment rate for not reporting quality measure data.²

Ask your medical director or ED administrators to get your department involved with CEDR.

This means that starting in 2015, CMS now penalizes physicians who are not adequately reporting quality measure data.

To allow emergency physicians to keep up with changes in quality measures and ensure they are fairly reimbursed for their services, ACEP created a system called the Clinical Emergency Data Registry (CEDR) to measure and report health care quality and outcomes. CMS has approved CEDR to be a Qualified Clinical Data Registry, allowing CEDR to satisfy PQRS reporting and potentially other quality reporting requirements.

What is the Clinical Emergency Data Registry?

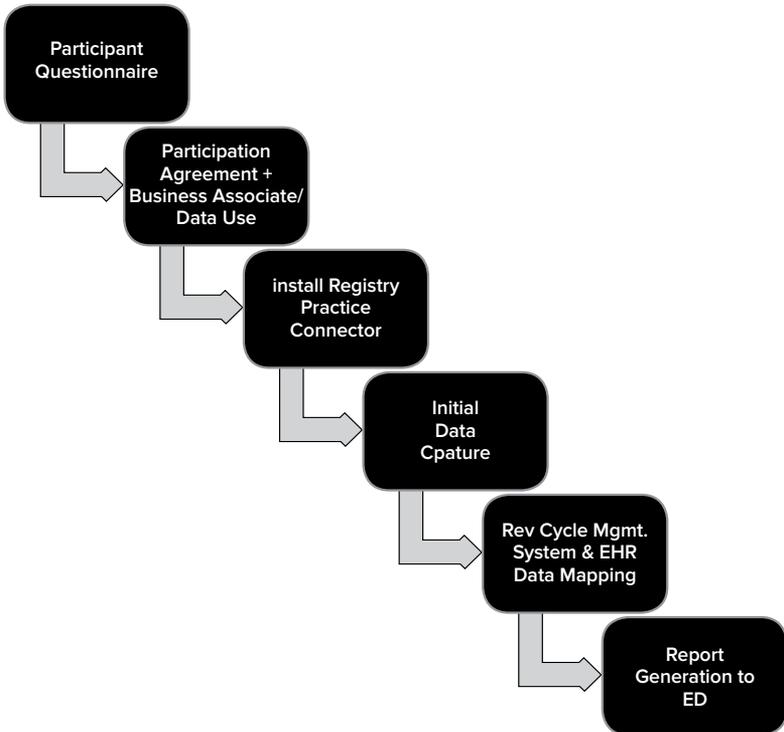
CEDR will measure and report quality metrics, such as emergency department utilization of CTs, three-day return rate to ED, and time to TPA; however, it will also provide physicians with information to identify outcomes and trends in emergency care. Additionally, CEDR will give physicians feedback on their performances and compare the individual physician to his/her peers at a national level.

The data registry will collect all this information from an ED's electronic medical record system, administrative data system, or the practice management system so that the individual physician or physician group does not have to develop a separate system to collect this complex information.²

Implementing CEDR

ACEP began implementing the Clinical Emergency Data Registry in February 2015. By the end of 2015, CEDR had been fully implemented. In order to join CEDR, potential participants are asked to fill out a questionnaire that includes information on the group and emergency departments they serve. Once this is completed, both parties fill out a Participation Agreement, including a Business Associate Agreement and Data Use Agreement in compliance with HIPAA. After everyone is in agreement, the Registry Practice Connector software can be installed. The software is designed to be as unobtrusive as possible and should require read-only credentials to the Revenue Cycle Management system and/or Electronic Health Record used by the physician's group. Data then can be extracted in a secure manner. A Client Account Manager (CAM) will then work with a group administrator to assess data mapping as well as obtain performance reports and create an easily accessible dashboard that allows group participants to see their quality measure performance.²

FIGURE 1. Process of Enrolling to Participate in CEDR



Participant Questionnaire. Your group provides CEDR with information on group size, number of hospital EDs served, number of emergency clinician providers affiliated with each hospital and contact information for each ED.

Participation Agreement and Business Associate Agreement. The Participation Agreement is a vehicle to create common understanding and agreement of participation and expectations. It also includes the Business Associate Agreement and the Data Use Agreement for HIPPA compliance.

Installation of the Registry Practice Connector (RPC). Our standard integration method involves the installation of a piece of software known as the Registry Practice Connector which runs as a Windows service. This service is integrated with the Revenue Cycle Management (RCM) system &/or Electronic Health Record (EHR) database using read-only credentials for the back end RDBMS (i.e. Microsoft SQL Server, etc.).

The Registry Practice Connector allows us a great deal of flexibility in mapping data elements required by the registry and usually requires no involvement of the RCM &/or EHR vendor beyond providing read-only credentials to the database in situations that require it.

Our goal is to have minimal impact and require little if any work effort on the part of the RCM / EHR vendor and/or the group IT staff.

In situations where RPC installation is not possible, the registry can accept data files from the participating site or the RCM / EMR vendor via the data push method. Files are typically transferred via secure file transport protocol (SFTP). However, we encourage participation thru the data pull method via the Registry Practice Connector to reduce the burden of data collection and reporting on the ED providers and RCM firms.

Initial Data Capture. All data extract and upload activity is fully encrypted and complies with HIPAA guidelines. We have successfully mapped data from over 50 different EHR systems.

RCMS / EHR Mapping. This step involves Group Administrator participation. A Client Account Manager (CAM) will engage the group in discussion to ensure accurate data mapping.

Report Generation. The Client Account Manager will coordinate calls with the group to review performance reports and answer questions. Typically during this step, the group will get access to an interactive dashboard. The dashboard gives the group the ability to query their data, see measure performance across different measures for multiple locations and providers.

For more information visit www.acep.org/cedr. Copyright © 2015 ACEP — All rights reserved

Advantages of CEDR

By creating its own database, ACEP has provided a quality measurement device made by emergency physicians geared to work best for emergency physicians. Its goal is to be user-friendly, provide quality data on patients from all payers, have meaningful measures, and pose a minimal data entry burden. While physicians were previously paid on a volume-based system, new reimbursement measures are moving toward a system that emphasizes payment for quality care. Keeping track of certain quality measures can help identify areas that need improvement. In order to develop quality metrics that are more evidence-based and aligned with current practice patterns, multiple new measures are being tested using CEDR data. For example, using evidence-based guidelines from Pediatric Emergency Care Applied Research Network (PECARN), data on emergency department utilization of CT for minor blunt head trauma for patients aged 2-17 years is being analyzed. The use of pregnancy tests for adult females with abdominal pain is also being evaluated. By participating in CEDR, a physician is able to track their own practice and improve upon it, thus creating a safer and more efficient emergency department.

Creation of APCDs in many states and impact on reimbursement

In order to comply with national and state payment reform initiatives, as well as respond to a push for increased transparency in health care and analysis of utilization and cost of health care, states have increasingly over the past decade begun to establish state-sponsored all-payer claims database (APCD) systems.³

State-sponsored APCDs collect eligibility and claims data from private insurers, public insurers (including CHIP, Medicare, and Medicaid), dental insurers, and prescription drug plans. The database looks at the charges for specific diagnosis codes and procedure codes, as well as the payment the physician received. The goal of APCDs is to provide policymakers statewide information from all payers about the costs, quality, and utilization patterns for health care in their state. This same data may eventually be used by patients and health care purchasers to compare prices and quality between various providers and make more informed decisions about cost-effective care.⁴

As of 2015, 18 states had established APCDs, and many more were engaged in the process of implementing an APCD.⁵ Some include legislatively mandated reporting by insurers, while others are voluntary and thus less detailed. One of the challenges the states have encountered is accurately tracking providers, as it has been expensive and complex for states to use taxonomy codes (such as the NPI, or National Provider Number), state licenses, and physician names.⁶ However, if APCDs are going to be used to track provider pricing, quality, or efficiency, accurate provider tracking will be essential. There is concern that in the future, the information included in the APCD could be used by insurance companies to set reimbursement rates for physicians, including emergency physicians, based on their knowledge of reimbursements by other insurers,

and that this shared information could drive down reimbursement in an anticompetitive way. However, this does not appear to have happened yet in existing markets with APCDs.⁴

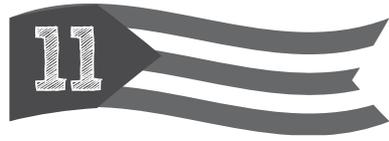
Key Points

- ✓ We are moving toward a pay-for-performance reimbursement system. CMS now requires all physicians to report quality measure data or there will be a negative payment rate.
- ✓ ACEP's CEDR will make it easier for emergency medicine physicians and physician groups to meet the PQRS reporting requirements and possible state reporting requirements. CEDR will also provide physicians with meaningful measures and feedback on their performance, and it will allow physicians to compare their performance to their peers at a national level.
- ✓ State-sponsored APCDs are becoming increasingly common. They provide information to consumers, businesses, policymakers, and physicians about health care waste and potential cost saving areas.

WHAT'S THE ASK?

1. Ask your medical director or ED administrators to get your department involved with CEDR.
2. Advocate to your legislators for quality measures relevant to the emergency department and improving the care we provide.
3. Learn more about CEDR and how you can participate by visiting <http://www.acep.org/cedr>. ★

NOTES



FAIR PAYMENT AND BALANCE BILLING

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When insured patients have a medical emergency, they often seek care at an emergency department without any prior planning. To this extent, patients may visit an ED or physician that does not have a preexisting contract with the patient’s insurance plan and is “out of network” or “non par.” The emergency physician will provide care, regardless of the patient’s ability to pay, and will then seek payment from the patient’s insurer. If the physician and insurer have a pre-existing contract (physician is “in network”), the insurer will pay the physician their contracted rate, which is often less than the physician’s typical charge. When the provider is out of network, the insurer may not pay the physician’s full charges, and the physician may then try to recover the unpaid portion of their charges from the patient. This practice of billing an insured patient for the difference between a physician’s charges and the amount reimbursed by the insurance company is called “*balance billing*.”

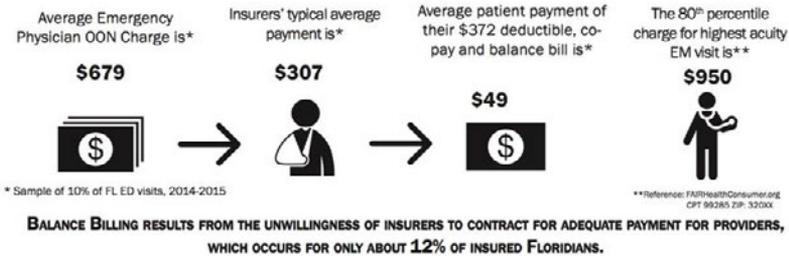
As legislators target payment issues, it’s important to frame the issue in context of the health care safety net and the burden of EMTALA.

Balance billing occurs when there is a discrepancy between what an out-of-network physician thinks is “*fair payment*” for their services and what an insurer is actually willing to pay. Insurers in these situations argue that physician charges are too high, or they may simply be underpaying as part of a strategy to reduce expenditures.¹ Physicians, on the other hand, may feel that the standard reimbursement from the insurer is far too low and are forced to bill the patient to recoup the rest of their fees. Insured patients may have out-of-pocket costs much higher than they expected.

Balance billing and fair payment issues affect all specialties, but emergency medicine is particularly affected because of EMTALA. Emergency physicians are legally obligated to provide care to patients without regard to their ability to pay or their insurance plan. When there is a disagreement over payment between

an out-of-network physician and insurers, balance billing is sometimes the only mechanism by which emergency physicians can obtain fair payment. Nevertheless, balance billing pits physicians and patients against each other, placing added financial burdens on patients who reasonably expect their emergency care to be covered by insurance. The practice has drawn the ire of consumer advocacy groups and has spurred legislative battles in multiple states.

FIGURE 1. Emergency Physician Out-of-Network (OON) Charges



Source: FCEP

The Rise of Managed Care and Issues of Fair Payment

In the past 30 years, more traditional health insurance has been all but completely replaced by managed care organization (MCO) plans. MCOs (which include preferred provider organizations — PPOs — and health maintenance organizations — HMOs) contract with a network of physicians and other providers to provide medical care to their customers. Generally speaking, when an MCO **contracts** with a physician or physician group, they will reimburse less than the physician's typical charge. Physicians will accept these discounted, "in-network" rates if they feel the added benefits of the contract (prompt and direct payment, higher patient volume, etc.) are worthwhile. For services *covered* by their plan, MCO patients will only pay a physician the pre-determined co-pay, co-insurance or deductible for their plan, and the MCO pays the physician according to the agreed upon contracted rate. Physicians must ensure that reimbursement rates within an MCO contract are fair before signing, otherwise they will be obligated to accept discounted reimbursement rates without recourse. For out-of-network services, the MCO will frequently pay less than the physician's billed charges, leaving a large balance as the patient's responsibility beyond the typical co-pays and co-insurance amounts. The physician then bills the patient for this balance.

In-Network vs. Out-of-Network

When physicians are in-network, they have agreed to accept a pre-negotiated rate for their services and will not balance bill. For example, if a physician's professional fee is \$100, she may negotiate with an MCO and accept a discounted rate of \$80 in exchange for a streamlined claims process and prompt, direct payment.² When a physician provides care as an out-of-network provider, there is no pre-negotiated rate. The physician will bill \$100 but the insurer may only pay \$75 because this

is their “standard” rate. Moreover, the insurer may send this \$75 payment to the patient (instead of to the physician), leaving the physician responsible for billing the patient. In the absence of the added benefits of the contract, a payment of \$75 is not necessarily fair payment for the service. In this scenario, the physician may seek the remaining \$25 by appealing their claim to the MCO or by balance billing the patient the remaining \$25. Out-of-network care can pit providers, patients, and insurers against each other.

Unique Challenges for Emergency Physicians

Physicians often don’t contract with an insurer if they believe the reimbursement or other contractual provisions are unfair or undesirable, and physicians are not required to contract with specific insurance companies or accept patients with specific coverage. Likewise, patients should be aware of the financial consequences if they choose an out-of-network physician — these are explained in the statement of benefits for their insurance. In non-emergency care, this means physicians can choose their patients and patients can select in-network and out-of-network providers knowing their anticipated out-of-pocket costs.³ For emergency care, the situation is very different. Patients should be focused on receiving rapid, high-quality medical care, not on finding an in-network ED or emergency physician. Emergency physicians do not check their patients’ insurance status before treatment — a practice that would raise ethical concerns, impede the provision of timely emergency care, and violate our federal mandate under EMTALA. Like all physicians, emergency physicians believe they should be reimbursed fairly for the care they provide. Unlike other specialties, emergency physicians do not turn away patients based on their ability to pay resulting in our specialty providing the most uncompensated EMTALA-related care of any specialty.⁴ Accordingly, ensuring fair payment from insurance companies is of particular importance to emergency physicians. Likewise, when providers are out-of-network, balance billing may be one of the few mechanisms by which they can obtain fair payment.

Federal Regulations on Balance Billing

The Affordable Care Act of 2010 includes patient protection provisions that establish insurance plan standards for the coverage of emergency care. The provisions include: (1) a ban on requirements for preauthorization, (2) a requirement that cost-sharing and benefits are the same for emergency care, regardless if providers are in-network or out-of-network.⁵ Of note, the ACA does not prohibit balance billing. The Department of Health and Human Services further clarified the ACA provisions in their 2010 Interim Final Rule, which established minimum payment standards for out-of-network providers of emergency care. The purpose of establishing minimum payments was to prevent increased cost burdens for patients seeking emergency care from out-of-network providers. By setting minimum payment standards, HHS is trying to prevent insurance plans from paying an unreasonably low amount to an out-of-network provider, thereby shifting a large amount of financial responsibility to the patient.⁶

The minimum payment amounts are determined by the “Greatest of Three” rule, which stipulates that the minimum reimbursement for out-of-network providers equals the **greatest** of the three following amounts:⁷

1. The median in-network provider rate
2. The amount for the emergency service calculated using the same method the plan generally uses to determine payments for out-of-network services (such as the usual, customary, and reasonable charges)
3. The amount that would be paid under Medicare

As with many regulations, there have been significant unintended consequences of the “Greatest of Three” rule. Insurers now have significant power to determine out-of-network rates because they control their in-network provider rate and also determine their “usual, customary and reasonable” (UCR) charges. Left to insurers, UCR calculations will be inherently biased due to the insurers’ desire to minimize expenditures. Also, Medicare rates are already highly discounted and are governed by federal budget calculations, not on the fair value of service. Thus all three minimum reimbursement options for out-of-network emergency services will lead to lower rates for out-of-network physicians. In this environment, balance billing may be the only way out-of-network physicians can obtain fair payment. In states where balance billing has been prohibited or limited, emergency physicians may be stuck accepting unreasonably low reimbursement for out-of-network care. The “Greatest of Three” rule also has implications for in-network providers in states with limits on balance billing. Insurers in these states have no incentive to offer in-network emergency physicians fair market rates because physicians who don’t contract must still accept their patients (due to EMTALA), and also accept their minimum reimbursement with no alternative avenue to recoup fair payment.

Usual, Customary and Reasonable Charges

Prior to 2009, the majority of insurance companies determined their out-of-network UCR by utilizing large national databases owned by Ingenix, a subsidiary of UnitedHealth Group (a large insurer). The databases would compile charge data from providers in a specific area and then establish a benchmark for UCR. Since Ingenix was a wholly-owned subsidiary of an insurer, there was an obvious conflict of interest. An investigation into Ingenix by the state of New York in 2008 revealed that rates in the Ingenix databases were discounted by as much as 30% below actual market rates by means of selective inclusion of claims data. The investigation by New York and multiple class action lawsuits by medical societies across the country led to the closure of Ingenix. Settlement money from UnitedHealth was used in 2009 to establish a new independent database governed by FAIR Health, a non-profit agency.⁸ The settlement did not require insurers to utilize the database to determine UCR, so some insurers have continued to avoid fair payment by establishing a lower UCR using a percentage of Medicare rates. To date, there is still no national standard for determining UCR, leading to legislative battles in many states.

State Regulation on Balance Billing

There have been numerous high-profile stories in the media detailing apparent predatory balance-billing practices by some physicians.⁹⁻¹² These stories have generated outrage from consumer advocacy groups, insurers and physicians alike. Most of the outrage surrounds “surprise bills” which occur when patients seek elective care which they think is in-network but are “surprised” to discover they were cared for by an out-of-network provider, resulting in balance billing. Less common are stories of physicians charging exorbitant amounts for emergent care; however these instances are typically found to be charges of a specialist who saw the patient in the ED, rather than an emergency physician. Nevertheless, stories of “surprise” billing practices have prompted legislation targeting balance billing in many states. Four main strategies are often used to combat “surprise billing”:

1. *Disclosure and transparency:* Some states require insurers to include clear language in their statement of benefits that highlights the possibility of balance bills when seeking emergency care from out-of-network providers. Similarly, some states require insurers to maintain updated lists of in-network providers and facilities in order to increase transparency.
2. *Balance billing prohibitions:* Many states have adopted some form of prohibition on balance billing for out-of-network care; these include CA, CT, DE, FL, IL, MD, MN, NY, PA, RI, UT and WV.¹³ Restrictions on balance billing vary widely in their scope. Some states prohibit balance billing only for ambulance services while others prohibit balance billing for any emergency services.
3. *Hold harmless provisions:* Some states require that insurers hold patients “harmless” against balance bills. The intent is to force insurers to negotiate fair payment directly with physicians while protecting patients. There is no ban on balance billing per se, but if patients receive a balance bill, by law they are not required to pay it.
4. *Adequate payment:* “Adequate payment” laws require insurers to pay out-of-network emergency providers a standard amount based on in-network rates or UCR. Most of these laws include an “assignment of benefits” provision that requires insurance plans to send payment directly to physicians rather than to patients. States have also established arbitration, dispute resolution or mediation processes for disputes between physicians and insurers over out-of-network reimbursement. Generally speaking, laws that allow insurance plans to pay based on their own UCR rates give substantial power to insurers in determining rates.

In 2011, the National Conference of Insurance Legislators (NCOIL) adopted model legislation on out-of-network balance billing written with input from many specialty societies, including ACEP.¹⁴ The main focus of the legislation is disclosure and transparency rather than prohibition of balance billing.

In states like California where balance billing for emergency care is prohibited, emergency physicians are especially vulnerable. Insurers are required to pay a “reasonable and customary” amount based on credible, annually-updated local charge data. However, if physicians disagree with this amount, their only option for pursuing higher reimbursement is a costly and cumbersome voluntary dispute resolution process.¹⁵ Insurers can choose not to participate in dispute resolution,

leaving physicians without the ability to negotiate truly fair payment and unable to balance bill. “Hold harmless” provisions in states like Colorado force insurers to negotiate acceptable payment with out-of-network emergency physicians or pay the physician’s full charges.¹⁶ Insurers argue that “hold harmless” provisions lead to higher costs by way of increased physician payments and eventual higher insurance premiums. Texas passed legislation in 2015 that establishes a mediation process for patients who receive a balance bill for emergency care that is greater than \$500.¹⁷ The mediation process requires physicians and insurers to negotiate a reduced charge. This bill adds to disclosure and transparency laws in Texas that require insurers, hospitals and providers to provide up-to-date plan participation and common charge data to patients.¹⁸

In 2015, Connecticut passed legislation regarding emergency care costs and competition. Prior to that, in 2014, New York adopted what was widely regarded as the most comprehensive out-of-network emergency care legislation to date.. The law went into effect on April 1, 2015, and combines disclosure and transparency, a hold harmless provision, and adequate payment protections.¹⁹ Under the law, emergency physicians are not prohibited from balance billing. When a health plan receives a bill for emergency services from a non-participating provider, the plan is required to pay an amount that it determines reasonable, less applicable patient cost sharing. Out of network payment rates can be independently established by insurers but are compared to the 80th percentile of rates published in the FAIR Health database. Insurers and physicians alike can utilize a baseball-style arbitration process on a claim-by-claim basis at the individual CPT code level. Notably, emergency physician claims are exempt from arbitration if they are (1) less than or equal to \$600 (with an annual adjustment for inflation) after any applicable co-payment, co-insurance or deductible, and (2) less than 120% of the usual, customary and reasonable amount. New York ACEP sought this exemption for high volume, lower reimbursed claims so that physicians would not be in a position of going to arbitration when the cost of the appeal exceeds the benefit of winning the appeal. It is not yet clear how the New York law will function in practice. Emergency physicians are justifiably worried that the dispute resolution process is cumbersome and expensive, leaving small physician groups with little to no ability to dispute unfair reimbursement for out-of-network care. This concern is supported by general consensus that arbitration mechanisms have to-date been largely unsuccessful in other states.²⁰

WHAT'S THE ASK?

Balance billing and determination of fair payment continue to be active issues at the federal and state level, including in states that already have relevant legislation. As state legislatures move to regulate balance billing and payment for out-of-network emergency care, emergency physicians need to take a proactive role. Because of our unique obligations under EMTALA, emergency physicians have few allies in legislative battles on balance billing. To that end, forming coalitions, establishing political networks, and framing the issue in context of the health care safety net and the burden of EMTALA will be essential to successful legislative, regulatory, and judicial efforts. ★



THE EVOLVING REGULATORY ENVIRONMENT

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The current Medicare program includes some controversial rules and regulations that impact emergency providers and our patients. In this chapter, we will provide education and guidance for emergency physicians on the issues of (1) Admission Rules; (2) Readmission Rules; (3) The Independent Payment Advisory Board; and (4) ICD-10. As Medicare sets the bar for the private insurance industry, the regulatory implications of the aforementioned policies extend beyond Medicare beneficiaries and have the potential to affect all Americans.

Support institutional policies and public regulation conducive to the best patient care, starting with the initial visit to the emergency department.

Admission Rules

Inpatients vs Outpatients and the “Two Midnight Rule”

In response to unclear criteria governing Medicare Recovery Audit Contractors (RAC) decisions to accept or deny claims from hospitals requesting payment for inpatient services, the Centers for Medicare & Medicaid Services announced the “Two Midnight Rule” in 2013. This stipulation stated that patient encounters necessitating a hospital bed through two separate midnights would be reimbursed as “inpatient” stays. All other stays, including observation admissions, were designated “outpatient” visits. The issue with this distinction is that patient encounters for similar complaints, involving similar work-ups and even identical procedures, can result in widely disparate payments. Typically, outpatient encounters yield lower hospital reimbursements than inpatient encounters. Hence, many providers argue that enforcing this rule penalizes hospitals for innovations reducing length of stay.

Patients, conversely, often face greater cost sharing for outpatient visits. Take, for example, chest pain, the leading short-stay chief complaint.¹ Medicare patients contribute an average of \$1,260 in one single coinsurance payment for inpatient

chest pain stays, but have separate copayments for each service consumed as outpatients. These individual outpatient payments can often exceed the inpatient fee, thus making observation stays financially undesirable for patients.¹

The “Two Midnight Rule” is of particular concern for emergency physicians because the anticipated classification is typically made at the point of admission, early on in a patient’s course, before his or her care needs are fully manifest. Thus, emergency physicians are put in a position to determine an encounter’s reimbursement profile based purely on speculation.

Given such “Two Midnight Rule” criticism, CMS recently announced a compromise. In July 2015, CMS proposed a rule in which physicians may admit patients as “inpatients” for expected stays of lesser duration, so long as documentation supports specified severity of symptom criteria or risk of adverse events during hospitalization.² The ACEP-supported modification was formally adopted in October 2015, when CMS released its 2016 Outpatient Prospective Payment System Final Rule.

The “Three Day Stay” for Skilled Nursing Facilities

Under Medicare law, Medicare beneficiaries must be admitted as hospital inpatients for three days before Medicare will cover their services in skilled nursing facilities (SNFs). For many reasons related to an individual’s care plan, staying in a hospital’s observation unit may be more appropriate. Unfortunately, observation admissions expose patients to financial liability should they require post-acute care SNF services. Hence, the “Three Day Rule” asserts pressure on admitting physicians to find a medical reason necessitating three days of inpatient care, a practice that may not reflect optimal resource utilization.

The “Improving Access to Medicare Coverage Act of 2015” (H.R. 1571; S. 843) would alleviate this inequity by deeming an individual receiving “outpatient” observation services in a hospital to be considered an “inpatient” with respect to the Medicare three-day stay requirement.^{3,4} ACEP believes that all days spent receiving care in a hospital should count toward Medicare’s three-day hospital stay requirement, regardless of their status as inpatient or outpatient, and the College supports this bill.⁵

Disclosure Requirements

Historically, hospitals were not required to notify patients of their classification as outpatient or observation status as opposed to inpatient status. Thus, patients remained unaware of the associated cost-sharing implications until they received a bill. Fortunately, the “NOTICE Act,” which requires such transparency, was signed into law in March 2015, and it should help patients better understand their hospital stays.⁶

Readmission Rules

For Medicare, a readmission results when a patient is admitted to a hospital within 30 days of being discharged from a previous hospitalization. Readmissions may occur at any hospital, not just the initial hospital. As a cost savings strategy and move toward value-based care, Medicare's Hospital Readmission Reduction Program (HRRP) penalizes hospitals with relatively higher rates of Medicare readmissions by reducing reimbursement.⁷ The Program is part of the Affordable Care Act and began in 2013.

The current focus in the HRRP is on several select conditions: namely, myocardial infarction, heart failure, pneumonia, chronic obstructive pulmonary disease (COPD), and elective hip or knee replacement. Nonetheless, CMS still collects data on all-cause readmissions with the intent to expand its target condition list moving forward.

Since more than 50% of Medicare admissions come through the emergency department, emergency physicians are the gatekeepers determining a hospital's readmission profile. As such, they may face pressure from hospital administration to observe or discharge patients instead of admitting them. The hospitals' financial incentives may be in conflict with a patient's medical need.

What's more, hospitals with greater shares of low-income beneficiaries and more complex social determinants of health have seen greater readmission penalties over the first years of the HRRP.⁷ The program therefore disincentivizes safety net care. As safety net providers, emergency physicians should consider advocating for relaxed penalties in hospitals with a large proportion of low-socioeconomic status beneficiaries.

On the other hand, the HRRP and previously mentioned data create an opportunity for emergency physicians to advocate for improved care coordination in the ED at the hospital-system level. Programs leveraging robust social worker-based interventions to improve discharge planning, communication, and follow-up have significantly improved both ED and hospital recidivism.

Finally, emergency physicians should continue to educate policymakers on the natural history of chronic disease processes, explaining the medical necessity of acute care for certain conditions despite the best preventive measures. They should emphasize the key role emergency providers play in keeping patients healthy, highlighting the results of the RAND study addressed in this book.

The Independent Payment Advisory Board (IPAB)

Prior to passage of the ACA, only Congress, with expert advice from the Medicare Payment Advisory Commission (MedPAC), could make changes to the plans, benefits, and payments made by Medicare. As part of the ACA, the Independent Payment Advisory Board (IPAB) was created to achieve savings in Medicare, without requiring Congressional action or approval.⁸ When Medicare's annual rate of spending growth passes goals set by the ACA, the IPAB is tasked with proposing cuts to Medicare to bring costs within goal. These cuts cannot, however, raise beneficiary revenues, increase their cost sharing, or restrict benefits and eligibility criteria.⁹ Thus, by default, they extend the financial burden to hospitals and providers. But the IPAB cannot reduce reimbursement to Medicare part A (hospitals and nursing homes) until after 2020, leaving Part B (physicians) particularly vulnerable in the near future.⁹

The lack of physician representation on the IPAB is equally concerning. Of IPAB's slated 15 full-time members, appointed by the president and confirmed by the Senate, only a minority can be health care providers, and none of them may be practicing physicians.¹⁰

In summary, the IPAB has no accountability to Congress, health care providers, or the public, and it threatens to cut physician payments. This could cause even more health care providers to question the value of participating in the Medicare program and jeopardize patient access to care.¹⁰ Accordingly, ACEP supports IPAB repeal. Legislation supporting IPAB repeal, the "Protecting Seniors' Access to Medicare Act of 2015,"¹¹ passed the House in June 2015 and was referred to the Senate Committee on Finance.¹²

The IPAB has not yet been formed or had any impact on Medicare spending, as cost growth to date has been below the targets established by the ACA. According to the latest projections by the Congressional Budget Office (CBO), the growth of Medicare spending per beneficiary will not exceed the targets from 2015 through 2024. When spending first exceeds the targets in 2025, the IPAB (if still in place) could be tasked with reducing spending by \$1 billion that year.¹³

ICD-10

The Department of Health and Human Services has used the International Classification of Diseases 9th Revision (ICD-9) for coding and communicating diagnoses for "epidemiology, health management and clinical purposes"¹⁴ since 1979. These codes are used worldwide to identify study subjects, to monitor prevalence and incidence of disease, and, especially important to health care in the US, for billing. The next revision of the code, known as ICD-10, has been in use through much of the developed world including Germany, the UK, and Australia beginning as early as 1995.

Adoption in the U.S. was first set to begin in October 2013. Organized medicine groups resoundingly lobbied to delay adopting these policies, citing cost to providers, lack of clinical benefit, timing of this transition while other costly tech infrastructure developments (such as HITECH and Meaningful Use) are still phasing in, and fears of increased claims denials due to miscoding.¹⁵ These efforts succeeded twice in postponing adoption of ICD-10 until October 2015, at which point the codes went into effect.¹⁶

Emergency physicians in particular may have trouble justifying hospital admissions and reporting certain diseases to public health departments under ICD-10.¹⁷ Up to 27% of the most commonly used codes are said to have “convoluted mappings” that may not translate directly from ICD-9 to ICD-10.

Fortunately, CMS heeded physicians’ warnings of the potential pitfalls and relaxed its first-year coding requirements. CMS will continue working with physicians’ groups such as ACEP’s Coding and Nomenclature Committee to facilitate fully transitioning to ICD-10 with programs to include sharing best practices through an ICD-10 coordination center, sending information directly to Medicare providers, providing in-person training for smaller physician-practices, and naming a CMS “ICD-10 Ombudsman” to answer questions regarding claims submissions.¹⁸

WHAT’S THE ASK?

1. Follow implementation of the revised CMS rule allowing exceptions to the “Two Midnight” minimum required for inpatient stays. Support further regulation linking reimbursement criteria to medical evidence.
2. Urge Congress to support the “Improving Access to Medicare Coverage Act of 2015,” which will allow time spent in observation to satisfy the three-day inpatient hospital requirement necessary for post-hospital skilled nursing facility coverage.
3. Thank your members for their support of the “NOTICE Act,” which requires hospitals to communicate the cost implications of observation status to patients in observation.
4. Advocate for improved ED-based care coordination services and personnel to impact hospital readmission rates.
5. Ask your federal representatives to repeal the Independent Payment Advisory Board (IPAB), which authorizes a sub-optimally representative panel to make direct physician payment cuts and bypass Congress. Its artificial spending targets will be met on the backs of those seeing our country’s most high-need and at-risk patients.
6. Utilize the resources provided by ACEP, the AMA, and CMS to continue to smooth your transition to full utilization of ICD-10. ★

NOTES



GRADUATE MEDICAL EDUCATION FUNDING

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As the United States faces the challenge of caring for a growing, aging population, the demand for physicians has intensified. By 2025, the demand for U.S. physicians will outstrip supply by a range of 46,000 to 90,000.¹ Graduate medical education (GME) funding is the lifeblood of training new doctors to meet this growing demand. It keeps residency programs solvent and able to produce residency-trained emergency physicians. Despite this critical need, GME continues to be under attack — chiefly because of significant financial challenges to Medicare and Medicaid, the key contributors to GME funding. Fiscal constraints have motivated both state and federal governments to re-evaluate their support of GME, leading to potentially debilitating cuts to residency funding and significantly endangering our country's ability to train the next generation of physicians. Emergency medicine health advocates already are hard at work to protect GME funding and provisions for residency-trained emergency physicians.

Be vocal in rallying support for GME in the local residency association and at the hospital administrative level.

GME Funding: The Basics

Graduate medical education funding primarily is provided by the federal government through a variety of payers. The federal Medicare program, via the Centers for Medicare & Medicaid Services (CMS), contributes the majority of GME funding. Roughly \$15 billion in public funding supports GME, and two-thirds of that—about \$9.7 billion—comes from Medicare, with an additional \$4 billion coming from Medicaid. Medicare supports 90,000 residents, providing payments of more than \$100,000 per resident.² The U.S. Department of Veterans Affairs (VA) separately funds \$1.4 billion, roughly 9%, of all graduate medical education. The Health Resources and Services Administration (HRSA) funds the remaining \$500 million of GME. The degree to which private insurers fund training-related costs is difficult to calculate, because GME payments are often included in patient care revenue.

Funding generally is divided into *direct* medical education (DME) and *indirect* medical education (IME). DME includes resident salaries, overhead, and faculty supervision. DME costs are calculated based on a hospital's direct GME costs per resident, multiplied by the number of full-time equivalent residents and the number of inpatient days allotted to Medicare patients.³ DME costs per resident for each institution were developed based on those incurred in 1984 or 1985, adjusted for inflation, and vary widely across the country. They are paid by patient services revenue from Medicare, Medicaid, the VA, and private insurers.⁴

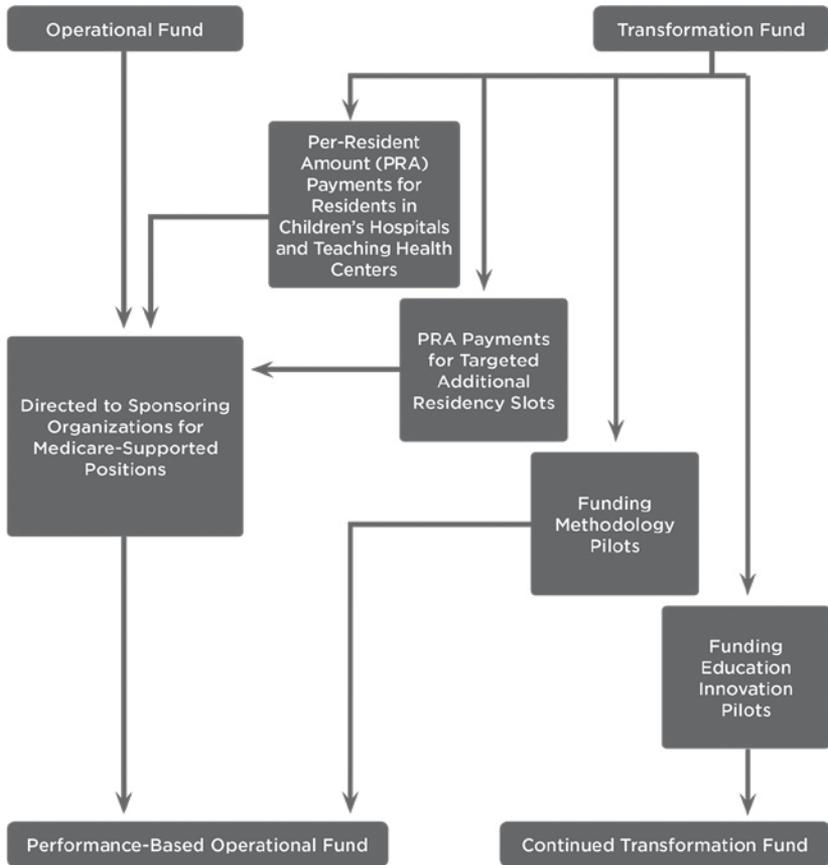
Indirect medical education payments are justified by increased costs to hospitals associated with training residents and students. IME is intended to offset the increased costs that academic centers bear due to their higher acuity patients, added staff, inefficiencies secondary to having multiple learners, and increased technological costs. The American Association of Medical Colleges (AAMC) reports that teaching hospitals “make up 20% of the nation’s hospitals yet conduct almost two-thirds of the most highly specialized surgeries, treat nearly half of all specialized diagnoses, train almost 100,000 resident physicians and supply more than 70% of the hospital care provided to the nearly 43 million uninsured patients.”⁵

IME funding is based on the IME adjustment factor, which is calculated using a hospital's resident-to-bed ratio, which is represented as r , and a multiplier, which is represented as c , in the following equation: $c \times [(1 + r).405 - 1]$. The multiplier c is set by Congress. Thus, the amount of IME payment that a hospital receives is dependent upon the number of residents the hospital trains and the current level of the IME multiplier.

The multiplier initially was set at 11.59%, based on recommendations from the secretary of the Department of Health and Human Services (HHS). The multiplier is determined by Congress and has fluctuated several times. The Balanced Budget Act of 1997, as well as subsequent legislation, set up annual reductions in the IME multiplier until it settled at its current rate of 5.5% in 2003. Therefore, using the current adjustment factor, hospitals receive a 5.5% increase in their Medicare payment as IME payment for every 10% increase in the resident-to-bed ratio.⁵ IME funding has been criticized because of its lack of transparency once it enters the hospitals' coffers. The IME funds go into the general funds of the hospital, and then can be used as the hospital sees fit.⁶ Given the difficulty in tracking the IME funds, IME has been the target of proposed funding reductions. Medicare IME payments were \$6.5 billion in 2010, compared to \$3 billion in DME funding.⁷

Disproportionate share hospital (DSH) payments are another funding source allocated to hospitals caring for a higher percentage of uninsured or underserved patients. The DSH is a federal-state partnership intended to reimburse hospitals for the costs of Medicaid or underinsured patients who leave providers uncompensated for some portion of their care.⁸ Since the intent of the ACA is to reduce the number of uninsured and uncompensated care, the ACA scheduled DSH reductions starting in 2014, but they were delayed until 2017.⁹

FIGURE 1. IOM Committee’s Proposed Medicare Graduate Medical Education Funding Flow



For more information, visit www.iom.edu/GME. Courtesy of Institute of Medicine of the National Academies.

Resident Position Allocations

The Balanced Budget Act of 1997 placed a cap of 94,000 on the number of residency positions that CMS would fund, based on the number of residents a teaching hospital reported in 1996.¹⁰ However, via state support, scholarships and endowments, “above the cap” residency positions have been added since 1997. In 2012, a total of 117,717 resident physicians were in training.¹¹

As the number of medical schools has steadily increased, the number of residency positions has not kept pace. Since 2002, enrollment at the nation’s medical schools

has increased by 23.4 percent, and 17 new medical schools have been established.¹² In the 2015 NRMP Match, a record 41,334 applicants vied for 30,212 positions; 30,035 positions were placed, a fill rate of 99.4%. Of the 18,025 U.S. allopathic medical school seniors who entered the 2015 Match, 16,932 matched to first-year positions, leaving 1,093 (6.1%) graduating allopathic medical students unmatched. The rate of unmatched osteopathic medical school graduates was even higher, as 611 of 2,949 (20.7%) went unmatched. And 53.1% of the U.S. citizen international medical school students and graduates (IMGs) who submitted program preferences matched, while 49.4% of the 7,370 non-U.S. citizen IMGs matched.¹³

The Affordable Care Act of 2010 established a number of provisions that will affect GME funding. These include reducing the current cap on residency positions by 65% of currently unused slots (eg, if 6 slots remain unused, the cap is reduced to 2), with 75% of new slots going to primary care or general surgery (§5503). Prior to the ACA, if a teaching hospital closed, these residency spots would be “lost.”¹⁴ The ACA stipulates that unused slots from hospitals that close (§5506) also are redistributed, a rule that was implemented in 2011. The CMS revised the regulations (§413.70) in 2012, stating that any hospital receiving a §5503 grant would be evaluated from July 1, 2011 (the date of implementation) to July 1, 2016. At that point, any unused funding would be reallocated elsewhere.¹⁵

Current Legislation

There are bills in both the United States House and Senate aimed at increasing support of GME. The Resident Shortage Reduction Act of 2015 (H.R. 2124), and the Senate version (S.1148), aim to increase the number of graduate medical education spots by 3,000 each year between 2017-2021 (a total of 15,000 residents). In determining which hospitals would receive new slots, preference would be given to hospitals in states with new medical schools, states that have the highest percentage of population living in health professional shortage areas, hospitals associated with Veterans Affairs, hospitals that emphasize training in community-based settings and/or in hospital outpatient departments, and hospitals with meaningful use electronic health records.^{16,17}

H.R. 1117, the Creating Access to Residency Education (CARE) Act of 2015, sponsored by Representatives Kathy Castor (D-FL) and Joe Heck, DO, (R-NV) would establish grant funding through CMS targeted to states with a ratio of less than 25 medical residents per 100,000 population. This fund would assist with covering up to two-thirds the cost of a primary care residency slot or up to one-half the cost for a slot in other specialties and encourage partnerships between teaching hospitals and other entities to cover the remaining expenses.

Outside Rotations

While emergency medicine residency programs seek to increase training opportunities, a risk of financial penalty exists when rotations occur off hospital grounds. The Direct Graduate Medical Education (DGME) section of the Social Security Act states:

“A hospital may count residents training in non-hospital settings for direct GME purposes... if the residents spend their time in patient care activities and if... the hospital incurs all, or substantially all, of the costs for the training program in that setting...”¹⁸

The costs include salary, benefits, and costs of teaching staff. Outside hospitals that are approved by CMS teaching facilities may collect direct GME from CMS when a resident completes an outside rotation there. The primary residency may then request reimbursement from the outside hospital to pay salaries and benefits. Non-hospital settings, including non-teaching facility rural hospitals or other sites that may provide a key component of emergency residency training (ie, poison control centers, pediatric centers), will not receive compensation from CMS because the hospital does not incur “all or substantially all” of the training costs. In this case, neither hospital receives compensation. Such a policy is a disincentive to the development of rural emergency medicine rotations and other non-hospital-based training opportunities; it also limits rotations and other non-hospital-based training opportunities and rotations in community settings that do not meet criteria to collect money directly from CMS.

Decreasing Medicaid Support

While Medicaid programs are not obliged to pay for GME, Medicaid is the second largest source of funding (behind Medicare) for GME. The federal government has no explicit guidelines for states on whether or how their states make GME payments. In 2013, the AAMC conducted a survey of state Medicaid programs to examine their policies on financing GME. Budget shortfalls have motivated states to reduce their Medicaid support of GME. As of 2012, 42 states and the District of Columbia provide GME payments under their Medicaid program, although 5 states are considering eliminating their funding. This is in stark contrast to 2005, when 47 states provided Medicaid funding of GME.

Institute of Medicine Report Aims to Reform GME

The Institute of Medicine (IOM) formed a 21-member expert committee to conduct an independent review of the governance and financing of the GME system. In its report, “Graduate Medical Education That Meets the Nation’s Health Needs,” the IOM Committee on the Governance and Finance of Graduate Medical Education asserted that GME programs do not train adequate numbers of physicians who are prepared to work in needed specialties or underserved areas.¹⁹ The

report recommends the creation of a new GME financing system “with greater transparency, accountability, strategic direction, and capacity to innovate.”²² The committee recommends maintaining the current levels of Medicare GME funding while modernizing payment methods to reward performance, ensure accountability and create incentive for innovation, eventually phasing out the current system. However, the report does not find “credible evidence” to support claims of a physician shortage, and it does not propose adding additional funds to GME or increasing the number of residency positions.

The IOM report makes several recommendations. The first is to replace the current payment model (made up of direct and indirect GME payments) with one GME fund with two subsidiary funds: an operational fund and a transformation fund. The operational fund would distribute a single payment to currently accredited GME programs based on a national per resident amount, adjusted for geography. The transformational fund would award new Medicare GME-funded training positions in priority specialties and geographic areas, develop GME program performance measures, and support other innovative projects. The money to finance the transformational fund would be drawn from the operational fund (the total payments to accredited GME programs) at a rate of 10% in the first year (approximately \$1 billion), increasing to 30% by the fifth year, with eventual restoration of the monies to GME operations once successful innovative models had been established.

Second, the report proposes creating a GME policy council in the U.S. Department of Health and Human Services to develop a strategic plan for Medicare GME financing, research areas of workforce needs, develop future federal policies, and provide annual progress reports to Congress and the president on the state of GME. This also would create a GME center within the Centers for Medicare & Medicaid Services to manage the operational aspects of GME funding.

The American Hospital Association (AHA), American Medical Association (AMA), and AAMC heavily criticized the IOM report. The AAMC estimates that the IOM proposal would result in a 35% reduction in Medicare GME payments (based on the funds that would be redirected to the transformation fund). The AMA stated, “the report provides no clear solution to increasing the overall number of GME positions . . . to meet actual workforce needs.”²⁰

Advocating for the Value of GME

It is important for residents to advocate for GME funding. There are many benefits of GME that physicians can articulate to legislators. On the national level, GME not only funds the next generation of physicians, but also improves access to care. Teaching hospitals care for the underserved, indigent, and elderly, including 28 percent of all Medicaid hospitalizations. Teaching hospitals provide 40% of all charity care. Over 37,000 medical residents receive some or most training at VA Hospitals, caring for our veterans and active duty military members.

On the state level, GME is a tool that states can use to attract physicians to their region. Most residents stay to practice throughout their career in the same state in which they trained in residency. Residents are young, ambitious, well-educated citizens who help to grow communities. Residents buy houses, pay taxes, send their children to school in the communities in which they train. A town, city, or state cannot grow without physicians who are capable of caring for the population, and attracting doctors to a state during residency is the best possible recruiting mechanism.

WHAT'S THE ASK?

1. Advocate on behalf of GME. Visit EMRA.org or SAVEGME.org (sponsored by the AMA) to sign a petition to Congress urging support for preserving GME funding. Via SAVEGME.org, you can also obtain information regarding scheduling meetings with local officials.
2. Get involved with your State ACEP chapter to educate your state legislators about the importance of GME.
3. Be vocal in your hospital rallying support for GME both in the local residency association and at the hospital administrative level. ★

NOTES

PHYSICIAN SHORTAGE AND WORKFORCE CHALLENGES

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Physician workforce shortages represent an ever-increasing challenge facing the United States. A recent report released by the Association of American Medical Colleges (AAMC) predicts the demand for physicians to grow faster than supply, with a projected shortfall between 46,100 and 90,400 physicians by the year 2025. This is countered by a physician supply increase of only 66,700 (9%) if current workforce trends remain unchanged. Steps have been taken to produce additional physicians for the workforce in recent years, but they are unlikely to meet the demand. The number of physicians completing medical residencies in recent years has risen from 27,000 to around 29,000 annually. This has helped, but still falls short of predicted need. Primary care specialties are expected to be one of the most dramatically affected specialties with projected shortfalls ranging between 12,500 and 31,100 physicians by 2025.¹

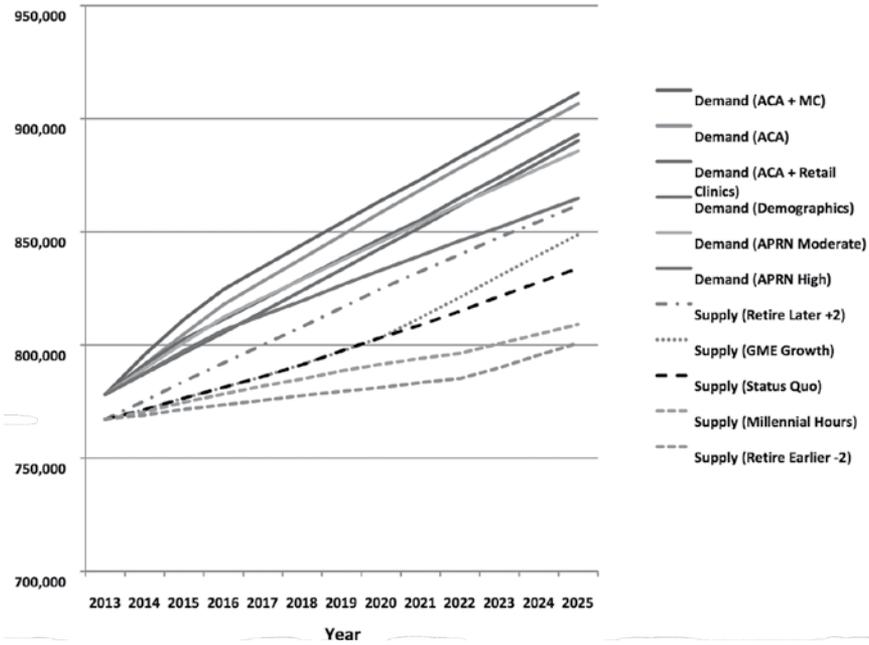
To better allocate resources, medical professionals should urge the federal government to fund the National Health Care Workforce Commission.

Demographics and Workforce Changes

Changing demographics and implementation of the Affordable Care Act (ACA) are expected to be major players in the increasing demand for physician services. The Congressional Budget Office estimates 26 million additional people will acquire insurance through the ACA who would otherwise not have obtained medical insurance.² The Health Resources and Services Administration (HRSA) notes that physician utilization is directly correlated with insurance status: Those who possess health insurance are more likely to utilize health services.³ Each specialty is expected to experience varying levels of increased utilization, with the highest being a 3.2% increase in surgical specialist, a 2.0% increase in primary care, and all other specialties experiencing a minimum of a 1.5% increase in patient volume.

Changing workforce patterns are predicted to affect access to health care. Analysis by the AAMC's Center for Workforce Studies shows the millennial generation is more likely to work fewer hours in favor of increased quality of life outside of work. It is predicted that physicians under 35 will continue to work approximately 7% fewer hours per week relative to earlier physician cohorts.¹

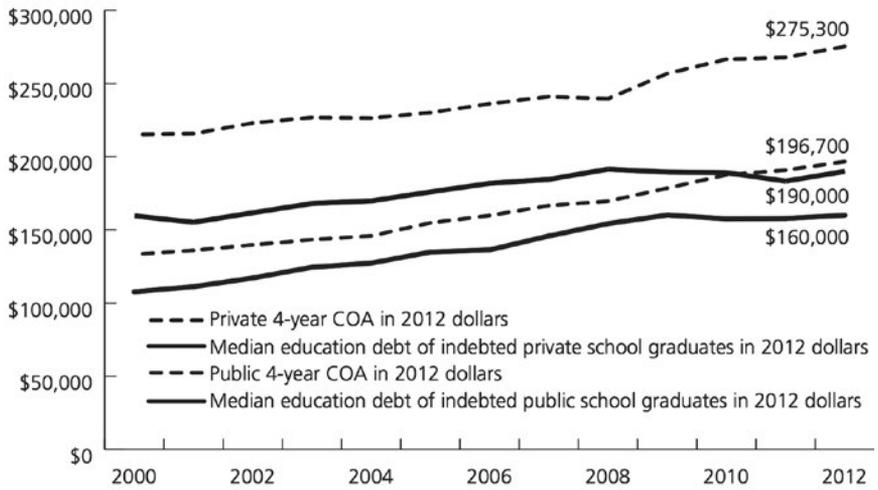
FIGURE 1. Projected Total Supply and Demand for Physicians, 2013-2025



The AAMC charted the projected total supply and demand for physicians from 2013-2025, predicting a shortage of 46,100 and 90,400 physicians by the year 2025.¹

A 12% increase in emergency department visits is anticipated between now and 2025, with the increase attributed to changing demographics (eg, aging population). Some reports portend that the demand for emergency care will eventually be unaffected by the ACA because any expanded need beyond baseline growth will be temporary as increased access to primary care is achieved.¹

FIGURE 2. Median 4-year Cost of Attendance and Education Debt of Indebted Medical School Graduates, 2000-2012 (in constant 2012 dollars)¹



Source: AAMC Graduation Questionnaire (GQ) and Tuition and Student Fees Survey (TSF)

| Care Setting | Growth from changing demographics | Growth from ACA |
|-------------------------|-----------------------------------|-----------------|
| Office visits | 14% | 4% |
| Outpatient visits | 15% | 2% |
| Emergency visits | 12% | 0% |
| Hospital inpatient days | 23% | 1% |

Medical School Costs and Effects on Workforce

Graduate medical education (GME) costs are on the rise, and the subsequent burden placed on students is having a dramatic effect on career choice. Roughly 84% of students are graduating with either public or private educational debt. The average medical student graduating in 2014 left medical school with an estimated \$176,348 in debt. This represents a 4% increase from the previous year’s graduates. Current median tuition estimates a 4-year cost of attendance at \$226,447 for public medical schools and \$298,538 for a private medical school education.⁴ This debt load represents a significant burden to graduates who earn an average of \$51,586 during their first year of residency.⁵

In a 2014 study surveying 3,032 allopathic medical students, Rohlfsing et al. determined that medical student debt — in particular, debt in relation to peers at the same institution — appeared to influence the way in which medical students approached major life decisions including specialty choice.⁶ The results of this

study mirrored those of another 2014 study, where Phillips et al. evaluated data from 136,232 physicians who graduated from U.S. allopathic schools and found that high education debt deters graduates of public medical schools from choosing a primary care pathway.⁷ It is important to note that economic modeling indicates that primary care physicians' household incomes and expenses will not preclude a physician from repaying current medical debt level, especially when federal forgiveness, income based repayments, or additional primary care repayment programs are utilized.⁸

Income Based Repayments

Many residents and physicians choose to take advantage of the Income-Driven Repayment offered by the federal government to decrease required payments during residency and the first years of their practicing career. Through this system, the borrower is responsible for 10-15% of their discretionary income, but never more than the 10-year standard repayment plan amount.⁹ This remains a viable option for students interested in primary care who have acquired heavy education debt. This system replaced the prior deferment process and may challenge some residents living in more expensive metropolitan locations where expenses are higher and initial wages are locked in place. However, some of the initial fears of the impact on these urban programs and reduction in filled positions have not come to pass.

Public Forgiveness Loan

One additional option is to obtain employment with a nonprofit organization, which allows loans forgiveness through the *Public Loan Forgiveness Program*. This program is intended to encourage physicians to acquire full-time employment in the public service sector. Through this program, loans taken under the William D. Ford Federal Direct Loan Program are eligible for forgiveness. After the borrower has made 120 on-time, full, scheduled monthly payments on direct loans, s/he is eligible for loan forgiveness.⁴ This method certainly remains a viable option for physicians to seek employment in the nonprofit field while paying off educational debt.

Physician Shortage by Specialty

The shortage of physicians stretches across all specialties, although primary care is noted to have the most significant gap. Since primary care physicians serve as the basis for coordinated care in our current system, this shortfall — projected between 12,500 and 31,100 physicians — will have a significant impact on care delivery. While the largest absolute number is in primary care, the largest shortage by percentage of overall deficit is predicted for surgical specialties.¹ The Council on Graduate Medical Education (COGME) Third Report estimates that the appropriate ratio of primary care to specialty physicians is about 50/50, which far

exceeds the current 35-38%.¹⁰ The addition of more complicated elderly patients and newly insured chronically ill will further tax the already under-resourced primary care system into the distant future.

Emergency Medicine Shortage

The supply of emergency physicians is expected to increase from approximately 36,000 FTE to 55,400 FTE physicians by 2025, an anticipated change of 54%. This increase represents a nearly 30% increase in supply per 100,000 citizens — yet that supply does not keep up with the rising demand. For this reason a 287% increase in Advanced Practice Nurses[S2] is anticipated, with an increase from 5,600 FTE to 21,700 FTE by 2025, and a 172% increase in physician assistants, from 9,200 to 25,000 — suggesting that only around 50% of providers (physicians, NPs and PAs) will be physicians in 2025.¹¹

Rural Emergency Medicine Shortage

Rural America is particularly affected by the shortage of emergency physicians. While 21% of the U.S. population lives in rural areas, only 12% of emergency physicians practice there. Not only is the density of emergency physicians lowest in rural settings (10.3 urban vs. 5.3 large rural vs. 2.5 small rural), but also the percentage of emergency physicians with residency training in emergency medicine is lower as well. Rural physicians who identify as having emergency medicine as a specialty are less likely to have formal emergency medicine training (31% vs. 57%), be board certified (43% vs. 59%) and to have graduated in the past 5 years (8% vs. 19%).

There have been several initiatives to help recruit physicians to rural areas. Of particular effectiveness are rural rotations in residency training. Not only do rural rotations offer unique training opportunities but increases the likelihood of Emergency medicine residents returning to rural areas. Additional recruitment strategies including loan repayment programs, signing bonuses, telemedicine, and recruiting residents from rural communities for training have shown some benefit in increasing the penetration of board certified physicians in rural communities.¹²

Physician Workforce Study — Unfunded Mandate of the ACA

Section 5101 of the Affordable Care Act created the National Health Care Workforce commission with the intent to provide data and impartial advice to Congress. Since passage of the ACA, the workforce has remained unfunded. Although no specific amount of funding is required, previous budget requests have been along the lines of \$3 million. The commission's members were appointed in 2010; however, federal appropriations laws prohibit the workforce from meeting until it's funded by Congress. Without funding a single unbiased source of data to detail workforce needs, the challenges of how to allocate resources and determine how best to improve our workforce will remain difficult.¹³

WHAT'S THE ASK?

1. For all providers to advocate at the federal level to ensure adequate graduate medical education availability in the future.
2. For student, resident, and medical professionals to address the rising cost of health care education and the subsequent impact it has on the medical profession.
3. To better allocate resources, medical professionals should urge the federal government to fund the National Health Care Workforce Commission. ★

ADVANCED PRACTICE PROVIDERS IN THE EMERGENCY DEPARTMENT

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Emergency departments are busy places, and they get busier every day.¹ To cope with rising patient volumes and stagnant pipelines for training physicians, EDs have been employing increasing numbers of non-physician providers to care for patients. Nurse practitioners (NPs) and physician assistants (PAs) play a critical role in managing patient flow and supplementing the work performed by emergency physicians. This chapter will explore how these professionals are trained and the impact they are having on the emergency medicine workforce.

Help ensure patients receive accurate information about providers' credentials through policies such as the AMA's truth in advertising campaign.

Nurse Practitioners

Applicants to advanced nursing programs must have graduated from nursing school and hold a state-registered nursing license. Programs are approximately 2 years long and require the student to choose a specialty track: midwifery, mental health, pediatrics, primary care, etc. There is a component of classroom learning and clinical rotations to each.

An estimated 9,000 NPs practice in the emergency department.² Students wishing to work in the ED generally follow the family medicine or adult medicine curriculum, as dedicated emergency medicine training is usually not available within the master's program. However, interested NPs may pursue a 1-year emergency medicine fellowship for additional experience; currently 8 such fellowships exist.^{3,4} NPs can also obtain an Emergency Nurse Practitioner credential through the American Nurse Credentialing Center, which allows experienced emergency NPs to demonstrate their proficiency. This is an on-the-job pathway that requires a minimum of 2,000 hours worked, 30 hours of continuing medical education, and additional professional development through presentations and publications.⁵

Although NP programs have typically granted master's degrees, nursing educational bodies are beginning to focus more on doctoral degrees as the terminal degree for advanced practice nursing. The American Association of Nurse Practitioners observes in a position paper that "advanced practice nursing is currently one of only a few health care disciplines that prepare their practitioners at the master's rather than the doctoral level... However, it is clear that the course of work currently required in NP master's programs is equivalent to that of other clinical doctoral programs." This transition is already underway, and the stated goal for eliminating all nursing master's programs is 2015.⁶

Nursing organizations are also collaborating to standardize licensing requirements and scope of practice for NPs, which currently vary significantly from state to state. The APRN Consensus Model, as this effort is called, has already been incorporated by several states.⁷

Physician Assistants

PAs can come from any undergraduate major as long as they fulfill the science class requirements, making their clinical backgrounds more variable. However, most PA schools also require some amount of hands-on patient care experience as an admission prerequisite. According to the American Academy of Physician Assistants (AAPA), most successful applicants have about 3 years of experience in another health care field such as phlebotomy, emergency medical services, or surgical technologist.⁸

PA school is 2-3 years long, with 1 year of basic science classes and the remainder being clinical rotations. Graduates are awarded master's degrees. PAs must also pass the Physician Assistant National Certifying Exam (PANCE) administered by the National Commission on Certification of Physician Assistants (NCCPA) to be eligible for state licensure. Passing the PANCE allows diplomates to use the title PA-C.⁹ PAs receive their licenses from the state Board of Medicine, the same body that oversees physicians.

Of the more than 93,000 practicing physician assistants in 2015, 10.8% practice in emergency medicine, the third largest single PA specialty after primary care and orthopedics.¹⁰ The overwhelming majority of emergency PAs obtain their expertise through on-the-job experience; only 10.68% of emergency medicine PAs pursue further specialty training before working in the ED.¹¹ However, for those who desire additional training, there are a growing number emergency medicine PA residency programs available. As of October 2015, there were 13 such programs certified by the Association of Postgraduate PA Programs.¹²

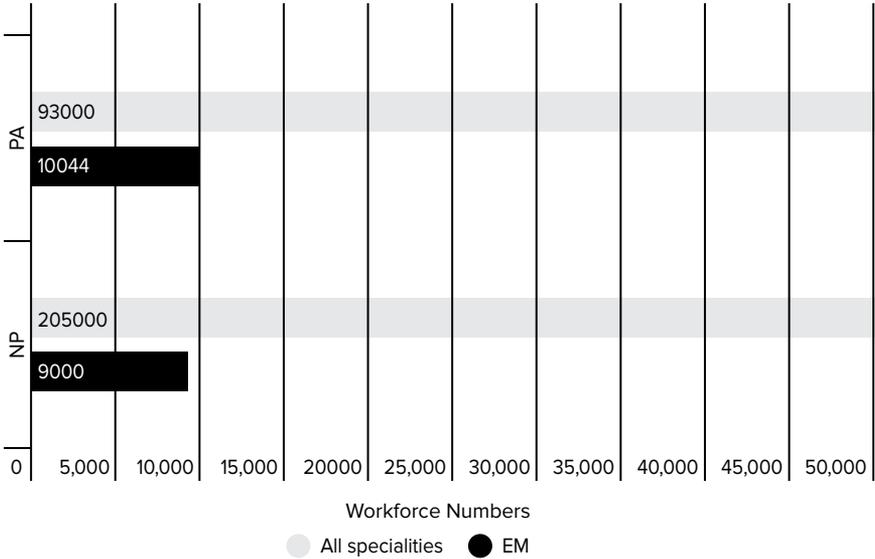
The NCCPA also offers a Certificate of Added Qualification (CAQ) in emergency medicine for those who would like to bolster their EM credentials. The CAQ requires 18 months of emergency medicine experience (3,000 hours), 150 hours of continuing education in the field, physician attestation of demonstrated procedural competencies, and completion of a certifying exam. It is important to note that the CAQ is not a training program, but rather a demonstration of proficiency.¹³

Advanced Practice Provider Specialty Organizations

As the demand for and number of NPs and PAs in the emergency department grow, so do their respective professional organizations in engaging in public discourse of health care policy and advocacy. Similar to medicine, there are both national general professional societies as well as sub-specialty societies.

FIGURE 1. Advanced Practice Clinicians in the ER

A look at the mid-level providers: Physician Assistants and Nurse Practitioners



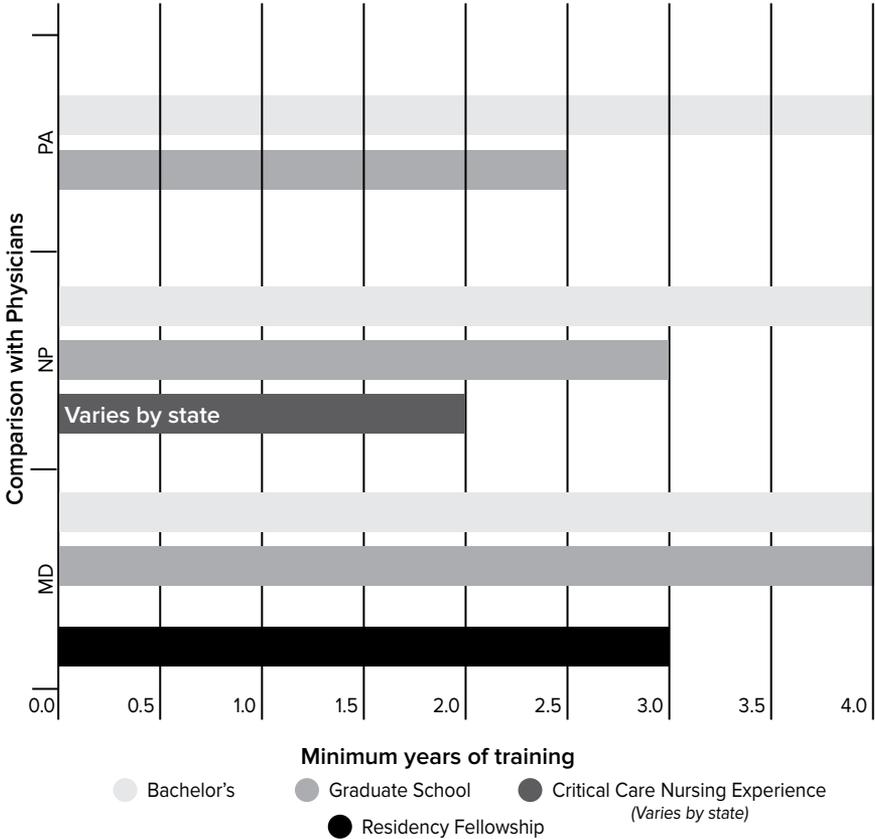
↑ 31-38%. Estimated job growth for NPs & PAs over 10 years from 2012-2022

PAs are most prominently represented by the AAPA and the Society of Emergency Medicine Physician Assistants (SEMPA) on a specialty level. The AAPA has more than 100,000 members across all PA specialties and is the overall advocacy organization for PAs, similar to the American Medical Association for physicians.¹⁴ SEMPA currently has 2,200 members among the estimated 9,000 practicing EM PAs.¹⁵ SEMPA collaborates with ACEP on many initiatives, from education to advocacy.

NPs are represented overall by the American Association Nurse Practitioners (AANP). The American Academy of Emergency Nurse Practitioners (AAENP) and the Emergency Nurse Association (ENA) represent NPs at the specialty level. The AAENP is a relatively new organization that began in 2014 to organize a cohort of EM nurse practitioner professionals.¹⁶ It currently offers an online database of training programs for APRNs and hosts an annual conference for its members.

The ENA is a comprehensive nursing organization that includes both NPs and RNs working in the ED. Founded in 1970, this body has more than 40,000+ members from 35 countries.¹⁷

FIGURE 2. Comparing the Training Between PAs, NPs, and Physicians



Scope of Practice

Like physicians, NPs and PAs are licensed separately by all 50 states. As such, each state gets to decide what duties or tasks NPs and PAs are allowed to perform under the terms of their license; this is called “scope of practice.” While the scope of practice of physicians is almost identical from state to state, that of NPs and PAs varies widely. Some states allow NPs to practice without any physician supervision, while others do not grant them independent prescribing authority.¹⁸ PAs must practice under a physician in every state and must have a formal agreement defining the physician-PA relationship. However, the specifics of this agreement,

who is allowed to set the terms, and the degree of supervision required (co-signing charts vs. seeing all their patients) depends on state law. Some states also limit how many PAs a physician can supervise.^{19, 20}

Scope of practice laws also affect the composition of that state's workforce. States with stringent practice requirements for NPs and PAs, for example, often attract fewer of these providers to work there. States that allow more independence, on the other hand, will have a greater number of NPs and PAs compared to the number of doctors in the state, offering greater opportunities for collaboration.²¹

ACEP clinical and practice management guidelines state that NPs and PAs support the efforts of physicians in the emergency department but do not replace the medical expertise and patient care provided by emergency physicians. Each hospital should have established guidelines for how NPs and PAs will be supervised and the types of patients they are permitted to see. ACEP further recommends that "advance practice registered nurses or physician assistants should not provide unsupervised emergency department care," even if state scope of practice laws allow independent practice.²²

Effects on Workforce

Numerous research studies have warned that the physician workforce is not increasing fast enough to meet the needs of our aging population. Depending on which study is cited, in the next few decades the United States will be about 20,000 physicians short of having adequate coverage to serve our citizens.²³

NPs and PAs have increasingly been seen as a potential solution given their shorter training pipeline. The number of NPs and PAs continues to rise, with the United States Department of Labor anticipating about a 35% increase in this workforce from 2012-2022.^{24,25} According to research by the Health Resources and Services Administration, "Since many of the NPs, PAs are recent graduates of their respective education programs and few are near retirement age, ... the supply of new practitioners is almost certain to continue to grow substantially relative to both population and the supply of physicians for the foreseeable future."²¹

Some physicians fear that the easy availability and low cost of NPs and PAs will lead to reduced salaries and fewer job opportunities for doctors. However, a 2012 article showed that physician salaries were unaffected by NP and PA scope of practice laws, including the laws that allowed NPs to practice independently of physicians.²⁶ Job opportunities for physicians are projected to grow by 20% from 2012-2022, according to the United States Department of Labor, twice as fast as the national average across all occupations.²³ There will likely be new opportunities to improve teamwork among diverse groups and to become better supervisors.

Truth in Advertising Campaign

The Truth in Advertising Campaign is an initiative by the American Medical Association (AMA) to require, in state law, that all health care providers properly disclose their professional credentials and level of training. The reasoning behind this campaign is to clarify provider credentials for patients and to promote patient safety by helping them choose the most appropriate health care professional. Many patients surveyed by the AMA were reportedly confused by the differences between various health care providers. According to the AMA, “confusion about who is and who is not qualified to provide specific patient care undermines the reliability of the health care system and can put patients at risk. People unqualified to perform health services can lead to medical errors and patient harm.”²⁷

To rectify this problem, the AMA has created model legislation that requires all health care providers to accurately state their level of training, education, and licensing when interacting with patients or in advertising materials. After a failed attempt to get this language passed by Congress, the AMA has been successful in getting such bills passed in several state legislatures. However, the resulting state laws are inconsistently enforced. The entire campaign has been met with concern by other health provider specialty organizations, who interpret this as an attempt to restrict their practice.^{28,29}

WHAT'S THE ASK?

1. Be knowledgeable about the state laws where your practice that govern NP/PA scope of practice.
2. Advocate for the importance of physicians as team leaders in emergency medicine.
3. Work with state leaders to ensure patients receive accurate information about providers' credentials through policies such as the AMA's truth in advertising campaign. ★



CONTROVERSIES IN BOARD CERTIFICATION

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Within the landscape of medical specialties, emergency medicine is a relative newcomer. Although emergency care existed long before, it wasn't until 1979 that the American Medical Association and the American Board of Medical Specialties recognized emergency medicine as the 23rd medical specialty. Since that time, the field of emergency medicine has continued to grow at an incredible pace. More than 150 emergency medicine residencies now exist,¹ with more than 26,000 board-certified emergency physicians practicing today.²

Support efforts to ensure board certification is standardized and maintained in a consistent fashion.

A Brief History of ABMS and ABEM

At the turn of the 20th century, interest in specialty training and certification was growing within the medical community. The beginnings of residencies and fellowships were materializing, and the first specialty examining boards were coming into existence. Between 1917 and 1932, specialty boards of ophthalmology, otolaryngology, obstetrics and gynecology, and dermatology were established. A pivotal moment came in the summer of 1933, when representatives from these specialty boards — along with delegates from the AMA, AAMC and the Federation of State Medical Boards — convened during an American Medical Association meeting.³ The group acknowledged that additional specialty examining boards would form in the near future and that an advisory council should oversee the process of specialty certification. This council, the Advisory Board for Medical Specialties, would be composed of members from each of the individual specialty boards and was later renamed the American Board of Medical Specialties.⁴

The journey toward a specialty board in emergency medicine began in earnest in the 1970s. The American College of Emergency Physicians and the University Association of Emergency Medicine (UAEM), a predecessor to the Society of Academic Emergency Medicine, recognized a need for the development of emergency medicine training programs, as well as a means of certification. In 1976, the American Board of Emergency Medicine was created, and in 1979 the ABMS recognized the specialty.

Residency Training, Practice Tracks, and Board Eligibility

ABMS currently requires residency training for board certification, but this was not always the case. With the creation of any new specialty board, it was common practice to allow non-residency-trained physicians to take the certifying examination if they had worked in the specialty for a sufficient amount of time. This pathway to certification, often referred to as a “practice track,” allowed physicians who trained before the era of a specialty’s residencies to obtain board certification. From 1979 to 1988, ABEM allowed both residency-trained and practice track physicians to obtain board certification in emergency medicine. In 1988, ABEM discontinued the practice track as a means of eligibility, in effect requiring all future diplomats to complete an accredited emergency medicine residency.⁵

Before any ABMS specialty board candidate is allowed to sit for the examination, that physician must meet the necessary criteria to be “board-eligible.” In order to be board-eligible for the current ABEM exam, a physician must:

1. Graduate from an approved medical school.
2. Complete an accredited residency in emergency medicine.
3. In most cases, hold a valid medical license.

On Jan. 1, 2015, ABEM added further stipulations to the term “board-eligible,” the most significant of these being new time criteria. ABEM will allow a physician to remain board-eligible for a maximum of 10 years following residency graduation as long as the candidate continues to meet certain conditions, including the completion of continuing medical education.

Maintenance of Certification Controversies⁶

Once ABEM certified, one must participate in the Maintenance of Certification (MOC) program, which promotes continuous professional development and learning. The program, initially implemented in 2004, underwent additional changes in 2011 in an effort to ensure high standard of care and meaningful standards. There are currently 4 components:

1. LLSA (Lifelong Learning and Self-Assessment) tests
2. APP (Assessment of Practice Performance)
3. ConCert (Continuous Certification Exam)
4. Maintenance of Professional Standing via state licensure.

In addition, one must maintain an average of 25 AMA PRA Category 1 credits per year or the equivalent in the first and second 5 years of initial ABEM certification.

ABMS proposes that by engaging in MOC the public is assured that board-certified physicians are meeting strict standards for professional development. However, there has been controversy regarding the cost of completion of MOC requirements and the time required for completion and whether participation actually improves physician performance and/or patient outcomes. ABMS argues that MOC activities are based on evidence based guidelines, and specialty best practices, with each member board reviewing the standards for MOC. Yet, those who disagree with current MOC requirements often point to the lack of evidence based studies that show MOC requirements actually improve patient care. Additionally, each MOC requirement has additional out-of-pocket costs to the physician. These include LLSA reading lists whose costs are variable between publishers, the cost of each LLSA test, \$100/registration, ConCert testing at \$1850/MOC period, all added to the cost of maintaining state medical licensure and CME credits required.

TABLE 1. Initial Cost of Certification⁷

| | ABEM | AOBEM | BCEM |
|-------------------------|-------------|--------------|-------------|
| Application Fees | \$420 | \$300 | \$750 |
| Written Exam | \$960 | \$1,100 | \$1,600 |
| Oral Exam | \$1,225 | \$800 | \$1,540 |

Lastly, there is an argument that written testing may not be the best way to test physician knowledge. Some propose that many study programs meant for passing certification exams are “teaching to the test.” In addition, clinical decisions are not always black and white, yet testing involves picking the best answer. Finally, there are arguments that in today’s digital age with a plethora of medical resources available via digital applications, written testing in a closed-book environment does not represent how physicians currently practice.

The Daniel Case

After the closure of the practice track toward ABEM certification, there remained a number of practicing emergency physicians who had not received board certification and who had not completed an emergency medicine residency. In 1990, Gregory Daniel, MD, and a collection of other plaintiffs sued ABEM to reopen the practice track to board certification. Many of these plaintiffs eventually established the Association of Disenfranchised Emergency Physicians, later renamed the Association of Emergency Physicians (AEP). The legal battle that ensued would last 15 years; in 2005, the 2nd Circuit Court of Appeals upheld a decision and dismissed all claims against ABEM.⁸

This legal decision legitimizes the long-held belief of many physicians that residency training is a necessary component in the education of a proficient physician. At present time, ABEM and all other specialty boards of ABMS continue to require residency training for certification eligibility. The controversy of board certification continues, however, with a number of physicians interested in searching out alternative means of board certification.

The Creation of ABPS and the Controversy

The American Board of Physician Specialties (ABPS) exists as a competing organization to the ABMS. ABPS was created in 2005 as the parent organization to several specialty boards, including the Board of Certification in Emergency Medicine (BCEM), a direct competitor to ABEM.⁹ The creation of these alternative boards has attempted to open a separate gateway for emergency physicians who do not meet the requirements for ABEM board certification.

Controversy has surrounded the creation of BCEM, which allows non-emergency medicine residency-trained physicians to obtain “board certification” in the specialty. Currently, the BCEM boasts 3 different requirement tracts that make a candidate eligible to sit for its exam. Two of these tracts offer eligibility after the candidate has completed a non-emergency medicine residency program and has worked in an emergency medicine setting for a required amount of time.

Collections of emergency medicine organizations, including EMRA, ACEP, and AAEM, have opposed the ABPS alternative board for a host of reasons. The central issue in the debate is the necessity of emergency medicine residency training for board eligibility. EMRA has taken a firm stance, adamantly asserting that residency training in the specialty is a critical component in the training of a new emergency physician.

Board Certification and Advertising

Regardless of which certifying board a physician chooses, it ultimately is up to individual state medical boards to determine whether a physician can be publicly advertised as “board-certified.” Most states’ medical boards strictly regulate the use of this term, having decided that declaring board certification may impact the decisions patients make regarding their medical care. Until recently, the use of the term meant the physician was certified by the ABMS, or possibly the AOA. Over the past few years, ABPS and BCEM have asked for their processes to be considered equivalent to ABEM or AOBEM certification, which has resulted in several rulings by state medical boards and appeals courts regarding the status of board certification.

While state medical boards have been the stage for most certification battles, some of these issues have spilled over into the courts. The New York State Department of Health determined that BCEM certification was not equivalent to certification by ABMS or AOA; thus, BCEM physicians could not advertise themselves as board-

certified. This resulted in a legal suit between the ABPS and the state's department of health, originally filed in 2006. In 2009, a district court ruled in New York's favor, citing the lack of specialty-specific training as an indication of the certifying bodies' inequity. This decision was appealed; in 2010, the 2nd Circuit affirmed the Department of Health's decision.¹⁰ Other states such as Texas have had temporary approval of the use of the term board certified for BCEM diplomates, but then reconsidered and removed that ability.

Osteopathic Recognition and Training

The American Osteopathic Board of Emergency Physicians (AOBEM) offers eligibility for board certification for doctors of osteopathy who have completed an American Osteopathic Association-approved residency in emergency medicine and who have either practiced for 1 year or have completed a year of subspecialty training. As of December 2011, a total of 2,152 emergency physicians were board-certified by AOBEM.¹² To meet this requirement, graduates of an American Osteopathic Association (AOA) emergency medicine program must pass an oral and a clinical examination.

In 2012, the ACGME took controversial steps to limit access to its fellowships by allowing eligibility only for graduates of ACGME residencies. This change prevents AOA residency graduates from participating in ACGME-accredited fellowships. This action was the start of the AOA and ACGME merger, which was initiated in July 2014 when the AOA House of Delegates voted to approve a single accreditation.¹³ The merged path to single-residency accreditation is set to be complete in 2020. This results in the ability for both DOs and MDs to complete ACGME residencies and fellowships.

In January 2015, the AOA and the American Association of Colleges of Osteopathic Medicine (AACOM) became member organizations of the ACGME. Most programs are actively working on getting pre-certified as ACGME. At this time board certification and recertification will remain the same: DOs will take AOBEM and MDs will take ABEM. However, DOs will be able to take both certifications. MDs who complete osteopathic focused training will be eligible to take the osteopathic boards as well. It seems at this time that AOBEM and ABEM will remain different but equal board certifications.¹⁴

Conclusion

Emergency medicine training and certification have developed rapidly since the recognition of the field in 1979. Today, it is a widely accepted and influential specialty within the house of medicine. The term "board-certified" in emergency medicine has evolved over the past 30 years and now faces new challenges, as ABPS and BCEM attempt to provide alternative paths to certification. It is imperative that all emergency physicians continue to advocate for the importance of board certified residency trained providers caring for patients in the emergency department.

WHAT'S THE ASK?

1. Board certification must be standardized and maintained in a consistent fashion. Providers should monitor state level attempts to include new certification attempts that do not meet the standards of emergency medicine residency trained physicians.
2. Physicians should monitor MOC requirements and the relevant controversies and advocate for appropriate modifications that reflect evidence based medicine. ★



MEDICAL LIABILITY REFORM

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The mere mention of medical malpractice fires up many physicians' sympathetic nervous systems — and understandably so, as almost all physicians will face a malpractice claim at some point in their career.¹

Involvement in any lawsuit is emotionally exhausting. Furthermore, physicians understand from clinical experience that most errors are not the fault of individual acts of negligence. Rather, errors arise from the lack of adequate systems and processes in place to prevent human errors from causing harm.²

Advocate for sensible improvements in your malpractice system, and support liability reforms that improve quality of care while controlling costs.

Under the current system, physicians finance malpractice liability coverage that insures the billions of dollars spent on health care in America. However, unlike other industries where liability insurance is just a “cost of doing business,” physicians are unable to re-capture liability costs as revenue.³ Physicians have a relatively limited ability to pass along this cost to the consumer due to third-party price control (ie, private health insurance companies and publically funded programs such as Medicare).⁴ Thus, in addition to the emotional costs of medical malpractice, economically, physician practices are particularly sensitive to rising medical malpractice insurance premiums.

The response to rising jury verdicts and premiums in the 1970s marks the beginning of contemporary medical advocacy. Physicians — alarmed by the lack of malpractice insurance affordability and the downstream effects on patients' ability access to timely and appropriate medical care — joined together and lobbied legislatures for help. The term “tort reform” in this context thus refers to the legislative changes to state common law governing medical liability in response to these advocacy efforts.

Medical Malpractice Basics

State Common Law

Until the past 40 years, medical malpractice law was state law established by judicial decisions, rather than state or federal legislation. State judicial decisions are binding on subsequent cases only in that state (unless overturned by a higher state court). Therefore, medical malpractice law varies from state to state.

Elements of a Claim

There are four basic elements of a malpractice claim:

1. Established doctor-patient relationship
2. Breach of the standard of care
3. Causation
4. Harm

In a medical malpractice claim, the plaintiff (patient) alleges that the defendant (physician or hospital) was negligent in providing medical care and, as a direct result, the patient suffered harm. The law that governs what constitutes failure to meet the required standard of care varies from state to state.

Economic, Noneconomic, and Punitive Damages

In addition to proving negligence, the plaintiff's attorney also has to prove the amount of harm sustained by the plaintiff patient. Damages are compensation for economic and noneconomic losses. Economic damages include quantifiable costs such as cost of medical care and lost wages. Noneconomic damages include intangible losses such as pain and suffering, physical disfigurement, and loss of consortium (damages claimed by family member or spouse re: loss of benefits from a relationship with the plaintiff). In rare cases, punitive or exemplary damages may be sought for egregious behavior or intent to harm, not just negligence.

Specific Statutory Medical Malpractice Reforms ("Tort Reforms")

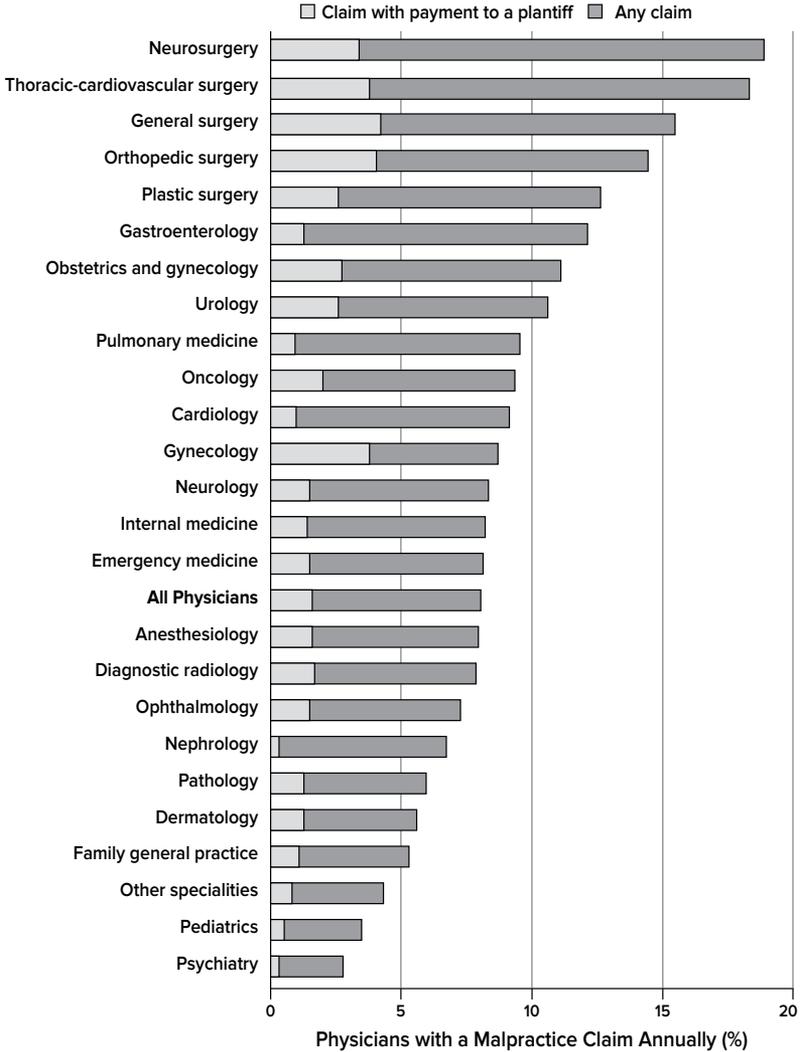
State-enacted medical liability reforms can be categorized into four general groups: caps on damages, decreased reliance on lay juries, reduction in time period allowed to commence a lawsuit, and apportionment of liability.⁵ While certain reforms have been proven to control the growth of malpractice premiums and indemnity payments, a recent study failed to demonstrate subsequent reductions in health care utilization by emergency physicians (a proxy for defensive medicine).⁶

Caps on Damages

About 35 states have some sort of cap on the amount of noneconomic damages a plaintiff may recover.⁷ The amount and what types of noneconomic losses that are capped vary considerably from state to state. Nearly all studies have found that caps on noneconomic damages reduce the size of indemnity payments.⁸ More important, the majority of studies have found that caps are effective at controlling malpractice insurance premiums.⁸ Some research has shown the size of the cap

matters. For example, a cap of \$250,000 reduced insurance premiums by 20% as compared to no cap, but a less restrictive cap of \$500,000 did not show a significant reduction in premiums.⁹ One possible explanation for this effectiveness is the actuarial certainty a cap on intangible potential losses can provide.

FIGURE 1. Proportion of Physicians Facing a Malpractice Claim Annually, According to Specialty



From "Malpractice Risk According to Physician Specialty," The New England Journal of Medicine, Vol. 365 No. 7. Copyright 2011, Massachusetts Medical Society. Reprinted with permission from Massachusetts Medical Society.

Decreased Reliance on Lay Juries

Statutory reforms in this category have tightened requirements for qualifications of expert witnesses and implemented pre-trial certifications, screenings, and use of alternative dispute resolution forums. In a study analyzing the available data for the most common types of medical malpractice reform, stricter rules regarding expert witnesses was the reform most consistently associated with reducing the number of lawsuits and average indemnity payments.⁵ Certification of merit requirements, pretrial screening panels, and alternative dispute resolution programs can carry significant administrative costs and have not been shown to have an effect on indemnity costs, malpractice premiums, or frequency of claims.⁸ However, little research has been done evaluating cost effectiveness, comparing pre-trial screening programs and/or alternative dispute resolution forums with traditional litigation and indemnity.

Qualifications of Expert Witnesses

Under traditional common law evidentiary standards, an expert witness must have the education, training, or experience to testify about a particular issue in a lawsuit. Because this standard is so broad, a medical expert witness in a case does not necessarily need to have actual clinical experience in the same specialty as the defendant physician, nor is it required that their clinical experience is current or in a similar practice setting. Because of these discrepancies, some states have passed legislation specifying stricter qualifications for expert witnesses in a medical malpractice case. For example, in West Virginia, to qualify as an expert witness, a physician must not only have the experience and/or training in diagnosing or treating injuries or conditions similar to those of the plaintiff's, but also, at the time of the medical injury, the physician must have spent at least 60% of his or her professional time in active clinical practice.¹³

Statute of Limitations

Statutes of limitations are laws that regulate how long a plaintiff has before s/he is barred from filing a lawsuit because too much time has elapsed. All states have a statute of limitations — in general, 2-3 years.¹¹ In cases where the injury is not immediately apparent, the time period may not start until after the discovery of an injury or when an injury should have been reasonably discovered. For cases involving injury to minors, historically the statute of limitations does not start until a minor reaches the age of majority, but some states have modified the age (generally, 4-18 years old) or imputed knowledge to guardian. Studies have found a modest constraint on the growth of malpractice insurance premiums but no effect on indemnity payments in states where the time period provided is decreased.

Apportionment of Liability

Statutory reforms adjusting apportionment of liability have changed the common law doctrine of joint and several liability and the evidentiary collateral source rule. Under joint and several liability, a plaintiff harmed by multiple defendants can recover all the damages from one of the defendants, a few of the defendants (“several” liability), or from all the defendants (“joint” liability). In more than 40 states, legislation has passed adopting a system of proportionate liability where each co-defendant would only be liable for their portion of the harm.⁴

A similar common law doctrine, comparative negligence, allows the jury to reduce the damages by the proportion of harm attributable to patient’s own actions. About two-thirds of the states in the U.S. have changed traditional evidentiary rules and allow juries to hear evidence about collateral or other sources of compensation, such as worker’s compensation or coverage by the patient’s own health insurance.⁴ Policy studies attempting to evaluate the effect of proportionate liability and the collateral source rule on indemnity costs and insurance premiums have not found that these reform to have any statistically noticeable effect on those liability measures.⁸

Example State Approaches

In 1975, California enacted the Medical Injury Compensation Reform Act (MIRCA).¹² This statute was the prototype of medical liability reform, capping noneconomic damages at \$250,000, adding a collateral source rule, modifying statute of limitations, and mandating initial arbitration of claims. Similarly in 2003, Texas passed comprehensive legislation that required certification of merit to be filed with any medical malpractice case, capped non-economic damages at \$250,000, and modified statute of limitations.¹⁹ Michigan’s approach was slightly different.¹⁴ In 1986, Michigan allowed courts to assess attorney fees and costs for complaints that were found to be frivolous. Then, in 1993, Michigan enacted a \$280,000 cap on non-economic damages except for cases that involved serious brain, spinal cord, or reproductive organ injury, in which the cap on non-economic damages is \$500,000. Two years later, Michigan reformed the rule of joint and several liability and collateral source rule.

Federal Proposals

Although proposed in tandem with state reforms since the 1970s, national tort reform legislation has been largely unsuccessful. For example, in 2005, under Pres. George W. Bush, comprehensive federal tort reform legislation including a national cap on non-economic damages failed to pass. In 1993, Pres. Bill Clinton’s medical liability reform proposals — which included enterprise liability, limits on noneconomic damages, and increased use of alternative dispute resolution forums — were dropped due to opposition from physicians, managed care organizations, and trial attorneys. Enterprise liability refers to a system in which, rather than individual physicians, provider organizations charged with financing and delivering

health care services (ie, hospitals and hospital systems, health maintenance organizations, or group medical practices) would bear responsibility for medical malpractice.¹⁵ One of the main physician concerns about enterprise liability was loss of clinical autonomy.

In addition, recent federal proposals for “safe harbor” liability protection have failed to gain traction likely due to general concerns about clinical autonomy and difficulty in establishing consensus guidelines applicable everywhere in the US. For example, in 2014, despite ACEP’s support, H.R. 4106, “Saving Lives, Saving Costs Act” failed to pass. This legislation would have provided increased liability protection in the form of a legal “safe harbor” for physicians who can demonstrate that they followed clinical practice guidelines or best practices developed by a multidisciplinary panel of experts. These protections would include ability to remove cases from local state courts to federal court, mandatory review by an independent medical panel to determine whether the national standard of care was met, and if so, admissibility of the panel’s findings in trial with presumption that the panel findings are correct.

Currently, ACEP supports federal malpractice legislation addressing the impact of the 1986 Emergency Medical Treatment and Labor Act on already burdened safety net hospitals.¹⁶

Emerging Solutions

In the past 40 years, liability reform has mostly been aimed at reducing malpractice insurance costs because of the significant economic impact premiums have on physicians’ practices and consequently, patients’ access to health care. But the focus is turning.⁸ More and more, the emphasis is on health care reform overall: improving quality of care while controlling costs. For physicians, getting sued for malpractice has a huge emotional cost that traditional reforms have yet to address. Laws that allow expressions of regret and apologies for bad outcomes acknowledge the human aspect of caring for patients. In addition, the emerging culture focused on shared decision-making also should be recognized legally. When physicians engage in shared decision-making with their patients, they educate their patients and allow their patients to make a decision regarding their health based on their values, priorities, and risk tolerance. Reforms should focus on judicial and statutory recognition of shared decision-making as a method of cost containment and quality, patient-centered care.

Understanding the Limits

While the data has shown that caps on damages and other solutions can improve the economic climate for physicians, the data on the impact on the quality and cost of care has not been so clear. A controversial, but robust, study done in 2014 examined 3 states that had completed various malpractice reform efforts and their

impact on resource utilization, admissions, and costs in emergency care. In none of the 3 states, including Texas after its recent reform, was there an improvement in cost of care or reduction in ordering.¹⁷ Thus it is important that when we physicians advocate for reform, we recognize the limits of what the data shows the impact can be. The gains to physicians are real, the opportunity for improved access to underserved communities may be present as well, but the impact on defensive medicine has not yet materialized in the literature.

TABLE 1. Medical Malpractice Basics

| | |
|--|--|
| <p>State tort law</p> | <p>Medical malpractice is a form of professional negligence. Negligence is a legal term of art. The rules governing what constitutes negligence fall under the general body of law dealing with injuries to people or property known as tort law. Tort law in the US is traditionally under the authority of the states, not the federal government.</p> |
| <p>Origins in common law</p> | <p>Until the last 40 years, medical malpractice law was largely state common law, or legal rules that are established by state judicial decisions, rather than state or federal legislation. Common law works through “legal precedent”, meaning that the legal principles from each case is binding on the subsequent case (unless overturned by a higher state court). However, state legal precedent is only binding within that state. As a result, while the basics are the same, medical malpractice law varies from state to state.</p> |
| <p>Elements of a claim—1) established doctor-patient relationship, 2) substandard care, 3) causation, 4) harm</p> | <p>In a medical malpractice claim, the plaintiff (patient) alleges that the defendant (physician or hospital) was negligent in providing medical care and as a direct result the patient suffered harm. The law that governs what constitutes failure to meet the required standard of care varies from state to state.</p> |
| <p>Economic, Noneconomic, and Punitive Damages</p> | <p>At the end of a trial, the plaintiff’s attorney also has to prove the amount of harm sustained by the plaintiff patient. Damages are compensation for economic and noneconomic losses. Economic damages includes quantifiable costs such as cost of medical care and lost wages. Noneconomic damages include intangible losses such as pain and suffering, physical disfigurement, and loss of consortium (damages claimed by family member or spouse re loss of benefits from a relationship with the plaintiff) . Punitive damages are not noneconomic damages. In rare cases, punitive or exemplary damages may be sought for egregious behavior or intent to harm, not just negligence.</p> |

WHAT'S THE ASK?

1. Advocate on the state level for improvements in your malpractice system with sensible solutions such as caps on noneconomic damages, stricter expert witness qualifications, and shortening the time period allowed for commencement of a lawsuit that have been shown to reduce malpractice insurance premiums.
2. Understand the economics of malpractice and impact on physician practices of rising costs that cannot be passed onto patients, but limits of reform that may not impact the cost of the overall delivery of care in the system.
3. Advocate for malpractice liability reforms that align with overall goals of improving quality of care while controlling health care costs. ★



THE CORPORATE PRACTICE OF MEDICINE DOCTRINE

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The Corporate Practice of Medicine Doctrine (CPOM) refers to the public policy limiting the practice of medicine to licensed physicians by specifically prohibiting businesses or corporations from practicing medicine or employing physicians to practice medicine. This doctrine also prohibits fee-splitting arrangements whereby a non-physician is entitled to a percentage of the fees charged by a physician for medical services. Rather than being a federal doctrine, the CPOM is state-based, meaning it varies in its scope and applicability from state to state.¹ The doctrine can be based in state legislation, state regulations, opinions of state attorneys general, or state case law (court decisions).² A recent review of the applicability of the CPOM identified 33 states that have some form of the CPOM in effect.³

Physicians should advocate for provider autonomy while balancing it with cost and quality improvement.

History

The CPOM has its roots in the late 19th and early 20th centuries. With rapid industrialization of the U.S. economy, more Americans were working for large companies, some of which hired physicians to care for their workers. At the same time, other companies or entrepreneurs hired physicians as employees to staff medical clinics, advertising their medical services, collecting fees and paying the physicians a salary or percentage of the business's income. In both of these situations, the concern arose that the profit motive of the employer may interfere with the medical judgment of the employed physician, compromising patient care.

In advocating for the CPOM, the American Medical Association argued that due to their medical training and ethical obligations, physicians were the parties most suited to determine the best course of diagnosis and treatment for their patients. While appropriate patient care was a main justification for the AMA's advocacy of the CPOM, another important consideration was control of the practice of medicine as a professional body and preventing the "unfair competition with the profession at large" from these corporate forms of practice.⁴

Over time, the CPOM has been key in shaping the U.S. health care system. The CPOM's prohibition on fee-splitting explains the separation of fees charged by a hospital from fees charged by a physician. The same distinction is responsible for Medicare Part A, which covers hospitalizations, and Medicare Part B, which covers doctors' visits.⁵

The CPOM in Practice

The CPOM prohibits the employment of physicians by non-physicians, as well as fee-splitting arrangements between physicians and non-physician entities or individuals. The CPOM would then seem to posit the physician firmly in a private practitioner model. Thus, the physician would be protected from the risks of lost autonomy (and lost profits) to corporate management. Conversely, the physician would be unable to avail herself of the benefits of corporate structure, such as tax advantages, limited personal liability in legal cases, and economies of scale. However, nearly from the beginning of the CPOM, exceptions, both state and federal, have been created to allow the coming together of physicians in a variety of practice forms.

Physician-Controlled Group Practices. State exceptions to the CPOM provide for the formation of organizations such as the professional corporation, the limited liability company and the professional partnership. These organizational structures allow physicians to come together in a medical practice, and indeed, employ other physicians, provided they meet certain requirements designed to safeguard physician autonomy and control. The primary requirement to form such a group is that each of the partners or shareholders of the group be a licensed physician, thus maintaining physician control of patient care and physician profits.

Hospitals and Academic Centers. Many states also grant exceptions allowing hospitals to directly employ physicians, on the theory that hospitals are separately licensed entities with overlapping obligations for patient care.⁶ Further state-by-state exceptions exist for the direct employment of physicians by academic medical centers. Where the hospital- or clinic-based direct employment of physicians is permitted, physician autonomy is generally protected by statutes providing that the hospitals or clinics do not interfere with or control the judgments of physicians.

Independent Contractors. In another exception to the CPOM in many states, non-physician entities may engage the services of a physician as an independent contractor, the definition of which is determined by the Internal Revenue Service.⁷ In this context, a physician's autonomy is protected by the fact that for a physician to qualify as an independent contractor, "the payer has the right to control or direct only the result of the work and not what will be done and how it will be done."⁸ Thus the physician as an independent contractor decides how to treat a patient.

Health Maintenance Organizations. Health Maintenance Organizations (“HMOs”) provide yet another exception to the CPOM, this time under federal law.⁹ Under this act, an HMO collects a per-patient-per-month fee, which is used to cover all health care expenditures for these patients, as long as the care is provided within the HMO network of approved or employed providers. Exceptions exist for emergency services, which must be covered regardless of being in or out of network.

ACOs and the Corporate Practice of Medicine

With the Patient Protection and Affordable Care Act came a new health care service entity, the accountable care organization (“ACO”). ACOs are defined as “groups of doctors, hospitals, and other health care providers who come together voluntarily to give coordinated, high-quality care to their Medicare patients.”¹⁰ ACOs benefit from controlling costs by sharing in the difference between projected costs and actual costs, as well as by receiving increased payments for meeting quality of care metrics. Although contemplated by the Affordable Care Act, an ACO is a legal entity existing under state, not federal, law, and therefore state legal doctrines such as the CPOM apply and must be considered when structuring ACOs.¹¹

Like the CPOM, the ACO model is intended to avoid both incentivizing excessive care and encouraging inadequate care. In a fee-for-service model, each visit, study, and treatment can increase a physician or organization’s profits, which may encourage excessive care. In a capitation model, in which a group or organization receives a fixed payment per patient per time period, providers may be motivated to undertreat a patient in order to decrease expenses.¹² By providing a hybrid model of fee-for-service for certain healthcare services and capitation for other health care services, as well as offering financial incentives for overall quality of care, ACOs attempt to bridge these two models and better balance costs and outcomes.

Since 2011, there has been a rapid increase in the number of ACOs as well as the number of people covered by ACOs. From 2011 to January of 2015, the number of ACOs increased from 77 to 744, an increase of 966%. There are currently 23.5 million people covered by ACOs, with projections of 70 million covered by 2020, and 150 million covered by 2025.¹³

The CPOM and Emergency Medicine

The CPOM, conceived in an era in which the practice of emergency medicine was at best nascent, has interesting applications to emergency medicine. From the beginning, emergency medicine has been distinct from much of the practice of medicine in that, unlike most other specialists and primary care providers, an emergency medicine physician does not have a panel of patients, instead serving all comers to her emergency department. This open practice, combined with the 24-hours-a-day, 7-days-a-week nature of emergency medicine, makes the solo practice of emergency medicine impossible.

Private Practice Groups. The spectrum of private practice ranges from a handful of physicians covering a single emergency department to group practices including dozens of physicians covering multiple hospitals. These private group practices are typically organized as partnerships or limited liability companies (or similar structures) in which the partners or shareholders are all emergency physicians. Physicians in private practice groups often share increased administrative burdens or hire outside services to take care of administrative functions, such as billing and collections. While a private group practice may have salaried physician employees who are not partners or shareholders, the expectation is generally that physician employees will eventually become partners or shareholders. The extent to and the time frame in which these employees become partners or shareholders is an important consideration for any physician joining such a practice.

Physician Practice Management Companies. In PPMs, a corporate entity contracts with multiple hospitals to provide physicians to staff their emergency departments. Generally, these emergency medicine physicians are employees or private contractors, but not owners of the PPM. The PPM, in turn, handles billing, scheduling, record-keeping, liability insurance, and other important (but often cumbersome) administrative tasks. Unlike a private practice group, while physician input may be sought by a PPM, in the end, a PPM's policies are determined by its corporate management. Likewise, whether publicly or privately owned, a PPM's profits accrue to its shareholders, with emergency physicians entitled only to their agreed upon contractual compensation, regardless of actual profitability. For these reasons, among others, PPMs have been a controversial aspect of emergency medicine for years.¹⁴ As the PPM industry is estimated to have contracts with more than 50% of the emergency departments in the U.S., the role of PPMs in the practice of emergency medicine, and the appropriate protections for physician autonomy in PPMs, are important questions for the emergency medicine profession as a whole and physicians considering working in a PPM in particular.

Hospital or Academic Practices. Some emergency physicians are employees of a hospital or academic medical center. As employees, these physicians enjoy guaranteed salaries and benefits, and also avoid some of the administrative burdens of private practice. Many states seek to protect the autonomy of employed physicians through statutory measures requiring physician freedom from interference in deciding patient care.

The Current Landscape of Medical Practice

In a recent national survey of practicing physicians, the percentage of physician respondents in independent practices (owned by the physicians practicing in the group) was 35% in 2014, down from 49% in 2012 and 62% in 2008. Conversely, approximately 53% of physicians considered themselves to be employees of a hospital or medical group, up from 44% in 2012 and 38% in 2008.¹⁵ If these numbers are broadly applicable, in the past few years, for the first time in the United States, more physicians consider themselves employees rather than

emergency physician, but also exposes the physician to increased legal liability. Whether an emergency physician is adequately compensated for these increased supervisory demands and legal liabilities is yet another aspect of the discussion of physician autonomy.

Open-Book vs. Closed-Book Billing. In an “open-book” practice, the emergency physician can review what a patient is being billed for the emergency services provided. While simple in concept, open-book practice is far from universal. When a practice is “closed book,” the physician does not know what a patient is being billed for emergency care. Without knowing what her patients are being billed, it is difficult for a physician not only to provide a check on overbilling, with the attendant ramifications for Medicare and Medicaid fraud, but also to know if she is being appropriately compensated for her services. While often associated with PPMs, closed-book billing can also be found in private group practices and employed-physician situations, and should be considered when evaluating a potential position.

Non-Compete Clauses. With increasing consolidation in groups, hospitals, and health systems, overly restrictive non-compete clauses can significantly impact a physician’s ability to find a new position if current employment comes to an end. Physicians should be careful when considering any contract with a non-compete clause and consider consulting legal counsel. The inability of a physician to relocate their practice can have a significant impact on their autonomy to practice where and when they choose.

Resources for Emergency Physicians

The landscape of medical practice is constantly in motion, requiring ongoing attention by physicians to the issues at hand and their contract. EMRA offers multiple resources on contracts that introduce the concepts and some of the concerns regarding non-compete clauses, partnership tracks, liability concerns, and much more.^{16,17} Legal counsel should be considered when signing a contract for most physicians who are not comfortable reviewing a contract for the potential pitfalls for their practice and lifestyle.

WHAT’S THE ASK?

1. Educate yourself about the evolving types of employment and current concepts such as unionization, 26 ACO leadership, hospital employment, private practice, and PPMs to protect your practice and preserve your autonomy.
2. Physicians should advocate for provider autonomy while balancing it with cost and quality improvement.
3. Physician contracting can have many potential hazards; thus it is incumbent upon the provider to use resources and consult legal counsel to ensure that their medical autonomy is preserved. ★

TECHNOLOGY IN PATIENT CARE

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We are at critical capacity, with increasing emergency department volumes and wait times.¹ In an effort to improve efficiency and safety, technology has started to play an increasingly important role in day-to-day life. With directive legislation and increasing innovations, the practice of emergency medicine is drastically different than it was even 5 years ago. Among the motivations, some include better patient record-keeping, increased access to data and medical information, computerized safety mechanisms, and increased billing efficiency. It is essential to be familiar with both the benefits and hazards of rapidly increasing technology to be a functional emergency physician in the years to come.

Physicians should advocate for patient privacy, data security, and reliable data as technology is introduced and new modalities are offered to both provider and patient.

EHR Mandates and its Effects

In 2004, legislation was initiated to advance electronic health records (EHRs) in the United States. As part of the Health Information Technology for Economic and Clinical Health Act (HITECH), billions of dollars were funneled in support of increased EHRs.² Incentive programs were created first, closely followed by penalties. Now, over 80% of all health care facilities and over 90% of all hospital facilities use EHRs. Physician response is mixed. Many feel their time with patients vs. in front of a computer is drastically reduced. Though significant, the adjustment likely has long-term benefits in terms of better record-keeping and increased access to patient data.³ For example, providers can use EHRs to get an overview on frequent ED visitors and save time and costs with maintaining a unified plan.⁴

Since 2011, a series of government mandates called meaningful use (MU) required health care facilities to collect and transmit health care data among different health care facilities and different EHRs. These mandates have affected home-grown EHRs, which have been unable to keep up with technology mandates; almost all hospitals are rapidly turning to enterprise solutions. Some feel this has led to a monopoly of health care data by a few enterprise EHR solutions, leading to a decreased incentive on those EHR companies to improve the usability of their

Thus far, the applicability seems to be vast. Fortunately, these apps appear to be highly accurate and of great use to physicians.⁹ The potential benefits begin in the prehospital setting to aid providers in both disaster scene management and assessment of chemical and nuclear disasters.^{10,11} In addition to physician use, the Emergency Nurses Association has supported mobile app usage in the emergency setting, citing the safety of drug administration given the rapidly increasing use of new drugs.¹² Beyond helping the clinicians during the visit, it is possible that doctors may end up prescribing applications to their patients, as some success has been shown in improving patient follow-up after emergency department visits.¹³ The potential of mobile medical applications is just beginning to be realized.

However, the use of apps does not come without hazards. Many applications are available to providers, and it is unclear which are legitimate.¹⁴ Many apps are willing to reference the original literature to legitimize the tool they are providing, but some do not offer this assurance. In addition to those dangers, public sentiment was increasingly negative when mobile medical apps were used in direct contact with the patient to aid medical decision-making, as opposed to traditional diagnostics.¹⁵ This sentiment is backed up by the limited ability of mobile medical apps to aid in accuracy of routine procedures like central lines.¹⁶ Finally, we must be cautious when entering a patient's personal health information into one's cellphone, as this may start to infringe on patients' HIPAA rights.

Unbiased sources attempt to recommend certain apps that are trusted and widely used.¹⁷ While these assessments are a good guide, each provider is finding apps that best serves his/her practice style and are deemed to be reliable. The dangers and negative perceptions must be taken into account moving forward. Providers are encouraged to proceed with cautious optimism at the opportunity to enhance patient care.

Future Potential

Technology in the ED is spreading quickly and certainly changing practice at almost daily intervals. The horizon is unclear and includes the potential for integration of national health records, an idea supported by the American College of Emergency Physicians.¹⁸ Of note, statewide information sharing between all EDs has been shown to save money in studied states.¹⁹ Still, with any change that moves this quickly, monitoring is necessary to prevent disastrous outcomes. The use of this technology needs to be monitored to ensure both accuracy of diagnosis and integrity of the health care interactions.

WHAT'S THE ASK?

1. Physicians should advocate for Electronic Health Record improvements that not only delivery quality, but also ensure an adequate user interface.
2. Technology that aids — instead of encumbers — the physician with resources and streamlining data has the potential to significantly improve the practice of medicine, but requires physician guidance.
3. Physicians should advocate for patient privacy, data security, and reliable data as technology is introduced and new modalities are offered to both provider and patient. ★



TELEMEDICINE

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Telemedicine refers to the practice of treating patients from afar through a virtually supplemented interaction. This can take many shapes and forms and is different in each specialty.¹ New technology and devices have been developed to support the expansion of telemedicine. Many believe that telemedicine is evolving because of advancements in data speed, making it a feasible replacement for face-to-face communication. It is also postulated that telemedicine was born out of the disparate medical professional resources in the rural parts of the world.

A specific standard for transmission and storage of PHI should be developed to encourage the adoption of telemedicine.

There are a multitude of current uses of telemedicine. Studies demonstrate the usefulness of this technology without significant risks.² As practitioners enter the field of telemedicine they find it is readily adopted by patients because of the extreme convenience it provides. Some of the earliest examples of telemedicine were practiced in the emergency department. For example, sending EKGs to cardiologists to get a remote consultation is considered telemedicine. Telestroke was created in order to consult with neurologists for patients who presented to EDs with stroke-like complaints. Teletrauma was created in order to help emergency physicians determine whether to transfer patients and by what mechanism. As the technology evolves, the potential use for telemedicine continues to expand.

Technology and Security

The use of telemedicine is commonly categorized into 3 types of encounters: live video consultations, remote monitoring, and capturing/storage of patient data for future use.³ All three interactions create significant amounts of patient-generated data that is classified as patient health information (PHI). Under the federal Health Insurance Portability and Accountability Act (HIPAA), any transmission of this data must be secured to maintain patient confidentiality. The expansion of telemedicine creates additional challenges to ensure that data being transmitted from patients to health care providers is not breached. Within a hospital system

many steps are taken to protect the IT infrastructure from outside breaches. But when information is transmitted from a patient's home Wi-Fi or cellular data network these security provisions are not in place. This raises many questions: If data is breached, who is responsible? For remote monitoring of patients, who is the custodian of the data?⁴

Technology to support telemedicine has rapidly evolved. From increased bandwidth enabling support of high definition video consultations to increased use of mobile health remote monitors and “wearable technology,” the generation of intended/unintended health data is ubiquitous. How these legal liabilities are determined, in the courts and legislative processes, will shape the way in which the technology is adopted and integrated into the current health care landscape.

Reimbursements and Regulations

Reimbursement patterns are evolving rapidly. For accountable care organizations (ACOs), telemedicine is often looped into the coverage plan because of the improved quality of care and costs savings it provides.^{5,6} Private insurance companies are sometimes quicker to adopt more liberal reimbursement practices. Early studies have shown that telemedicine can reduce costs and increase compliance for chronic conditions, which reduces complications and ultimately insurance companies' costs in the long term.^{2,7} For Medicaid and Medicare, there are many limitations on reimbursements for telemedicine at this time.⁸ For example, reimbursements for telestroke consultations are currently limited to “rural health professional shortage areas” or in a “county not classified as a metropolitan statistical area.”⁹ Medicare currently only reimburses for real-time video-based consultations. In certain states, the patient may also need to be at a health care facility defined as a facility with skilled nursing care to receive reimbursement for physician consultation. In a few states with less access to health care professionals, Medicaid will actually reimburse telemedicine visits at rates equal to face-to-face visits.

It will be important for the laws and regulatory guidelines to adapt to this evolving technology landscape to ensure that improvements in quality and technology are supported by the rules and appropriately compensated. The regulatory environment of telemedicine is variable by state.¹⁰ Given that this is largely new technology, legislation regulating this practice did not exist until very recently. Legislation in the state of Texas requires that a face-to-face encounter be conducted prior to allowing a telemedicine consult to be conducted. This effectively limits the telemedicine consultations to previously established patient-physician relationships.¹¹ Conversely, recently legislation in the state of Washington deemed the “Telehealth Parity Law” mandates equal reimbursement for services that are delivered via telemedicine instead of in-person.¹² Licensing across state lines is another barrier; many states require that a physician be licensed to practice medicine in the state where the telemedicine encounter will be performed. Creating mechanisms to support portability of care across state lines is a major issue for telemedicine providers to reduce redundant costs and administrative

barriers.¹³ As these programs expand and evolve, there are significant opportunities for engagement with providers, payers, and legislators for advocacy to support telemedicine programs.

Entrepreneurial Opportunities

Many physicians are expanding beyond the direct patient care arena to explore new opportunities in the evolving world of telemedicine. Some physicians are starting their own telemedicine consult services for direct patient care while others are setting up online tools and resources for patients to manage their own health care. Others still are interested in the data sharing aspect and how it can be done in a HIPAA safe and security compliant manner. While this process evolves from the early adopters to a stable part of the health care landscape, there will be many opportunities for adventurous physicians to participate in the design and delivery of these programs.

Future Potential

Telemedicine has the potential to revolutionize the practice of medicine. With the rapid pace of advancing technology and innovation, telemedicine is becoming adopted in the acute care setting all over the country. Some authors postulate the majority of health care visits will be via telemedicine in as soon as 5 years. To ensure that physician adoption keeps up with the pace of technological capabilities and demand, top health care centers in America are incentivizing its use. Some places are developing new curriculum and training programs to educate health care professionals. Where this technology ends up in the landscape of the health care system is still to be determined, but none would suggest it is not a long-term part of the picture.

WHAT'S THE ASK?

1. A specific standard for transmission and storage of PHI should be developed so that health care providers do not pre-emptively limit their adoption of telemedicine.
2. Physicians should advocate for adequate reimbursement to support the development and integration of telemedicine.
3. Physicians should advocate for stable but responsive regulations governing the practice of telemedicine to help with broad adoption. ★

NOTES

REGIONALIZATION OF EMERGENCY MEDICINE

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Regionalization is the concept of organizing hospitals and providers into an emergency network capable of providing the “right care, at the right place, and right time.”¹ This network involves patients, EMS personnel, hospital systems, emergency physicians, and specialty providers. The need for regionalization has developed over time as a strategy to combat either a lack of personnel and equipment in resource-poor areas, a lack of experience with sub-specialized patients, and/or the need to consolidate care based on the extreme cost associated with infrequent events (ie, regional burn centers to respond to a mass thermal burn event). As emergency physicians, we are the leaders in creating solutions to such systems challenges and it is important to understand the financial, political, regulatory, and cultural barriers of regionalization.

Participate in regionalization efforts in your state to ensure that systems are appropriately and safely developed for patients and providers.

Regionalized care flows through one of two basic models: transfer of patients from outlying, usually less-populated regions to a single high-volume, high-specialty center (“funnel” model), or by bringing specialty care to patients where they are via efforts such as telemedicine (“hub-and-spoke” model).²

FIGURE 1. Hub-and-Spoke Model

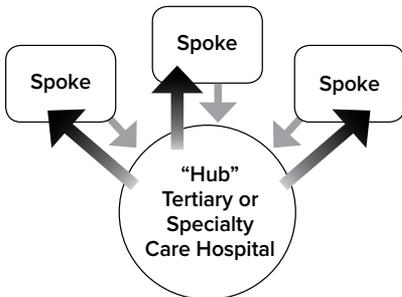
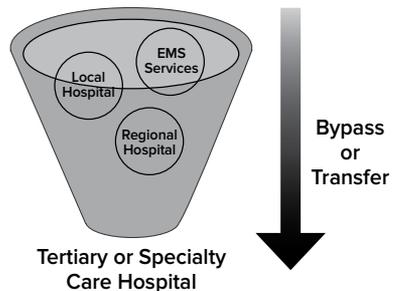


FIGURE 2. Funnel Model



In the “funnel” model, EMS triages patients to tertiary care centers, bypassing regional hospitals to access specialty services (ie, STEMI care). In the “hub-and-spoke” model, patients are received at regional “spoke” hospitals that send patient vital signs, imaging, etc., to “hubs,” such as a major academic center, receiving in exchange diagnostic information and expertise. Critics feel the funnel model forces rural EMS providers to travel far distances from their base of operation, leaving their region uncovered for an extended period of time. Some also feel it disenfranchises small rural hospitals, where it is difficult financially and politically to establish and maintain such resources.

History of Regionalization

Prior to the 1970s, there was no formal EMS system in the United States. Therefore, most of our early experiences with regionalization were derived from the military. During the Korean and Vietnam wars, it became apparent that transportation from front-line stabilization centers to more sophisticated specialty hospitals showed improved survival.³ Serious deficiencies in our homeland emergency care network were first identified by a 1966 report by the National Academy of Sciences Committee on Trauma and Shock, *Accidental Death and Disability: The Neglected Disease of Modern Society*. They recommended patients be transported to the “emergency department best prepared for their particular problem.”⁴ This set the stage for the Emergency Medical Services Systems (EMSS) Act of 1973, which created 303 contiguous emergency care regions across the country.¹ States were given grant funding based on their size and makeup, and were allowed to distribute funds as they saw fit.³ Unfortunately, these grants only lasted 5 years, at which point many EMS programs fell apart. States were forced to increase funding to their EMS programs, and many dissipated.⁵

Applications of Regionalized Care

Regionalization has been attempted around many clinical care areas in a variety of settings with mixed results. Table 1 explores some of the most common.

TABLE 1. Regionalization Solutions Applied to Medical/Surgical Disease

| Disease or System | Resource Problem | Geographic Solutions | Evidence-based, Outcome-driven |
|--|---|--|---|
| Trauma (Level I) | 24 hour in house coverage: <ul style="list-style-type: none"> • Boarded trauma surgeon • Anesthesiologist • Labs, CT, X-ray, blood products • OR, PACU, ICU staff | <ul style="list-style-type: none"> • Triage protocols to bypass local hospitals • Teletrauma • Use of regional centers for lower acuity patients | Yes, centralized trauma systems improve outcomes ⁶⁻⁸ |
| Stroke Centers (Joint Commission certified) | <ul style="list-style-type: none"> • IV tPA • CT scanner • (Tele)stroke consultation • PSC*: Stroke service, unit • CSC**: Stroke neurosurgery | <ul style="list-style-type: none"> • Bypass to PSC (if <15-20 min transport time) • IV tPA at regional hospital (if >15-20 transport time) • Telestroke for IV tPA • Teleradiology • Robotic clot retrieval | Yes, telestroke shown to be safe and effective ⁹⁻¹¹ |
| STEMI (PCI) | <ul style="list-style-type: none"> • PCI/Catheterization lab • Fellow-trained cardiologist +/- CT surgeon • Coronary Care unit | <ul style="list-style-type: none"> • 12-lead EKG by EMS • Hospital bypass protocols for STEMI • "No diversion" policy for receiving hospitals | Yes, PCI superior to lysis if performed within 30 minutes ¹² |
| Post-Cardiac Arrest/Therapeutic Hypothermia | <ul style="list-style-type: none"> • Cooling system • PCI-capable as above • ICU staff | <ul style="list-style-type: none"> • Multiple centers with capability to perform hypothermia • Transfer to PCI center | Yes, hypothermia shown to decrease mortality and morbidity ^{13,14} |
| Telepsychiatry | <ul style="list-style-type: none"> • Lack of mental health resources • Inadequate number of psychiatrists | <ul style="list-style-type: none"> • Tele-health consultation • CMS reimbursement for telemedicine consults | No conclusive evidence. Generally, thought to be equal to in-face consultation ¹⁵⁻¹⁷ |
| TeleICU | <ul style="list-style-type: none"> • ICU staff • Specialized monitoring equipment | | No conclusive evidence. Some studies suggest decreased length of stay, mortality ^{18,19} |
| Pediatrics (NICU OB/Gyn) | <ul style="list-style-type: none"> • Pediatric subspecialties • PICU/intensivists • NICU/neonatologist • OB/Gyn capability • Trauma capability | <ul style="list-style-type: none"> • Transfer to tertiary trauma or primary pediatric center | Trauma: No conclusive evidence to suggest superiority of tertiary children's hospitals NICU: Yes, improved outcomes with transfer to specialty center ² |

*PSC: Primary Stroke Center **CSC: Comprehensive Stroke Center

Trauma Systems and “the Golden Hour”

Trauma systems as we know them today developed through a long process. Voluntary accreditation of trauma centers began in the 1980s. Today, there are approximately 400 trauma centers that must be approved by the American College of Surgeons Committee on Trauma (AS-COT) to be recognized as a trauma center.²⁰ Trauma centers are designated as Level I-IV depending on their capacity of care, with the highest level being Level I and requiring extensive resources as listed.

One large study recently examined the effect of care at a Level I trauma center on risk of death in adult patients with moderate to severe traumatic injury. It found that the risk of death within one year after injury was significant lower when cared for at a trauma center.⁷ Another study compared data from all 50 states and concluded those states with trauma systems in place for at least 10 years experienced at 8% reduction in mortality from motor vehicle collision.⁸

Approximately 70-80% of patients now live near a trauma center; however, there remains no standardization of this system, and states are highly variable in their access to this care.¹ The capability to expand teletrauma, such as with telestroke, may provide a more regionalized rather than centralized approach to trauma care.

Stroke

Stroke remains touted as one of the most successful regionalized care efforts. Beginning in 2003, acute stroke became a true emergency with a strict timeline for the administration of tPA within 3 hours. Guidelines allowed EMS to bypass nearby hospitals preferentially for Primary Stroke Center (PSC) hospitals if <15-20 minutes away.²¹

For the 50% of the population who do not have access to these centers, telestroke programs have developed in 27 states.²¹ Stroke is particularly amenable to this hub-and-spoke approach due to it generally being a cognitive, rather than procedural, intervention. Remote consultation allows them to review patient images, help with decision to administer tPA, or less commonly, to perform robotic endovascular intervention. Multiple studies have supported that telestroke intervention has a similar efficacy to a tertiary stroke center.⁹⁻¹¹

ST-elevation Myocardial Infarction (STEMI)

If trauma has the “golden hour,” then the slogan for myocardial infarction is said to be “time is muscle.” In 2004, the American Cardiology Association/American Heart Association (ACA/AHA) established a “door-to-balloon” time of 90 minutes. In 2007, the Mission Lifeline program was created to accelerate regionalization of STEMI, funneling regional centers to primary percutaneous coronary intervention (PCI) centers. They created standardized protocols for

EMS systems to triage patients with suspected STEMI, enhanced networks between regional hospitals and PCI centers, and required a detailed data collection for ongoing improvement efforts.¹²

Evidence demonstrates a decreased chance of survival if either fibrinolysis or PCI is delayed greater than thirty minutes.¹² Therefore, an ongoing Cochrane review is directly comparing the outcomes related to transfer for PPCI at tertiary centers versus thrombolysis at regional centers. This will likely define further transfer protocols and the ability to incorporate regional hospitals into STEMI care.²²

Post-Cardiac Arrest Care & Therapeutic Hypothermia

Therapeutic hypothermia after cardiac arrest has been shown in 2 randomized controlled trials to demonstrate survival benefit. However, the ideal organization of these centers remains unknown. The state of Arizona has created a very structured response network for the “post-resuscitation” bundle, with specific cardiac arrest centers (CACs). These centers have strict inclusion criteria including basis of their ability to administer therapeutic hypothermia, perform 24/7 PCI, report accurate data, utilize an evidence-based termination of resuscitation protocol, have a protocol for organ procurement, and train their community in bystander CPR.¹³ Currently, 38 centers in Arizona are included in this capacity.

Pediatrics

With only 27% of emergency visits comprised of children, our youngest population requires special consideration when creating emergency care networks. A child with a certain disease may present differently than an adult, making EMS protocols inapplicable. A paucity of specialty pediatric care can translate into children funneling to a tertiary care center when they outgrow regional resources.²³

One successful model of regionalized pediatric care is for perinatal and the neonatal intensive care unit (NICU). Evidence demonstrates that outcomes are significantly improved when transferred to a specialty hospital. In a 2007 study, they demonstrated that “low volume” hospitals (those treating <100 very-low-birth-weight infants per year) demonstrated a significantly higher odds ratio for death, ranging from 1.19 to 2.72.²⁵

To expand such programs, Congress signed the Emergency Medical Services for Children (EMSC) Act in the 1980s. This emphasized the development of pediatric EMS protocols and established an evidence base for research known as PECARN, or the Pediatric Emergency Care Applied Research Network.^{23,24} The EMSC continues to support regionalization of pediatric care, awarding over \$1.2 million in grant money to 5 states in 2012 with the goal of sharing resources and developing models of inclusive care for those resource-limited areas.²⁴ There is hope that emerging technologies, such as telemedicine, may help bring pediatric specialization to rural areas.

Financial Challenges of Regionalized Care

A major obstacle of establishing, maintaining, or improving regionalized systems is cost. Currently, there is a large statewide variation in payment structure. Since the discontinuation of federal programs funding EMS systems in the 1980s, most urban regions utilize fire-based transport and are dependent on tax subsidies to fund EMS systems, whereas rural regions may use fee-for-service systems staffed by volunteers.¹

In 2009, the Institute of Medicine released *Hospital-based Emergency Care: at the Breaking Point*. They recommended that “Congress should establish a demonstration program, administered by the Health Resources and Services Administration, to promote regionalized, coordinated, and accountable emergency care systems throughout the country, and appropriate \$88 million over 5 years to this program.”²⁷ A bill is pending in Congress for the reauthorization of a similar program which would appropriate \$24 million annually for 2015-2020.²⁸

New technology such as telemedicine may improve utilization of resources by allowing patients to consult doctors more quickly. An innovative strategy through Baylor Health Care System is the creation of Project Ethan, or Emergency TeleHealth and Navigation. Since 2014, they have been equipping all paramedics with a tablet that allows doctors to speak with patients remotely and divert the patient to outpatient centers when appropriate. Up-front costs have been reported at \$1 million, but administrators believe the system will lower costs over time.²⁹

Future Considerations

With the Affordable Care Act and large budget deficits, more questions than answers remain in the establishment of formalized, federal regionalized care. Perhaps regionalized centers should be defined by disease type rather than being limited to geography or state lines.¹ This would require changes in legislation to allow EMS services to bypass local hospitals and cross state borders, which in many geographic areas where the largest city is in another state, makes sense. Telemedicine might help in hybrid models of regionalization as the technology develops. Regardless, as medicine becomes more complicated and specialized, regionalization will likely play an important part in the future care delivery model.

WHAT'S THE ASK?

1. Participate in regionalization efforts in your state to ensure that systems are appropriately and safely developed for patients and providers.
2. Support legislation that promotes appropriate regionalization such as ACEP-supported trauma financing and regionalization through H.R. 648: <https://www.congress.gov/bill/114th-congress/house-bill/648>.
3. Review and understand the ACEP policy on EMS regionalization. <http://www.acep.org/Clinical---Practice-Management/EMS-Regionalization-of-Care>. ★

PALLIATIVE AND END-OF-LIFE CARE

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The World Health Organization defines palliative care as “an approach that improves the quality of life of patients and their families facing the problems associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual.”¹ Hospice care is closely related, and describes care and symptom management provided to patients in the last 6 months of life.

Educate providers and patients about the legal documents related to palliative and end-of-life care, and encourage their use when appropriate.

Emergency physicians are on the front lines of providing care for patients who have complex medical needs that require palliative and hospice care resources.² One study estimates that 75% of older adults visit the emergency department in the last 6 months of life.³ End-of-life conversations are often postponed, leaving those discussions for emergency physicians.⁴ The ED is an appropriate and increasingly important setting for palliative care and for initiating palliative care consults.⁵⁻¹⁰ In its initial Choosing Wisely recommendations, the American College of Emergency Physicians highlighted the importance of palliative and end-of-life care in the ED, by addressing it among their 5 recommendations: “Don’t delay in engaging available palliative and hospice services in the emergency department for patients likely to benefit.”¹¹

There are challenges to providing palliative and end-of-life care in the ED, including a lack of hospice and palliative subspecialists, time, management of multiple patients, and the lack of a long-term physician-patient relationship between emergency physicians and their patients.^{8,12-15} As such, it is especially

important for emergency physicians to have basic palliative care skills.¹⁶ In order to help equip emergency physicians with these skills, the Improving Palliative Care in Emergency Medicine (IPAL-EM) initiative of the Center to Advance Palliative Care (CPAC) “offers a central portal for sharing essential expertise, evidence, tools and practical resources to assist clinicians and administrators with the successful integration of palliative care and emergency medicine.”¹⁷⁻¹⁹ Integrating palliative care into the emergency department setting is becoming increasingly common, especially as some EDs designate specific areas for elderly patients, incorporating ways to identify patients with hospice and palliative needs, even as early as in triage.²⁰⁻²³

Palliative and end-of-life care can provide tremendous benefits to both patients and their families. Patients who receive timely palliative and hospice services have improved quality of life and potentially longer life expectancy.^{24,25} Palliative care initiated in the ED offers the opportunity for patients to have symptom relief, have referrals to community resources and home services, and, if appropriate, to avoid hospitalization.^{2,6,23,26-30}

Advance Planning Documents

In 2014, the Institute of Medicine (IOM) released a report on end of life care in America, “Dying in America: Improving Quality and Honoring Individual Preferences Near the End of Life.” A key recommendation of this report is to “improve delivery of end-of-life care to one that is seamless, high-quality, integrated, patient-centered, family-oriented, and consistently accessible.”³¹ A focus area to meet this goal is improved clinician-patient communication for advanced care planning.³¹ Currently there are several advanced care planning documents that help to guide clinical decisions in a patient-centered way that upholds the patient’s goals and values.

A medical power of attorney (POA) (a type of durable power of attorney) is a document that designates an individual to make medical decisions on a patient’s behalf if the patient becomes incapacitated and can no longer make his or her own medical decisions. POAs are the legal voice for a patient who is incapacitated, and they rank ahead of other statutory decision-makers with the exception of a court appointed guardian. As such, in time-sensitive medical emergencies, EMS providers and emergency physicians should seek the highest ordered legal decision-maker, which may be a POA instead of a spouse or other traditionally assumed surrogate. It is important to ensure the POA is specific to medical and not financial or other decision-making authority.

FIGURE 1. Advance Planning Documents

| Document | Description | Limitation(s) |
|--|---|---|
| Power of attorney (POA) | Designates an individual to make medical decisions on a patient's behalf if the patient becomes incapacitated and can no longer make his or her own medical decisions | Legal document that must be created prior to an emergency |
| Living will | Outlines interventions such as CPR, intubation, and tube feedings, that a patient would or would not want in the event that the patient has a terminal medical condition and is unable to make medical decisions | Does not consider all possible procedures or the context of those procedures (e.g. for palliative purposes) |
| Out-of-hospital Do not resuscitate (OOH-DNR) | Express a patient's desire not to receive CPR in the event of cardiac arrest | Do not aid decision-making in non-arrest emergencies that may require other invasive, life-sustaining interventions such as intubation. |
| Physician orders for life-sustaining treatment (POLST)* | Portable physician orders. Include DNR status, goals of treatment in the context of additional interventions such as advanced airway, feeding tubes, and IV administration of medications, options for comfort care and refusal for hospital transport or admission unless comfort care at home is inadequate, and identification of decision-makers involved in completing the POLST | Sometimes there is confusion among EMS providers and emergency physicians regarding the interpretation of the orders |

**POLST are also sometimes named Medical orders for life-sustaining treatment (MOLST)*

A living will or advance directive is a legal document signed by a patient while s/he is still able to make personal medical decisions. A typical advance directive outlines interventions (such as CPR, intubation, and tube feedings) that a patient would or would not want in the event s/he has a terminal medical condition and is unable to make medical decisions. One limitation of these documents is that they might not consider or list the many possible interventions during critical illnesses. For example, it might not address the possibility of intubation to facilitate a palliative surgery performed to reduce the pain caused by a large tumor. The definition of a terminal condition or vegetative state is also difficult to identify. Thus these documents often are more of a starting place for a conversation with patients and less of a prescription to be followed.

Out of hospital do-not-resuscitate (OOH-DNR) forms are another advance planning document that express a patient's desire not to receive CPR in the event of cardiac arrest. In many cases, EMS is dispatched for a patient in cardiac arrest, and the patient has already expressed the wish to not have CPR.³² When no surrogate decision-maker is available in such situations and no other documentation is available, EMS and emergency physicians should follow the limitations as reflected on the OOH-DNR form, but otherwise follow standard practice.³³ OOH-DNR orders are often visible on bracelets, wallet cards, or other identifying documents outlining the patient's wishes. OOH-DNR forms are only in force in the states where they were issued and can be overruled by the highest ordered decision-maker when the patient becomes incapacitated.

Physician Orders for Life-Sustaining Treatment (POLST) are a set of portable medical orders that have become a critical component of advance care planning relevant to patients who are expected to be in their final year of life. Introduced in Oregon in 1991, POLSTs fill an important gap left by other advance directive documents. POLST forms are dynamic, with revisions as appropriate to changes in health status or patient goals, often as patients near the end of life.³⁴ As a physician's order, POLST are potentially an improvement over advance directives.³⁵ While the patient maintains decision-making capacity, he or his surrogate decision-maker upon his incapacity, can choose to overturn the POLST decision during a medical emergency.

POLSTs have several sections, and each state has different items on their POLST forms. The first section contains identifying information. The second section is an option for a DNR order. The third section addresses goals of treatment in the context of additional interventions such as advanced airway, feeding tubes, and IV administration of medications. There are also options for comfort care and refusal for hospital transport or admission unless comfort care at home is inadequate. The last section identifies the decision-makers involved in completing the POLST, including the patient or a surrogate and the health care provider. The decision-maker signature implies that a thoughtful discussion was held, and the provider signature is needed for the form to be a valid medical order. Forty-three states now have a fully endorsed or are actively developing POLST programs designed within the National POLST Paradigm, (<http://www.polst.org>).³⁵ POLST forms impact treatment in the out-of-hospital settings by providing EMS with physician orders that are clear instructions about patient preferences and enabling greater individualization of care during out of hospital emergency care.³⁷⁻⁴⁰ Despite the growing use of POLST forms, there often is confusion among EMS providers and emergency physicians regarding the interpretation of the orders, suggesting the need for additional research, education, training, and safety efforts to ensure that patient's goals and values are being carried out in treatment decisions.⁴¹⁻⁴³

Medico-Legal Considerations

Emergency physicians have an ethical obligation to honor a patient's values and goals of care while providing quality care as indicated. For patients with palliative and end-of-life care needs who present to the emergency department, there are multiple medico-legal issues to consider. As with any patient presenting to the ED, EMTALA requires that patients with palliative and hospice care needs receive a medical screening exam to determine if an emergency medical condition exists. If such a condition exists, then further evaluation and treatment should be based on a patient's values and goals, as expressed by the patient or a surrogate or as outlined in an advance care planning document such as an advance directive, living will, OOH DNR, or POLST. In many cases, patients with expressed wishes against aggressive treatments still require treatment for pain or other symptoms such as nausea and vomiting. There is a risk of incorrectly assuming that a patient who does not want aggressive interventions does not require care. However, patients with palliative and end-of-life needs still should receive the best care possible consistent with their goals and as outlined in their advanced care planning documents.

A patient with decision-making capacity retains his/her right to override the goals and values codified in these documents at any time. A legal designee (including a family member) who is identified by a living will/advance directive or a POLST cannot make changes to a patient's stated goals or wishes if the patient has decision-making capacity. It is critically important for EMS and emergency physicians to act with a patient-centered focus based on legal and medical documents and not to act solely on family-reported goals and values. When doubt exists about providing treatment, unless there is a documented patient wish for specific goals and values, providers should assume full care and resuscitation.

When there are issues about end-of-life care and the patient is incapacitated, it is important for ED physicians to understand the surrogacy issues in their state.⁴⁴ After a patient is incapacitated, each state has a statute of the order in which decision-makers are appointed. In most cases, a court appointed guardian, followed by any legal power of attorney has decision-making responsibility, although many patients will not have either of these. The next surrogate decision-makers are a spouse, adult children, parent, and then brothers or sisters of the patient. It is important to remember that when a class has more than one individual, consensus of the decision-makers of that class is required in most states. Since the designees stand in for the patient, they have the ability to change any documents such as DNR and POLST forms.

Future Directions

In addition to the growing importance of palliative and end-of-life care in the ED, there are larger movements that have brought palliative and hospice care into the public consciousness and have fueled controversy about end-of-life decision-making. In 6 states — Oregon, Washington, Vermont, Montana, New Mexico, and most recently, California — aid in dying is permitted by law. During the 2014-15 legislative year, lawmakers in 24 states introduced bills dealing with right-to-die issues, although many of these bills have not come up for committee hearings or have been voted down in state legislatures.⁴⁵ These broader public and legislative discussions are likely to impact ED care in the future.

CMS recently proposed physician payment rules for 2016 with increased payments for advance care planning conversations that physicians have with patients.⁴⁶ These revised reimbursement guidelines are likely to encourage more physicians to engage in these discussions with patients.

WHAT'S THE ASK?

1. Advocate for improved and comprehensive payment for palliative care services.
2. Seek broader adoption of POLST and related forms and improve EMS/emergency physician training on how to apply POLST.
3. Educate providers and patients about the various types of legal documents and encourage their use where appropriate. ★



MENTAL HEALTH IN THE EMERGENCY DEPARTMENT

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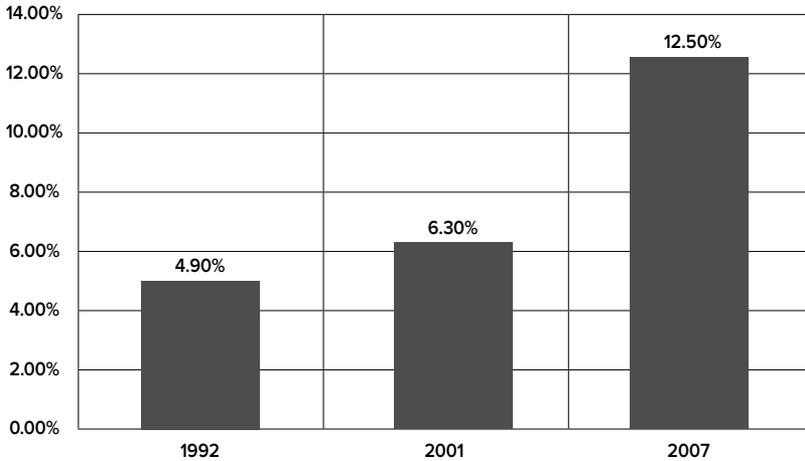
The landscape of mental health services has drastically evolved over the past two centuries.

Once centered on the asylum and the long-term institutionalized care of patients with the most severe and chronic mental health problems, the emergence of pharmaceutical therapies shifted care to the outpatient setting. As a result, the US mental health system has become a more community-based, decentralized, heterogeneous, and fragmented array of outpatient services. Although this has facilitated improved access for patients with minor to moderate mental health conditions, the number of patients requiring acute stabilization and intervention has overwhelmed most available mental health access points, leaving those in crisis with no alternative but to seek care at overburdened emergency departments (EDs). This coupled with dwindling psychiatric hospital beds has created a mental health crisis in the US.

Advocate for improved resources for comprehensive and preventative outpatient psychiatric care to stem the tide of diminishing acute psychiatric care beds.

The number of psychiatric hospitals and acute care psychiatric units has declined steadily since the 1960's. Beds nationwide dropped from approximately 400,000 in 1970 to 50,000 in 2006, with 80% of states reporting a shortage of psychiatric beds.^{1,2} Whether due to the long-term effects of deinstitutionalization, inadequate community resources, the large numbers of uninsured patients, or other causes, the number of patients in psychiatric crises' presenting to EDs is on the rise.³ Between 1992 and 2001, there were 53 million mental health visits in emergency department across the US, an increase from 4.9% to 6.3% of all ED visits, and an upswing from 17.1-23.6 visits per 1,000 of the US population during this period.⁴ By 2007, psychiatric visits accounted for 12.5% of the 95 million visits to the ED, almost doubling from the proportion (6.3%) in 2001.^{3,5}

FIGURE 1. Proportion of all ED Visits Nationwide for Mental Health Concerns.^{3,4,5}



Causes of Increased Behavioral Health Treatment in EDs

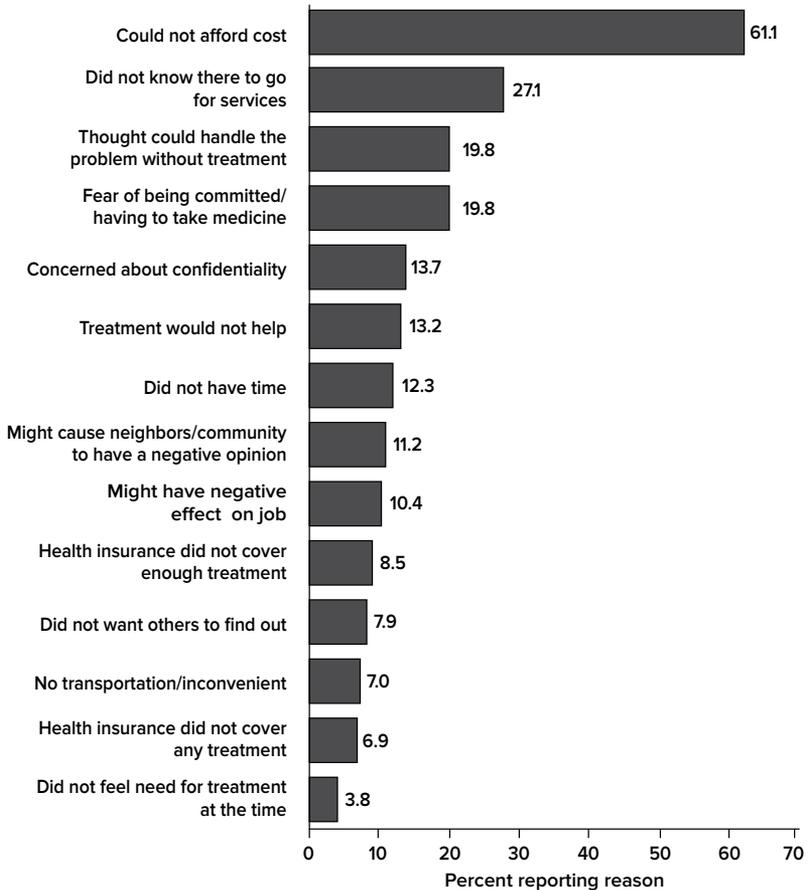
There are several salient factors contributing to increased behavioral health treatment in in EDs including insufficient community resources, a dearth of mental health insurance coverage, and increases in drug use in certain communities. Together, these issues are leading to an influx of behavioral health emergencies visits, growing at a rate four times higher than non-behavioral health visits.⁶

Insurance companies, government payors, and managed care organizations have reduced reimbursement rates, making it difficult for outpatient facilities to operate. This lack of funding has led to operational short-falls for community-based services causing many outpatient practices to close their doors. For example, a report by the Minnesota Psychiatric Society noted that one organization in the state closed six of its nine outpatient clinics due to inadequate payments.⁷ As a result, this decline in outpatient and inpatient resources has led to an escalating access crisis, even among those that are insured given the poor rates of reimbursement.

Financing mental health services appears to be a major obstacle for those suffering from psychiatric conditions often, secondary to lack of insurance coverage. Despite steady reductions in the number of uninsured Americans since implementation of the Affordable Care Act (ACA) of 2010 (P.L. 111–148, P.L. 111–152), there are still 38 million Americans lacking any type of health insurance.⁸ According to a recent survey, 61% of those needing but not receiving mental health care listed cost as a barrier.⁹ Adults with mental illness are much more likely to lack insurance coverage than those without mental illness.¹⁰ Moreover, an AHRQ/SAMSHA study found that uninsured individuals with behavioral health conditions were more likely to have multiple ED visits during the course of a year, with prolonged lengths of stay and were less likely to be admitted to inpatient units.¹¹

FIGURE 2. Reasons for Not Receiving Mental Health Services in the Past Year

Among adults aged 18 years or older with any mental illness who did not receive mental health services

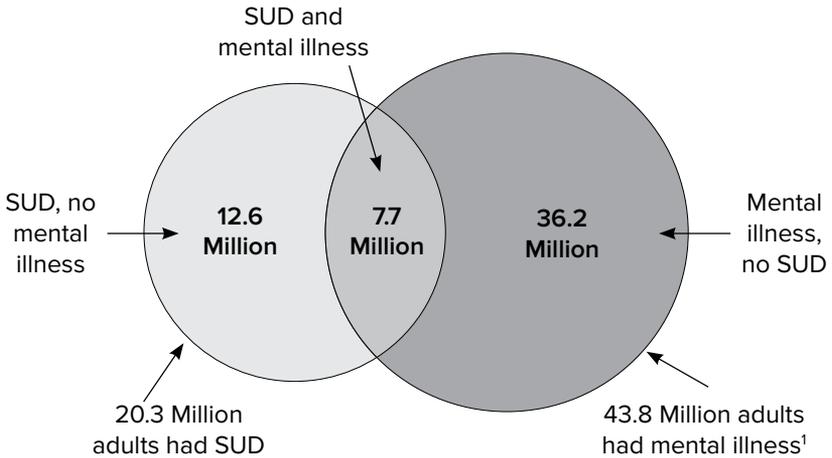


(From Substance Abuse and Mental Health Services Administration. Results from the 2013 National Survey on Drug Use and Health: Mental Health Findings, NSDUH Series H-49, HHS Publication No. (SMA) 14-4887. Rockville (MD): Substance Abuse and Mental Health Services Administration; 2014; with permission.)

On another front, according to the SAMSHA 2012 report, substance abuse is on the rise nationally, including first-time users of heroin and marijuana (including synthetic marijuana such as Kush, Spice, and K2).¹² Patients with mental health conditions are not immune from this trend and are seeking treatment for substance abuse and/or intoxication in EDs at an increasing rate. One study in Maryland

reviewing data from 2008 to 2012 showed the prevalence of co-occurring mental illness among substance abuse-related encounters increased from 53% to 57% for ED encounters.¹³

FIGURE 3. Past Year Substance Abuse and Mental Illness Among Adults Aged 18 Years or Older. SUD, substance use disorder.



(From Substance Abuse and Mental Health Services Administration. Results from the 2013 National Survey on Drug Use and Health: Mental Health Findings, NSDUH Series H-49, HHS Publication No. (SMA) 14-4887. Rockville (MD): Substance Abuse and Mental Health Services Administration; 2014; with permission.)

Impact of Increased Behavioral Health Treatment in the ED

Boarding

Psychiatric boarding is one of the most prevalent issues EDs face across the nation. As defined by the American College of Emergency Physicians (ACEP), boarding is the holding of patients in the ED after the patient has been admitted to a facility, but not physically transferred to an inpatient unit for definitive care. The prolonged boarding of psychiatric patients in EDs can severely cripple the effective flow of an ED, impacting the well-being and safety of all patients and ED staff.

Boarding psychiatric patients ties up an incredible amount of ED resources including patient beds, care providers, ED staff and ultimately, healthcare dollars. It delays the definitive care of psychiatric patients who are typically in need of acute interventions, often exacerbating their conditions and, at times, making it unsafe for these patients and the staff caring for them. Ultimately, boarding contributes to ED crowding, which has been defined as a state in which the identified need for emergency services outstrips available resources in the ED (ACEP Crowding

Resources Task Force, 2002). Crowding can have a negative impact on patient safety by increasing wait times and preventing timely evaluation and treatment of those seeking care, increasing patient walk-outs, and even increasing inpatient mortality for admitted patients in a facility.¹⁴

A national survey conducted by ACEP in 2008 revealed that nearly 80% of EDs boarded their psychiatric patients due to the paucity of available inpatient hospital beds. One group of researchers revealed that the average length of stay in EDs is 42% longer for patients with mental health problems, averaging more than 11 hours nationally.¹⁵ In another study, 1 in 12 patients with psychiatric complaints had an ED length of stay of greater than 24 hours.¹⁶ A 2012 survey from the National Association of State Mental Health Program Directors (NASMHPD) found that 10% of hospitals are boarding patients for several weeks.¹⁷

There have been several proposals to help decrease boarding in EDs nationwide, however, more research is needed to validate the impact they might have. First and foremost, access to outpatient and inpatient psychiatric care needs to improve. Increased state and federal funding should be used to increase access points into our mental health system. Additionally, telemedicine could allow psychiatrists to evaluate and screen boarded patients from their own homes or office instead of having them wait in overstimulating EDs without a definitive plan. Furthermore, improved case management for these patients coupled with an increase in outpatient capacity can help reduce the number of acute psychiatric emergencies.¹⁸

One interesting proposal is to establish benchmarks in ED care of psychiatric patients, such as measuring the number of visits lasting greater than 24 hours.¹⁶ This statistic could be used as a quality metric directly tied to hospital reimbursement rates, incentivizing hospitals to address this problem. Furthermore, concurrent medical and psychiatric evaluation instead of a step-wise evaluation protocol can reduce delays in treating psychiatric patients in the ED.¹⁹

Some states have already taken matters into their own hands. For example, Washington State's Supreme Court issued a ruling banning psychiatric boarding in EDs in 2014 claiming it was a violation of the state's Involuntary Treatment Act and a deprivation of liberty in violation of the State Constitution. While this unprecedented ruling garnered significant media attention, it did not provide any solutions to the underlying issues contributing to psychiatric boarding. Furthermore, many experts believe this decision will have minimal impact because it conflicts with federal law preventing hospital emergency departments from discharging unstable patients (i.e., those who are suicidal or homicidal). Thus, more comprehensive legislation, instead of solely judicial decree, is needed to truly alleviate this problem.

In unprecedented fashion, Washington State Supreme Court ruled to ban psychiatric boarding in EDs in August 2014, claiming it was unconstitutional by violating the state's Involuntary Treatment Act and a deprivation of liberty in violation of the State Constitution.

Suboptimal Psychiatric Care and Safety in EDs

To exacerbate the issue of boarding, many ED staff may lack adequate understanding of mental illness, resources for safe intervention, or even harbor negative sentiments towards psychiatric patients. ED staff often report a sense of fear and anger provoked by these patients' aggressive or bizarre behavior.²⁰ Additionally, the revolving door nature of many presentations along with poor follow-up care and medication non-compliance results in a sense of hopelessness and a 'why bother?' attitude in staff.²⁰ One study found that the greater the negative affect of staff towards the mentally ill patient, the less the propensity to help.²¹

Many ED providers do not receive adequate training in caring for mental health patients. They often lack the de-escalation skills and safety techniques that can assure a safe environment for the patient and themselves. Without these skills, ED staff often prematurely jump to the use of restraints, seclusion, and/or sedatives which can further deteriorate a patient's condition or delay definitive evaluation. This can, in turn, increase the length of stay of patients and in some instances lead to unnecessary hospital admissions.

There is a dire need to better equip and train ED staff to provide a higher level of care to patients in acute mental health crisis. It has been postulated that patients who receive higher quality initial care are more likely to go home than stay in the emergency room as boarders.²² For example, hospitals that participated in the Institute for Behavioral Healthcare Improvement's 2008 learning collaborative, a national initiative to improve behavioral health, found that they were able to reduce the length-of-stay of psychiatric patients in the ED and the use of seclusion and restraints with low-cost interventions including improved training for clinical and security staff.²² By training staff in de-escalation techniques, they were able to significantly reduce boarding times and improve patient experiences.²² Although the number of psychiatric emergencies presenting to EDs will likely not subside anytime soon, it would be prudent to consider including national psychiatric training for all ED care providers.

Incarceration of the Mentally Ill

In a 2006 report, the Bureau of Justice Statistics estimated that 705,600 mentally ill adults were incarcerated in state prisons, 78,800 in federal prisons and 479,900 in local jails.²³ Research suggests that "people with mental illnesses are overrepresented in probation and parole populations at estimated rates ranging from two to four times the general population".²⁴ This has caused significant strain on US law enforcement agencies and correctional facilities for several reasons. First, individuals with mental illness are jailed on average two to three times longer than individuals without a mental illness arrested for a similar crime.²⁵ Next, jails incur significant costs associated with the oversight of mental health prisoners for medication and other health-care services.²⁵ Lastly, these inmates have very little chance of rehabilitation while incarcerated without proper psychiatric care;

this increases the likelihood they will remain a danger to society or become repeat offenders. Moreover, a stay in jail may even exacerbate the person's illness, and at the very least tarnish their public record making it more difficult to regain employment and reintegrate back into society.²⁵

Medication non-compliance is one major reason why psychiatric patients decompensate and begin acting erratically and/or commit crimes. In one study, it was shown that monthly medication possession and receipt of outpatient services reduced the likelihood of any arrests.²⁶ This study further concluded that there was "an additional protective effect against arrest for individuals in possession of their prescribed pharmacological medications for 90 days after hospital discharge".²⁶ Thus, increasing community access to outpatient psychiatric services after incarceration for medication management should be the cornerstone of any mental health reform.

There is also a clear link between mental illness, homelessness, drug abuse and incarceration. Many homeless psychiatric patients are arrested for nonviolent crimes including trespassing, petty theft, or possession of illegal substances. About 74% of state prisoners and 76% of local jail inmates who had a mental health problem met criteria for substance dependence or abuse.²⁷ Public policies addressing homelessness and improved care modalities for substance abuse disorders will go a long way towards diminishing incarceration rates of those with mental illness.

Relevant Legislation

Introduced in the House by Representatives Tim Murphy (R-PA) and Eddie Bernice Johnson (D-TX), the "Helping Families in Mental Health Crisis Act of 2015" (H.R. 2646) aims to improve research, data collection and efficacy of existing mental health programs and promote evidence-based approaches in creating systems of care for patients with mental illness. This bill will among other things:

- Encourage early intervention and prevention programs for acute mental health exacerbations.
- Increase access and availability of community mental health programs for more effective outpatient mental health management.
- Remove regulations that currently prohibit the same-day billing under Medicaid for treatment of physical and mental health for the same patient, in the same location, on the same day; expand the availability of inpatient psychiatric beds by amending the Medicaid Institutes for Mental Disease (IMD) exclusion to give states the option of receiving federal matching payments for care of adult patients with mental illness on a short-term basis.
- Allow physicians to share limited information with the caregiver of a person with mental illness to help support the patient and their treatment.
- Establish federal liability protections as an incentive for health professionals who volunteer at community health centers or behavioral health centers.

Source: ACEP HR 2646 Support Press Release, June 2015

These provisions are a major step in the right direction towards meaningful mental health reform in the US. This bill is actively supported by ACEP, the American Psychiatric Association (APA), and the National Alliance on Mental Illness (NAMI). There are many other bills being actively considered and explored, but the fundamental concepts remain the same in all of these legislative efforts: improve outpatient access, reduce regulatory barriers to integrated health, and provide additional resources for mental health treatment.

WHAT'S THE ASK?

1. Advocate for improved resources for comprehensive and preventative outpatient psychiatric care to stem the tide of diminishing acute psychiatric care beds.
2. Promote a more collaborative environment between Emergency and Psychiatry departments to help cultivate institution-specific solutions that improve the care of the acutely ill psychiatric patient.
3. Work with community leaders, health care providers and law enforcement officials to create multidisciplinary initiatives that address the link between mental health disorders, substance abuse and incarceration. ★

With thanks to Dr. Cedric Dark for his professional guidance, advice, and assistance in polishing this manuscript.

COMMUNITY PARAMEDICINE AND EMS POLICY ISSUES

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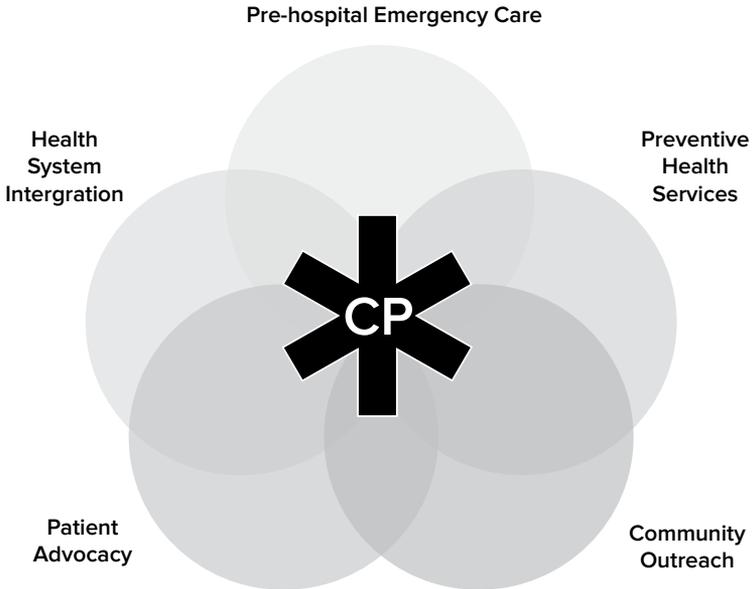
Community paramedicine is a facet of the evolving integrated health care system that proposes to expand the role of paramedics and emergency medical technicians beyond that of traditional emergency care. The Institute of Medicine has estimated that up to \$750 billion of the health care budget has been spent annually in potentially avoidable medical services, \$18 billion of which can potentially be attributed to avoidable emergency department visits.¹ Not only does the overuse of emergency services represent potential fiscal savings, it does not always appropriately address the needs of those patients. The uninsured, chronically ill, elderly, homeless, and disabled are often referred to the emergency department because there are no other options available. Community paramedicine can potentially address this gap by offering services such as management for chronic disease, substance abuse, and mental health, as well as hospice care, injury prevention outreach, medication reminders, and patient advocacy. The uniting facets of mobile integrated health care are visualized in Figure 1, which demonstrates how the diverse skillsets of many different disciplines can be harnessed by the community paramedic.

Clinicians should work with legislators to support bills that provide enhanced liability protections for providers rendering care required under EMTALA.

Diversion to Alternative Care Centers

According to the National Center for Health Statistics, the number of ED visits increased by 18% between 1994-2004, causing more than 50% of hospitals to cite overcrowding in the emergency department.^{2,3} Frequently, when emergency departments have exhausted their resources due to overcrowding or lack of inpatient beds, the hospital is put on “ambulance diversion” to steer emergency services toward hospitals with appropriate capacity.

FIGURE 1. Community Paramedicine at the Intersection of Applied Allied Health Resources



However, in the wake of the increasing utilization of the emergency departments by increasingly ill patients, many systems have opted to move non-emergent patients from the emergency department to primary care settings; in essence, preemptively diverting these patients from the ED. A study conducted by the RAND Corporation estimates that 14-27% of all emergency department visits can be handled at alternative care and urgent care centers, saving up to \$4.4 billion annually.⁴ The Emergency Room Diversion Grant Program in the Deficit Reduction Program of 2005 allocated \$50 million to states to extend hours of clinics, educate patients about appropriate usage of the emergency department, and establish new community health care centers.⁵ The Center for Medicaid and Medicare Services (CMS) used findings obtained from this grant to identify strategies to reduce ED use, which can be condensed to the following three approaches:⁶

1. Broadening access to primary care centers.
2. Targeting frequent ED users.
3. Targeting patients with behavioral health problems.

The last action point draws attention to the fact that 12.5% of ED visits are related to behavioral and substance abuse problems. Several pilot programs have utilized EMS to divert these patients to urgent care and sobering centers, and have been successful in reducing overall ED use. For example, the STOP program in Providence, Rhode Island, allows EMS transport services, staffed with an EMT and a social services outreach worker, to identify and transport intoxicated persons to sobering centers rather than to the ED or prison.⁷

While diversion to alternative care centers may reduce non-emergent ED usage, one must also be cognizant to potential dangers in tasking EMS personnel with making decisions involving ED diversion. Without the full arsenal of diagnostic tools available in the emergency department, patients may be incorrectly triaged as non-urgent when in fact they may require further medical care. Another obstacle involves the Emergency Medical Treatment and Active Labor Act, which mandates a medical screening exam and the provision of emergency care to patients who present to the ED requesting evaluation, regardless of ability to pay. To fulfill their EMTALA obligations, hospitals must provide an MSE to every patient who seeks it before diverting them elsewhere. Diverting non-urgent patients prior to evaluation by an emergency physician may be construed as a violation of these obligations if done so in the emergency department setting. While certain provisions of EMTALA allow for physician surrogates (in this case, pre-hospital professionals) to perform an MSE, there are strict bylaws that require phone consultation with the ED physician. Certainly, further legislative activism concerning diversion to alternative care centers must provide for the obstacles presented by diagnostic uncertainty and EMTALA requirements to ensure patient safety while seeking cost reductions.

Alternative Providers in the Field

As EMS evolves within our nation's health care system, the opportunity has arisen for pre-hospital care to take an expanded role with the delivery of proactive community health resources.⁸ A key component in the development of Community Paramedicine and Mobile Integrated Healthcare (MIH) solutions involves the incorporation of alternative and supplemental providers into the EMS response system. Effective MIH platforms are integrated systems that utilize both clinical and non-clinical providers to bring holistic solutions into the field. A growing venture in the Canadian city of Winnipeg, for example, has witnessed great success by assigning a social worker to each patient, and then harnessing the talents of respiratory therapists, physical therapists, and occupational therapists to maximize patients' functionality and wellbeing in the home.⁹

Clinical providers with advanced training in community health care needs — including primary care, preventative medicine, mental health, and even definitive minor acute care — are the foundation of an EMS-based solution to enhance primary care access for medically underserved populations. New initiatives suggest expanding the roles of these EMS providers to allow them to forgo transportation of the patient in favor of a more appropriate alternative care center or treating them at home.¹⁰ The latter option can be further expanded into a medical home model, where clinical providers can coordinate with an interdisciplinary team to provide management for chronic conditions, enrollment assistance in social services, and education about appropriate use of health services.¹¹ Alliance with additional allied health providers allows for synergy in the delivery of high-quality comprehensive care in the pre-hospital environment. Several EMS and government agencies throughout the nation have experimented with great success in incorporating social workers, behavioral health care

specialists, case managers, and even clinical pharmacists into their MIH pilot programs.^{12,13} While roadblocks to inclusion of these experts are typically financial, legislative challenges regarding liability in unconventional practice environments, with concerns that community activities may be outside of the traditional scope of practice, also exist. Future MIH regulations should provide for an appropriate role of alternative providers in the field.

Reducing ED Utilization Through Health System Integration

The prospect of integration and incorporation into the broader health system comprises perhaps the most promising and compelling role for MIH solutions. Reducing overutilization of the emergency department has the potential to reduce costs, improve health outcomes, and enhance the patient experience. EMS-driven MIH programs stand uniquely poised to have a broad impact on improving the care of our patients.¹⁴

A national health interview survey conducted by the CDC found that Medicaid beneficiaries utilized the ED at almost a twofold higher rate than their privately insured counterparts, suggesting that overuse of the ED is a symptom of a more fundamental issue concerning lack of access to coverage and a void in the availability of comprehensive integrated care.¹⁵ Community paramedicine, in conjunction with additional health providers, can potentially serve to fill this void, and in the process, reduce ED utilization for non-emergent conditions. Many pilot programs are already seeing success in improving community health needs by training paramedics to work with patients' primary care providers and provide expanded care coordination services with social services, home health agencies and public health departments. Under this integrated system, patients have access to post-discharge follow up, chronic disease management, home safety assessments, immunizations, and referrals without needing to visit the ED.¹⁶

WHAT'S THE ASK?

1. Providers should support legislation that broadens the ability of emergency physicians to utilize surrogates such as pharmacists, behavior health experts, and primary care providers to perform a medical screening exam as required by EMTALA in the pre-hospital setting.
2. Clinicians should work with legislators to support bills that provide enhanced liability protections for providers rendering care required under EMTALA (eg, H.R. 836/S. 884).
3. Physicians can advocate for appropriate increases in the scope of practice of EMS providers for diversion to potential alternative care locations. ★

SUBSTANCE USE AND ABUSE IN THE ED

Brittany C.H. Koy, MD, Northeast Ohio Medical University

In the late 1990s, concerns arose within certain sectors of the medical community regarding potential undertreatment of pain. The American Pain Society introduced the concept of “pain as the 5th vital sign” in 1996. This in turn led to a Joint Commission standard in 2000, for quantifiable assessment of pain with vital sign acquisition for every patient.¹ During medical school, physicians are taught to not only assess pain severity on one of several scales available, but also to evaluate other

qualifiers such as character or quality and exacerbating or remitting factors. Students are taught these are key elements to history taking, and later in training are reminded that these required elements must appear in our documentation for billing purposes. Pain is at the forefront of our minds and is a driving factor for most patients’ visits to the ED.

However, with this increased focus on treating pain, the use of opioid medications for such treatment has skyrocketed in both acute and chronic pain management. This is now presenting emergency physicians with new obstacles in both the treatment of pain and substance abuse secondary to misuse of prescription opioid medications.

However, with this increased focus on treating pain, the use of opioid medications for such treatment has skyrocketed in both acute and chronic pain management. This is now presenting emergency physicians with new obstacles in both the treatment of pain and substance abuse secondary to misuse of prescription opioid medications.

Background

There were more than half a million ED visits in 2009 for misuse or abuse of prescription opioids,² and more than 16,000 people will die this year (46 per day) from overdose of these medications.³ Substance use is a critical issue addressed daily by emergency physicians across the country. The rising number of people abusing opioids, including both heroin and prescription pain medications, has created a new hurdle for health care. One study defined misuse of prescription opioids as self-escalation of dose, obtaining additional opioids without prescription, or using them for a reason other than pain. The same study found that in 85 patients surveyed after discharge from the ED with a prescription for opioid painkillers, 42% reported misuse at the 3- or 30-day mark.⁴ Further, is it

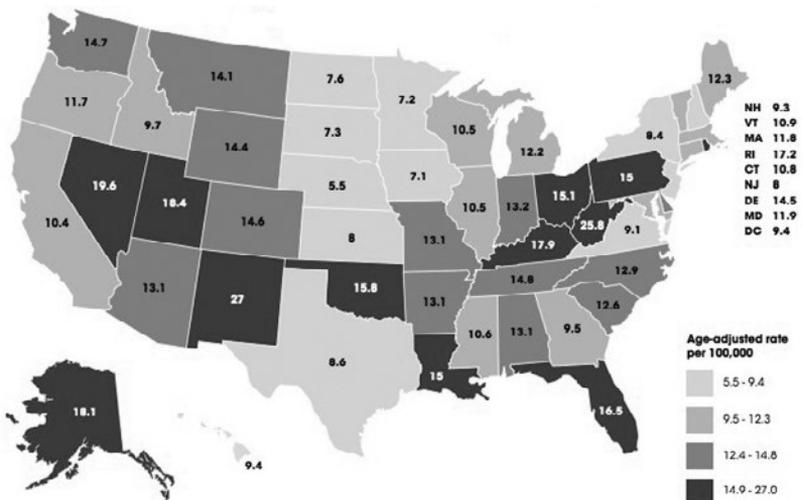
Seek information about your specific state legislation and mandated policies regarding opioid prescribing, and follow suggested guidelines.

well known that ED visits for misuse or abuse of pharmaceuticals have been on the rise. According to the Drug Abuse Warning Network (DAWN) Report in 2010, ED visits from misuse or abuse of pharmaceuticals increased 115% from 2004 to 2010.⁵

The numbers regarding this misuse are troubling, but even more so is the association of prescription opioids being a precursor for future heroin use when the supply of prescription opioids runs out. The startling fact is that more people abuse prescription opioids than heroin and cocaine combined.² CDC analysis from 2002-2013 showed rates of heroin dependence and abuse were strongly correlated with rates of heroin related deaths; that heroin use has increased across most demographic groups concurrently with prescription opioid abuse and overdoses; and, that heroin use is occurring in the broader context of this polysubstance abuse as larger numbers of heroin users report a history of prescription opioid misuse.⁶

Emergency physicians are faced with a daily obstacle of walking the line between adequate treatment of pain and being forced to consider that the medication they prescribe in good faith could be misused or diverted and potentially harm the patient or someone else. Large scale analyses have shown that prescriptions from the ED account for only a modest portion of overall opioid prescriptions, and a recent study of more than 27,000 ED patient visits showed that only 17% of discharged patients received an opioid prescription.⁷ Furthermore, the same study also showed that emergency physicians are overwhelmingly following the aforementioned guidelines to prescribe limited quantities of immediate release formulations. From these numbers, it appears we are cognizant of the problem and our role as prescriber is being exercised with appropriate caution while still attempting to provide adequate analgesia.

FIGURE 1. Drug Overdose Death Rates by State, 2008



Identifying Patients at Risk

Many emergency medicine and toxicology providers have been working diligently to arm colleagues with the knowledge and tools to make gains in the battle against opioid abuse. Table 1 identifies characteristics that increase risk for prescription opioid abuse.^{2,4} Prescribers should be mindful of these when prescribing to patients identified as having one or more of these attributes. The Collaborative for REMS (Risk Evaluation and Mitigation Strategy) Education, known as CO*RE, was formed in 2010, prior to the release of the Food and Drug Administration's Extended Release/Long Acting Opioid REMS blueprint. CO*RE and its partner organizations are working to educate prescribers and patients regarding the facets of the FDA REMS in order to reduce adverse effects, improve safety, and maintain access to these medications for patients in need. The REMS is a multifaceted approach encouraging use of tools such as the Opioid Risk Tool (Figure 1),⁸ a self-reporting type assessment that can be scored in less than 1 minute and targeted toward the primary care setting to help categorize patients who may be at high risk of future abusive drug-related behavior.

TABLE 1. Risk factors for prescription opioid abuse.^{2,4}

Risk factors for prescription opioid abuse

- Male
- Middle age
- Rural or Southern geographic region
- American Indian/Alaskan Native
- Disability
- Chronic pain
- History of previous opioid use
- Other substance abuse in past 12 months
- Oxycodone use

Prescription Drug Monitoring Programs

Another tool to aid prescribers in decision-making are the prescription drug monitoring programs (PDMPs). Forty nine states have now enacted legislation to create PDMPs,⁹ state databases that track prescription and dispensing of controlled substances. Hoppe, Perrone, and Nelson describe the physician's role as both "judge and jury" as a new skill for emergency physicians.¹⁰ However, it appears this skill is variable, as a 2013 study showed only fair agreement between clinical impression of drug seeking behaviors versus PDMP definition of these behaviors.¹¹ That same study concluded that while many hurdles still exist to being able to fully reap the benefits of PDMPs, they may provide an objective criteria to decrease the misuse of prescription medications while enabling providers to provide appropriate ED analgesia.

Use of PDMP has come as a double edged sword, with some in emergency medicine seeing legislated mandatory use in some states as an extra burden on already stretched thin physicians when research has shown its use only changed prescribing pattern in a modest number of cases.¹¹ Negative aspects of implementation have been cited as time intensive labor to obtain information that delays patient care, lack of real time data reporting, limited cross state sharing, missing data from government programs, use of aliases or falsified information, no access to established pain contracts, and lack of direction on interpretation of data provided from the system.¹⁰ Issues regarding mandated enrollment and provider access have been improved when enrollment was made available online, and utilization of the PDMP increased with streamlined Web access. Pilots to integrate PDMPs with electronic medical records have received positive feedback, as the automatic query of the PDMP reduces time required by physician to manually input information. While the jury may still be out, it appears PDMPs are here to stay, as their support appears in most model legislation regarding opioid abuse, such as those guidelines written by the American Medical Association (AMA) and National Conference of Insurance Legislators (NCOIL).

TABLE 2. Opioid Risk Tool (ORT).⁷

| | Female | Male |
|--|--------|------|
| Family history of substance abuse | | |
| Alcohol | 1 | 3 |
| Illegal drugs | 2 | 3 |
| Prescription drugs | 4 | 4 |
| Personal history of substance abuse | | |
| Alcohol | 3 | 3 |
| Illegal drugs | 4 | 4 |
| Prescription drugs | 5 | 5 |
| Age 16-45 | 1 | 1 |
| History of preadolescent sexual abuse | 3 | 0 |
| Psychological disease | | |
| ADD, OCD, bipolar, schizophrenia | 2 | 2 |
| Depression | 1 | 1 |
| Scoring Totals | | |

Self assessment administered to patients at initial visit prior to beginning opioid medications for pain management. Scores 0-3 are low risk for future opioid abuse, 4-7 predict moderate risk for opioid abuse, and 8+ considered high risk for opioid abuse.

TABLE 3. Comparison of NCOIL and AMA Model Legislation Emphases

| NCOIL | AMA |
|--|---|
| PDMPs | |
| <ul style="list-style-type: none"> • Enhance interstate data sharing • Expansion of authorized users/ mandated use • Dispenser/pharmacy reporting (including mail order) • Evaluation of outcomes/state studies • Aggressive pursuit of funding to maintain systems | <ul style="list-style-type: none"> • Does not support mandated use • Recommends VA and governmental services share information with state PDMPs • Recommend workflow integration, point of care use • Supports legislation to fully fund use in all 50 states |
| Prescribing Practices | |
| <ul style="list-style-type: none"> • Consistent, guideline based methods • Avoid blanket policies, use individual treatment plans • Regulation of pain clinics/elimination of “pill mills” | <ul style="list-style-type: none"> • Supports actions to halting “pill mill” clinics/on-line pharmacies • Provides for CME to combat drug diversion relevant to the population they serve • Recommends discount of DEA fees for prescribers taking CME related to preventing abuse/diversion • Supports addressing factors other than supply chain to avoid concomitant increase in illicit drug use (heroin) |
| Education/Outreach | |
| <ul style="list-style-type: none"> • Consider mandated CME for providers • Public education and media campaigns | <ul style="list-style-type: none"> • Positive incentives to promote physician education rather than punitive or mandated measures • Recognition of addiction as medical condition • Federal funding for state level drug disposal/take back |
| Treatment and Prevention | |
| <ul style="list-style-type: none"> • Enhance initiatives • Remove hurdles to prescribing subutex, suboxone | <ul style="list-style-type: none"> • State based resources supporting assessment of treatment gaps and target funding to expand treatment programs • Supports treatment coverage by health plans |

Naloxone Legislation

Treatment of prescription opioid overdose has become a hot topic in the lay public as well. Family members of chronic pain patients and addicts alike are lobbying alongside medical professionals for easier and wider access for the public to naloxone reversal kits and education on their use in hopes of decreasing mortality from overdose. Both the AMA and NCOIL guidelines support expanded access to naloxone. Online education portals, such as the www.stopoverdose.org, have information for providers and the public on the use of naloxone and other addiction-related topics.

Legislative Approach to Opioid Epidemic

Table 2 compares some key differences in the prescription opioid model legislation recommendations by the AMA and NCOIL. The NCOIL recommendations echo the AMA on the importance of adequate PDMPs, education campaigns, availability of naloxone, recognizing pain as a medical problem, improved access to treatment, need for drug take back programs to decrease drug diversion, and expansion of drug courts for nonviolent offenders to promote rehabilitation and decrease recidivism rates. However, NCOIL recommendations also expound on use of treatment plans, regulation of pain clinics to avoid “pill mills,” and mandatory continuing physician education. The AMA guidelines, however, emphasize less mandated and punitive measures, and promote education and regulation relevant to the patient population the physicians serve, as this can vary greatly when comparing primary and emergency care to pain management or addiction medicine specialists. The AMA recognizes that a one-size-fits-all approach that may develop from physician mandates (even if unintended) may be harmful to patient care. Several states are now passing legislation governing opiate prescribing with both mandated and suggested policies regarding use of PDMPs and prescribing habits. ACEP has issued a clinical policy to attempt to address the lack of uniform state guidelines. Both the state and ACEP guidelines tend to have the same theme including avoidance of long-acting opioids, limiting prescriptions to a 3-day supply, and declining to replace lost or stolen prescriptions.¹²

Marijuana Legalization

Use of recreation and medical marijuana is currently on the rise and will likely continue to increase with legalization. At this time, 23 states have legalized marijuana for either medical or recreational use, or both. Americans spend approximately \$120 billion annually on marijuana.¹³ However, under current federal legislation of the Controlled Substances Act, marijuana remains a Scheduled 1 controlled substance.¹⁴ State guidelines for medical use vary greatly from use for cancer and epilepsy, to even minor conditions such as headaches, anxiety, or nausea. While it is important to consider all medications and supplements taken by a patient, it can be difficult to adjust for the different types of marijuana available.

Under current legislation some states strictly regulate the medical marijuana through dispensaries; however, other states allow for home growers to distribute with a license. Different growth patterns can cause wide variation in both efficacy and side effect profile. Given recent legalization it is likely that ED visits will increase with wider availability of prescription marijuana. One study from 2015 showed the prevalence of cyclic vomiting from marijuana in Colorado nearly doubled since decriminalization in 2009.¹⁵ Increased unintentional exposures in pediatric patients have led to increasing numbers of ED visits since legalization in some states.¹⁶ Another recent study supports increased marijuana abuse with the most significant increase in abuse rates where marijuana is legal.¹⁷

Access to legal marijuana may increase diversion for other uses such as creation of butane hash oil (BHO), created by using butane as a solvent to concentrate THC. This greatly increases potency of the drug, increasing not only danger due to injury from hallucinatory effects, but also other concerns such as burns and explosions that may occur during its creation. Admissions to a Colorado burn center due to BHO burns were nonexistent before liberalization, but 29 cases were reported during and after liberalization through 2014.¹⁸ In addition to skin grafting, some required intubation and other lifesaving measures, raising concern that a drug some view as mild could have life-threatening consequences. Additionally, police, EMS personnel, and even bystanders could be injured secondary to exposures and explosions, raising similar concerns as mobile meth labs.

Further studies will be necessary to determine health care related costs. While medical and recreational marijuana usage is state dependent, it will likely be a cause for concern for emergency medicine physicians, especially those practicing in legalized states. A detailed past medical and social history should be obtained, and review of all medications — including medicinal and recreational marijuana — should be performed at every visit. Clinicians should be aware of state prescribing laws and keep informed of current state legislation.

WHAT'S THE ASK?

1. Seek information about your specific state legislation and mandated policies regarding opioid prescribing, and follow suggested guidelines. Use PDMPs when appropriate.
2. Advocate for improved pain management curriculum within your residency program. Propose teaching on opioid prescribing in the ED such as that suggested by Poon and Greenwood-Ericksen.¹⁰
3. Be aware of common interactions between marijuana and medications, and prescribe thoughtfully. Consider side effects of marijuana use when appropriate. ★

NOTES

SOCIAL DETERMINANTS OF HEALTH

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This is Angela's 4th visit to the emergency room this year for asthma. She's already had one hospitalization. "Could anything at home be triggering these attacks?" her physician asks. "Yes, there are cockroaches everywhere, and there has been a leak in the ceiling that has mold around it. We haven't been able to get the landlord to fix it for months," her mother says over Angela's coughing and wheezing. "Her doctor just started a new inhaler and she's using it every day, but it's just not helping."

Emergency physicians should be leading the charge for change that could benefit those most desperate for help.

Background

Social circumstances have a significant impact on health, and these problems often manifest in the emergency department. As the front line providers of the health care system, emergency physicians care for patients in crisis. Often, the root cause of why patients end up in the ED has a great deal to do with their circumstances, such as homelessness, domestic violence, unemployment, and poverty. Collectively these are referred to as the social, economic, environmental, and legal issues (SEEL), or, more simply, the social determinants of health (SDOH).¹ While we, as emergency physicians, typically focus on treating acute illness, it is important for us to recognize these upstream issues as we treat their ultimate health consequences.

Traditionally, SDOH have been a challenge for ED providers.² Medical education does little to train physicians to address these problems. In practice, we usually defer to social workers when SEEL issues arise. Not surprisingly, providers are hesitant to ask about and patients often do not volunteer information about SEEL issues.^{3,4,5} However, recent research shows that addressing these root causes improves health outcomes while saving health care dollars.⁶

One of the most prevalent social issues is homelessness or lack of stable housing. Many ED patients come in because of chronic complaints that are directly related to their living situation. Work focused on housing stability in many cities has shown remarkable outcomes in terms of overall cost savings, improved health, connection to primary care, and decreased ED and acute care visits.^{7,8,9}

Access to healthy foods is a challenge in some communities.^{10,11} There is evidence that patients with chronic diseases (such as congestive heart failure, diabetes, and hypertension) experience a decrease in ED and inpatient visits when they have access to a healthy diet, leading to both improved health and decreased costs.¹⁹

Many of these issues seem to be beyond our scope — and unmanageable from the perspective of emergency care. However, our unique positioning as the gateway to the health care system, coupled with the dual promise of improved health outcomes and cost savings, points to an unrealized potential for the ED in caring for social emergencies. Given the prevalence of social issues that show up at our doorstep,^{12,13} the ED is primed for intervention on social determinants and holds the promise of decreasing overall health care costs, improving health outcomes, decreasing health disparities, improving both patient and provider satisfaction, and decreasing crowding.^{21,23}

With the passage of the ACA and a shift toward improving both health outcomes and the patient experience, addressing SEEL issues can become a centerpiece of helping EDs meet these metrics. Implementing programming and resources to address SEEL issues not only allows departments to do “the right thing” for patients, but also will allow providers to look at patients holistically and meaningfully determine how to connect patients to resources. Additionally, assisting with patients’ social concerns may lead to faster, safer discharges as well as decreased recidivism, which would improve ED boarding, crowding, and throughput.^{21,23}

How can we address social determinants of health in an environment where resources and providers are already overwhelmed? Some ED-based programs have already demonstrated success in this regard, and what follows is a basic template for developing a plan to address SDOH in the emergency department.

Application

1. Assessing Current Resources & Departmental Challenges Metrics

What resources does your ED have to address SDOH? The resources vary from simple handouts to multiple full-time staff members. Understanding the current utilization of resources at your facility and key issues, such as admission rates, ED or inpatient boarding, patient satisfaction, staff satisfaction, staff education and ED staffing can help to reveal what may be possible and what barriers may arise in addressing patients’ SEEL needs.

2. Identifying Current Social Issues/Patient Needs/Provider Needs

To systematically address the SDOH that affect patients' health, we must understand what these needs are, and one key way to do that is by conducting a needs assessment. As one study showed, providers' perceptions are not line with that of their patients' regarding key social needs.²⁵ At the same time, addressing provider needs is important to help ensure personal investment in the process, ensuring effective care. Understanding these issues may also lead to both increased patient and provider satisfaction.¹⁴

While there are no well-validated metrics for provider satisfaction, various patient screening tools have been proposed over the years to screen for upstream social issues that may contribute to poor health outcomes.^{15, 16}

3. Addressing Social Issues in the ED

Many EDs have social workers and/or case managers available during certain hours. These individuals often also cover other parts of the hospital, such as inpatient services or the outpatient clinics. Other EDs have dedicated ED part-time or full-time social workers and case managers. Most often, social workers and case managers help with mandatory reporting requirements (such as issues around domestic violence, sexual assault, child abuse, and elder abuse) as well as issues affecting discharge/disposition (such as helping patients find shelter, be placed into a skilled nursing facility, or go home with additional supports to family). Fewer programs explore connections to community resources (like food banks), public benefits (eg, food stamps, cash benefits, and Section 8 housing), or even community primary care clinics. As there has been no standardized approach, many different models exist around the country to leverage local resources in order to address SEEL issues, and we will explore a few here.

A. Highland Health Advocates/Health Advocates of Alameda Health System

The Highland Health Advocates (HHA), based at Highland General Hospital — Alameda Health System, in Oakland, CA, grew out of the need to address patients' more chronic SEEL needs, such as homelessness, access to healthy foods, and income support. HHA addresses these needs by working in partnership with the ED's fulltime social worker.

HHA brings together two nationally recognized models, HealthLeads (<http://healthleadausa.org>) and Medical Legal Partnerships (<http://medicalllegalpartnership.org>). Volunteers — mostly students and retirees — are trained to provide resource navigation for ED patients. Any member of the ED staff, including registration and front desk staff, can refer patients to HHA. After completing a brief social needs intake/screen, HHA then assists with various SEEL issues, such as completing applications, scheduling appointments, and revising resumes. HHA provides longitudinal follow-up

through phone calls and appointments to ensure patients have been able to access referrals and resources. When more complex issues arise, the volunteers will “refer up” to either the ED social worker or a legal partner. The legal partners, local community-based legal services providers, assist with more complex issues, such as contesting an eviction, appealing benefit denials or terminations, or helping obtain custody/child support. Each legal partner is onsite one half-day a week to conduct intake, and s/he provides additional legal services via phone and email.

Together, the volunteers and legal partners, in cooperation with the social workers, create a continuum of care for patients’ SEEL needs. For example, the volunteer could help an individual fill out a food stamp application and also refer them to local food pantries. On the other hand, the lawyer could help if the individual were mistakenly found to be ineligible for food stamps or if food stamps were later terminated. For families with complex immigration status or individuals requiring emotional support, such as in cases of intimate partner violence or elder abuse, the social worker can step in and provide counseling and advocacy. Early data from this program has shown improved connection to both resources as well as primary care.

B. Aurora Student Hotspotter Program

This program, based at the University of Colorado in Aurora, utilizes college students to address patients’ SEEL needs. Partnered with the local fire department, the Colorado Patient Navigator Training Program, and other community partners, the Hotspotter program trains student volunteers to identify complex social issues and become resource navigators for complex frequent ED users.¹⁸ After completing a curriculum consisting of lectures and site visits, students accompany frequent ED utilizers through the health care system — both inpatient and outpatient — and help with various social needs, such as applying to housing, finding food pantries, navigating transportation, and other community resources that patients need.

C. Frequent Users of Health Services Initiative

A joint venture between the California Endowment and the California Healthcare Fund, the focus of this initiative was to promote a more responsive system of care that addresses patients’ needs, improves outcomes, and decreases unnecessary use of emergency rooms and avoidable hospital stays. Based on pilot programs in six different hospitals, case management was utilized to make referrals to essential resources. Data from an independent review was very promising, suggesting that after 2 years of program enrollment, average inpatient charges decreased by 69%, falling from \$46,826 at 1-year pre-enrollment to \$14,684 at the 2-year point — and 2 years post-enrollment into the initiative, average inpatient days decreased by 62%. In addition, there was a documented 61% decrease in ED visits.¹⁷

Implementation and Evaluation

1. Advocating on a Systems Level

There is great need and utility in focusing resources on connecting our patients to existing services to help with their unique individual needs. However, even if we are able to devote staff and time, and are able to close the existing “advocacy gap” by eliminating barriers to existing services, there still often still remains a “resource gap.” With increased efficacy on the ground and elimination of the “advocacy gap,” demand may exceed the supply of needed services. Additionally, even without eliminating the “advocacy gap,” existing services may be inadequate to meet existing need.

One glaring example is that of housing. Some suggest public housing or Section 8 as the solution. However, further probing reveals that the waiting list for Section 8 and public housing is often closed, meaning one cannot sign up to get onto the waiting list. Even after one signs up, there is often a wait to for housing which may be as long as a decade. In the interim, patients who are unstably housed must rely on a patchwork of shelters, friends/relatives, and the streets.

We thus advocate for further involvement, not just in the ED, but also on the local, state and national level, to raise awareness and champion issues that impact the SDOH, and ultimately, our practice. Effective change has to come from many fronts, and we as ED providers have unique perspective and knowledge that is essential in guiding the process of implementing such positive change.

WHAT'S THE ASK?

1. Understand the value we bring.

As emergency providers, we serve as the safety net for society, the last resort for the disadvantaged, the poor, and maligned. We are, unavoidably, voyeurs of the downstream effects of policy and systemic failures, and as such we have insights into the problems that exist and how to best address them. Emergency physicians should be leading the charge in the hospital and on the advocacy front to effect that change that could benefit those most desperate for help, and ultimately, society as a whole.

2. Become educated.

This chapter is meant as merely a starting point. There are myriad resources available to learn about the SDOH, and there are many existing success stories, several with immediate relevance to emergency practice. Other key sources of information to use as a jumping-off point include publications by the Commonwealth Fund⁶ and the World Health Organization¹. In addition, social media can be informative, as there seems to be a recent cultural movement toward acknowledging and addressing key SEEL issues.¹⁹

3. Facilitate creativity and innovation.

Armed with inspiration and knowledge, the next step is to be a champion, to spur development of local programs to help address social needs.

4. Spread the word.

It is important to be involved. Although important changes happen on the local level, often to have a greater impact, one needs to be present in policy discussions. There are numerous avenues to achieve this goal: within EMRA and ACEP involvement in leadership positions and committees; more broadly through local politics, and by communicating these issues with state and national representatives. ★



HOW A BILL BECOMES A LAW

*David G. Reid, DO, UT Southwestern/Parkland Memorial Hospital
Jason Bowman, MSIV, Brown University*

Getting involved in the political process as a physician or medical student can be an uncomfortable and nerve-wracking experience — even more so because of the minimal training (if any) that most of us receive in how to do so, or in how the political system works.

We spend years learning the language and code of medicine — what it means when someone has an acute vs. chronic issue, an ischemic vs. hemorrhagic event, or a proximal vs. distal comminuted fracture. Similarly, there is a language and process within politics and advocacy. Failing to learn at least the basics of each of these can keep us from fully understanding and participating in the legislative process, or make us feel uninformed in the midst of an advocacy conversation.

Recognize and understand the legislative language, general steps, and pitfalls of the bill-to-law process.

Most of us will not ever find ourselves directly assisting in the writing of a bill with our representatives and their congressional staffers. However, when these bills become laws they will affect our lives and medical practices. Furthermore, nearly every medical advocacy trip to Washington, D.C., or a state capitol building will involve promoting — or cautioning against — a bill that has the potential to become law and impact the practice of emergency medicine. Therefore, understanding this process is vitally important for your efforts as an advocate of our profession and specialty.

What Is a Bill?

A bill is simply an idea for a law that has been researched and put on paper to be introduced to either the U.S. House of Representatives or Senate, or the same corresponding bodies at the level of a state government. Together the House of Representatives and Senate make up what we know as Congress, and individually they are often referred to as the two chambers of Congress. (As an aside, Nebraska is the only state in the country whose state legislature is “unicameral” — having only one body or chamber, rather than two.) Ideas for bills can come from

almost anyone: a representative from Congress, staffers, advisors, donors, and constituents like you! Some strong motivation — be it safety, efficiency, or beliefs and values — will typically drive an individual or group to research an issue and come up with a compelling argument for why a change or creation of law is needed. Congressional staffers then work with legislative counselors (lawyers) to properly and legally draft the idea into a bill, which will then be introduced by the elected official to his or her chamber of Congress.

Travelling to meet with your representative, in district or the Capitol, can be an exciting adventure. On most advocacy visits with an organization or group, you will receive “briefs” or “one-sheets” on certain bills that ACEP is asking you to promote or advise against. If you are meeting back in district on behalf of an organization, they can often provide you with this type of material as well. This is a good example from a previous ACEP Leadership & Advocacy Conference:

Medical Liability Reform for EMTALA Services

**Support the “Health Care Safety Net Enhancement Act of 2015”
(H.R. 836/S.884 sponsored by Representative Charlie Dent (R-PA) and
Senator Roy Blunt (R-MO)).**

The Health Care Safety Net Enhancement Act will encourage physicians and on-call specialists to continue their lifesaving work and ensure emergency medical care will be available for your constituents when and where it is needed. Specifically, the legislation addresses the growing crisis in access to emergency care by providing emergency and on-call physicians who provide EMTALA-related services with temporary protections under the Federal Tort Claims Act. EMTALA, the “Emergency Medical Treatment and Labor Act” is a federal law enacted in 1986 that requires hospital emergency departments and its physicians to provide a medical screening exam for all patients, regardless of their insurance status or ability to pay. If an emergency medical condition is discovered, then medical treatment must be provided on-site or the patient transferred to a facility that could provide the necessary treatment.

This brief was created to help advocates tell their representatives to support H.R. 836 and S. 884, which are separate but identical bills, simultaneously introduced by co-authors in the House and Senate. You can easily ascertain all of this by just looking at the title, even with no formal training in political terminology. Bill number 836 was introduced to the House of Representatives (H.R.) by Rep. Charlie Dent — a Republican (R) from Pennsylvania (PA). Bill number 884 was introduced in the Senate (S.) by Sen. Roy Blunt, a Republican from Missouri (MO). Sometimes you will see a bill written with a congressional number such as:

H.R. 836: 114th Congress 1st Session

At the national level, a particular Congress spans two years and is divided into two sessions. Each session typically lasts from January to December, with multiple breaks and vacations along the way. Elections in each chamber (at the end of even-numbered years) bring in new faces that make each Congress unique. Our example bill was introduced to the 114th Congress in the 1st session of its 2015-2017 term.

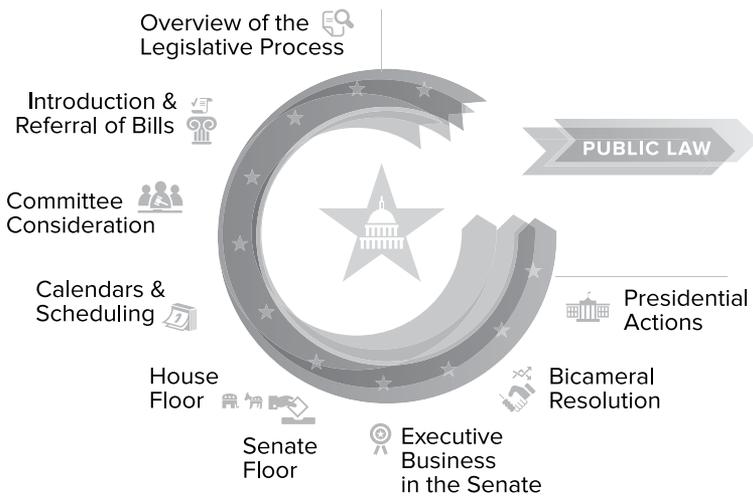
When a bill is moving through one chamber of Congress, the goal is that a similar (if not identical) piece of legislation will move through the other body. This is because every bill, no matter which chamber it starts in (H.R. or S.), ultimately must pass a vote by both. Therefore, it is typical to have similar bills for the same idea going through each chamber simultaneously in order to save time and garner support in both chambers. Sometimes the final language is slightly different for each bill. Through negotiations and revisions, a single version can ultimately be created that each chamber agrees upon before the combined bill is sent to the president for approval.

While understanding how bills become laws is simple, actually getting a bill passed into law is not. Only about 5% of the bills introduced ever actually become laws. Thousands of bills are considered every Congress, but the vast majority never reaches a final vote by the House of Representatives or the Senate.

The Process

With a couple of exceptions, a bill goes through basically the same process in each chamber of Congress. Follow the flow-chart on this page to see how a bill progresses from either the House of Representatives or the Senate. Several key points in this pathway are explained in greater detail in the following paragraphs.

FIGURE 1. Legislative Process



Full Chamber Vote

A bill that is approved by a committee is put on the congressional calendar for a second reading, followed by debate and amendments from the entire chamber. This will ultimately be followed by a vote from all members of the chamber who are present. If a bill is passed by the House of Representatives, and there is no corresponding bill in the Senate, then the approved bill is introduced in the Senate and goes through the process again (and vice-versa for bills that originate in the Senate). If there is a corresponding bill approved in the Senate, then a Conference Committee — made of members from both chambers — will debate and hash out a new single joint version of the two corresponding bills to go immediately back to each chamber for a final vote. Regardless of whether 1 bill is passed through the 2 chambers, or 2 separate bills are combined into 1 by a conference committee, the final bill approved by both chambers will ultimately travel to the president's desk in the White House.

Trouble Ahead

Many bills are “tabled” during committee deliberations and votes, or at a full chamber vote. This means consideration of the bill has been suspended indefinitely, and as a result the bill dies. At any voting point on the path, the bill could also be rejected outright as well. The majority of the 95% of bills that die in Congress meet one of these two ends.

A special and often dramatized point of potential trouble for a bill is the filibuster. At the federal level a filibuster can only occur in the Senate, since the House of Representatives passed rules in the 1840s to avoid filibusters. So, the discussion here will focus on the Senate. During the 2nd reading and debate period on the Senate floor, prior to the full Senate vote, the law permits a senator (or series of senators) to speak for as long as they wish in an effort to delay and/or prevent a vote from occurring as scheduled. This is a hotly debated political technique, and can only be stopped by a 3/5 vote of the Senate. While use of the filibuster and the vote to end one are both fairly rare occurrences, several well-publicized filibusters have occurred at the state and national levels in recent years.

Actions of the President

When a bill approved by Congress does finally reach the president, the political process is not complete. Often the president signs the bill into law, which is the most common and straightforward ending. However, if the president doesn't sign the approved bill for 10 days, and Congress is still in session, the “Presentment Clause” of the U.S. Constitution mandates that the bill still becomes law. If, however, the Congressional session ends before the 10-day period, the president can use what is called a “pocket veto” by not signing the bill, and it will not become law. Finally, the president has the option to reject the bill outright, an action called a veto, at which point the bill is sent back to Congress. If 2/3 of each chamber vote to re-approve the bill, in spite of the president's opposition, the veto is overridden and the bill becomes law.

Judicial Branch's Role

The judicial branch can also play an important part in the passage and survival of laws in the U.S. Specifically, the judicial branch is tasked with examining laws that are appealed and determining if they are in line with the U.S. Constitution. This is referred to as judicial review. Interestingly, the Constitution does not explicitly decree the role of the judiciary in the legislative process, like it does with the Congressional and Executive branches. Rather, the power of the courts to declare laws unconstitutional is considered an implied power, based on *Article III* and *Article VI* of the Constitution. As of 2014, the Supreme Court had used judicial review to rule 176 acts of Congress as unconstitutional.

For example, two separate challenges to the 2010 Affordable Care Act were appealed to the Supreme Court for judicial review. In *National Federation of Independent Business v. Sebelius* (decided on June 28, 2012) the Supreme Court ruled that the individual mandate described in the ACA was constitutional. Subsequently, in *King v. Burwell* (decided June 25, 2015) the justices ruled that federal subsidies for health care premiums could be used in states that did not have a health care exchange and relied upon the federal exchange. It is likely that the ACA would not have survived, or would have been altered significantly from its present form, if the judicial review process had gone differently.

What Happens After Passage

After a bill becomes law, then Congress must decide how to fund it. An important topic to be aware of in regards to Congressional funding is the current “pay as you go” (“PAYGO”) budgeting rule. Initially in effect from 1990-2002, and then re-enacted by the 111th Congress and President Barack Obama, this rule requires that each new federal expenditure — such as funding a newly passed law — must be offset by an equivalent reduction in expenses from somewhere else in the federal budget. So, if a new health care law requires \$10 million to enact fully, then \$10 million must be cut from other programs.

An additional expenditure control measure by Congress is the use of sequestration to cut budgetary spending. If, at the end of a congressional session, the federal budget balance is negative, then the session’s deficit is balanced by deducting from other programs funded by the federal budget. Certain programs are protected from sequestration though, such as Social Security, most unemployment benefits, veterans’ benefits, Medicaid, and SNAP (food stamps). This can magnify the impact of cuts on the parts of the budget deemed discretionary.

Finally, Congress can use additional legislation to pass a bill that provides “offsets” of costs or eliminates the funding for specific programs or laws that are already passed. For instance, in the Affordable Care Act, there was a provision for a study on workforce shortages that has not yet been funded despite its inclusion in the law. Regardless of the pathway chosen, limits on funding are a final mechanism to prevent a law from being fully enacted.

Conclusion

The way a bill becomes law in the United States is an important and powerful part of the American legislative process. It is important for all of us to understand as citizens, and especially critical for us to know as health care providers in order to effectively advocate on behalf of our patients and our profession.

WHAT'S THE ASK?

1. Understand the process of how an idea for a law becomes a bill and goes through the process of becoming a law.
2. Recognize and understand the legislative language, general steps, and pitfalls of the bill-to-law process.
3. Engage and participate in advocacy efforts at appropriate times in the process. ★

GETTING TO KNOW YOUR LEGISLATOR

Tiffany D. Jackson, MD, EMRA Vice-Speaker of the Council, The University of Alabama at Birmingham

Jonathan W. Meadows, MS, MPH, CPH, MSII, Touro College of Osteopathic Medicine

As emergency medicine physicians, we are constantly confronted with individual patients suffering the medical consequences of broader social and environmental factors and the effects of health policy. While routinely advocating for our patients' immediate health care needs to nurses, consultants, and administrators, residents often feel passionate about addressing those social circumstances that contribute to the underlying burden of disease. Beyond the role of bedside physician, they wish to be advocates, but may feel overwhelmed by constraints on their time and daunted by the complexities of the political process. Traditional residency curricula have limited formal training and limited time allocated for political and community advocacy. Many think that solely in engaging with legislators is the best way to be an advocate. But they don't engage, because they either don't know how (or feel awkward doing so) or they believe that legislators aren't accessible with the scores of people and organizations already competing for attention. This is not true; the following sections provide a process for becoming engaged with legislators at all levels of government as an emergency medicine physician advocate.¹⁻³

“Medicine is a social science, and politics is nothing else but medicine on a large scale.”

— Rudolf Virchow

Identify Your Specific Passion: Why You Advocate

According to the ACEP code of ethics, emergency physicians have an ethical duty to promote population health through advocacy, participating in “efforts to educate others about the potential of well-designed laws, programs, and policies to improve the overall health and safety of the public.”⁴ Physician advocacy can range from working toward state health care reform to advising a local school

board.³ Advocacy activities might include attending a physicians' day at the state capitol, testifying before a committee, or corresponding and meeting one-on-one with an elected official.⁵

Regardless of the advocacy venue, it is crucial to identify a personal topic that nourishes your passion for advocacy. It may seem unlikely that a letter or conversation from an individual physician could impact public policy, but multiple cases demonstrate that passionate physicians can, indeed, affect legislation. Two physicians working with the Canadian Association of Emergency Physicians, for example, influenced the government to enact one of the most stringent gun regulations in the Western hemisphere, contributing to a 37% drop in gun-related deaths in the years following the law's enactment.^{6,7} As our nation continues the process of health reform, effective physician advocacy is more important than ever.

Be Informed

Research your topic thoroughly and know your subject matter. More important, understand your opponents' arguments, which will enable you to address criticisms of your position in advance of any meetings with policymakers. For federal or national issues, begin by visiting the main EMRA and ACEP advocacy websites for introductory information presented as policy briefs or legislative updates and position statements. Next, go to subject area websites to acquire supportive detailed information, such as the Kaiser Family Foundation. Additionally, be familiar with current legislation on your topic and understand your legislator's perspective. Note any news articles, non-academic literature, and relevant academic publications for both sides of your position. Understanding multiple sides of the issue strengthens your position when speaking to legislator or his/her staff and strengthens the legislator's position while voting. If you are dealing with a state or local lawmaker, research when and how other states or local communities have addressed similar issues. Understanding the committees they serve on, their voting record, and their constituencies can help you make an effective advocacy pitch to an elected official. Websites of elected officials contain extensive information about the personal and professional background of legislators. Attending ACEP's annual Leadership & Advocacy Conference in Washington, D.C., (for education on major issues, in-depth advocacy training, and direct federal advocacy opportunities) and attending state chapter legislative events can help advance your advocacy experience.

Advocacy Through Leadership

While it is crucial to demonstrate a detailed understanding of your issue, remember you already are well-positioned to make an impact. Your role as a physician gives you a great deal of clout; physicians enjoy considerable social status and respect as healers, scholars, and public servants. A survey of legislative assistants reported that 90% of physician lobbyists were either very effective or somewhat effective — and, in the words of one legislative assistant, “should recognize the power they have to influence Congress.”¹¹ Moreover, within the

current health care system, emergency physicians provide a disproportionate share of the care for the underinsured — far more than any other medical specialists.¹² This further sets our specialty apart and gives us a more powerful voice in the public policy debate.

Partnering with supportive organizations such as EMRA, ACEP, AMA, or a local grassroots network can add strength in numbers to your issue, making legislators more likely to respond and act. Additionally, these professional organizations already may have researched and laid the groundwork needed to present your issue; their government affairs staff may have established relationships with legislators and can help refine and tailor your arguments.¹³ They can offer contacts to like-minded interest groups and lobbyists who wish to be involved and will eventually be included in the policymaking process. Inviting such groups to the discussion early in meetings with legislators or their staff or through collaboration-building meetings can earn valuable allies, bolster support, and facilitate passage of a bill. Just as modern medical paradigms incorporate a health care team with a physician as team leader, various members bring diverse knowledge and skills to the table, resulting in more effective advocacy.⁹

Advocacy Through Writing

Share your efforts with the academic and the public policy community. Legislative officials and staff read and watch various sources of mainstream media and literature (eg, news, editorials, television, government reports, and academic publications) to inform themselves of the issues that matter to their constituents. Letters to the editor (LTEs) are a common method of publication that articulates the flashpoint topics and shape discussion. Many influential LTEs were published in major journals, such as the *Journal of American Medical Association*, the *Lancet*, or the *Journal of Emergency Medicine*, as well as their supplemental online counterparts (blogs, Web articles, etc., such as news@JAMA and the JAMA Forum). LTEs also can be submitted to other non-academic periodicals, such as newspapers and magazines, which are reviewed and analyzed by legislative staff daily. Each journal has publication criteria, ranging from invitation-only to open calls for submissions. LTEs must be brief (300 words or less) and concise.

Scholarly publications on advocacy remain relatively scarce. Advocacy often does not fit in the traditional scholarship model and typically has not been promoted through the academic rewards of faculty promotion or tenure. Opponents of increased calls for advocacy in the medical profession even argue that advocacy may subvert academia scholarship, “as advocacy seeks change rather than knowledge.” Models for scholarly advocacy do exist, however. Influential American educator Ernest Boyer, PhD, proposed an alternative model in which advocacy may be considered the “scholarship of application,” alongside the more traditional scholarship of discovery. As advocacy becomes increasingly integral to the medical profession, physicians need to be recognized for their expertise, and their advocacy efforts need to be acknowledged for what they are — true scholarly pursuits.

Core Advocacy: Direct Communication & Relationship with Elected Officials

The first step is to establish contact with the elected official or his/her office. Reach out to staff (aka legislative assistants) who are responsible for the daily office activities. Utilize the various local, state, and federal websites for each part of the legislative branch to determine your federal and state leaders. These website can provide valuable phone numbers and addresses. For federal elected officials, your legislator's Washington office can also provide contact information for their district office.

Snail Mail

While traditional mail largely has been supplanted by electronic communication, letters sent via the postal service remain highly effective in advocacy. A tangible letter stands out more than one among dozens of daily emails and demonstrates that you did more than just cut and paste. Use a standard format; a single page should be sufficient, summarizing one or two key issues in language an educated layperson can understand.¹³ The following is one example:

Sample letter

*Jane W. Doe, MD
500 West Way
Indianapolis, IN 40000*

January 1, 2013

*The Honorable P. Smith
Indiana Senate
Indianapolis, IN 40000*

Dear Sen. Smith,

I am a constituent of yours from Franklin County, writing to ask for your support of the proposed bicycle helmet law (Senate Bill 400). As an emergency medicine physician, I see many children present to the emergency department with head injuries that could have been prevented by wearing a bicycle helmet. The story of Billy K., also from Franklin County, stands out in my mind. He is a 5-year-old who was just learning to ride his bike. No one on his street or in his family had ever worn a bicycle helmet; they were not even aware it was a safety concern.

When Billy arrived to the emergency department, he was confused and had a large cut overlying a skull fracture to the back of his head. After a week in the hospital Billy went home, but had he worn a helmet, he might not have been injured at all. Fortunately, he was able to return to normal activities, but not all children are so lucky. Approximately 7% of all brain injuries are related to bicycle accidents;¹⁷ one study shows that the use of bicycle

helmets can reduce the risk of head injury by 74% to 85%.¹⁸ Finally, the CDC recommends that states increase helmet use by implementing legislation, education, and enforcement.

If you have any questions about my personal experience or the research regarding bicycle helmet safety, please do not hesitate to contact me.

Thank you for considering supporting Senate Bill 400.

[Handwritten Signature]

Jane W. Doe, MD

Email

The ease and speed of email have made it a convenient way for the public to contact legislators; however, this ease and convenience can discredit its content. Mass emails asking citizens to add their names before forwarding them to representatives are tallied and then promptly dismissed by legislative staff. To stand out, your email must demonstrate the same interest and passion as any other communication. The subject line of the email should state you are a constituent and explain where you are from.¹⁴ Draft your email as you would write a letter; include an introduction, specific request, story, supporting statistics, repeated request, and a thank-you. Personalization will improve the chances of your email being read and considered by the legislator. Timing is important; some studies indicated emails are better received on Tuesday, Wednesday, and Thursday mid-morning and mid-afternoon.

Telephone

Like physicians, legislators are very busy. Taking the time to call a legislative office — in Washington, D.C., in state, or locally — can be productive, but getting the opportunity to speak with a legislator is rare. More often, you will be directed to a legislative assistant, who will collect and condense information to present at a later time. Legislative assistants frequently determine whether issues are presented favorably or unfavorably, and they can have substantial influence over policy decisions. Be respectful and courteous; you may gain an ally and knowledgeable resource. Telephone calls can be ideal when a bill is up for vote.

Face to Face

Meeting a legislator can be intimidating, but remember that you are the health care expert. Be polite, but confident. Dress professionally, arrive early, and wait patiently in spite of long delays. Occasionally, you may end up meeting with a legislative assistant instead of the elected official. Whether you meet the legislator or the staff member, follow the same format suggested for written communication: introduce yourself, shake hands, state where you are from, if you are a constituent, and if you represent a group, yourself, or both. Then, clearly explain what you

want from the legislator, tell your story, give pertinent facts, repeat your request, and entertain questions. Take a few notes; come prepared, but be flexible and have a normal, relaxed, and open conversation. Maintain a pleasant, professional tone and do not become derogatory or defensive. Try to frame your position in positive terms and portray yourself as in support of an issue rather than against an opposing view, which may invite critical unfavorable questioning by the staff or legislator.¹³ Be respectful of your legislator's time, thank him/her at the close of the conversation, and indicate you will follow up on your request. Leave your contact information and indicate your availability for further conversation regarding your issue.

When to Make Contact

Make contact when a bill of interest is coming up for a vote in committee or on the floor (depending on the scheduling of the particular legislative session), if there is a major issue affecting your patients after your prior background research is done, if you have bill language that has been drafted, or you are a part of a coalition. Search out additional unique opportunities for meeting with legislators after you have identified your passion and become informed about your issue(s). Contact the legislator's office scheduler to set up individual meetings in Washington or at a local office. It is extremely important to identify yourself as a constituent — it will increase the likelihood of a timely response. Periods of congressional recess are opportune times to meet your legislator; these dates can be obtained from the local/district office. You can also invite your legislator to tour your emergency department for a first-hand look at issues specific to your facility, as suggested by ACEP.

As your specific piece of legislation or issue progresses, your activities and contacts may shift as well. When proposing a bill and if appropriate, assist in reaching out to legislators who might serve as a key sponsor, a co-sponsor, or a supporting sponsor. More important, find a champion for your cause.⁵ When a bill is in committee, offer testimony on the record.¹⁶ Contact your legislators again when legislation is coming to a vote and after a vote, and thank them for their attention to the issue. In general, particularly thank them if their stance aligns with your position; encourage future work and partnership if it does not. This process can be prolonged and requires persistence, but maintaining contact can create long-term relationships for continued cooperation on future projects. After any contact with your state senators or congressmen, be sure to send a thank-you letter.

Testifying Before Committee

The experience of giving testimony before a legislative committee tends to be more structured than individual meetings and is guided by the committee chair, but the same basic principles of etiquette and self-presentation apply. Professional business attire is appropriate. When you arrive, let the chairman know you are there. When asked to testify, start by introducing yourself, explaining your credentials, and stating whether you support or oppose the specific bill in

question; then make your case as you normally would. Be prepared for distraction; committee members may speak to each other, pass notes, or read other documents. Regardless, if they ask a question, assume they are paying attention and answer it.

Conclusion

As long as emergency departments remain the canary in our current health care coal mine, emergency physicians will be ideally situated to advocate for the health of both individual patients and communities as a whole. Advocacy can take many forms. Find your passion and use the information and strategies in this handbook to speak up for your specialty, whether on a local or national scale. Be patient, be persistent, and continue to serve as your patients' voice.

With thanks to Michael M. Khouli, MD, and Lindsay Harmon-Hardin Weaver, MD, for their authorship of a previous version of this chapter.

WHAT'S THE ASK?

1. Identify your specific passion and why you choose to advocate amidst the multitude of tasks and obligations inherent to physicians.
2. Advocacy through leadership is central, and this activity is clearly coalition-building and, in a sense, is just like team-building in the ED setting.
3. Write letters to the editor that utilizes personal stories in addition to government and academic studies to advocate for your passions.
4. Develop relationships with your legislative offices by creating lines of communication and perfusing those communication lines with trusted information and reliable opinions. ★

NOTES

GETTING INVOLVED IN THE HOUSE OF MEDICINE

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Emergency medicine continues to see unparalleled growth in the house of medicine, with more than 1,800 new emergency medicine residents in 2015 alone. As our specialty grows, we must ensure that our voice in advocacy expands to meet this growing demand. There are numerous opportunities to participate and advocate throughout emergency medicine. Regardless of the method, we all share a common goal in advancing and building our specialty.

Action is key. Get involved early and become a passionate voice of our great field of medicine.

Emergency Medicine Residents' Association

The Emergency Medicine Residents' Association (EMRA) was founded in 1974 and today has more than 13,000 members. It ranks as the second-largest specialty association in emergency medicine, behind the American College of Emergency Physicians (ACEP), and is the oldest and largest independent resident organization in the world. The organization works collaboratively with ACEP and the American College of Osteopathic Emergency Physicians (ACOEP) on common goals and projects. EMRA operates under a shared services agreement with ACEP but retains its independent spirit. EMRA advocates not only for the field of emergency medicine itself, but also for the success of its members. With its own operating budget and leadership, the issues of residents remain the focus of its every action. Through various committees, organizations, scholarships, and benefits (both personal and professional), EMRA is an invaluable resource for residents and a unique opportunity for residents to get involved in the house of medicine with like-minded individuals. **Learn more at emra.org.**



American College of Emergency Physicians

With more than 32,000 members, ACEP is the largest emergency medicine specialty organization in the United States. The college's formation in 1968 coincided with the establishment of the specialty to represent the interests of emergency medicine physicians and help develop the field. Today, the organization is active across the legislative, regulatory, and administrative spectrum to help advance the interests of its members and patients. Residents can participate in any committee, with multiple advocacy-related opportunities including Federal Governmental Affairs and State Legislative Committee. The Young Physicians Section offers residents an opportunity to transition into a group inside ACEP that has a similar perspective. If involvement at the national level is not your interest, there is a state chapter in every state that focuses on local issues and is another opportunity for participation. **Learn more at acep.org.**

American College of Osteopathic Emergency Physicians

Founded in 1975, ACOEP is a rapidly growing organization. In 2014, there were more than 60 osteopathic EM training programs offering 270 resident positions (a 46% increase from 2008). As the number of osteopathic medical schools and residency training programs continues to increase, so too will the number of osteopathic emergency physicians. ACOEP advocates not only for osteopathic physicians' training, but also for emergency medicine itself. ACOEP has numerous committees and boards that advocate for emergency medicine, such as the Governmental Affairs Committee. This committee reviews and develops policy and legislation that pertains to EM in the United States. **Learn more at acoep.org.**

Society for Academic Emergency Medicine

By improving research and education in EM, SAEM serves as a strong advocate for the advancement of emergency medicine. With a special focus on the academics of emergency medicine, SAEM continually strives to promote our specialty by improving and researching how we practice emergency medicine. SAEM provides great opportunities for resident involvement — such as an annual meeting and a research forum — and continues to be a growing organization in the world of emergency medicine. **Learn more at saem.org.**

Getting Involved in an Organization

Now that you've joined some of these great organizations and have seen the value of advocacy, you may ask, "How can I make a difference?" Within each of these organizations there are multiple outlets to strengthen our field's presence within the hose of medicine.

EMRA Health Policy Committee

Recognizing that no one individual could perform the task of marshaling all legislative issues, EMRA created its Health Policy Committee in 2008. The committee was founded to support the board on health policy issues affecting its members. Resident participation in the committee is ideal for those interested in health policy, politics, or legislation. EMRA committee members were instrumental in the development of the first edition of the Advocacy Handbook and the Advocacy Lecture Series.

Leadership & Advocacy Conference

The Leadership & Advocacy Conference was created by ACEP to help train and develop leaders in the practice of emergency medicine. Politicians make legislative decisions (such as EMTALA) that have a long-lasting impact on the practice of medicine. Each physician must be an active voice in the political process as fundamental changes in the nature of health care delivery are discussed. This conference is an opportunity for physicians to get training in political advocacy to help further the goals of delivering high-quality emergency medical services. Part of the conference is dedicated to making visits to legislators' offices on Capitol Hill to educate and advocate for critical issues in emergency medicine.

EMRA hosts a portion of the conference that is specifically tailored to the interests of residents and first-time conference attendees. With a track that involves lectures, advocacy training, and receptions with leaders in the specialty, the conference has continued to provide a unique educational opportunity for resident physicians. EMRA annually issues its Chair's Challenge, a call for residency program chairs to sponsor their residents' summit attendance. With a nominal registration fee for EMRA members, each resident can attend for the costs of transportation and housing.

The 911 Network

As the industry of health care continues to grow and change, staying up-to-date is crucial. The ACEP 911 Network is one of the easiest ways to become a better-informed physician and more effective advocate. ACEP established the network in 1998 to encourage members to cultivate long-term relationships with federal legislators, convey legislative and regulatory priorities, and affect the final outcome of federal legislation important to emergency medicine.

The ACEP 911 Network offers several avenues for advocacy participation:

- **Weekly Updates.** Sent by email to inform participants of the latest legislative, political, and regulatory issues and activities.
- **Call Alerts.** You can use a toll-free number to call your representative's or senators' offices. Often the message is as simple as, "I live in Rep. X's district and would like him or her to support bill # xxx."
- **Delivery of NEMPAC Contributions.** Some NEMPAC (National Emergency Medicine Political Action Committee) contributions are delivered directly by 911 Network members who reside in the legislators' districts. It is a simple way to meet your representative and offer yourself as a resource.
- **ED Visits.** Physicians are encouraged to invite legislators to tour their emergency departments. This provides legislators and their staff the opportunity to witness firsthand the operations of an ED and to meet their constituents.
- **Team Captains.** The ACEP 911 Network is organized by a group of team captains who receive focused training and communications, increased resources, and special recognition for their efforts.
- **Advocacy Training.** Members of the 911 Network are encouraged to continually develop their advocacy skills. To help improve advocacy efforts, political education training is offered each year during ACEP's Leadership & Advocacy Conference and during the ACEP Scientific Assembly (SA).

NEMPAC

The National Emergency Medicine Political Action Committee (NEMPAC) is a critical advocacy powerhouse that augments the voice of emergency physicians and their patients in the federal election process. National political action committees (or PACs) combine donations from individuals to make meaningful contributions to federal candidates running for a seat in the U.S. House of Representatives or Senate. As physicians, our success as advocates hinges upon our ability to work with federal lawmakers who share a common vision to improve emergency services. Because health care is at the top of the priority list for many candidates, contributions to NEMPAC will help facilitate the emergency physician's place at the table.

In recent years, NEMPAC contributions to political campaigns have focused on candidates who support emergency medicine reform issues like the Access to Emergency Medical Services Act. In addition, NEMPAC continues to push for

legislation to increase the number of emergency medicine residency positions funded by the federal government and supports proposals that would defer student loan payments until after residency and fellowship training is complete. Simply put, the mission of NEMPAC is to use campaign contributions and political advocacy to support candidates who foster the legislative priorities of emergency medicine patients and physicians. Based on the 2012 election cycle, NEMPAC is the fourth largest physician specialty political action committee. In the 2012 elections, NEMPAC donated more than \$2 million to a total of 238 candidates for the House and Senate.

Health Policy Fellowships

For those who are actively involved in health care policy throughout residency, it doesn't have to end there. Our specialty is dedicated to change at a higher level, and there are numerous fellowships dedicated to teaching residents how to effectively make that happen. Learn more about these programs through the EMRA Health Policy Fellowship Directory at emra.org/match/health-policy-fellowships.

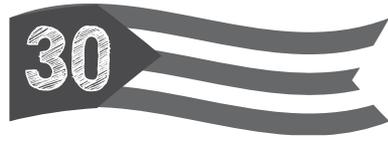
Health Policy Mini-Fellowship

EMRA and ACEP jointly sponsor a Mini-Fellowship in Washington, D.C., for interested residents while still in training. The Mini-Fellowship is a month-long (4-week) rotation for residents to take as an elective during their training or within 5 years of residency graduation. Applications are due in July and are considered by a selection committee for the available positions. The program includes training in advocacy, lobbying in the Capitol, and working with non-governmental organizations, the regulatory process, and much more. For those considering advocacy as a part of their life, this is an excellent opportunity to get on-the-ground experience without the full year commitment.

WHAT'S THE ASK?

1. Our place as a specialty in the house of medicine must be constantly represented, strengthened, and advocated for, starting at a level of individuals who share a common goal.
2. Whether it be through, EMRA, ACEP, state chapters, or any of the other various organizations, action is key. Get involved early and become a passionate voice of our great field of medicine.
3. If you have a passion for ongoing health care advocacy, consider a fellowship in health policy. ★

NOTES



HEALTH SERVICES RESEARCH

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The science and sophistication of emergency medicine research and clinical practice have been revolutionized over the past 30 years. Despite these improvements, many basic questions remain about how to most effectively deliver emergency care. Health services research (HSR) examines topics relating to the organization, delivery, and financing of health care, many of which are pertinent to emergency medicine:

- What factors predict a patient's return to the ED within 72 hours?
- Which patients need diagnostic imaging in the ED? How does imaging influence ED length of stay?
- If we improve access to primary care, how does this change patients' ED use?
- How has the Affordable Care Act impacted ED utilization?

Learn how health sciences research could revolutionize the delivery system of health care and how it may affect the practice environment.

Just as effective medical care is based on a foundation of clinical and translational research, health policy advocates rely on HSR to help define the problems facing our system and identify more effective ways to organize and pay for health care. HSR can measure the successes and failures of past health policy interventions and provide guidance for future policy design.

Overview of HSR

In 2002, the Agency for Healthcare Research and Quality (AHRQ) described health services research as an examination of “how people get access to health care, how much care costs, and what happens to patients as a result of this care.” AHRQ defined the primary goals of HSR as the identification of “the most effective ways to organize, manage, finance, and deliver high quality care; reduce medical errors; and improve patient safety.”¹ In contrast to basic science or clinical research that is focused on a single disease process or type of therapeutic intervention, HSR broadly examines public health, the structure of the health care system, the cost

and quality of health care services, and ability (or inability) of populations to receive those services. HSR may examine a single emergency department, a large hospital, or an entire national health care system.

Challenges in Study Design

HSR methods in study design and data analysis often differ from those used in clinical or translational research. Prospective study design and data collection are often regarded as necessary for the highest-quality clinical research, but prospective studies are uncommon in HSR due to logistical and financial limitations. A classic example of a health services study is The *RAND Health Insurance Experiment*.² This landmark study collected data prospectively over 15 years, randomized individuals to one of several different types of insurance, and researchers examined how this assignment affected use of health care services. To execute this large-scale prospective study required a multimillion-dollar investment, which is not feasible for most researchers. Since HSR prospective studies (including randomized controlled trials) often are impractical, health services researchers use sophisticated statistical tools — including propensity scores, instrumental variables, multiple imputation, and adaptive trial design³ — to perform “quasi-experimental” studies that can account for confounders and missing data.

Data Sources

To study state or national trends, health services researchers utilize large administrative databases or surveys. One database that is frequently used is The Centers for Disease Control and Prevention’s *National Hospital Ambulatory Medical Care Survey* (NHAMCS), an annual probability sample of visits to nonfederal hospital emergency departments and outpatient offices. NHAMCS collects a wide range of data, including (but not limited to) patient demographics, type of ED care providers, vital signs, diagnostic tests, medications, and diagnoses. This breadth of data collection allows researchers to address a broad range of research questions without making the investments required by the RAND study. Other major databases can be found through the Agency for Healthcare Research and Quality’s *Healthcare Cost and Utilization Project* (HCUP), which is a set of several patient-level databases compiled in partnership with federal agencies, state governments, hospital associations, and private industry. HCUP databases that focus on emergency departments include the *National Emergency Department Sample* (NEDS) and *State Emergency Department Databases* (SEDD).

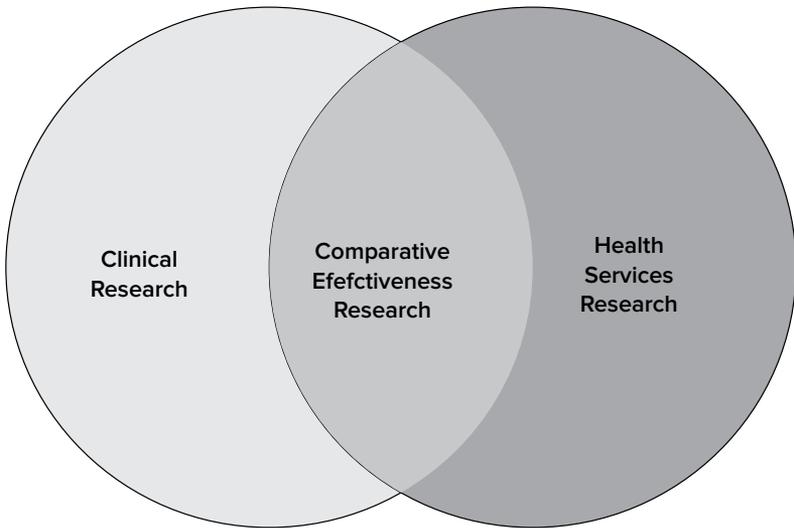
The NHAMCS database is used frequently in health services research. For example, investigators used NHAMCS data to measure the utilization of midlevel providers in U.S. emergency departments from 2006 to 2009. They found that 5.8% of ED patients were seen by midlevel providers without physician involvement, and midlevel caregivers who worked in rural EDs saw a higher proportion of patients than those in urban EDs. These findings may motivate researchers to examine differences in cost and quality between physician and midlevel staffing

in rural and urban emergency departments.⁵ Another study used NHAMCS data from 2001 to 2008 to examine the growth of observation care in U.S. emergency departments. This research found that the number of ED patients with dispositions to observation units increased nearly four-fold during the study period. This trend may guide future research on measuring the quality and cost-effectiveness of observation units.⁶

In addition to state and federal governments, nonprofit organizations also play a major role in health services research. Examples of these organizations include *AcademyHealth*, the *Robert Wood Johnson Foundation*, the *Commonwealth Fund*, and the *Kaiser Family Foundation*. Many of these organizations have their own surveys and databases that are used in HSR.

Comparative Effectiveness Research

FIGURE 1. Comparative Effectiveness Research is the Intersection of Clinical and Health Services Research



Comparative effectiveness research (CER) is one type of HSR that examines the relative benefits, harms, and efficiency of different approaches to disease prevention, diagnosis, and treatment. In the 2009 American Recovery and Reinvestment Act (ARRA), Congress allocated \$1.1 billion to promote the development of comparative effectiveness research. While clinical trials often seek to identify the efficacy of specific interventions in an idealized setting — such as assuming full patient compliance, excluding patients with certain comorbidities, and ignoring cost considerations — CER seeks to identify the effectiveness of

clinical treatments in a real world context, often with consideration of patient adherence, patient preferences, and costs incurred. CER will not only be key in identifying effective clinical care, but likely will be used by federal, non-profit, and private insurers to evaluate care quality and make reimbursement decisions.

The Patient Protection and Affordable Care Act of 2010 took further steps to expand CER and established the Patient Centered Outcomes Research Institute (PCORI). PCORI is an independent, nongovernmental organization whose mission is to develop CER that helps inform decision-making by both patients and health care providers. PCORI's research aims to integrate patient perspectives and preferences into care plans and goals of treatment, prioritizing considerations of symptom management and health-related quality of life in addition to morbidity and mortality.

CER has historically been more popular outside the U.S. in countries with greater governmental control over their health care system. The United Kingdom, for example, employs the *National Institute for Health and Clinical Excellence* (NICE), a division of the *English National Health Service* (NHS). The organization publishes evidence-based guidelines on “the most effective ways to diagnose, treat, and prevent disease and ill health,” based on evaluations of the efficacy and cost-effectiveness of various interventions and technologies. The recommendations of NICE guide the availability of treatment for patients utilizing the country's public health care system.

Funding Health Services Research

In addition to funding opportunities through PCORI and national non-governmental foundations such as the Commonwealth Fund, there are also EM-specific HSR funding opportunities. The Emergency Medicine Foundation has yearly grant opportunities for patient-centered outcome and health policy research. On a rolling basis, the NIH Office of Emergency Care also has funding opportunities for EM HSR. Financial support may also be available from the Emergency Medicine Action Fund (EMAF), an EM advocacy group that focuses on state and federal health policy, such as implementation of the Patient Protection and Affordable Care Act.

Implications for Advocacy

In the coming years, high-quality CER will give physicians and patients the information necessary to make better-informed decisions about the cost, quality, and expected outcomes of different diagnostic and treatment options. Policymakers use CER to influence cost-efficient medical decision-making through a combination of publicly reported quality metrics and payment structure reforms.

The ED has started to gain attention as a key arena for cost effective delivery of care.⁷ Emergency medicine advocates armed with evidence from HSR can help

shape the appropriate development of national policy. One recent example of effective advocacy using HSR is recent redaction of CMS quality measure OP-15. This measure would have tracked the number of emergency department CT scans performed to evaluate atraumatic headache among patients without high-risk clinical factors (eg, thunderclap onset, use of anticoagulants, etc.). Hospitals with high rates of CT scans for atraumatic quality would be rated as having poor quality care and would be subject to penalization.

Emergency medicine health services researchers evaluated the measure's clinical efficacy and found that OP-15 was not an accurate reflection of ED quality of care or CT utilization. In one study, EM health service researchers conducted a retrospective study of 748 patients who had CT scans deemed inappropriate by OP-15. They found that 489 of these patients had clinical criteria that indicated a CT scan as clinically appropriate. The researchers concluded that in addition to not being accurate, OP-15 may also "produce misleading information about hospital ED performance."⁸ CMS has since removed OP-15 from their set of proposed quality metrics for 2016.

Conclusion

Health services research will continue to guide the development, evaluation, and reform of health policy on state, federal, and international levels. With recent federal investments in CER, researchers will have more tools to better analyze the relative costs, benefits, and risks associated with diagnostic and treatment decisions. In an era of increasing focus on health care cost and efficiency, a generation of new health services researchers in emergency medicine will help revolutionize the way health care is delivered. Emergency physicians must be active participants in health services research to ensure the correct clinical questions are being identified and studied that benefit our patients and providers.

WHAT'S THE ASK?

1. Physicians in the emergency department need to educate themselves about the potential of health sciences research to revolutionize the delivery system of health care and how it may affect their practice environment.
2. Physicians should utilize Comparative Effectiveness Research to advocate for their patients and improve the health delivery to the individual and community.
3. Physicians should advocate for funding for PCORI and the NIH Office of Emergency Care. Without funding, we cannot generate the data needed to drive effective CER, which will guide future policy decisions. ★

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