

Emergency Medicine **Advocacy** **HANDBOOK**

5th Edition

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US Acute Care Solutions is proud to offer an educational grant to support the *Emergency Medicine Advocacy Handbook*, 5th edition, furthering the tradition of promoting this and other EMRA activities.

Our commitment to EMRA is grounded in the belief that emergency medicine residency training is the gold standard for the practice of the specialty. We take pride in hiring emergency medicine residency-trained physicians, and we are pleased to support residents throughout their training.

The *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.

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Foreword

Over the past decade, the importance of health care advocacy in the practice of everyday clinicians has continued to grow exponentially. The picture on the front of this 5th Edition of the EMRA Advocacy Handbook seems an apt depiction of the struggle that many practicing doctors feel today. Medicine is being torn at the seams by the political whims of a partisan dysfunctional system that makes ventricular fibrillation look like an organized plan!

Since the first edition of the handbook, health care has seen tectonic shifts. The Affordable Care Act expanded coverage, provided mandated benefits, and changed the access to coverage equation for millions of Americans. Increasing cost, narrow networks, surprise billing, escalating deductibles, and stagnation of the family living wage has led to increased cost pressures for most consumers and challenged access to care. Increasing burnout among physicians, novel technologies, telemedicine, and the consumerization of health care has changed how physicians choose to provide care in the modern health system. New and novel mergers of different parts of the health care system and the creation of mega systems continue to challenge the importance of the physician as leader.

Despite the world changing beneath our feet, nurses and physicians remain the most respected and trusted professionals. **The value of our opinions and ability to shape policy has never been more important.** We have seen physicians run for office and win. Emergency medicine has become one of the largest political action committees with an annual leadership conference in Washington, D.C., that brings the message directly to the representatives. State chapters have wielded powerful voices on numerous issues, from the opioid epidemic to the fight for fair coverage and network advocacy.

Now is our time to lead. Lead not only the house of medicine but also the work to improve the lives of those we serve. **We must be the light in the window, the missing link of health care, that is the beacon of hope for our patients, burnt out providers, and the next generation deciding if a career in medicine is worth it.** Maybe Napoleon Bonaparte put it best: “A leader is a dealer in hope.”

Emergency physicians are the best dealers in hope I know. We stand in the darkness and see people often at the worst moments of their lives. We offer hope to those society has forgotten. We find a way despite the sorrow to come back and provide care 24/7/365. **Each of you is the living embodiment of hopeful leadership.**

Your work on advocacy will be the difference in our future, and we cannot do it without you. I hope you find this handbook to be a valuable resource in your efforts and that it inspires you to make advocacy a regular part of your medical practice. Thank you for being an advocate and leader!

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INSURANCE BASICS

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In order to understand the present U.S. health insurance structure, it is important to understand its past. Health care policy has been shaped by American ideological values, those values heavily debated and ultimately resulting in controversial policies. By becoming familiar with our history, we can understand the possibilities for future policy and what it may take to get there. Consider this timeline of major U.S. health policy in the past century.¹

Insurance coverage is the basis of access to care for many patients, but what is actually covered by their policy remains an area of constant concern.

- In 1927 the Committee on Costs of Medical Care was established and began a 5-year study to examine the state of medical care in the country.
- In 1936 the Technical Committee on Medical Care was created to further study health status in the U.S. and examine the needs for health care and health insurance.
- In the 1940s, in the wake of the Great Depression, President Franklin Roosevelt called for an economic bill of rights, including “the right to adequate medical care and the opportunity to achieve and enjoy good health.” Not long after, Harry Truman proposed a comprehensive insurance program that was ultimately unpopular in the setting of anti-socialist sentiment at the time in the wake of WWII.
- Throughout the 1950s to the late 1960s, American ideology on health care became even narrower as the discussion began to shift from a need for comprehensive coverage for all, and health care as a right, to a solely economic issue.
- In 1965 the Medicare and Medicaid Act was passed to cover the elderly and those in poverty.
- In 1972 Social Security amendments pass, allowing people under age 65 with long-term disabilities and end-stage renal disease (ESRD) to qualify for Medicare coverage. Those with long-term disabilities must wait 2 years before qualifying for Medicare.

- From 1990–1994 President Bill Clinton worked on a universal health care proposal that included a “managed care” option and started a White House task force on health care reform. Ultimately, with opposition from organizations like the Health Insurance Association of American and a divided Congress, the proposal died.
- In 2006, Medicare Part D was passed while Massachusetts and Vermont passed comprehensive health care plans at the state level.
- In 2010 the House passed the Patient Protection and Affordable Care Act (ACA).

Medicare

After decades of debate over a national health insurance program to improve access for the elderly and those receiving public aid, President Lyndon B. Johnson signed into law the Medicare and Medicaid Act, specifically Title XVIII and XIX of the Social Security Act of 1965. Today, Medicare serves as the largest health insurance payer nationally. It covers more than 56 million Americans and had total expenditures of \$678.7 billion in 2016.²

As the largest health insurance payer in the nation, Medicare is one of the most influential players in our nation’s health care system. Medicare sets national standards for hospital and physician reimbursement rates and funds a large portion of Graduate Medical Education. Medicare has also been a leader in pay for performance, quality standards, and national benchmarking initiatives that have reshaped health care in the past 20 years.

Funding for Medicare comes from tax contributions by employees and employers (known as payroll taxes), premiums and copays paid by beneficiaries, taxes on Social Security benefits, and a portion of national tax revenue from the general fund of the U.S. Treasury. However, recent estimates project this trust will be depleted in 2026.³

Eligibility for Medicare includes Americans age 65 and older, individuals with disabilities, and individuals with ESRD. Coverage comprises 4 distinct 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 an optional managed care program that gives beneficiaries the option to enroll in Medicare benefits through private insurance coverage, which the government pays for in fixed premiums.
- Part D, added in 2006, covers prescription medications.

Prior to 1965, half of elderly Americans lacked health insurance; by 1970, 97% were covered. The number of Medicare beneficiaries will increase from 19 million in 1965 to an estimated 81 million by 2030. As the aging population continues to grow, along with the per enrollee health care costs, there will be continued pressure to provide quality coverage to this population at reduced

costs.⁴ This has led to recurrent efforts by Medicare beneficiaries and large lobby groups associated with them (eg, AARP) to defend included benefits, limit co-pays, and ensure access to services.

Medicaid

Medicaid arose alongside Medicare in 1965 with the goal of providing health insurance to the poor by supplementing existing entitlement programs.² Medicaid now serves as the largest source of funding for medical and health-related services for America's low-income population. It provides coverage for more than 76 million beneficiaries, including almost 33 million children and more than 10 million disabled Americans.⁵

CHIP

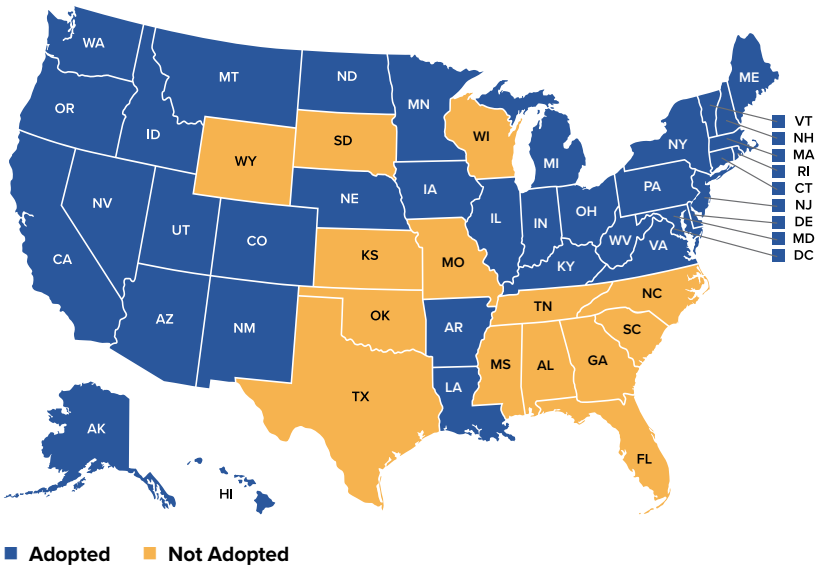
The Children's Health Insurance Program (CHIP), also known as Title XXI of the Social Security Act, is part of the Balanced Budget Act (BBA) of 1997. The BBA provided \$40 billion in federal funding to be used to provide health care coverage for low-income children living in households under 200% of the federal poverty level (FPL) who do not qualify for Medicaid. States can elect additional coverage up to and beyond 300% of the FPL, but bear additional financial costs with reduced federal matching. The initial law only provided funding through 2007. However, CHIP has been reauthorized 3 times, with the most recent reauthorization in 2015 providing funding through fiscal year 2018.⁶ As of 2017, 9.4 million children were enrolled in the program. Since CHIP is a program within Medicaid, not a separate entity, it is also administered by individual states, federally regulated, and financed by both states and the federal government.⁷

Medicaid Administration

Medicaid differs from Medicare not only in its designated beneficiaries, but also in how it is run. Medicaid is administered by individual states and funded by each state with matching federal funds and subsidies. To receive funding from the federal government, states must meet national requirements. However, individual states largely set their own regulations and, until the passing of the ACA, their own eligibility criteria in relation to the FPL. For example, a 2-person household at 175% of the FPL may be eligible for Medicaid in one state but not in another.

The ACA expanded Medicaid eligibility to all individuals under the age of 65 in households with income up to 138% of the FPL. This was designed to be expanded across the nation, standardizing Medicaid coverage and increasing access to coverage for millions of low-income Americans without insurance. As of February 2019, 37 states (including Washington, D.C.) had expanded Medicaid eligibility but 14 states had not.⁸

FIGURE 1.1. Status of State Expansion of Medicaid (as of February 2019)



SOURCE: Kaiser Family Foundation, kff.org

Funding and Payment

In 2016, estimated “net outlays” for Medicaid were \$581.8 billion.² This included direct payment to providers of \$266.4 billion, payments for premiums of \$254.7 billion, payments to disproportionate share hospitals of \$19.7 billion, and administrative costs of \$28.1 billion. Additionally, \$4.4 billion was spent for the Vaccines for Children Program under Title XIX. It is projected that with no other changes to the law, total outlays will reach \$823 billion by FY 2022.²

Private Insurance Market

The private health insurance market functions by pooling risk across a large group of individuals and providing standardized coverage to the individuals that pay the premium. In the United States, private insurance can be purchased by an individual directly or through an exchange, although it is more commonly provided by employers. Insurers cover most of the cost of beneficiaries’ preventive care and a portion of other health care expenses depending upon the type of coverage elected, deductible, and co-insurance requirements.

Wage control laws in World War II led to employer-based insurance programs marketed as “benefits” to recruit competitive candidates.⁹ These programs expanded after the war, growing in popularity because businesses could provide a form of tax-free compensation to employees. Expanding from initial coverage via fee for service, new and distinct models developed over the next 70 years to include various forms of capitation and copay.

The Exchanges

A major impetus for the development of the ACA was the lack of affordable insurance available to individuals. During the recession of 2008, this issue became more evident as individuals became part-time employees and lost their health benefits.¹⁰ Individuals faced high premiums and deductibles, limitations to the types of health care plans they could access, and discrimination against pre-existing health conditions. The ACA created third-party markets known as health insurance exchanges, which increased 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 2015.¹¹ Current challenges include decreasing numbers of insurers in the marketplace, from an average of 6 insurers per state in 2015 to 3.5 insurers per state in 2018.¹²

The Affordable Care Act

The ACA (2010) was the most significant regulatory overhaul and expansion of health care coverage since the passage of Medicare and Medicaid in 1965. The ACA implemented many changes to expand access to health care coverage:¹³

- Individual Mandate Requirement: Most U.S. citizens and legal residents are required to have health insurance or pay a financial penalty.
- Exchanges: Creation of state-based American Health Benefit Exchanges for individuals to purchase coverage.
- Essential Benefits: New regulations on health plans available in the exchanges
- Medicaid Expansion: Medicaid coverage for all non-Medicare eligible individuals under the age of 65 with incomes up to 133% of the federal poverty level.¹⁴

Specific aspects of the ACA were challenged in a case that made its way to the Supreme Court in 2012.¹⁵ The Supreme Court ruled that the ACA’s requirement that certain individuals pay a financial penalty for not obtaining health insurance was authorized by Congress’s power to levy taxes.¹⁶ However, the court limited the ACA’s expansion of Medicaid. The Supreme Court ruled that Congress exceeded its constitutional authority by coercing states into participating in the expansion by threatening them with the loss

of existing federal payments. This ruling afforded states the opportunity to decide individually if they would expand Medicaid in accordance with the ACA's original guidelines. By the end of 2018, 34 states (including Washington, D.C.) had expanded Medicaid to cover more than 15 million individuals, but an estimated 2.2 million individuals remained uncovered who would be eligible under the expansion.¹⁷

The ACA has also faced extensive political pressure since its enactment. Congress, after coming under Republican control in 2010, passed multiple bills to repeal the ACA while President Barack Obama was in office, but all were vetoed. Under President Donald Trump, there has been an expansion of short-term health plans (also known as “skimpy” plans), the repeal of the individual mandate tax penalty, and a reduction in the enrollment time period and advertising. While not the full repeal and replace initially proposed, the potential impacts on the program remain significant.

Why the ACA's Essential Health Benefits protection is of interest to the ED population

The ACA requires all health benefits plans to offer at minimum the essential health benefits package,¹⁸ including those offered through the exchanges and those offered in the individual and small group markets outside the exchanges. The essential health benefits package includes items and services in 10 benefit categories:

1. Ambulatory patient services
2. Emergency services
3. Hospitalization
4. Maternity and newborn care
5. Mental health and substance use disorder services including behavioral health treatment
6. Prescription drugs
7. Rehabilitative and habilitative services and devices
8. Laboratory services
9. Preventive and wellness services and chronic disease management
10. Pediatric services, including oral and vision care

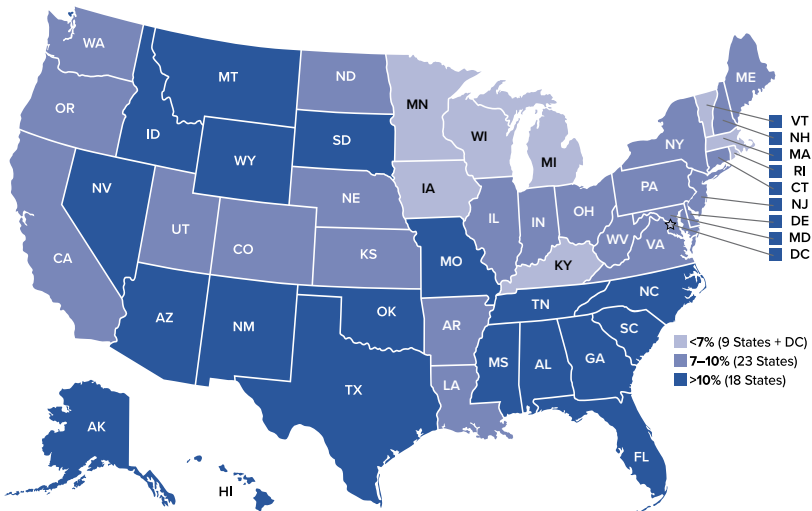
The ACA also requires that the scope of benefits be equal to that of a “typical employer plan” and that the benefits reflect an appropriate balance among the categories. These essential benefits and standards prevented the practice of increasingly skinny coverage being offered by some insurance companies as a way to fulfill coverage obligations at an attractive price point. This practice had left many patients surprised to find out how little was actually covered by catastrophic plans and the cost they faced when accessing even preventive care.

These essential health benefits are specifically relevant to emergency medicine because they require insurers to cover emergency department visits. The ACA requires all plans to cover behavioral health treatment, mental and behavioral health inpatient services, substance use disorder treatment, and pre-existing mental and behavioral health conditions. Furthermore, by mandating coverage of preventive and wellness services and chronic disease management, the ACA helps patients both with and at risk for chronic conditions that previously would only have been able to use the ED for their care.

Demographics and numbers of the remaining uninsured

Under the ACA the number of uninsured nonelderly Americans decreased by 16 million between 2013–2016, from 44 million in 2013 to less than 28 million at the end of 2016.¹⁹ Among the 28 million individuals who remained uninsured, 45% still cited the high cost of insurance as the main reason for their lack of coverage.¹⁹

FIGURE 1.2. Uninsured Rates Among the Nonelderly by State, 2017¹⁹



NOTE: Includes nonelderly individuals ages 0 to 64.

SOURCE: Kaiser Family Foundation analysis of 2017 American Community Survey (ACS), 1-Year Estimates

Despite the coverage increases from 2013 to 2016, individuals who remained without insurance were still mostly low-income adults since children have greater availability of public coverage in many states: 85% of the uninsured were nonelderly adults, while the uninsured rate among children was under 5%. Individuals at the highest risk of being uninsured were those below the poverty level, but 80% of uninsured families had incomes below 400% of the poverty level. Increased participation by states in the Medicaid expansion would provide additional coverage to many of these remaining uninsured populations.

Despite debate over reversing the ACA after the presidential election in 2016, millions of people gained coverage under the ACA provisions that went into effect in 2010. As of this publication, more than 27.6 million Americans remain uninsured because of cost, lack of individual state expansion, and several other reasons discussed in this chapter. What will be done about it in coming policy reform remains to be seen.¹⁹

WHAT'S THE ASK?

Insurance coverage is the basis for access to care for many patients, but what is actually covered by their policy remains an area of constant concern. Advocacy on the basics of insurance includes:

- Knowing how to direct an uninsured patient to the exchange in your state.
- Appreciating if your state has participated in the ACA Medicaid Expansion.
- Understanding the Essential Health Benefits, their importance in having adequate coverage, and how they impact patients in the ED.



INSURANCE CHALLENGES

Eric Maughan, MD; Sahar Morkos El Hayek, MD; Jamie Akiva Kahn, MD, MBA

Receiving health care in America is often predicated upon insurance coverage. However, insurance companies and governments facing increasing costs, pressures to reduce premiums, and consumers who are confused about coverage has resulted in increasing challenges to coverage, to affordability, and to access.

Access to insurance does not guarantee affordable coverage or the ability to access care.

Challenges to Coverage

The American health care system is a patchwork of patients receiving insurance from different sources including employers, individually purchased, and from the government through Medicare (primarily for those over age 65) and Medicaid (primarily for low-income Americans). Recent policy changes, notably the ACA, impact all these sources and contribute to the system's complexity and dynamism. These policies include a mandate that all large employers provide health insurance for their employees, a mandate that all individuals who do not get insurance through their employer purchase their own, and the expansion of Medicaid to more Americans. But this dynamic system continues to change, and the repeal of the individual mandate tax penalty and elimination of cost sharing reductions (CSR) are two of the more recent major policy changes that are projected to potentiate market instability, making insurance access and coverage more volatile.³

Repeal of the Individual Mandate (The Tax Cuts and Jobs Act 2017)

The ACA's individual mandate required all Americans to obtain health insurance or pay a penalty tax of \$695 or 2.5% of income, unless they qualified for an exemption.⁴ Many health economists agree that such a mandate is necessary because it creates a stable risk market and spreads health care costs among both healthy and sick, young and old. Without such a requirement, there is a concern that sicker (and more costly) patients could be disproportionately overrepresented in the market (adverse selection) and can lead to a collapse of the market (death spiral).

The Tax Cuts and Jobs Act⁴ passed in December 2017 and to be implemented in 2019 repeals the tax penalty associated with the individual mandate. In the absence of tax penalty, the incentive to enroll may become obsolete for some populations, especially healthier and higher income members of society. This may translate into lower rates of enrollment of healthy patients and an increase in insurance premiums as the risk pool becomes sicker. Some studies project that eliminating the individual mandate will increase premiums by 7–15% by 2019,⁵ which could lead to millions of more Americans being uninsured.⁶ Some states are implementing their own version of the individual mandate, but this has not been a widespread effort and the effects are yet unknown.

Cost Sharing Reduction Elimination

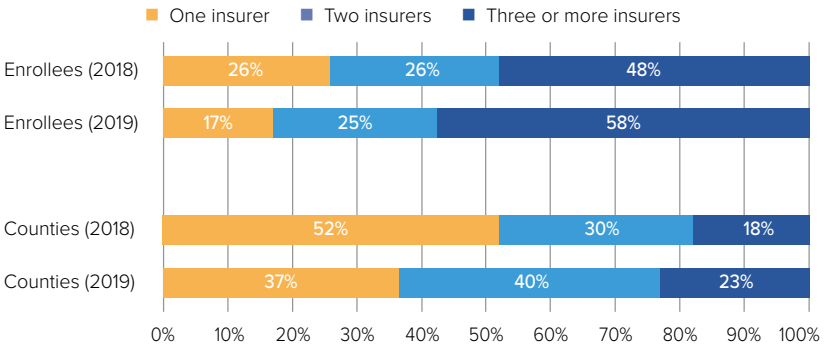
The CSR is a discount associated with the ACA that lowers the out-of-pocket maximum deductible and copayments. After taking into account an individual's income and health plan, an insurance company agrees to not charge above a certain amount to the patient and receives that lost revenue as a payment from the federal government. The legality of such federal payments has been debated in courts for years, and in 2017, President Trump's administration decided to no longer make those payments. This created considerable market imbalance and uncertainty among insurers, who faced a higher-risk population, greater cost burden, and less confidence in the market. In most states, insurance companies compensated by increasing premiums (which are subsidized by the federal government as well), and many consumers chose to purchase other health plans. The Congressional Budget Office forecasts that eliminating the CSR will increase the federal deficit, but will not have a huge impact on the number of uninsured, as the higher premiums will be offset by higher tax credits for those premiums. However, they forecast that more companies will drop out of the insurance market, due to the political instability around the policy.⁷

Market Uncertainty and Decrease in Insurer Options

The substantial uncertainty in federal implementation of policies affecting insurance markets (eg, cost-sharing reduction payments, enforcement of the federal mandate) is complemented by inconsistent ACA Medicaid expansion across states. The ACA was designed so that low-income individuals would be covered by a more expansive Medicaid program while others would be covered by other reforms (including the employer mandate mentioned above). However, due to a Supreme Court decision, the option to expand Medicaid to cover all those intended by the ACA was left up to individual states. In 2018, 14 states had still not expanded Medicaid programs, leaving millions of uninsured adults outside the reach of the ACA with limited options for affordable health coverage.⁸ This unpredictable expansion pattern is affecting both payers and consumers. Insured citizens in non-expansion states are facing higher insurance premiums

as insurance companies are slowly exiting the market to avoid suffering revenue cuts.⁹ Those companies that are staying risk uncertainty in predicting cost offsets.¹⁰ This trend holds across the country, as the political uncertainty around the ACA is hurting competition in the markets. In 2018, states averaged 3.5 insurers participating on their health insurance marketplaces, compared with an average of 5 insurers per state in 2014. The average number of plans per state dropped from 4.3 to 3.5 between 2017 and 2018, and the number of states with only one issuer rose from 5 in 2017 to 8 in 2018.¹¹

FIGURE 2.1. Insurer Participation In ACA Marketplaces, 2018–2019¹¹



Source: Kaiser Family Foundation analysis of data from the 2019 QHP Landscape file released by healthcare.gov on October 24, 2018. Note: For states that do not use healthcare.gov in 2019, insurer participation is estimated based on information gathered from state filings. Enrollment is based on 2018 plan selections. 2019 columns may not sum up to 100 due to rounding.

Challenges to Affordability

Some insured Americans are finding that access to insurance does not grant access to affordable health care, due to high deductible health plans (HDHPs), Medicaid restrictions, and new narrower health plans.

High Deductible Plans

HDHPs are increasingly common, covering nearly 40% of Americans with employer-based coverage in 2016 (up from 26% in 2011).¹² Initially touted as a way to reduce health care costs, these plans have also decreased access to care for some Americans.

Much of the evidence behind HDHPs comes from the Rand Health Insurance Experiment (HIE) of the 1970-1980s. In that randomized controlled trial, nearly 3,000 families were assigned to coinsurance rates ranging from 0%–95%, with deductibles up to \$3,000 (in 2018 dollars). Those patients who were randomized to a higher deductible plan spent up to 30% less on health care, with minor

differences in health outcomes¹³ (limited to worse management of hypertension and vision in low-income patients). It is estimated that the widespread adoption of these plans has kept annual health care spending growth 0.9 percentage points lower than it would have been without HDHPs.¹⁴

While the rise of HDHPs decreased health care costs, it has harmed some patients as well. The Rand HIE showed worse health outcomes for those unable to afford their deductible. As 40% of Americans report not having \$400 with which to easily cover an unexpected emergency expense, the average deductible now far exceeds the liquid savings of the average American and may result in reduced access to care.¹⁵ According to the CDC, 15.5% of patients with employer-based HDHPs had problems paying medical bills, compared with 10.3% in a traditional plan.¹⁶ Additionally, the cost savings of HDHPs are not generally from lower prices or from patients comparing prices for medical care, but from individuals receiving less care. Again, this matches the CDC's data: 8.5% of those with HDHPs admitted forgoing medical care due to concern about cost, compared to 4.1% with a traditional plan.¹⁶ Whether this decrease in care leads to worse health outcomes has not been firmly established, but the decrease has been noted even in "highly effective" aspects of care, including preventive medicine.

Medicaid Restrictions

With the implementation of the Affordable Care Act, Medicaid has played an expanding role in access to health care in the U.S. However, access to Medicaid is decreasing in some states because of the choice to not expand Medicaid coverage, a requirement that Medicaid recipients contribute financially to their care and, most recently, a work requirement for Medicaid applicants.

Medicaid work requirements, implemented by 4 states and considered by an additional 7 as of 2018, mandate that non-disabled Medicaid applicants spend 80 hours each month working, looking for work, volunteering, or involved in "community engagement."¹⁷ Proponents of this requirement argue that by encouraging working and volunteering, Medicaid recipients will be healthier and the program will be able to focus on the vulnerable populations that it was originally designed to help: pregnant women, children, and people with disabilities.¹⁸ Opponents argue that health is needed for employment opportunities, that there is no evidence such restrictions will reduce costs or improve health, and that these will merely be a means to decrease health insurance coverage, harming other vulnerable populations. As these programs are in their infancy and face legal challenges before implementation, there will surely be more analysis and debate to come.

Skinny Health Plans

The Affordable Care Act established new requirements for insurance plans (the 10 Essential Benefits) across the country, including procedures and conditions to be covered and who can be refused coverage or charged a different premium. However, short-term health plans, designed for low-income, healthy workers or those between jobs and without access to employer-based insurance, are exempt from some of these restrictions. These plans were limited in duration to 90 days by President Obama in 2016,¹⁹ but President Donald Trump then expanded the duration to 12 months, renewable up to 36 months, effectively allowing these short-term plans to become long-term coverage.

Proponents of these plans suggest that by not being subject to the ACA requirements, these plans are less expensive than compliant plans, insuring those for whom the ACA plans are too expensive while increasing competition in the health insurance market.²⁰ Opponents argue that these plans can saddle patients with unexpected medical bills, that they undermine the consumer protection inherent in the ACA, and that they may siphon healthier patients out of the ACA risk pool, leading to a collapse of the ACA insurance market. These plans are also just emerging in 2018, and more time and data are needed to determine their true effect.

Challenges to Access

Once patients have navigated the challenges getting covered for and affording medical care, they may still have challenges accessing care. These challenges come in many forms, including narrow networks and insurers' reluctance to pay for some visits.

Narrow Networks

In order to better control costs, many insurance plans have a network of providers they require patients use resulting in patients having difficulty getting care if their preferred provider is not "in network." This has been a problem since the rise of HMOs well before the ACA and has grown steadily worse. Of health plans on the Health Insurance Marketplace (set up by the ACA), 73% were considered narrow network in 2018, compared with 54% in 2015.²¹ The problem extends beyond the marketplace, as up to half of large employers began considering narrow network plans for their employees.²² Some providers (especially radiology, anesthesiology, pathology, and emergency medicine) may be out-of-network despite working at an in-network hospital, leading to surprise medical bills. Patients covered by these plans may also be unable to receive care at their preferred or most convenient location.

Of course, difficulty finding a doctor despite having insurance is not limited only to privately insured patients. According to the CDC, only 69% of doctors in 2018 were accepting new Medicaid patients, compared to nearly 85% accepting new Medicare or private insurance patients.²³ Opponents of Medicaid expansion have pointed to this as evidence that expanding Medicaid may not be the most efficient way to provide care.

Prudent Layperson Standard

Another obstacle for insured patients trying to access care is that insurers in some states may refuse to pay bills for what they deem to be non-emergent ED visits. Currently, insurers are required to pay for ED visits based on the “prudent layperson standard” (if the symptoms could be considered by a person without medical training to be an emergency). This symptom-based model is being replaced in some instances with a retrospective, diagnosis-based model, which could leave some patients responsible for the bill of a visit that was determined retrospectively to be non-emergent. The challenges to the prudent layperson will be discussed more in Chapter 6.

WHAT'S THE ASK?

Access to insurance, does not guarantee affordable coverage or the ability to access care. Advocacy on the challenges of insurance include:

- Understanding the significance of new policies and their effect on insurance markets.
- Knowing the facts in your state. Has your state expanded Medicaid? What's your state's uninsured rate? How many insurers exist in the market? How are insurance premiums changing with policies?
- Educating your patients on their options to get insured and the difference between insurance, affordability, and coverage.



UTILIZATION OF EMERGENCY SERVICES

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Emergency department utilization in the United States has increased by more than 40% in the past 30 years.¹

Because of a perception that emergency care is costly, the attention of government legislators, hospital administrators, insurance companies, and emergency medicine organizations has been focused on the escalating volumes. Despite concerns from regulators, patients continue to access emergency services at increasing rates for acute care needs with higher disease burden.

Emergency care and the utilization of services is changing dramatically: EDs are seeing more patients, with more complex health conditions.

Patient Demographics

Emergency medicine spans diverse patient populations, as illustrated by the National Hospital Ambulatory Medical Care Survey (NHAMCS) in 2015.² The highest ED users were patients from age groups 25-44 (28.6%), were female (55.4%), and were Caucasian (58.6%). Medicaid coverage was used most often (34.8%), followed by private insurance (34.3%), Medicare (17.7%), and the “other” category, which included no insurance (9.8%), patients utilizing both Medicaid/Medicare (3.6%), and worker’s compensation (0.9%).

TABLE 3.1. ED Visits by Race, Age, and Ethnicity, 2015²

Patient Characteristics	# visits in thousands (standard error in thousands)	# visits per 100 persons/yr (standard error of rate)
All visits	136,943 (8,519)	43.3 (2.7)
RACE AND AGE		
White	100,387 (6,337)	41.1 (2.6)
< 15 years	19,036 (2,031)	43.1 (4.6)
15–14 years	14,289 (976)	45.2 (3.1)
25–44 years	27,625 (1,769)	44.3 (2.8)
45–64 years	21,318 (1,321)	32.0 (2.0)
65–74 years	8,055 (650)	35.0 (2.8)
> 75 years	10,065 (770)	61.0 (4.7)
Black or African American	31,900 (3,249)	77.3 (7.9)
< 15 years	6,729 (1,080)	73.3 (11.8)
15–14 years	5,264 (597)	80.1 (9.1)
25–44 years	10,180 (1,165)	90.9 (10.4)
45–64 years	7,015 (753)	69.4 (7.4)
65–74 years	1,491 (185)	57.0 (7.1)
> 75 years	1,220 (205)	76.7 (12.9)
Other Ethnicity	4,656 (541)	15.1 (1.8)
Hispanic or Latino	22,587 (2,484)	40.4 (4.4)
Not Hispanic or Latino	114,357 (7,382)	43.9 (2.8)
White	80,223 (5,285)	41.1 (2.7)
Black or African American	30,178 (3,168)	78.2 (8.2)
Other	3,955 (483)	14.8 (1.8)

Source: NCHS, National Hospital Ambulatory Medical Care Survey, 2015

The relationship between ED utilization and having health insurance is complex. Two separate theories prevail. One theory is that having health insurance reduces the out-of-pocket ED costs to patients, thereby increasing ED visits. The other theory is that having health insurance encourages patients to use outpatient services, thereby decreasing ED visits. The data support both hypotheses.

In 2008 Oregon awarded Medicaid to citizens in a lottery fashion. They subsequently followed the health care utilization habits of those who acquired coverage through the lottery compared to those who did not acquire Medicaid. The results showed that obtaining Medicaid resulted in a 40% increase in ED utilization.³ A follow-up study demonstrated that these results remained consistent even 2 years later.

Conversely, a study that evaluated Kentucky's Medicaid expansion and Arkansas's Affordable Care Act expansion from 2013 to 2015 found opposite results. This study showed that expanding state-funded insurance programs resulted in an increased use of outpatient services by 12.1 percentage points and a decrease in ED visits by 29%.⁴

These conflicting results likely stem from the fact that health care benefits provided by government-funded insurance programs vary significantly from state to state with respect to deductibles, co-pays, and ED visit coverage. This makes the effects of expanding these programs exceptionally difficult to predict and apply to other states. The debate will likely remain unclear until a more homogenous system is adopted nationwide. Continued evaluation of the relationship between ED utilization and health insurance is essential as the dependence on ED services grows annually.

Increasing Utilization of EDs

Utilization of emergency department services has steadily increased over the past several years, demonstrating a growing need for the skill set emergency physicians offer. To help explain the increase in ED utilization in the U.S., the RAND Corporation performed an extensive mixed-methods study.

The analysis showed that between 2003 and 2009, direct admissions by primary care physicians (PCPs) decreased by 10%, yet the total number of hospital admissions increased.⁵ Delving into this discrepancy, the data showed that a 17% increase in admissions from unscheduled ED visits accounted for nearly all of the hospital admission growth.⁵ This pattern suggests that outpatient providers started directing their patients to EDs and relying on ED providers to determine their patients' dispositions. The RAND Corporation interviewed PCPs, and many admitted to this phenomenon, commonly because of illness severity, patient complexity, need for after-hours care, and availability of advanced diagnostic equipment.

Walk-in patients are another common source of ED visits. The RAND study found that most individuals who presented to the ED for a non-emergent health problem did so because they perceived their illness to be life-threatening or felt they had no viable alternative.⁵ Many patients reported feeling they cannot contact their PCP easily. These findings suggest that efforts to reduce non-emergent ED visits should focus on timely access to PCPs, an adaptation that could reduce health care costs.

Changing Disease Severity

Our population is growing older and older. A byproduct of this is increased disease chronicity, severity, and complexity. The brunt of increased chronic disease prevalence and severity is felt on the front lines in emergency departments. It is no secret that emergency providers are expected to have expert knowledge in a much wider range of pathology than ever before. As patients live longer with more complex health care needs, medical charting and billing must evolve as well.

ED bills are expensive compared to a primary care visit, with patients paying a premium price for immediate care and results. While this may come at an increase cost, ED care does have the benefit of identifying life-threatening illness immediately. Unfortunately, with the steady rise in health care costs straining state and federal budgets, ED billing has received heightened scrutiny, particularly because there has been an increase in the number of high intensity billing (HIB) charts.⁶

HIB charts are those billed at a “level 5” or critical care level, considered to be the highest billable level of charting. Some have stipulated that the advent of the electronic health record (EHR) has facilitated this trend by making it easier for ED providers to transform a low intensity billing (LIB) chart into a HIB chart even when providing the same services. Burke et al. evaluated this contention and demonstrated that HIB charts appropriately corresponded to:⁶

1. An increase in the number of ED services provided (laboratory tests, imaging studies, procedures)
2. An increase in the number of patient comorbidities
3. Higher patient complexity
4. More ICU admissions
5. A decrease in the number of hospital admissions

These findings suggest the ED has evolved to become a site that provides more comprehensive care to patients, thereby reducing the need for admission and justifying the increase in HIB charts.

TABLE 3.2. HIB Charts in the ED

	2006	2012
% of HIB charts	45.4%	57.7%
% of 99285 (level 5) coded charts	39.7%	49.4%
% of 99291 and 99292 (critical care) coded charts	5.7%	8.3%
% of LIB charts	53.6%	41.9%
Average # ED services provided	1.28	1.41
Average # outpatient ED services provided	7.1	8.6
Average # ED services provided in a HIB chart	12.9	13.7
Average # ED services provided in a LIB chart	5.3	5.2
Total admission rate	40.1%	36%
Total “observation” status	4%	5.4%
Total ICU admissions	11.7%	12.3%

Adapted from: Burke L, Wild R, Orav E, Hsia R. Are trends in billing for high-intensity emergency care explained by changes in services provided in the emergency department? An observational study among U.S. Medicare beneficiaries. *BMJ Open*. 2018;8(1):e019357.

Utilization Challenges from Hospital Closures

Unique to medicine, emergency departments are required by law to offer consultation and treatment to patients. While emergency physicians pride themselves on the credo “anybody, anytime, anywhere,” this does create a payer mix largely out of the control of EDs. Furthermore, it creates unique utilization challenges moving forward.

EDs operate under a fee-for-service model, making them lucrative businesses if their customers can pay. But EDs also operate under the Emergency Medical Treatment and Labor Act (EMTALA), meaning they must see *all* patients, regardless of ability to pay. EDs that serve mainly low-income and uninsured populations have therefore become financial sinkholes closing at an increasing rate, leaving the underserved communities with reduced access to emergent medical care.⁶⁻⁸ Since 1990 the total number of annual ED visits in the U.S. has increased by more than 40%, but the total number of EDs has decreased by 11%.⁷

In California, from 1990 to 2009, the total number of EDs decreased by 27%.⁷ Hsia et al. evaluated the characteristics of those EDs and found closures were more common if they provided services for a higher proportion of MediCal patients, served a higher proportion of black patients, and if the hospitals were for-profit.⁸ ED closures result in increased EMS travel times to the nearest ED, which is particularly detrimental for those who require rapid intervention, such as trauma and AMI patients.

Trauma center closures in the U.S. have mirrored ED closure trends. Between 1990 and 2005, 339 of the 1,125 trauma centers nationwide closed.⁹ Strikingly, only 66 closed in the decade prior.⁹ Hsia et al. compared transport times to the nearest trauma center in the years 2001 and 2007. They found that 24% of Americans had to travel farther to reach a trauma center in 2007 than they did in 2001; 23% of those Americans suffered an increased travel time of greater than 30 minutes.⁷⁻⁸ Unsurprisingly, rural districts and communities with predominantly poor, uninsured, or black populations were more at risk of nearby trauma center closure.⁸

Impact of ED Closures on Patient Outcomes

ED closures have become a dangerous trend, particularly because they disproportionately affect already underserved communities. This shift not only limits patient access to critical health care services, but also has the indirect effect of increasing EMS transportation times to the nearest ED.

Crandall et al. focused specifically on the effect of transport times on mortality in Chicago gunshot wound patients. They found that patients who sustained a wound greater than 5 miles from a trauma center had both increased transport times and higher mortality, but could not prove a causal relationship between those two because of uncontrollable confounding variables.⁹

However, Shen et al. did successfully demonstrate that relationship when they compared prehospital travel times for AMI patients in 2001 to those in 2013.^{7-8,10} They showed that an increased travel time to the nearest hospital by just 10 minutes correlated with a statistically significant increase in mortality at 90 days and at one year.⁸ Moreover, AMI patients in communities that experienced a travel time increase greater than 30 minutes had a 30% higher 90-day mortality and 21% higher one-year mortality compared to communities that experienced no increase in travel time.⁸ Notably, low-income populations were 9.5 times more likely to have travel time increases greater than 30 minutes.

These studies share a common theme: The majority of patients suffering from ED and trauma center closures resulting in increased transport times are disproportionately poor, black, and uninsured. Reducing access to emergency services can have detrimental effects on patient outcomes, yet it is becoming increasingly prevalent.

WHAT'S THE ASK?

Emergency care and the utilization of services is changing dramatically. To be an effective advocate it is important to understand:

- Annual ED visits are increasing while total number of ED and trauma centers are decreasing resulting in worse patient outcomes.
- Because many patients who seek ED care for non-emergent complaints do so as a result of limited access to their PCPs, efforts should be made to increase access to PCPs.
- EDs are caring for more complex patients and delivering and billing for a higher level of care.



THE IMPACT OF EMTALA

William (B.G.) TenBrink, MD; Eileen O'Sullivan, MB BCh BAO;
Ramnik Dhaliwal, MD, JD; Kenneth Dodd, MD

The Emergency Medical Treatment and Labor Act was originally enacted to protect patients from being inappropriately transferred or denied emergency care because of their insurance status or ability to pay.¹ It has become the basis of the safety net of the American health care system.² However, EMTALA has no funding mechanism, and the annual direct costs to physicians from uncompensated care provided under EMTALA are estimated to be \$4.2 billion.³ The law has helped to shape the modern emergency care system, but it has become the focus of increasing scrutiny.

The purpose of EMTALA is to ensure equal treatment for any person seeking emergency care, but the law is under constant threat.

The Law

In 1986, EMTALA went into effect as part of the Consolidated Omnibus Reconciliation Act (COBRA) of 1985.⁴ It established 3 main obligations on the part of all hospitals that receive Medicare funding and maintain an emergency department:^{5,6}

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 criteria must be met regardless of insurance status or ability to pay, and investigation of a patient's financial status may not delay these basic obligations.⁷ EMTALA compliance is regulated by the Centers for Medicare & Medicaid Services (CMS), a division of the U.S. Department of Health and Human Services (HHS).

In 2003, HHS broadened the definition of a patient presenting to an ED to include those arriving on a “hospital campus,”⁸ defined as the physical area up to 250 yards from the main hospital building, including parking lots, 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. The same ruling iterated that EMTALA does *not* apply to the inpatient setting,⁸ and this has been upheld multiple times.⁹

Medical Screening Examinations

Any person who arrives at an emergency department for 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.”⁸⁻¹³ Provisions allow a hospital’s board of directors to designate certain non-physician 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.⁸ The exam must be of sufficient detail to uncover an underlying emergency medical condition (EMC) after a good faith effort.

The Stabilization Requirement

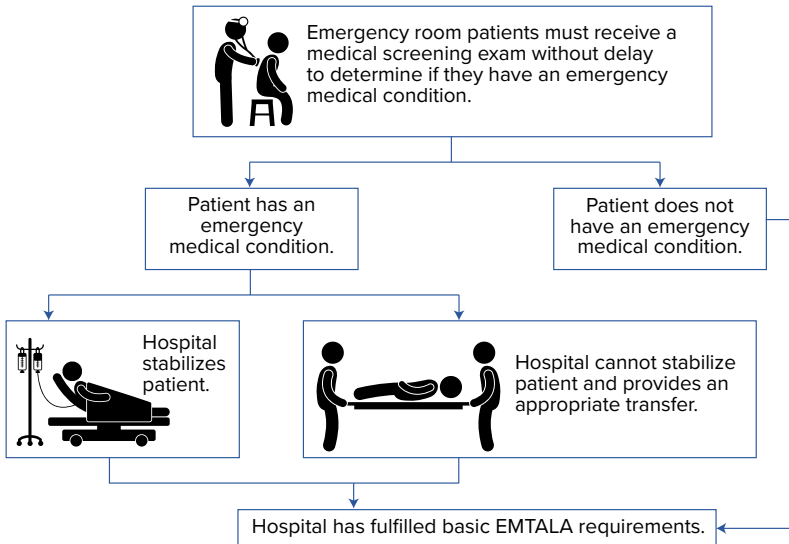
Like the screening requirement, the *stabilization requirement* applies to all Medicare-participating hospitals with dedicated EDs. This requirement must be fulfilled only if an EMC is discovered on the MSE.¹⁴ The definition of an EMC, by statute, is:¹⁵

“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.”

Hence, an individual is considered stabilized when there is a reasonable assurance that no material deterioration would result from transfer or discharge from the hospital or, in the case of women in labor, after delivery of the child and placenta.¹⁶ Neither the physician nor the hospital have ongoing EMTALA obligations after a patient has been stabilized.

Under the stabilization requirement, if a hospital performed an adequate MSE but failed to accurately detect an individual's EMC, the hospital may not have violated EMTALA's provisions — even if they released the patient without adequate treatment.¹⁷ The hospital still may be civilly liable to the individual, however, based upon state medical malpractice law, if the failure to detect an EMC was due to negligence during the screening exam.¹⁸ EMTALA applies when there was actual or effective failure to provide the MSE,¹⁹ or if there is discrimination, whereas a malpractice suit may center on a physician's failure to reasonably recognize or act upon certain clinical findings.

FIGURE 4.1. 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

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. At that point, both hospitals are subject to EMTALA requirements. Ultimately, the 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:⁴

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 in 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 no material deterioration should occur 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.⁴ Most hospitals include EMTALA language in transfer forms to ensure compliance with the requirements.

Interestingly, 42 CFR Part 4896 iterates that this law does not apply to transfers of inpatients. An exception is that a hospital or physician *can* be penalized if bad faith is demonstrated. For example, a patient is admitted in an unstable condition for the sole purpose of transferring them.⁶ Similarly, transfer obligations of hospitals with specialized capabilities also cease upon admission.

The Penalties

An EMTALA violation may result in termination of a hospital’s or physician’s Medicare Provider Agreement in extreme circumstances where there are gross or repeated violations of EMTALA.²¹ More commonly, penalties include fines to the hospital and individual physician. The Office of Inspector General (OIG) more than doubled the potential civil monetary penalty (CMP) for violations of EMTALA to \$104,826, per violation.^{20,21} In addition to CMPs, receiving facilities may sue transferring hospitals to recover damages and fiscal losses suffered as a result of an inappropriate transfer.

A recent analysis²² found that less than 8% of cases investigated by CMS resulted in settlements;²³ 97% of these were penalties against hospitals, and most complaints related to reported improper MSEs. Treating or transferring hospitals can be found liable when their providers or policies cause EMTALA violations. 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 their behalf.

Investigation of EMTALA violations is initiated by complaints, and EMTALA does include “whistleblower” protections for hospital personnel who report violations. There is a burden of proof on the accuser and this burden of proving a claim can be a reason a safety-net hospital, for example, may decide not to pursue an EMTALA complaint. A receiving hospital can be subject to a misdemeanor charge, however, by failing to disclose a violation. The OIG for HHS and CMS are responsible for such investigations; currently, there is a 2-year statute of limitations for civil enforcement of any violation.

Expanding Patient Population and Burden

Although EMTALA was intended to support the rights of the indigent patient, there have been unanticipated consequences of the law. These consequences include heavy monetary implications for those hospitals that constitute the safety net for this patient population and provide a disproportionate volume of uncompensated care. With a growing number of ED visits and a large proportion of uninsured patients, the system has seen overcrowding compounding this lack of financial support.²⁴ For many smaller and urban hospitals, this burden has been so great as to cause closure.²⁵ From 1991–2011, there was a loss of 647 EDs (12.7%), nationwide.²⁶ On-call physician specialists who fail to come to the emergency department after having been called by an emergency physician can be found in violation of EMTALA.²⁷ This obligation is felt to be a contributor to the decline in available on-call specialty services to EDs, in recent years.²⁸

Emergency physicians have benefited from securing some compensation under the ACA from the millions of newly insured patients who would have previously received uncompensated care, under EMTALA. Still, the ACA does not directly address EMTALA-related care, and emergency physicians continue to provide uncompensated care to the 28 million Americans who remain uninsured. Furthermore, most of the expanded coverage was in Medicaid payments that are generally not felt to cover the actual cost of care.

The Prudent Layperson Standard²⁹ has provided a great deal of protection for reimbursement of care provided under EMTALA. This is codified in federal law³⁰ and obligates health insurance companies to cover visits based on the patient’s presenting symptoms, not the final diagnosis. Recently, Anthem Blue Cross/Blue Shield (BCBS) has put forth a policy in multiple states by which they retrospectively deny coverage to patients who are ultimately found to have non-urgent conditions, thus making the patient financially responsible for the visit. ACEP continues to fight this policy as it threatens to disincentivize patients from seeking necessary care out of fear of financial penalty.

EMTALA and Diversion

The MSE can occur at multiple potential sites in an ED, such as triage, an exam room, stabilization or resuscitation bays, or a lower acuity urgent care/fast track module. As long as the screening and stabilization occur within the bounds of the ED, no further regulations exist.

Should a hospital desire to move the patient to a different location to complete screening and stabilization, several criteria must be met. A “bona fide medical reason” for the move must exist, as well as standard criteria such that “all persons with the same medical condition are moved in such circumstances...”³¹ These criteria, for example, allow moving actively laboring patients from the ED to Labor and Delivery, and can be used to otherwise move patients to another location in the hospital for a MSE provided all other elements of their care continue to comply with EMTALA. CMS specifically states these provisions do not allow a patient to be moved off-site, and that the patient must be accompanied by appropriate medical personnel - a patient cannot walk themselves.³¹ EMTALA risk exists if patients are found to be moved, for example, to an urgent care center outside of the ED while comparable patients are evaluated in the ED, if non-qualified providers conduct the MSE, or on top of traditional tort liability if an urgent condition is missed on the MSE.^{22,32-33}

In a 2018 case, *Friedrich v. South County Hospital Healthcare*, hospital-owned urgent care centers separate from the main hospital campus were found to be included under this definition.³⁴ Although EMTALA is administrated regionally, this precedent suggests that diversion of patients to an urgent care center for evaluation before they reach a full ED can carry increased EMTALA risk to both the provider as well as the health care system operating said center.

As long as the MSE is occurring within the ED, by providers who have been designated by hospital policy and bylaw to conduct screening exams, there appears to be little EMTALA risk in completing the evaluation in a fast track/urgent care/triage treatment zone that is part of the hospital’s ED. Conducting an MSE for potentially life-threatening concerns outside of the ED confers increased risk both to the patient as well as the provider.

Liability Reform

Emergency physicians and our on-call specialist colleagues uniquely care for patients with serious illnesses and injuries, with limited time and information. In these circumstances, the standard of care this provider can achieve is dependent on the circumstances of that encounter. It is felt by most emergency practitioners that while providing EMTALA-mandated care, these conditions of practice deserve special consideration and additional liability protections.

At the federal level, ACEP has repeatedly helped to introduce legislation addressing these liability issues. The most recent piece of legislation, H.R. 548, the “Health Care Safety Net Enhancement Act of 2017,” was introduced in January 2017 by Rep. Charlie Dent (R-PA). In its current form, this would provide temporary protections to emergency and on-call physicians, under the Federal Tort Claims Act,³⁵⁻³⁶ effectively considering those providers as federal employees with “sovereign immunity” when they are providing EMTALA-services. This legislation is an addendum to the Public Health Service Act. Under this proposed legislation, protections cease once patients are determined not to have emergency medical conditions or the emergency conditions are stabilized.

Repeal of EMTALA

The U.S. General Accounting Office (GAO) published an investigative report in 2001,³⁷ in response to concerns from the medical community that this legislation was excessively burdensome.³⁸ This report discussed the role that EMTALA has to play in uncompensated care, overcrowding and delays due to patients seeking non-urgent services. They also highlighted the many other factors that promote these issues, such as lack of access to care and increases in ED visits.

In October 2017, the House Budget Committee Chairwoman Rep. Diane Black (R-TN), a registered nurse, suggested during a television interview that EMTALA is in large part to blame for rising health care costs, and mentioned repeal. She argued that this law has taken away the ability for a provider to advise a patient when “an emergency room is not the proper place [for their evaluation].” ACEP continues to support EMTALA and rejected this assertion, given that uncompensated care in EDs amounts to less than 1% of the entire health care budget³⁹⁻⁴¹ and that there exists good evidence that the vast majority of ED visits are “unavoidable.”⁴²⁻⁴³

WHAT’S THE ASK?

The purpose of EMTALA is to ensure equal treatment for any person seeking emergency care, but the law is under constant threat. Effective advocacy includes:

- Understanding the requirements for medical screening, stabilization and treatment.
- Recognizing threats to patient care from policies that potentially violate EMTALA through inappropriate diversion or transfers.
- Advocating for support for providers of EMTALA-related unfunded care.



CROWDING AND BOARDING

Kathleen Y. Li, MD; Ramu Kharel, MD, MPH; Jessica Best, MD

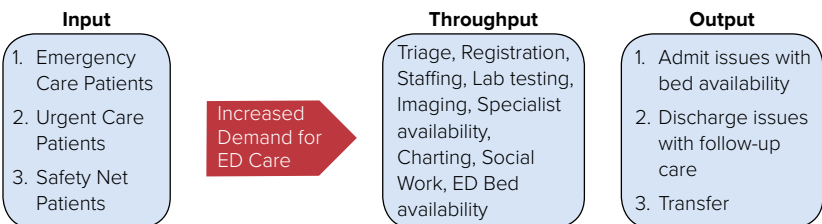
Boarding patients in the ED has become routine in many hospitals in the United States. Younger emergency physicians may never work in an ED that does not struggle with boarding and crowding, as departments face higher volumes and more critically ill patients. The result is congestion not only in the ED but also on the inpatient hospital floors and critical care units. There are solutions to help solve issues with boarding and crowding and standards for transit through the health care system.

Boarding and crowding is common in emergency care, but it does not have to be. It is critical that physicians advocate for an efficient work environment that allows them to provide the care patients need.

What is ED Crowding?

A 2014 Congressional Research Service (CRS) report on ED policy considerations defined ED crowding as “a situation in which the need for services exceeds an ED’s capacity to provide these services.” A number of factors contribute to crowding, from more patients coming to the ED either due to a lack of access to other forms of care, to inefficient ED processes or inadequate staffing, and a short supply of inpatient beds. The “input-throughput-output” model of crowding can be useful in identifying factors that contribute to or relieve ED crowding (see **Figure 5.1**). ED crowding results in problems such as long wait times, longer ED lengths-of-stay, and ambulance diversions, among others.

FIGURE 5.1. Input-Throughput-Output Model



Impact of Crowding on Patient Care

Crowding adversely affects patient care in a number of ways. Most important, it can delay care for patients presenting with time-sensitive conditions. In one study of patients presenting with acute coronary syndrome, increased crowding was associated with a delay of a median of 23 minutes in door-to-needle time in STEMI.¹ ED crowding has also been associated with longer time to imaging in acute stroke² and poorer performance on sepsis measures such as time to fluid and antibiotic administration.³

In addition, crowding can result in delays in the evaluation of patients by a doctor for a potentially emergent condition. Ambulance diversions increase patient transport times and long wait times cause more patients to leave without being seen. As the health care system backs up with crowding, the patients are displaced sicker and less differentiated into the least monitored location in the health system, the waiting room. With wait times in some large institutions longer than a day, the ability to recognize severe disease can be challenging and result in undiagnosed disasters.

- In 2017 at Lincoln Hospital in the Bronx, a patient went into a coma after waiting 9 hours in the waiting room. His chief complaint was assault; he was punched in the face, then fell to the ground. He ultimately died from an intracranial hemorrhage.⁴
- In 2008 at Kings County Hospital in Brooklyn, a patient was awaiting psychiatric placement when she collapsed in the holding area. There was a delay in recognition and resuscitation for the woman, who ultimately died.⁵

These incidents are just a few examples of what occurs in EDs with very large volumes of patients that struggle with crowding, boarding, and long ED wait times.

Health Care System's Effect on Crowding

In the current health care system, emergency departments are responsible for more than just emergency care. Along with the original purpose of stabilizing seriously ill or injured patients, EDs are increasingly relied upon to fill the gaps in the overall health system. EDs are major providers for safety net care (for underserved populations), after-hours care, and acute exacerbation of chronic health issues. According to an AAMC report, there will be shortage of up to 43,000 PCPs by 2030.⁶ The significant gap in the supply and demand of primary and behavioral health care providers has added to the workload of emergency departments around the country as patients are unable to get care from their PCPs for acute exacerbations of chronic problems.

Despite speculations that implementation of the ACA would decrease ED visits, there has been a steady increase in ED utilization every year. Per H-CUP data from 2006–2015, rate of ED visits reached a 10-year high in 2015 for all age groups.⁷ Since the ACA's enactment, the type of payer visiting the ED has changed, but the number of visits continued to rise in both Medicaid expansion and non-expansion states.⁸ Despite increasing use of HDHPs, threats to the Prudent Layperson standard, and other challenges in the current health care system, there does not appear to be a significant event that will result in the reduced utilization of emergency services anytime soon.

Boarding Causes Crowding

Although many factors contribute to ED crowding, boarding is the primary cause. According to the Joint Commission, boarding is defined as the “practice of holding patients in the emergency department or another temporary location after the decision to admit or transfer has been made.”⁹ Though it is not an accreditation requirement, current recommendations by the commission say boarding should not exceed 4 hours.⁹ Boarding in some institutions has become so common that inpatient nurses come to the ED to care for admitted-but-boarded patients.

The demands of boarded patients directly compete with the time required to care for other patients in the ED. By their nature, boarded patients are some of the sickest patients in the ED (hence requiring inpatient admission), and demand ED resources frequently. This in turn exacerbates crowding because resources are delayed or unavailable for other emergencies presenting to the ED. For instance, compliance with sepsis bundles decreases, there is delay in administration of antibiotics, management of analgesia is poor for patients in severe pain. Additionally, boarded patients have poor outcomes with increased mortality rate and increase length of stay in hospital. Increasing boarding time has also been associated with a greater number of medical errors and increased patient dissatisfaction.

Potential Solutions to ED Overcrowding

The ACEP Emergency Medicine Practice Committee has put forth guidelines to address overcrowding.¹⁰ The guidelines focus on modifying input, throughput, and output of patients from the ED.

Solution #1 Modifying Input of Patients into the ED

A large influx of patients into the ED can increase wait times, prompting more patients to leave without being seen. However, there are ways to decrease traffic by diverting patients who may not require emergency care.

Some solutions to divert patient flow include posting ED wait times or allowing patients to make an appointment in the ED. Knowing the expected wait time may help patients make a better decision as to whether their condition is emergent, and if they can be seen in their outpatient clinic or alternative care site.¹¹ By making ED appointments, a patient can be placed in a time slot where it will be predictably slower and their wait time will likely be less.

Access to primary care represents one key hurdle. A national study in Britain found that 26% of ED visits were due to an inability to obtain an appointment with a primary care physician.¹² Another study found that by creating a clinic for their homeless population in Chicago, one hospital was able to reduce ED visits by 24%.¹³ With a growing number of patients without health insurance, creation of clinics for uninsured individuals may be necessary.

Utilization of alternative care sites including urgent cares and freestanding emergency departments can potentially help decrease the inflow of patients. Urgent care sites provide a less expensive alternative to the ED, and in some studies as much as 37% of patients presenting to an ED may be triaged as appropriate to be treated in non-ED settings such as urgent care if timely care can be provided.¹⁴ Free-standing emergency departments have allowed for more access to care for a subgroup of the population.¹⁵ Telemedicine, which can take the form of emails, phone calls, or web-based chats, also provides an alternative site of care.¹⁶

Solution #2 Increasing Throughput in the ED

Throughput in the ED starts at registration and continues to triage, provider care, testing, and finally disposition. There are ways to streamline these processes and allow treatment to start prior to the provider seeing the patient. In addition, there are ways to design the department to move patients more quickly through lower acuity areas and decrease lab turnaround time by using point of care testing. The provider can be more efficient with charting by using effective EHR software or employing scribes. Dispositions can be sped up by the aid of social workers or case managers for complex care patients.

Patients may be able to hasten their own triage process by registering with a kiosk in the ED.¹⁷ Lower acuity patients can also pre-register at home prior to coming to the ED. Placing a provider in triage allows for the patient to be seen quickly on arrival, and formation of a treatment plan can be initiated and potentially implemented.¹⁷ If a provider cannot be in triage, nurses can start standing orders for patients with common ED complaints or those who may require simple imaging.

Split-flow models split patients into 2 categories: high and low acuity. The patients may be separated into another area frequently called a fast track. This area may be staffed by advanced practice providers who see lower acuity patients who need minimal resources. Split-flow models and fast tracks have proven to increase patient throughput.¹⁸ In addition to the fast track, other initiatives can help form a disposition faster: point of care testing in the ED and hiring an ED radiologist.^{19,20}

For the provider, charting can be daunting when trying to move a heavy volume of patients through the department. Patients seen per hour by a provider was found to be increased with the use of a scribe.^{21,22} In addition, EHRs provide quick access to test ordering, information from prior admissions, and test results.²³

Even with the most streamlined triage, provider care, and testing turnaround time, the patient may still be held up in the department because of social factors such as follow-up care, housing, or care for the mentally ill. Case managers and social workers can be helpful in coordinating care for high utilizer and psychiatric patients.^{24,25} They can help with home consults and placement of patients outside of the hospital. Community health care providers who visit patients in their homes have helped to decreased ED visits from these patients.²⁶

Solution #3 Increasing Output from the ED

Moving patients out of the ED more efficiently seems like an obvious solution to increase the number of beds available in the ED. If more beds cannot be created, then solutions must focus on effective output from the ED.

The critically ill patients who will be admitted will take the most time to work up and disposition to the floor or ICU. This will cause a backup with lower acuity patients in the waiting room if all beds are full. The military uses reverse triage to identify lower acuity patients, treat them, and discharge them quickly to get them back to battle. This approach could help free up space in the ED waiting room and treatment rooms.²⁷ If the more critical patients must be seen immediately, then the ED should move them out of a treatment room as quickly as possible and into inpatient beds, if available, and placing admission orders. Or if not, they patients can board in the ED while classified as inpatient status.²⁸

Having a bed manager in the hospital allows for facilitation of a timely transfer from the ED to inpatient beds. Having real-time bed census availability allows the ED to know the number and type of beds available.²⁹⁻³¹ Once admitted, the inpatient team as well as case management needs to work diligently on

discharge planning. To help turn over beds on the inpatient side, discharge waiting rooms can be used to hold patients who are stable pending discharge instructions.^{32,33}

Joint Commission Recommendations for Boarding

In September 2012, the Joint Commission published revisions to Leadership (LD) Standard LD.04.03.11, known as the “patient flow standard,” in the 2012 Update 2 to the Comprehensive Accreditation Manual for Hospitals. It is recommended that boarding time frames not exceed 4 hours. The 4-hour time frame is not being imposed as a national target or requirement for accreditation.⁹ The decision to not have this as a quality metric likely is multi-factorial, but at least sets a benchmark and a recognized standard to educate leadership to target.

WHAT’S THE ASK?

Boarding and crowding is common in emergency care, but it does not have to be. It is critical that physicians advocate for an efficient work environment that allows them to provide the care patients need. Get engaged by:

- Visiting the Hospital Compare website at <https://www.medicare.gov/hospitalcompare/search.html> to see how your workplace fares on measures related to crowding and boarding.
- Educating your legislators and hospital administrators about the clinically important impact of boarding and crowding on patient care.
- Advocating for programs in your hospital to decrease boarding and improve patient flow.



NON-EMERGENT VISITS AND CHALLENGES TO THE PRUDENT LAYPERSON STANDARD

Cameron Gettel, MD; Ramu Kharel, MD, MPH;
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In the 1980s and 1990s, private insurers frequently required 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-urgent” or “non-emergent.”¹ This practice led to fear about potentially devastating financial consequences of an ED visit and discouraged patients from visiting the ED even in the event of life-threatening emergencies.

In response, states began implementing the “prudent layperson” standard, beginning with Maryland in 1993.²

The prudent layperson 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 possesses 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

This standard required insurance companies to reimburse for emergency services when patients’ presenting symptoms met this definition of an emergency medical condition, regardless of their ultimate diagnosis. If the

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 found to not be urgent or emergent.

patient's chest pain turned out to be only acid reflux and not a heart attack, the ED visit was still covered, since a prudent layperson could reasonably expect that chest pain requires immediate medical care. The standard was adopted by 33 states and later by Medicare and Medicaid (Managed Care Contracts) in the Balanced Budget Act of 1997.^{4,5} In 1999, it was extended to all federal employees. ACEP campaigned 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.⁶

“Non-Emergent” ED Visits

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.

While there continues to be contention surrounding the definitions of “nonurgent,” “inappropriate,” or “unnecessary” ED visits, these encounters are frequently cited as a cause of rising health care costs in the United States. Overall health care expenditures have increased from 7.9% of GDP in 1975 to 17.8 % of GDP in 2015.⁷ Data from the Agency for Healthcare Research and Quality (AHRQ) suggests that emergency care accounts for around 4% of the total health care expenditure in the United States.⁸ The CDC defines a non-urgent visit as a medical condition requiring treatment within 2–24 hrs.⁹⁻¹² Emergent requires care in less than 15 minutes, urgent requires care within 15–60 minutes, and semi-urgent requires care within 1–2 hours.

In 2015, CDC found that out of 136.9 million ED visits that year, only 5.5% were considered non-urgent.⁹ Furthermore, the number of patients presenting to the ED for non-urgent complaints significantly declined during the previous decade, from 13% in 2003 to 5.5% in 2015.⁹

Despite the medical necessity of the vast majority of ED visits and the significant decline over the years in non-emergent visits, some insurance companies are denying payment if they consider the discharge diagnosis to be non-urgent or non-emergent. A landmark 2013 *JAMA* study evaluated a 2009 data set from the National Hospital Ambulatory Medical Care Survey (NHAMCS) of just under 35,000 ED patients and revealed that 6.3% had a “primary care treatable” discharge diagnosis. Of that subset, nearly 90% had similar presenting complaints compared to other patients needing ED evaluation, hospital admission, or immediate operative intervention, suggesting limited correspondence between presenting complaint and discharge diagnosis.¹³ This major overlap in the presenting symptoms between the urgent and non-

urgent visits underscores the validity of the prudent layperson standard and the need for evaluation by a trained emergency medicine provider to identify life-threatening emergencies.

This work was supported and expanded upon by a more recent 2018 study that assessed ED patients subject to possible denial of coverage under the policy of Anthem Inc., a large national insurer. This cross-sectional analysis of 2011-2015 NHAMCS data assessed ED visits with a discharge diagnosis deemed to be nonemergent by Anthem. For those visits subject to denial, nearly 40% were initially triaged as urgent or emergent and 26% received 2 or more diagnostic tests.¹⁴ Unfortunately, the push to control costs for insurance companies will likely result in these policies continuing despite the lack of evidence.

Legislative Threats to the Prudent Layperson

In addition to insurance companies, many states are still pursuing reduction of ED visits to control growing health care costs. 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, Washington state’s ACEP chapter led the development of the “ER is for Emergencies” program, which aimed to reduce costs by identifying 7 best practices (Figure 6.1). These standards were implemented by all Washington hospitals and included patient education regarding appropriate ED use, development of care plans with coordinated case management for frequent users of EMS and EDs, implementation of narcotic prescribing guidelines, and the creation of a health information exchange, the Emergency Department Information Exchange (EDIE). By sharing information in EDs across the state through the EDIE, this ACEP-led effort saved Washington State Medicaid \$34 million in the first year of program implementation and decreased visits for controlled substances by 25%, all while protecting the rights and safety of patients established by the prudent layperson standard.¹⁵

FIGURE 6.1. Seven Best Practices

1	Implement patient data exchange system (ie, EDie)
2	Identify Patient Review and Coordination (PRC) clients (ie, frequent 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 Healthcare Authority¹⁵

Other states have also faced challenges to the prudent layperson standard. In 2011, Kentucky Spirit, a managed care organization, 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.¹⁶ 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.¹⁷ 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" without specifying the criteria used to determine which visits are appropriate or how it would distinguish between emergent and non-emergent conditions.¹⁸ All of these programs are attempts to find ways to reduce coverage and costs for state Medicaid programs similar to the private sectors efforts.

Enactment of the ACA made the prudent layperson standard federal law and extended it to individual and small group health plans and to self-funded employer plans. Emergency physicians nationwide fear that attempts to repeal the ACA may strip the prudent layperson standard, potentially allowing insurance agencies to revert back to retroactively denying of coverage beyond the programs they are currently attempting to implement with the law in place.

Private Insurance Threats to Prudent Layperson

With wide variability cited in the rates of non-emergent and non-urgent ED visits, insurers have promulgated higher estimates in attempts to curb costs, suggesting they are overpaying for care that could be delivered outside of the ED in drugstore clinics, nurse advice hotlines, and through telemedicine.¹⁹

Anthem Blue Cross Blue Shield, one of the country's largest health insurers with more than 40 million members, developed a policy to retroactively deny claims they deem to be "non-emergent." The policy has been implemented in several states, and the insurance company plans on expanding it, asking patients to be able to determine the level of medical care they require and, if incorrect, be financially responsible for their decision despite lack of medical training. In Missouri, starting in 2017, Anthem BCBS implemented a policy that no longer covered ED visits deemed nonurgent, encompassing nearly 2,000 diagnoses.²⁰ Anthem has been reluctant to release information regarding its policy development, prior denials, and if ED visits have been deterred.

Using a list of predetermined non-emergent ICD-10 codes, an Anthem-employed medical director reviews ED claims, often without further patient medical record encounter information, to make decisions on coverage denial.²¹ ACEP has worked with local chapters and key congressional offices to pursue legislation in affected states to protect the prudent layperson standard. Under public pressure, Anthem conceded it will request and review medical records prior to denying claims, as well as adding "always pay" exceptions to the policy for when a patient received any kind of surgery, IV medication, MRI, CT scan, or if the ED visit was associated with an inpatient hospitalization.²¹ ACEP has also released videos for patients at www.FairCoverage.org outlining the dangers of the insurance giant's controversial policy, while also encouraging patients and providers to contact state and federal legislators to maintain the prudent layperson standard.²²

While Anthem was one of the first, the insurer is not alone in its desire to stop payment for services it retrospectively deems unnecessary. As a result of the ongoing threat to the prudent layperson and the ability of patients to seek needed care, ACEP in 2018 sued Anthem in Georgia in concert with the Medical Association of Georgia. The lawsuit argues that the Anthem Georgia policy violates the prudent layperson standard, and, furthermore, it violates the Civil Rights Act as its denials impact access to emergency medical care by members of protected classes.²³

Given ongoing budget difficulties in many states, efforts to save health care dollars by limiting reimbursement for "non-emergent" ED visits are likely to continue. It is critical that emergency physicians are educated about the pitfalls

to this approach and also about evidence-based, effective, and safe strategies to contain health care costs and deliver cost-effective emergency care.

WHAT'S THE ASK?

EDs remain a vital part of the health care system, providing a safety net for millions of Americans. 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 found to not be urgent or emergent. Effective advocacy includes:

- Vigilantly tracking and opposing policies that threaten the prudent layperson legislative standard.
- Highlighting and confronting policies that use pre-established lists of discharge diagnoses or retrospective chart review to determine coverage retroactively.
- Helping dispel myths and inaccuracies about the need for and cost of emergency care.



FREQUENT FLIERS: HIGH COST, HIGH NEED

Hannah Gordon, MPH; Marisa K. Dowling, MD, MPH; Theresa E. Tassej, MD, MPH; Aaran Brooke Drake, MD

Frequent fliers, super-users, or high utilizers — terms used interchangeably — are individuals who visit the ED repeatedly, accounting for a disproportionate share of ED visits, taxing health care resources. Given the ED’s role as the backbone of America’s health care safety net, how can these patients be better served in our emergency care system?

Defining High Utilizers

The highly scrutinized group of ED patients known as high utilizers sparks considerable debate in provider and policy circles. The definition of “high utilizer” varies, but 4 or more ED visits per year is the most common threshold. Others define high utilizers as those who visit the ED beyond “reasonable use,” have more than one ED visit per year, or who have a number of ED visits greater than the 99th percentile.¹

While high utilizers represent a small percentage of the total number of ED patients (4.5–8%), they constitute a disproportionate percentage of annual ED visits (21–28%).^{1–3} Policymakers and clinicians alike focus on high utilizers because of their significant impact on ED crowding, recidivism, EMS resources, and health care costs.⁴

Society often labels the homeless, uninsured, minorities, or those presenting “inappropriately” with non-urgent complaints as high utilizers.¹ Research, however, has shown otherwise. High utilizers are more likely to be insured, Caucasian, female, and have chronic medical conditions.^{5–7} The most common conditions afflicting high utilizers include diabetes, hypertension, sickle cell anemia, asthma, COPD, renal disease, and chronic pain. The high prevalence of chronic disease among high utilizers translates into higher acuity levels at ED

Afflicted by limited or poorly coordinated primary care, chronic and psychiatric diseases, and a variety of socioeconomic factors, high utilizers face an uphill battle in managing their health.

triage and more than double the odds of hospital admission and mortality when compared to patients who occasionally visit the ED.¹⁸ In fact, only about 10% of frequent users' visits are for clearly non-urgent conditions.⁹ Similarly, pediatric patients with frequent ED visits have higher rates of mental illness, substance abuse, and chronic disease.¹

According to a 2006 study, 84% of high utilizers were insured, with 81% of these having a source of primary care.¹⁴ Since the passage of the Patient Protection and Affordable Care Act (ACA), the percent of patients with health insurance has increased. However, that does not necessarily equate to primary care access.¹⁰ Studies indicate that the newly insured and Medicaid patients have higher rates of ED use¹⁰ and that frequent ED utilizers also heavily utilize other parts of the health care system, including primary care.¹¹

Moreover, high utilizers are not a static population. Individual patients may experience alternating periods of increased versus decreased ED use. A patient with an exacerbation of a chronic condition (cancer) that then stabilizes (remission) is an example of the intermittent high utilizer.¹² Consequently, "one size fits all" solutions for this population often fail.

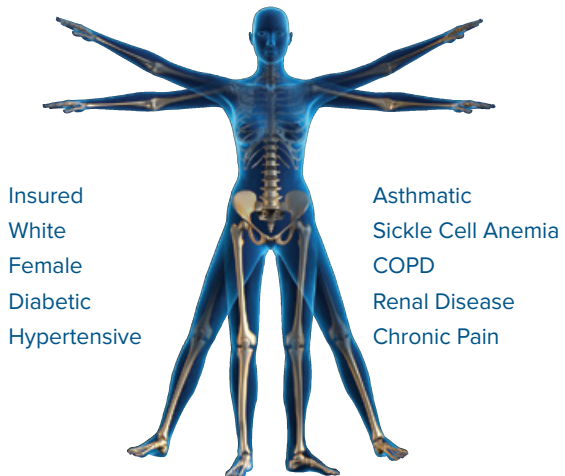
In an attempt to better understand this population, the Congressional Research Service outlined several categories of high utilizers based on their usage patterns, which may point to potential solutions.¹³

Frequent ED Users

Frequent non-emergent users — This group includes those with private insurance and a primary care physician, but who may have barriers to accessing primary care

resources, leading them to seek care for non-emergent conditions that could be treated in an alternative location. They typically have less chronic illness. Improving access to primary care may help reduce the number of ED visits for this group.

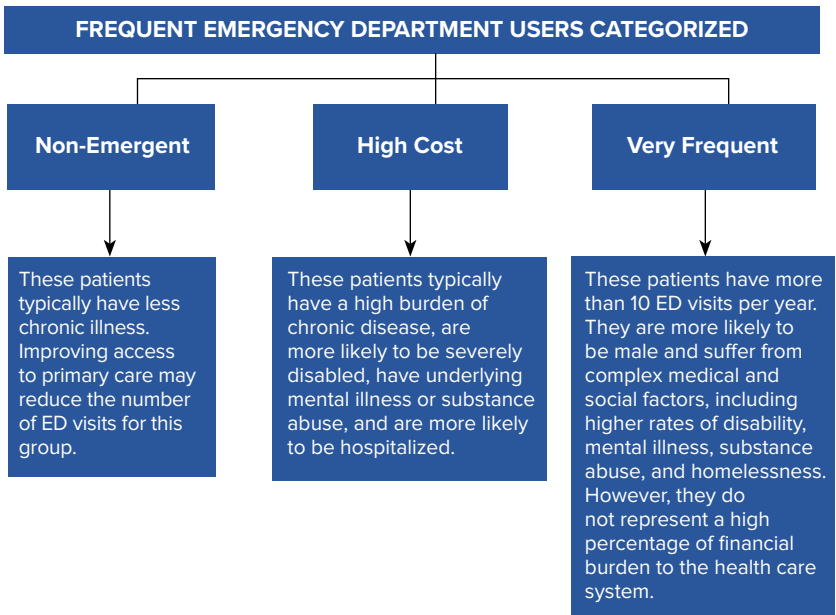
FIGURE 7.1. Anatomy of a Frequent Flier



High cost health system users — These patients generally have 4–9 ED visits per year. Patients in this group have a high burden of chronic disease, are more likely to be severely disabled, have underlying mental illness or substance abuse, and more likely to “shop” for providers. Because of their underlying illnesses, this group is the most expensive for the health care system since they are the most likely to require extensive testing and hospitalization following their ED visit.

Very frequent ED users — This group is a small portion (1.7%) of patients with more than 10 ED visits per year.¹³ They are more likely to be male and suffer from complex medical and social factors, including higher rates of disability, mental illness, substance abuse, and homelessness. They are less likely to require hospital admission and thus are less expensive for the health care system.¹

FIGURE 7.2. Frequent ED Users Categorized



Utilizing this framework to categorize high utilizers may guide case managers, physicians, and health care centers as well as local, state, and national policymakers in targeting solutions to better serve these individuals’ needs.^{2,14} Specifically, improving coordination of primary care, augmenting mental health and substance abuse resources, tailoring case management strategies, and removing socioeconomic barriers to primary health care could help decrease the number of ED visits for many of these patients.¹³

Controversies in the Management of High Utilizers

While providers, patients, and lawmakers want to improve care and access to resources for high utilizers to address their needs, the methods that are proposed can create their own controversies and legal challenges. The requirements of EMTALA and protecting the prudent layperson are two of the challenges most often confronted.

EMTALA

In 1986, Congress passed EMTALA, formalizing the ED's central role in the U.S. health care safety net — especially for high utilizers.⁷ While many emergency physicians take pride in the charge to provide care for “anyone, anything, anytime,” this pride can be strained in the case of certain super-users. EMTALA requires that health care providers conduct an MSE for each patient presentation, regardless of how repetitive or non-emergent a particular patient's complaint may appear. Additionally, some patients may interpret EMTALA to mean that EDs must provide free and all-encompassing health care to all comers, whether the condition is emergent or not, perhaps further driving costly ED use.^{7,15} The direct cost of uncompensated EMTALA care has been estimated at \$4.2 billion.¹⁷

Certain federal programs, such as the Medicare and Medicaid Disproportionate Share Hospital (DSH) payments, exist to assist hospitals in off-setting these costs.⁷ However, decreasing DSH payments under the ACA could eventually adversely affect EDs that care for a high portion of low income and frequent utilizer patients.¹⁸

Prudent Layperson Standard

The prudent layperson standard (PLS) raises another controversy in managing frequent ED utilizers. PLS dictates that ED visits should be reimbursed based on a patient's symptoms (eg, chest pain), not their final diagnosis (eg, acid reflux).

Despite PLS, in 2017 several insurance companies enacted policies to deny coverage for ED visits based on discharge diagnoses.²¹ These policies assume that patients (especially high utilizers) are “inappropriately” seeking ED care for low acuity conditions rather than seeking care in less expensive settings. Research has shown this assumption is unfounded. High utilizers, in particular, face barriers to primary care and/or socioeconomic challenges, making the ED at times the only viable option for timely medical care.

Consequently, health insurance policies that deny payment based on ED discharge diagnoses represent a threat to public health, especially for high utilizers with their increased incidence of chronic disease.

How Can We Improve?

The ACA represents a major step toward converting the U.S. health care system from fee-for-service (FFS) (ie, payment based on individual patient encounters) to value-based care. While FFS rewards the volume of services, value-based care reimburses on the premise that higher quality of care and better population health will lead to reduced payer costs. As hospitals have become increasingly penalized for readmissions for certain diagnoses, administrators have turned to patient-centered programs predicated on interdisciplinary team approaches such as case management, individualized care plans, and information sharing. Traditionally, this movement has centered on primary care specialties, rather than emergency medicine. However, several landmark EM-based programs in Maryland, Washington, and California have emerged with impressive results.

Program Overview

TABLE 7.1. 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 Prevention			\$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 (Chesapeake)

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. An analysis by the Brookings Institute in 2015 demonstrated that the alternative care plan programs resulted in a 40–50% reduction in hospital-based encounters in high-cost patients.²⁵

Washington State's "ER is for Emergencies" Program (Washington)

In 2012, Washington State Medicaid proposed reducing acute health care spending by limiting payment after three ED visits. Amid social and political backlash, the Washington chapter of ACEP, the Washington State Medical Association, and the Washington State Hospital Association offered the "ER is for Emergencies" program. This initiative sought to reduce Medicaid costs by decreasing unnecessary ED utilization and drug-seeking behavior. Though these interventions required significant initial financial investment, the Washington State Medicaid Program saved \$34 million in its first year and saw a 10% decrease in ED visits.²⁶

Seattle Group Health/SEIU Healthcare Effort (Seattle)

In a separate effort in the Seattle area, the Group Health Cooperative of Puget Sound, a nonprofit entity that provides health care and health insurance, joined forces with the Service Employees International Union 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 whose behavior health policy experts consider exceptionally difficult to change. Despite this, the program reduced ED use among these patients by 27% over 4 years.²⁷

Kaiser Permanente California (KP)

KP merges 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 model demonstrates how coordination of efforts among all of those involved in health care delivery can improve patient outcomes and allow for shared savings. KP 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.²⁸

Common Themes Among Successful Solutions

Targeting ED utilization from a variety of angles, these programs achieved remarkably reduced acute care costs while still improving outcomes. First and foremost, they focus on 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. Secondly, they provide less expensive alternatives to ED care, such as rapid outpatient referral programs and urgent care centers. Lastly, they improve the efficiency of traditional ED workflows via better data systems such as EHR infrastructure.²⁵

The unifying theme among all of these programs is the initiation of *case management* systems, which provide the trifecta of prevention, increasing use of alternative care venues, and improved ED efficiency.^{31,32} High utilizers are identified by case managers, after which a multidisciplinary team develops an individual care plan tailored to each patient's needs. Standardized management plans for certain groups of patients have been shown to improve ED efficiency for common complaints of high utilizers. For instance, Chesapeake instituted a low-risk chest pain pathway that safely decreased chest pain admissions and increased utilization of outpatient risk stratification.²⁵ Chesapeake integrates these plans into the EHR to make this information immediately available to treating providers.²⁵ KP's Emergency Prospective Review Program uses a call center staffed with KP emergency providers and nurses to coordinate the care of KP patients who also seek care at outside hospitals. KP also takes a slightly different stance on ED efficiency. Rather than focusing on ED throughput time, it allows providers to provide more comprehensive ED care. This is aimed at avoiding admission for studies that, if completed in the ED, could result in the discharge of an otherwise stable patient.²⁸

Several systematic reviews note the success of case management programs in moderately reducing health care costs, but they show variable results for reducing the number of ED visits by adult high utilizers.^{29–31} Importantly, not all case management programs have demonstrated improved costs.^{30,32} Less successful programs may suffer from poor clinician buy-in of case management goals, lack of focused interventions, poorly defined financial goals, inexperienced case managers, or lack of incentive to reduce spending.³³ The success of case management may hinge on its integration of preventive care with increased availability of alternate ED venues and streamlining the ED care of these patients.²⁹

Increased provider availability to patients for advice on where to go and what to do about their acute health problems appears to decrease costs. Both Seattle and KP provide this service through call centers.^{26,28} Chesapeake made

emergency care providers 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.²⁵

While “appropriate” ED use is a slightly more controversial topic, both the Washington and Seattle programs implement educational campaigns to assist patients in choosing the health care setting most suited to their current health care needs. 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 ED. Seattle’s program also financially incentivizes alternate care venue use through an increased co-pay for an ED visit of \$200, while maintaining its urgent care copay at \$15.²⁶

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 the Chesapeake Regional Information System for our Patients (CRISP), which centralizes health information, such as previous ED visits and imaging results, for much of the Maryland and District of Columbia region. As a result of these interventions, opiate prescriptions and the overall cost of hospital-based encounters for traditionally high-cost patients have halved.²⁵ KP’s EMR, HealthConnect®, similarly centralizes patient information from all participating hospitals; moreover, outside providers can access this resource through a dedicated call center. Improved access to patient history records permits more focused patient care, better patient interaction and avoids the risks and costs of duplicative testing among the many obvious benefits resulting from more information about the patient.

WHAT’S THE ASK?

High utilizers represent a challenge and opportunity for clinicians and policymakers. As research shows, high utilizers’ demographics are not always what society assumes. Afflicted by limited or poorly coordinated primary care, chronic and psychiatric diseases, and a variety of socioeconomic factors, high utilizers face an uphill battle in managing their health. However, there are many things providers and advocates can do to improve these patients’ outcomes:

- 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.
- Partner with hospital social workers and case managers to devise high utilizer plans for the top users of your department.
- Educate your political representatives about the misconceptions regarding high utilizer demographics and the successful programs that have already demonstrated improved outcomes and costs.



FREESTANDING EDs, SATELLITE EDs, AND URGENT CARE CENTERS

Miles Medina, DO; Melissa Villars, MD, MPH; Thomas J. Sugarman, MD, FACEP

Emergency medical services have expanded beyond the realm of the traditional emergency department that is part of a full-service hospital. As treatment has moved from inpatient to outpatient care, EDs are now separating from hospitals and increasing access in the community, similar to surgery, imaging, and cardiac centers. Freestanding emergency departments (FSEDs) must operate 24/7 to be recognized as EDs, but can be structured in different ways depending on state laws, Medicare/Medicaid reimbursement, location, and ownership. Broadly, they are categorized as:

- Independently owned FSEDs (IFSEDs): Not recognized by CMS nor part of a health system;
- Hospital-satellite EDs (HSEDs): Recognized by CMS and operating under an affiliated hospital's license, also known as Hospital Outpatient Departments (HOPDs).¹

FSEDs are not subject to federal EMTALA regulations, but many are subject to similar state-based regulations and as such, must perform an MSE on all patients regardless of ability to pay.

While not technically FSEDs, other alternatives such as urgent care (UC) centers and private centers such as Kaiser's multispecialty outpatient clinics called "hubs" are becoming increasingly prevalent and providing acute unscheduled care.

The acute care landscape is rapidly evolving in the U.S. Although there are significant challenges around payment reform, access to care, and EMTALA requirements, the sector also represents potential.

New Delivery Models in Acute Care

Since their advent in the 1970s, studies have demonstrated that these freestanding EDs can provide effective care for a wide variety of emergent conditions.² Originally created to alleviate the lack of access to care in underserved areas, the growth of both models in non-rural settings has been supported by changing payment systems that have created new financial incentives.³ Medicare and Medicaid do not recognize iFSEDs as EDs, but they reimburse 24-hour HSEDs as traditional hospital-based EDs. Independent FSEDs have been criticized for locating primarily in highly-insured areas.⁴⁻⁶ The owners of these iFSEDs have countered that they are not able to be profitable in areas with high CMS coverage because they are not allowed to bill CMS for providing emergency care. As payment policy towards FSEDs evolves, the model for success will likely continue to evolve.

The regulatory oversight of iFSEDs is largely determined at the state level, with some states requiring a certificate of need (CON) to operate. This variation can be seen with many iFSEDs in Texas operating without CONs, while in Colorado and Ohio they are required. Certificate of Need Laws generally limit growth of health care infrastructure and as such have been a barrier to the expansion of iFSEDs in many states. The Freestanding Emergency Center Section of ACEP has also emphasized the importance of integrating with the local EMS system to help with disaster response, as demonstrated by the reliance on HSEDs and iFSEDs during and after Hurricane Harvey.

UCs focus on treating lower acuity problems with widely disparate capabilities. Typically, facilities are not open 24/7, do not have diagnostic equipment, do not have advanced imaging beyond plain radiographs, and only have point-of-care lab testing. They may be staffed by physicians or solely by advanced practice providers (APPs). UCs are not subject to EMTALA requirements and are generally incapable of providing emergency lifesaving care. They often rely on the 911 system to transfer higher acuity patients to EDs.

TABLE 8.1. Characteristics of Emergency Care Models

	Hospital ED	HSED	iFSED	UC
Staffing	Physician with/without APP	Physician with/without APP	Physician with/without APP	APP and/or Physician
Hours	24/7	24/7	24/7	Usually 8-16 hours/day
Location	Hospital	Off-site from main hospital and based in hospital referral area	Usually in area with good payer mix	Variable
Diagnostic Capability	High capability	High capability	High capability	Low capability
Medicare/Medicaid Eligibility	Medicare/Medicaid—open 24/7 type	Generally, but if open < 24 hrs, Type B payments only	No	Yes, but not for EM CPT codes
Subject to EMTALA	Yes	Yes	No, but often subject to similar state requirements	No
Contract with private payers	Each hospital and/or group decides which insurance to contract	Participate with insurance according to hospital network	Variable	Sometimes, but not as EDs
Licensing	Federal and State	Federal and State	State	Some states regulate as medical clinics or physician offices

Payment Issues Involving FSEDs

CMS sets federal payment practices and regulations for Medicaid and Medicare. CMS policies determine which services at which locations are reimbursed at emergency rates. Traditional EDs get higher rates because of the overhead required to maintain 24/7 emergency services. In an ED, the reimbursement is divided into two payments, the facility fee and the professional (physician/APP) fee. In contrast, an outpatient doctor's office visit usually only bills professional fees. UCs are generally treated as offices with no facility charge, although laboratory and imaging tests can be billed separately. Under current regulations, CMS requires that in order to bill as an emergency department, the ED must be attached to a 24/7 inpatient hospital license. This effectively excludes iFSEDs since they are independent of the hospital ownership. CMS treats HSEDs as part of a hospital and reimburses them accordingly with both the facility and professional fee.

Two rates exist for CMS reimbursement for EDs: Type A and Type B. Type A is a rate for facilities that are open 24 hours a day, and Type B is the rate for facilities that are not. It is important to note that Type B rates are approximately 30% lower than Type A, and only about 1% of 2015 ED payments were Type B.⁷ Total ED rates, Type A or Type B, are significantly higher than urgent care rates for the same billed acuity. However, it is unclear whether the CPT codes adequately capture differences in acuity between UC, FSED, and ED visits.

Rural FSEDs

Rural communities have suffered from fewer health care services and vast travel distances for health care access, resulting in some groups suggesting that FSEDs could fill a needed service void. Because of low admissions, rural hospitals are unable to maintain hospital operating costs, leading to more closures. In 2016, more than 650 rural hospitals, with 38% of critical access hospitals, were at risk of closing because of financial loss.⁸ The freestanding EDs (both iFSEDs and HSEDs) cost less to operate than a traditional inpatient hospital, but could support a high volume of emergency patients and maintain access to emergency medical care in the community. These freestanding EDs would be able to both risk-stratify and stabilize patients prior to transfer to bigger facilities, should it be necessary. This solution has been considered by MedPAC.⁷

Though freestanding EDs present a possible solution to the lack of access in rural areas, these areas may not have large enough volumes to generate the needed revenue for an FSED. These economic considerations make rural locations unappetizing for the formation of iFSEDs that cannot receive federal payments. To remedy this, there have been proposals to convert rural hospitals into FSEDs that could receive federal support through traditional critical access funding, subsidies, or enhanced payments. These proposals are very much in their infancy and will require significant changes at both the state and federal level if they are to be successful.

Private Emergency Departments

Many acute patient visits identify health care problems that do not require hospitalization. However, some complaints are far too advanced for a single 20-minute primary care visit. Some highly integrated medical systems have sought to do more advanced diagnostic evaluation without the expense of an ED visit. These systems also seek to serve primarily their insured and thus do not want to open an FSED, which would be open to the public. One large insurer group known as Kaiser Permanente, Mid-Atlantic States (KPMAS) has utilized a “hub” model of care to address this issue. Since 2012, KPMAS has found that 91% of patients treated in EDs could have received adequate care at these specialty hubs — and an estimated 50% of these patients may have been discharged home.⁹

These hubs are in close proximity to multi-specialty medical offices (physicians may send patients from their offices to the hub), operate 24/7, employ primary care physicians, board-certified emergency physicians, and other specialists, offer ambulatory surgery capabilities, and coordinate direct admission with a partner hospital. The hubs treat Kaiser-insured patients only and are not subject to EMTALA because they are not hospital-affiliated or emergency departments. The hub model demonstrated a 23% decrease in hospital days and ED visits from 2009-2014 and a reduction in the cost of health care delivery of 3–4% compared to the average health care industry growth rate.⁹ While these hubs operate similarly to freestanding EDs, they fall outside the current regulatory environment for EDs as part of a vertically integrated health system.

Conclusion

The acute care landscape, including UCs, HSEDs, and iFSEDs, is rapidly evolving in the U.S. Although there are significant challenges around payment reform, access to care, and EMTALA requirements, the sector also represents potential. Advocacy includes:

- Knowing about the presence of freestanding EDs in your state, and the basic state laws and regulations surrounding their operation
- Advocating to protect the safety net provided by emergency departments.
- Supporting innovations that will improve service and access.

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INTRODUCTION TO PAYMENT

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Physician reimbursement can be an overwhelming and confusing topic for physicians. This chapter focuses on some of the basic information regarding how emergency medicine physicians are reimbursed, what documentation must be completed to be reimbursed, as well as information regarding relatively new changes to reimbursement as a whole. Historically, physician reimbursement has been based on quantifiable metrics such as the number of patients seen and procedures performed. The health care landscape is experiencing a shift in payment models, with insurers tying reimbursement to quality measures and value-based purchasing.

The health care landscape is experiencing a shift in payment models, with insurers tying reimbursement to quality measures and value-based purchasing.

The Traditional Payment Process

The core of physician reimbursement is based on documentation, the codes generated from that documentation, and RVUs (Relative Value Units) attached to the visit type; these factors ultimately determine the reimbursement amount. 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 Editorial Panel and CPT Advisory Committee, which is composed of a member from each specialty society. The CPT Editorial Panel also includes CMS and other representatives from the payer community, such as Blue Cross and Blue Shield, America's Health Insurance Plans, American Hospital Association.¹ The CPT code set includes codes for evaluation and management, critical care, observation services, and specific procedures.^{2,3} These codes form the basis for reimbursement, with some payers having additional modifiers and criteria attached to their final payment amount.

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. However, CPT specifically states that time is not a descriptive component in selecting ED E/M codes, because of the variable intensity and frequent need for multiple encounters over an extended period of time in that setting. 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.⁴ 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, and codes 99291-99292, which are used for critical care billing.⁵ The criteria and extent of service needed to generate certain E/M codes is outlined in Table 9.1 and the corresponding Medicare payment rates. It is important to note that the critical care codes 99291 and 99292 are not used as often as might be applicable in the ED, potentially leading to lost revenue.⁶

TABLE 9.1. Understanding E/M Codes

E/M Code	History	Exam	MDM	Total Physician Reimbursement from CMS (based on 2018 RVU & CF)	Total RVUs
99281	Problem-focused	Problem-focused	Straight forward	\$21.60	0.60
99282	Expanded	Expanded	Low complexity	\$42.12	1.17
99283	Expanded	Expanded	Moderate complexity	\$63.00	1.75
99284	Detailed	Detailed	Moderate complexity	\$119.52	3.32
99285	Comprehensive	Comprehensive	High complexity	\$176.04	4.89

For E/M Codes 99281-99285, certain criteria must be met with regard to documentation in the history and physical exam sections. As can be seen in Table 9.1, this information can range from problem-focused to comprehensive. Table 9.2 describes the specific documentation criteria required to meet the extent of service requirements.³ For example, a 99281 code would require only a chief complaint (CC), brief HPI, and limited exam of the affected part to qualify.

TABLE 9.2. 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, extended 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 last section of documentation, the MDM also has specific requirements ranging from straightforward to high complexity, as can be seen in Table 9.1. MDM complexity is determined by 3 components:

1. The number of diagnoses and management options considered
2. Data and testing reviewed
3. Potential risk of complications, morbidity, and mortality to the patient

For example, straightforward complexity criteria include minimal number of diagnosis and management options considered, minimal or no data reviewed, and minimal risk of complications, while high-complexity criteria include an extensive number of diagnosis and management options considered, extensive amount of data to be reviewed, and high risk of complications.³

These CPT codes generated by physician services are assigned an RVU that ultimately determines the reimbursement rate. RVUs are allocated by the Relative Value Scale Update Committee (RUC), which is also composed of representatives from each of the 25 medical specialties and an additional 6 assigned representative seats. The RUC uses the Resource Based Relative Value Scale to determine the RVUs assigned for each specific service and is responsible for making recommendations on the value of these codes to CMS. CMS ultimately decides the RVUs assigned to each CPT code, but generally follows advice from the RUC.

Assignment of RVUs must be done in a budget-neutral manner, as there is 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:

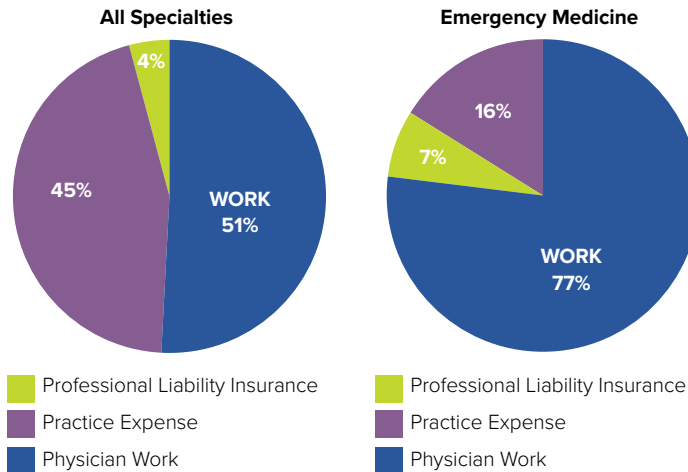
1. The value of physician work (WORK)
2. The value of practice expense (PE)
3. The cost of malpractice insurance (MP) or Professional Liability Insurance (PLI)

These 3 components ultimately make up the RVU formula with adjustment based on geographic location, the geographic practice cost index (GPCI), and a conversion factor (CF):

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

The physician work component accounts for about 51% of the total RVU for each service overall, but is closer to 77% for ED E/M codes. Work is determined based on the intensity over the time it takes to perform the service, as measured by the skill and physical effort, mental effort and judgment, and stress because of the potential risk to the patient. The PE component accounts for an additional 45% on average, with the PLI accounting for 4%.⁶ The PE component will be less of an RVU factor for hospital-based specialties, such as emergency medicine, given lack of operating expenses as compared to private outpatient facilities.

FIGURE 9.1. Work to Total RVUs



Emergency Medicine has the highest percentage of Work to Total RVUs of any specialty since we have limited practice expense

The GPCI adjusts for cost differences in all 3 areas of the total RVU formula — physician work, practice expense, and cost of malpractice insurance. 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 MP 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. The GPCI factor for physician work is determined based on differences in compensation for similar professions.⁷ 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 2018 was set at \$35.9996.⁸

This can be demonstrated using the example of drainage of a simple abscess (CPT code 10060) in disparate parts of the country.⁹ This results in the reimbursement for a simple abscess drainage in Fargo, ND, being \$97.19 versus \$118.07 in Queens, NY.

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. Currently both CMS and private insurers are shifting toward a reimbursement model that rewards physicians for providing value, delivering quality, and utilizing resources effectively.

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.^{11,12} 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 medical technology, increased utilization, or increasing complexity of patients. The linkage also did not account for the traditional economic cycles that involve recessions (eg, 2000 tech bubble) that would result in a decline in payment. These challenges made the SGR fatally flawed from inception.

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 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 12 years, resulting in almost \$170 billion dollars being spent by Congress in short-term patches to avoid these unsustainable cuts that reached as high as 27.4%.¹⁰⁻¹²

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 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 attempt to reward value and quality measures. Merit-Based Incentive Payments Systems (MIPS) and Advanced Payment Models (APMs) are two of the largest quality transformation projects in the program.

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 fee-for-service 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.

These agreed-upon contractual rates may be a percentage of what is actually billed, include quality incentives, and in some instances capitated amounts. While not required to follow CMS RVUs, the agreed-upon rates often fluctuate with changes in CMS pricing and follow a similar structure. 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.^{13,14}

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 FFS model.¹⁴⁻¹⁷

Merit-Based Incentive Payments Systems

MIPS is a value-based care payment program created after the MACRA repeal of the SGR to consolidate multiple quality payment programs throughout CMS. MIPS is open to individual physicians and groups of physicians who bill for Medicare Part B, and it is estimated that 600,000 clinicians were enrolled in 2018.

Increased (or even decreased) reimbursement is tied to a 100-point score encompassing 6 value-based areas: quality, cost, advancing care information, improvement activities, small practice bonus, and complex patient bonus. If a score of 15 (for 2018, subject to change in future years) is not reached, a penalty may be applied to reimbursement for Medicare Part B patients. This penalty caps at a possible 5% reduction in payments for 2018, but the penalty will steadily increase over the next few years.¹⁸⁻²⁰

WHAT'S THE ASK?

The repeal of the SGR and implementation of MIPS was a large step forward in payment reform; however, much is still unknown about the future of physician reimbursement. Effective advocacy will be required to ensure that the transition provides a stable environment for providers and patients. Advocacy can include:

- Staying informed about payment structures as large shifts are occurring with the implementation of MACRA and new private insurance company payment models.
- Learning about the new value-based program, MIPS, as a catalyst away from fee-for-service and toward value-based purchasing.
- Helping to design these new methods of reimbursement.



REFORMING FEE-FOR-SERVICE — PAYING FOR PERFORMANCE

Erik A. Berg, MD; Jesse Schafer, MD

Pay-for-performance (PFP) is a health care financing strategy that aims to improve health care quality by financially incentivizing provider performance on quality metrics. Quality metrics are predetermined measures related to processes of care that are associated with positive health outcomes or efficient use of health care resources.¹ Traditionally, physician reimbursement is tied to how much a provider does in terms of tests, procedures, or seeing more patients, regardless of indication, outcome, or patient satisfaction. This model is known as fee-for-service (FFS) and is one of the drivers of expanding health care costs in the U.S.²

In an effort to incentivize quality care and contain costs, CMS adopted the concept of value-based purchasing (VBP), which ties reimbursement to consensus-based quality measures and resource utilization measurements.³ Quality metrics are meant to standardize and compare the quality and delivery of care and account for the context of where that care is delivered. 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. VBP is the underlying principle behind the shift from FFS to PFP. In this chapter we will discuss the shift toward PFP through the implementation of quality measures.

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.

The Rise of Quality Measures

In the past 30 years, CMS has shifted from a FFS model to a PFP model, recognizing that one way to reform FFS is to incentivize the use and reporting of quality measures.^{3,4} The Hospital Quality Initiative (HQI) was rolled out by CMS shortly after publication of two reports from the Institute of Medicine: “To Err is Human” in 1999 and “Crossing the Quality Chasm” in 2001.⁵ 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 several domains.

Initially, there were no incentives to report on quality measures in 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 MACRA in 2015, the number of specialty-specific quality measures continued to expand.

The End of the SGR and Beginning of the Quality Payment Program

MACRA’s passage marked a key moment in the reform of physician payment. Under MACRA, CMS aims to incentivize high-quality and high-value care with payment incentives through the Quality Payment Program (QPP).⁷ Under QPP, providers can choose from two participation tracks, depending on practice size, patient population, location, or specialty. These tracks are the Merit-Based Incentive Payment System and Advanced Alternative Payment Models.

MIPS consolidates three older PFP programs — Physician Quality Reporting System (PQRS), Electronic Health Record Meaningful Use (EHR MU), and the Value-Based Modifier (VBM) — into a new system in which providers receive an annual composite performance score based on four categories of metrics (Table 10.1).

TABLE 10.1. Merit-Based Incentive Payment System Performance Categories (2018)

Categories	Points	Notes
Quality	50 to 75	Reporting on 6 specialty-specific measures is required. For example, avoiding unnecessary head CT scan for minor blunt head trauma for patients aged 18 years and older who are classified as low-risk
Cost	10	Total Per Capita Costs (TPCC) and Medicare Spending per Beneficiary (MSPB) are risk-adjusted and calculated per physician or group and compared to the national average. ⁸
Promoting Interoperability (PI)	0 to 25	Hospital-based emergency medicine clinicians can have their PI category score reweighted to 0% if eligible. In that case, the 25 points from the PI category are reassigned to the Quality category, for a total of 75 points in Quality.
Clinical Practice Improvement Activities (CPIA)	15	Clinicians choose activities they may participate in from among a list. For example, Consulting a Prescription Drug Monitoring program before prescribing opiates.

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 from 4% to 9% by 2023.

The second track for provider participation in QPP is through alternative payment models that meet CMS’s “advanced” criteria (required use of certified electronic health record technology, provider pay based on quality metrics similar to MIPS, provider accountability for “more than a nominal amount” of financial risk for monetary losses). In this arrangement providers face more downside risk, but are also eligible for higher bonus payments, including an annual 5% payment bonus as well as 0.5% higher base rate (as compared to MIPS) beginning in 2026 (0.75% versus 0.25%).

Emergency physicians have the ability to participate in MIPS as either individuals or part of a group. The Clinical Emergency Data Registry (CEDR) developed by ACEP is one means for emergency physicians to comply with this reporting process in a specialty-specific way.

Participation in Advanced APMs is currently more difficult, if not impossible, for emergency physicians. In CMS’s list of Advanced APMs, acute unscheduled care is not directly addressed, leaving many emergency physicians without a mechanism to participate in Advanced APMs.⁸ In response, ACEP developed

a proposal called the Acute Unscheduled Care Model (AUCM) that provides the opportunity for emergency physicians to participate in an Advanced APM.⁹ The overriding aim of the AUCM is to align the efforts of emergency physicians with CMS's goal of rewarding physicians for providing value rather than volume. Rather than simply characterizing emergency care as expensive and targeting a reduction in its use, the AUCM seeks to address the role EM can play in delivering value. As proposed, the AUCM would reward and facilitate post-discharge care coordination in the ED, allowing emergency physicians to safely discharge more patients. In order to ensure that discharges are safe and appropriate, the model calls for monitoring post-discharge events including death, repeat ED visits, inpatient admissions, and observation stays.

Current Quality Metrics

Just as the QPP aims to incentive individual providers to deliver value in health care, CMS focuses on value-based purchasing at the hospital level through Inpatient Quality Reporting (IQR) and the Outpatient Quality Reporting (OQR). Hospitals that do not meet the IQR/OQR reporting requirements 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. 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 now an expanded number of quality measures related to EM as outlined in Table 10.2. Each metric will have a defined population, inclusion and exclusion criteria, and the methods for determining success. For example, when treating children with pharyngitis, the population includes children ages 3-18 with a diagnosis of pharyngitis who had antibiotics ordered. Children on hospice are excluded. The successful completion is if a strep test was performed. Failure to test will qualify as a failure of the metric. It is important that providers understand the details and monitor their performance scores to ensure that their reported quality is accurate to their care. As their scores will follow them in their career when they move institutions, it is in each provider's interest to ensure accurate data.

TABLE 10.2. QPP Measures Relevant to Emergency Care in 2018

DESCRIPTION
Appropriate Testing for Children with Pharyngitis
Prevention of CVC-Related Bloodstream Infections
Acute Otitis Externa: Topical Therapy
Acute Otitis Externa: Systemic Antimicrobial Therapy Avoidance of Inappropriate Use
Avoidance of Antibiotic Treatment in Adults With Acute Bronchitis
Stroke and Stroke Rehabilitation: Thrombolytic Therapy (tPA)
Ultrasound Determination of Pregnancy Location for Pregnant Patients with Abdominal Pain
Rh Immunoglobulin (Rhogam) for Rh-Negative Pregnant Women at Risk of Fetal Blood Exposure
Preventive Care and Screening: Screening for High Blood Pressure and Follow-Up Documented
Atrial Fibrillation and Atrial Flutter: Chronic Anticoagulation Therapy
Adult Sinusitis: Antibiotic Prescribed for Acute Sinusitis (Overuse)
Adult Sinusitis: Appropriate Choice of Antibiotic: Amoxicillin With or Without Clavulanate Prescribed for Patient with Acute Bacterial Sinusitis (Appropriate Use)
Adult Sinusitis: Computerized Tomography for Acute Sinusitis (Overuse)
Emergency Department Utilization of CT for Minor Blunt Head Trauma for Patients Aged 18 Years and Older
Emergency Department Utilization of CT for Minor Blunt Head Trauma for Patients Aged 2 Through 17 Years
Overuse Of Neuroimaging for Patients with Primary Headache and a Normal Neurological Examination

TABLE 10.3. IQR Measures Relevant to Emergency Care

DESCRIPTION	Name
Median Time from ED Arrival to ED Departure for Admitted Patients	ED-1
Admit Decision Time to ED Departure Time for Admitted Patients	ED-2

TABLE 10.4. OQR Measures Relevant to Emergency Care

DESCRIPTION	Name
Median Time to Fibrinolysis	OP-1
Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival	OP-2
Median Time to Transfer to Another Facility for Acute Coronary Intervention	OP-3
Aspirin at Arrival	OP-4
Median Time to ECG	OP-5
Median Time from ED Arrival to ED Departure for Discharged ED Patients	OP-18
Door to Diagnostic Evaluation by a Qualified Medical Professional	OP-20
Median Time to Pain Management for Long Bone Fracture	OP-21
Left Without Being Seen	OP-22
Head CT or MRI Scan Results for Acute Ischemic Stroke or Hemorrhagic Stroke who Received Head CT or MRI Scan Interpretation Within 45 minutes of ED Arrival	OP-23

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 PFP 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 OQR measures for emergency care include only process measures: 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. 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?) rather than diagnosis based quality measures.¹⁰ Yet because we lack metrics for these skills and characteristics, OQR 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 quality; however, taken alone, they fail to account for the overall value and complexity 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 affects outcome performance measures for physicians.¹¹⁻¹⁴ 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 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).¹⁵ Tackling complex tasks seems to require sources of intrinsic motivation — such as purpose, mastery, or altruism — that are common among physicians.¹⁶ When financial rewards are applied to complex tasks, however, these financial incentives can actually undermine, or “crowd out,” intrinsic motivation.¹⁷ 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?

The transition from pay per volume to pay for quality continues to advance and will transform the landscape of health care. Advocacy includes:

- Engaging in developing quality measures relevant to emergency medicine.
- Taking an active role in defining measures that are accurate, fair, and meaningfully influence outcomes that matter to patients.
- Implementing relevant quality metrics in our practices.



DELIVERY SYSTEM REFORM

Kenneth Perry, MD; Jessica Alvelo, MD; Emmagene Worley, MD

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 ACA addresses this by incentivizing increased value in health care by rewarding groups of practitioners for decreasing costs while improving quality. It's within these environmental pressures that dramatic system reform is occurring, with new entities such as Accountable Care Organizations (ACO), bundled payments, integration of disparate parts of the health system, and innovative ventures.

The landscape of health care delivery is changing rapidly. Integration is occurring between physician groups, as well as different levels of the delivery system.

Accountable Care Organizations

The ACA established a new model of payments for practitioners who currently receive fee-for-service payments. If a group of practitioners can reduce costs, they will be allowed to receive a percentage of the savings they accrue. This shared saving model, the ACO, provides the framework for the cooperation of multiple 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.”¹¹ 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; that is, unlike HMOs, patients are not restricted to see only physicians and practitioners within their ACO for their Medicare benefits 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 worked to change the model of coordinated care. They have made interdisciplinary groups part of the same pool of payment, attempting to connect reimbursement with increased coordination of care. Unfortunately, it has not yet been determined how emergency medicine will fit into this new model as most do not include emergency physicians.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.

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 health care. The BPCI has been going through multiple phases spearheaded by CMS with 4 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 (DRG), such as a congestive heart failure exacerbation or a total knee replacement. There are 3 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.

According to a Lewin Group analysis of the bundled payment program, initial results showed that the retrospective model of bundled payments decreased expensive skilled nursing facilities stays and increased less expensive home health agency utilization.⁵ In addition, readmissions were decreased in comparison to standard Medicare reimbursements, but ED visits without hospitalization increased proportionately. These demonstration programs demonstrate that there is an opportunity for better coordination in the narrow areas studied, but time will have to tell if broader improvements can be made with bundled payments.

TABLE 11.1. Outline of the 4 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

These payment systems impact emergency medicine in several ways. After a bundled payment system is implemented, ED visits after the initial hospitalization usually remain stable as shown in the Lewin Group analysis of bundled payments.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, and the distribution of the reward is dependent on the institution. Emergency physicians must be involved to ensure appropriate participation in gainshare allocation and the resources to improve the care coordination.

Health Care Consolidation

There has been a trend toward consolidation in the health care industry, occurring primarily through hospital mergers, the development of ACOs, and the buy-out of physician practices by large health systems. Consolidation in the marketplace is at its highest levels in the past decade, with the number of hospital mergers doubling between 2009 and 2012.⁸ Data also indicate that the percentage of physicians employed by an integrated delivery system increased from 24% to 54% between 2004 and 2012, which is represented within EM as well.⁸

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 value directed paradigm, it becomes extremely challenging for small independent groups and individual hospitals to deliver the necessary degree of care integration. There are also higher reimbursement rates for those able to charge facility fees for outpatient visits in large health systems that are not available to independent providers, further increasing the pressure to consolidate into large health systems. The current regulatory and market conditions offering unprecedented levels of uncertainty in terms of reimbursement and technology demands have driven physician groups to move towards acquisition.⁹

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.¹⁰

New Types of Health Care Consolidation

Integration is not just happening at the physician group and hospital level, but rather all across the spectrum. Physician groups merging would be an example of horizontal integration, where a merger occurs at the same level of a supply chain. If different levels of a supply chain, for instance health insurers and pharmaceutical companies, merge it is called vertical integration. A great example of vertical integration is Optum Health. Optum does data analysis, health insurance, employs physicians and has a pharmacy benefit manager. This type of integration is occurring throughout the sector with CVS/Aetna, Cigna/ExpressScripts, and Humana/Kindred being just a few examples of pharmaceutical companies and health insurers merging. The impact of these new consolidations of different parts of the health care system that have not been traditional partners will introduce new pressures on the providers and patients with unknown outcomes.

Greenfield Healthcare Delivery Ventures

Recently, three non-health care industry giants have teamed up to address health care costs in America. The CEOs of Amazon, Berkshire Hathaway, and JP Morgan announced in January 2018 the formation of a new health care venture aimed at decreasing cost and increasing value. This is just one more example of vertical integration occurring within medicine. To start, the company will be enrolling their own employees and dependents, amassing more than 1 million potential patients. While operational details were not publicized in 2018, they named Dr. Atul Gawande as CEO.^{11,13,14} They identified 3 targets that add costs to the current health care system: pharmacy management benefit companies, insurance brokers, and insurers. Their vertical integration is impressive with Amazon owning PillPack, an online pharma company, and Berkshire Hathaway owning Teva Pharmaceuticals, a generic pharmaceutical company. They posit that by removing these “middle men” from health care delivery and facilitating a more direct stream between patients and their health care, costs will decrease.¹² Until concrete details are released, the impact is unclear. But with more than 1 million patients between them, one thing is certain: This new health care venture is something to watch.

WHAT'S THE ASK?

The landscape of health care delivery is changing rapidly. Integration is occurring between physician groups, as well as different levels of the delivery system. Advocacy here includes:

- Staying engaged in the landscape of health care delivery.
- Understanding the ultimate effect of mergers on patient care.
- Advocating for the practice of emergency medicine in this changing environment.



DATA REGISTRIES: IMPACT ON QUALITY AND REIMBURSEMENT

Luke Knapp, MD; Chet Schrader, MD, FACEP

Modern health care's drive toward increased quality and value has seen an emphasis placed on data and analytics, with a goal of affecting overall population health. To achieve these aims, the creation of large data sets to track metrics, evaluate health, and drive change has been required. The explosion of large databases and a desire to use this metadata has the potential to effectuate profound change.

Clinical Data Registries

CMS is mandated to implement a quality payment incentive program.¹ The PQRS was most recently used for reporting data through the end of 2016, when it converted to MIPS under the QPP.² Of note, 2015 was the first year clinicians were subject to negative payment adjustments for not satisfactorily reporting quality measure data. To achieve this aim, CMS allows for data processing via Qualified Clinical Data Registries (QCDRs), CMS-approved entities that collect and submit clinical data. While QCDRs are used to satisfy MIPS reporting data, they also have a wider scope as they are allowed to submit data on up to 30 non-MIPS CMS measures.³

Clinical Emergency Data Registry

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 as a QCDR that satisfies MIPS reporting and potentially other quality reporting requirements.

Health care legislation and CMS measures continue to emphasize quality over quantity, and multiple data registries have been implemented to help satisfy reporting measures as well as increase quality of care.

CEDR measures and reports quality metrics, such as ED utilization of CT scans, 3-day return rates to the ED, and time to tPA; however, it also provides physicians with information to identify outcomes and trends in emergency care. Additionally, CEDR gives physicians feedback on their performances and compares the individual physician to his/her peers at a national level.

CEDR collects 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. CEDR also allows for a simpler, single date capture to satisfy multiple quality measure reporting requirements by CMS.⁴

Implementing CEDR

ACEP implemented CEDR over an 11-month span in 2015. To join CEDR, potential participants complete a questionnaire that includes information on the group and EDs 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 agrees, 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 EHR used by the physician's group. Data then can be extracted in a secure manner. A Client Account Manager (CAM) will 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.⁴

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 still meeting CMS and other reporting requirements. CEDR also affords national, comparative data that allows clinicians and groups to identify quality measures that need improvement. The CEDR also benefits government policy-makers and health care leaders by supplying invaluable data to help guide future health care policy on a population level.⁴ Hopefully with the large volume of data that is gathered, emergency physician can advocate for informed and evidence based health policy and respond to external threats with the information available.

All Payer Claims Databases

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.⁵

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 to help guide health reform efforts. 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.⁶

As of 2018, 18 states had established APCDs, and many more were engaged in the process of implementing an APCD. It is estimated that half of all states will have an APCD or similar database by 2022, with each database containing information on roughly two-thirds of that state's population.⁷ Some APCDs include legislatively mandated reporting by insurers, while others are voluntary and thus less detailed.

There is ongoing debate about how APCDs can best enhance health care price transparency goals. Some states are utilizing public websites that display health care costs based on retrospective data. There exist wide variations in how the APCDs are being utilized amongst states. While many of these efforts are still young, there remains significant work for many of these databases to achieve their goals.

One challenge the states have encountered is accurately tracking providers, as it has been expensive and complex to use taxonomy codes (such as the NPI), state licenses, and physician names.⁸ However, if APCDs are to be used to track provider pricing, quality, or efficiency, accurate provider tracking will be essential. There is concern that in the future, information in the APCD could be used by insurance companies to set reimbursement rates for 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.⁶

As with all data presented to the public, concerns about accuracy and adjustment for patient populations remain. Doing large meta-data analyses and assigning health care outcomes only to the health care systems or providers in a certain geographic region can ignore variations in social determinants of health, access to care, and other non-medical health factors that influence outcomes. While these data limitations exist for APCDs, they exist in all large data registries and require careful monitoring and engagement to ensure the most accurate data is reported.

Transforming Clinical Practice Initiative

Under the ACA, CMS has initiated numerous programs to improve the efficiency of health care resources. One method to strengthen the quality of patient care and spend health care dollars more judiciously is the Transforming Clinical Practice Initiative (TCPI). The TCPI's primary goal is to help clinicians achieve large-scale practice transformation across the country. The TCPI will assist more than 140,000 clinicians by supporting practice transformation tools over the next 4 years. It is one of the federal government's largest investments in transforming health care on a large scale.⁹

Emergency Quality Network

ACEP has developed the Emergency Quality Network (E-QUAL), one of many CMS-approved networks under the TCPI. E-QUAL launched in 2015 with the goal of enrolling more than 24,000 emergency clinicians from 2,000+ EDs over a 4-year period. As of July 2017, more than 27,464 ED clinicians from 863+ ED practices were enrolled.⁹ E-QUAL has a dual mission to engage EDs and clinicians in multiple clinical initiatives while serving as a resource to the CMS-supported TCPI.

E-QUAL has 4 clinical initiatives with clinician and group enrollment. These initiatives have data available from phases 1 and 2. The initiatives are as follows: improving outcomes for patients with sepsis, reducing avoidable imaging in low risk patients, improving the value of ED chest pain evaluation, and improving strategies for opioid prescribing. Clinicians and ED groups can enroll in the E-QUAL Network by completing a quality improvement readiness assessment survey and then submitting NPIs and group Tax ID Number through ACEP's website. After enrollment, clinicians can choose which learning collaboratives they want to participate in; each learning collaborative has different enrollment deadlines for the different phases.

By participating in E-QUAL and its learning collaboratives, EDs can use performance benchmarks and other tools to improve patient care. Each learning collaborative supplies online learning activities, CME activities, monthly webinars, and other educational material. At the end of each phase, data and summary reports are supplied to all participants. This allows ED groups and clinicians to gauge where they stand on a national level, as well as identify metrics that need improvement or increased efficiency. EDs can also use this metric data to exhibit their high-quality care to health care payers. E-QUAL data will function similarly to CEDR/QCQR data in regards to quality improvement efforts implemented at a local level.

Not only will participation help improve patient care and health care efficiency, it will also help clinicians and groups receive proper compensation. It is important to note that participation in E-QUAL satisfies the Improvement Activity under MIPS, which is scheduled to have progressive payment adjustments as each year passes. By 2022, payments adjustments will be as large as +/- 9% based on numerous factors. CMS bases this reimbursement component strictly on participation, while other components of MIPS are based on actual quality metric scores not associated with E-QUAL (see above).¹⁰

WHAT'S THE ASK?

Health care legislation and CMS measures continue to emphasize quality over quantity. Multiple data registries have been implemented to help satisfy reporting measures as well as increase quality of care. Effective advocacy includes:

- Understanding the role of QCQRs and ACEP's CEDR that allows physicians to meet their MIPS reporting requirements and get meaningful feedback.
- Monitoring and engaging with state-sponsored APCDs as they will likely guide future quality measures and have an impact on reimbursement.
- Participating in E-QUAL's quality improvement projects that seek to improve quality and cost efficiency while also satisfying CMS reimbursement measures.



BALANCE BILLING AND FAIR COVERAGE

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Emergency medicine sits at the intersection of the failure of access, coverage, and payment in the modern health system. Under EMTALA requirements, care must be provided regardless of insurance or payment. Without a mechanism to negotiate fair contracts in the setting of mandates to provide care, providers and patients can be left with the problem of balance billing when coverage is not fair or adequate.

Balance Billing Defined

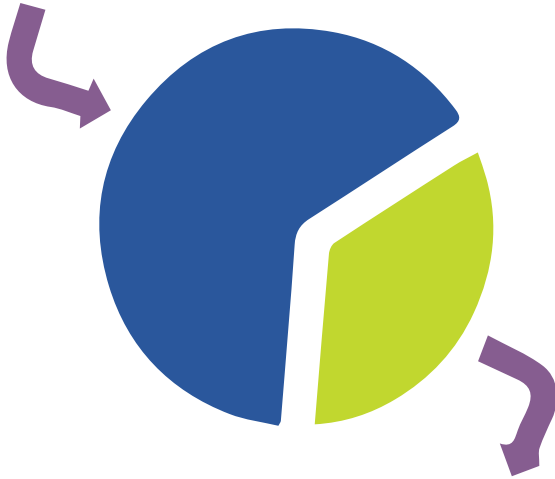
Medical emergencies can be one of the most frightening moments of a person's life. When faced with a problem like uncontrolled bleeding, chest pain, or a stroke, patients often seek treatment from a nearby ED. After a patient has been treated and stabilized, the physician then bills the patient's health insurance company. If the provider is "in network," meaning they have a pre-existing contract to provide medical services at a specific rate, the insurance company pays the allowed amount and the patient pays the applicable co-pay, co-insurance, and deductibles. If the provider and health insurance company do not have a contract, the services are "out-of-network" (OON), and insurance companies often pay a lower rate than the physician's typical charge. To be paid for the treatment in full, the physician who provided the legally required emergency care sends the patient a bill covering the difference between the provider's billed rate and the insurance company's paid amount. The provider and patient are often then left to work directly together to resolve the portion of the bill the insurance company would not pay. This practice is known as balance billing.

Emergency physicians have an ethical and legal obligation to treat all patients, and their engagement in the conversation regarding coverage and payment is more vital than ever.

FIGURE 13.1. Balance Billing

Doctor out of network?

Insurance often pays less than the full bill. . .



... the part that insurance doesn't cover is the **balance bill**.

Scope of Balance Billing

Balance billing burdens all medical specialties, but emergency care is the only care required by law to be provided regardless of insurance status.¹ Further, patients do not plan to have a medical emergency, and when time is of the essence they often do not know which emergency physicians are in network or out of network — much less whether a provider working at an in-network ED is employed by that ED or by an out-of-network group. As would be expected, emergency medicine accounts for about one quarter of cases of balance billing.² While the percentage is not insignificant, the prevalence of balance billing as a total of all ED encounters may actually be as low as 2%.³

When patients do not understand their insurance coverage and the implications of OON care, they can be caught off guard by these balance bills. Further complicating the matter is the increased medical costs related to changes in insurance coverage. HDHPs increase out-of-pocket costs for patients in the form of rising deductibles and copays.⁴ All of these changes — balance bills, high deductibles, and increased copays — are often lumped together in the media and labeled as “surprise bills.”⁵ What patients view as surprise bills are actually the result of insurance companies narrowing their networks and increasing costs to patients.

Emergency physicians serve an important role in the health care system by acting as the health care safety net for patients regardless of their insurance status. 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.⁶ Accordingly, ensuring fair payment from insurance companies is of particular importance to emergency physicians. Without the ability to decline contracting and services as other providers do when they are out-of-network, balance billing may be one of the few mechanisms by which emergency medicine can obtain fair payment.

Defining a Fair Rate

Determining a fair rate for emergency medical services is much more complicated than a simple flat fee across the country. Facilities treating uninsured and underinsured (eg, Medicaid) patients have to offset their losses by charging insured patients more, a practice called cost-shifting. The geographical location, cost of labor, taxes and regulatory costs, and other overhead of providing emergency care may further influence the difference in charges between EDs.

To help determine a fair rate, a system exists to analyze the usual, customary, and reasonable (UCR) charges for emergency services in any particular geographical region. Based on authority granted to them by the ACA,⁷ HHS requires insurance companies to reimburse OON emergency services for the UCR charge, unless a greater rate exists in either the typical in-network rate or the typical Medicare rate. Both in-network rates and Medicare rates are substantially lower than the actual cost of care, which would be expected for any negotiated contract. The rule requiring payment at one of these three levels, known as the “greatest of three” rule, then relies on the UCR being fairly determined.⁸ The federal government is not the only entity requiring reimbursement at those levels. In 2016, Connecticut started requiring emergency services to be provided to patients with costs and reimbursements akin to the greatest of three rule.

The challenge for UCR is the calculation of that rate and whose database is utilized. Insurance companies compile databases of all regions of the U.S. and set their rates based on those averages. They do this privately and are not obligated to reveal their data or methods. Perhaps unsurprisingly, this secretive “black box” method can result in fraud. Prior to 2009, the majority of insurance companies determined their out-of-network UCR charges by utilizing large national databases owned by Ingenix, a subsidiary of UnitedHealth Group. When they were caught manipulating UCR data by more than 30%, United Healthcare paid more than \$350 million in settlement.⁹ They are not alone in covering up the true costs of health care: Aetna attempted to increase their profits with similar manipulation, and in 2012 they had to pay \$120 million.¹⁰

The settlement funds allowed for the creation of an open-access database to serve as a repository of physician charges. The nonprofit agency overseeing the data, FAIR Health, manages this transparent database and allows for access to actual UCR charges, free of the conflict-of-interest from insurance companies.¹¹

The Greatest of Three Lawsuit

Despite the transparent database creation, insurance companies continue to rely on their own opaque methods for cost determination, and no national rule requires them to use FAIR Health. This lack of transparency violates the ACA's requirement that OON billers be reimbursed at a reasonable, objective rate. After the ACA was enacted, HHS was tasked with determining if the insurance companies' method for determining the UCR was lawful. During the rulemaking process, ACEP questioned the objectivity of the insurance companies' methods and noted that a database like FAIR Health should be used instead. Federal law requires that all comments submitted during the rulemaking period be addressed by HHS, but the department failed to respond to ACEP's comments, despite their legal obligation to do so.

When HHS finalized the rules without responding to ACEP's comments, ACEP sued. ACEP contended HHS ignored numerous comments and feedback provided by ACEP and patient advocacy groups. ACEP prevailed, and HHS was forced to respond to those public concerns.¹² By 2018, the courts had yet to determine if the response from HHS was sufficient.

ACEP's lawsuit also contended that insurance companies have an inherent conflict of interest in using their own secretive databases. By 2018, the courts had not yet ruled on ACEP's substantive claims regarding the lack of transparency involved in the determination of the UCR standard.¹³

Legislative Solutions

Patients reasonably expect their health insurance to cover their emergency care. Balance billing pits patients and physicians against each other when the problem lies in insurance coverage. As expected, consumer advocacy groups and federal and state legislatures are stepping up to find solutions.¹⁴ These policies have found a home in federal and state laws over the past decade, closing some of the gaps, but leaving the need for a more comprehensive solution.¹⁵ Some solutions are imperfect, like the one described above wherein the federal government and states like Connecticut apply the greatest of three law erroneously. Solutions often require addressing minimum benefit standards, balance bill caps, dispute resolution, informed consent, and network adequacy.

Minimum Benefit Standard. When a balance bill occurs, most parties want it resolved with minimal administrative cost and a standard minimum payment is often sought in statute. The challenge is agreeing to what that amount is tied to, as insurers and providers are often on opposite sides of the issue. Providers want either billed charges or a database that uses a reasonable payment standard (eg, FAIR Health). Insurers want the lowest amount possible, and they advocate for Medicare rates. Both sides are concerned that a rate above the current marketplace will drive costs and payments up if too high or down if too low.

Balance Bill Caps. One solution proposes legal regulations to prohibit or limit the amount of the balance bill, which provides a certain amount of protection to patients. States like Texas and New York pioneered this policy solution of limiting balance billing. As with the policy requiring reimbursements, this solution is not without flaws. For many patients, the balance bill limit (\$500 in Texas, for example) is not an insignificant expense. At the same time, the actual bill may be substantially higher, leaving the physicians who are legally required to provide medical care without a legal guarantee to payment for that care.

Dispute Resolution. Appeals are possible when a balance bill is above a state cap or threshold in some states. Texas provides for a mediation process for higher bills, and New York provides for a binding arbitration process. As with the aforementioned required reimbursements, these policies apply differently to different types of insurance, leaving many patients and physicians without a solution.^{16,17} There is also concern about the cost of dispute resolution over a small bill. If a provider is required to pay \$1,000 for arbitration for a \$250 bill, there is no economic incentive unless multiple claims can be bundled. The ability to bundle like claims has complicated many dispute resolution processes with some states, such as California, permitting it.¹⁸ Other states, like Connecticut, have not taken a position on the issue or not permitted it.¹⁹

Disclosure and Consent. Some states require disclosure in advance so a patient can make an informed decision about whether to accept out-of-network care.²⁰ This solution makes sense for non-emergent care when there is time to research in-network physician options. In medical emergencies, the luxury of time rarely exists, meaning advanced disclosure is of limited value and ability. Further, EMTALA prohibits emergency departments from disclosing whether their services are OON until after the care has been provided.²¹ Other states have required websites and lists of included insurance products to be maintained, which can introduce new administrative costs and challenges for practices.

Network Adequacy. Many legislators and regulators are bothered that a hospital can be in-network, while the providers working there can be OON. Further, entire communities can have multiple major hospitals without a single

in-network provider. As a result, ensuring that networks are adequately staffed by both hospitals and providers has come into the discussion of balance billing. In one example, the Texas Department of Insurance has a network adequacy requirement that requires contracted providers be available at contracted hospitals within a specified distance for the patient. Despite the legal requirement, not all insurers comply. In a 2018 settlement, Humana was fined \$700,000 for network inadequacy and had to process previously out-of-network bills as in-network.²²

First-Dollar Coverage. First-dollar coverage — the concept that insurance plans allow for certain types of care by providing 100% coverage from the first dollar spent toward that care — presents an additional path toward eliminating balance billing of patients.²³ First-dollar coverage models allow for a predetermined co-pay for care (or no co-pay at all), with the remainder of the bill being paid by the insurance company.²⁴ These plans eliminate the patient's deductible, which is a significant reduction in modern plans, particularly high-deductible plans. Such coverage would allow patients to access emergency care as described by EMTALA without being subject to balance billing by physician.

Model Legislation. Model legislation now exists that looks to strike a balanced solution to this problem. The Physicians for Fair Coverage have proposed a comprehensive solution that prohibits punishing patients for unexpected OON bills. This is accomplished by both prohibiting insurance companies from charging OON fees to patients for these visits and stopping physicians from directly billing patients. They recommend linking fair charges to an open, independent database, such as FAIR Health, and they recommend eliminating the ability of insurers to provide confusing and misleading information regarding coverage. By designing this model legislation, Physicians for Fair Coverage hope to provide a path for patients, insurers, physicians, and legislators unite behind a uniform, fair solution to the problems that create the need for balance billing.²⁵

WHAT'S THE ASK?

Balance billing and denials of coverage affect patients' ability to seek appropriate care and threatens the ability of emergency physicians to provide that care. Emergency physicians have an ethical and legal obligation to treat all patients, and their engagement in the conversation regarding solutions is more vital than ever. Advocacy can include:

- Advocating for fair solutions to the current reimbursement challenges.
- Discussing with your elected officials how regulations are impacting your patients and your practice.
- Supporting the organizations fighting detrimental policies.
- Recruiting your peers as fellow advocates.



REGULATORY ENVIRONMENT EVOLUTION AND DANGERS

Benjamin Karfunkle, MD; Natalie Kirilichin, MD, MPH

Physician advocacy efforts often target elected representatives with legislative authority. We vote, support political action campaigns, meet with officials and their staff, conduct health services research, and generate educational materials to inform policy. Physicians may be less familiar with advocacy targeting federal agencies. This so-called “Fourth Branch of Government” interprets legislation passed by Congress and signed by the President into the rules and regulations we ultimately follow. Significant changes can be made between the time a bill is signed into law and rules for implementation are written and enforced at agency discretion.

Regulatory agencies represent a critical component of the government that impacts care and requires ongoing relationships and advocacy similar to elected officials.

Regulatory agencies vary in size and rule-making authority but have broad and sweeping impacts on health care. The Centers for Medicare and Medicaid Services is the federal agency within the U.S. Department of Health and Human Services tasked with administering Medicare programs, state Medicaid programs, the Children’s Health Insurance Program, and health insurance standards. Ultimately, CMS issues regulations by publishing proposed rules, allowing for a period for public comment, incorporating feedback, and then finalizing those rules. Other independent organizations like the Medicare Payment Advisory Commission (MedPAC) advise Congress on issues affecting Medicare, but do not have rulemaking authority. With thousands of agencies with overlapping programs and enforcement, the web of regulations can be daunting.

CMS and other regulatory agencies are not traditionally staffed by actively practicing health care providers. Advocacy and education efforts in the form of proposed rule commentary after bill passage are as critical as outreach to representatives in Congress during the legislative process. Organized medicine,

including EMRA and ACEP, are instrumental in tracking rules that impact emergency care and advocating for positions that benefit practitioners and patients. Each year, for example, CMS releases several proposed regulations that directly affect how emergency physicians are paid under Medicare. In response, ACEP seeks member feedback and submits informed stakeholder commentary. These comments help inform and guide the agency's rulemaking process and hopefully shape the policy.¹ Without this advocacy, emergency physicians would be adversely impacted in their compensation and ability to provide care to patients.

As federal agencies often set the bar for private industry, the regulatory implications of the aforementioned policies extend beyond federal beneficiaries and have the potential to affect all Americans. While there are thousands of regulations that affect the current care of patients that could be examined, three of the largest controversies impacting emergency care today include the designation of inpatient status, the three day stay rule, and the hospital readmission program. This chapter will explore these programs as an example of the impact that these decisions can have on health care.

Inpatient vs. Outpatient/Observation Status

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 2013.² This stipulation stated that patient encounters anticipated to require a hospital bed through two separate midnights would be reimbursed as "inpatient" stays if they met all other criteria. All other stays, including observation admissions, would be designated "outpatient" visits. The issue with this distinction is that patient encounters for similar complaints, involving similar evaluations and even identical procedures, can result in widely disparate payments and coverage. 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.³ 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.

The Two Midnight Rule is of concern for emergency physicians because the 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. Emergency physicians

are put in a position to determine an encounter's reimbursement profile based purely on speculation. A 2018 study of this issue⁴ found that nearly 100,000 Medicare beneficiaries per year were observed as outpatients for greater than 48 hours. Compared to their peers who were observed for less than 48 hours for similar complaints, the long observation stay patients had a higher rate of readmission and overall mortality. The authors concluded that observation versus inpatient determinations should thus be based on actual length of stay rather than prospective prediction under the Two Midnight Rule to reduce the administrative ambiguity this policy has created.

Given Two Midnight Rule criticism, CMS announced a compromise in July 2015 allowing physicians to 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.⁵ The ACEP-supported modification was formally adopted in October 2015, when CMS released its 2016 Outpatient Prospective Payment System Final Rule.⁶

In recent reports to Congress, MedPAC criticized the Two Midnight Rule, recommending withdrawal of the rule and directing Medicare RACs to focus their reviews on short inpatient stays especially inpatient stays lasting only one day.⁷ Proposed changes include allowing for certain diagnoses to be considered "inpatient" even for a one-day stay, and to bring short inpatient stay payments more in line with payment for outpatient observation stay. CMS continues to collect data on short inpatient stays to inform rulemaking. The Office of the Inspector General (OIG) also issued a 2017 report urging more oversight in this sphere. As these regulatory agencies only have advisory roles, it will take ongoing advocacy with Congress to change the law or the regulator (CMS) to change the rule.

The Three-Day Stay for Skilled Nursing Facilities

Under Medicare law, beneficiaries must be admitted as hospital inpatients for three days before Medicare will cover services in skilled nursing facilities (SNFs) for rehabilitation and continued care after discharge. Medicare beneficiaries were often unclear about the differences between inpatient status and outpatient observation. Further, beneficiaries are occasionally surprised to learn that they fail to qualify for Medicare SNF coverage and are financially liable for the costs of SNF care. Organizations like MedPAC and ACEP pushed for mandated hospital disclosure surrounding classification of hospitalization. In response, Congress passed and CMS implemented the "Notice of Observation Treatment and Implication for Care Eligibility Act," which has required transparency since fall 2016.⁸

This three-day stay rule represents another avenue through which qualification as an outpatient for an observation stay may expose patients to financial liability. The rule also 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.

ACEP believes that all days spent receiving care in a hospital should count toward Medicare's three-day hospital stay SNF requirement, regardless of status as inpatient or outpatient.⁹ This assertion is congruent with MedPAC recommendations, which suggest that up to two days of outpatient observation time should count toward the three-day requirement.

Adopting this policy, however, is anticipated to increase overall Medicare program spending as more individuals become eligible for SNF care that was previously financed through beneficiary out of pocket spending. This potential downside is a political barrier to modifying the three-day stay rule as ACEP and MedPAC recommend.¹⁰

Re-examining Readmission Policies

For Medicare patients, 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 theoretical move toward value-based care, Medicare's Hospital Readmission Reduction Program (HRRP) penalizes hospitals with relatively higher rates of Medicare readmissions by reducing reimbursement. The program is part of the Affordable Care Act and began in 2013.¹¹

The current focus in the HRRP is on several select conditions: myocardial infarction, heart failure, pneumonia, chronic obstructive pulmonary disease, coronary artery bypass graft surgery, and elective hip and knee replacement. Since implementation, hospital readmission rates have dropped significantly for patients with these diagnoses, and to a lesser extent for admitted patients overall, while rates of short outpatient observation admissions have risen.¹²

MedPAC posited to Congress in its 2018 report that HRRP has lowered costs to Medicare without affecting overall risk adjusted mortality rates. Notwithstanding this claim, raw mortality rates for heart failure have increased since program implementation.

"Despite reductions in 30-day heart failure readmissions in 89% of U.S. hospitals between 2009–2016, 30-day heart failure mortality rates increased at 73% of these 'successful' hospitals during the same period," said Ahmad Abdul-Aziz, MD, at the annual scientific meeting of the Heart Failure Society of America.¹³

Similarly, CMS Medicare data from 2008 to 2014 demonstrate that heart failure 30-day mortality rates following hospital discharge rose by 1.3%, while 30-day readmissions fell by 2.1%.¹⁴ Critics worry that CMS's policy of punishing readmissions may disincentivize necessary readmissions.

Since more than 50% of Medicare admissions come through the emergency department, emergency physicians are the gatekeepers determining a hospital's readmission profile. They may face pressure from hospital administration to observe or discharge patients instead of admitting them. The hospitals' financial incentives may be in direct conflict with a patient's medical need. ACEP urges emergency physicians to carefully weigh potential unintended consequences of payment policy changes and make patient-centric disposition decisions.

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. Addressing perceived expensive, low-quality care will continue to be an important part of Medicare and other federal health care spending moving forward, but must be driven by patient outcomes as well as financial benefits.

WHAT'S THE ASK?

Regulatory agencies represent a critical component of the government that impacts care and requires ongoing relationships and advocacy similar to elected officials. Effective advocacy includes:

- Following, commenting, and engaging in rule-making as it occurs.
- Asking Congress to support MedPAC's recommendations for regulatory changes to issues such as the "Three Day Rule."
- Advocating for evidence-based programs which incentivize patient centric care.



GRADUATE MEDICAL EDUCATION FUNDING

Victoria "Tory" Haddad, MD; Puneet Gupta, MD, FACEP

As the U.S. faces the challenge of caring for a growing, aging population, the demand for physicians has intensified.

By 2030, the need for U.S. physicians will outstrip supply by a range of 40,800 to 104,900.¹ Graduate medical education (GME) funding is the lifeline for training new doctors to meet this growing demand. Yet GME continues to be under attack — chiefly because of financial challenges to Medicare and Medicaid, the key contributors to GME funding. State and federal governments have limited their support of GME, leading to potentially debilitating constraints to residency funding.

GME not only funds the next generation of physicians, but also improves access to care.

GME Funding: The Basics

Graduate medical education is primarily financed by public funding from a variety of sources. The federal Medicare program, via CMS, contributes the majority of GME funding. As of 2015, roughly \$16 billion in public funding supports GME, and two-thirds of that — about \$10.3–\$12.5 billion — comes from Medicare. Medicare supports 90,000 residents, providing payments of on average \$112,000–\$129,000 per resident.^{2,3} The second largest source of funding comes from Medicaid, providing an additional \$4 billion. The U.S. Department of Veterans Affairs (VA) funds \$1.8 billion, and lastly, the Health Resources and Services Administration (HRSA) funds \$500 million. The degree to which private insurers, nonprofits, and others fund training-related costs is difficult to calculate, because GME payments are often included in patient care revenue.

Medicare

Funding generally is divided into *direct* medical education (DME) and *indirect* medical education (IME). Medicare will only provide DME payments for residents and fellows in approved programs that, for EM, have been accredited by ACGME or the American Osteopathic Association. DME includes resident salaries,

overhead, accreditation fees, GME offices, 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.⁴ DME costs per resident are based on costs incurred in the 1980s during the original CMS inpatient prospective payment system, are adjusted for inflation, and vary widely across the country. They are paid by patient services revenue from Medicare, Medicaid, the VA, and private insurers.⁵

Medicare will only pay the full DME amount for the minimum accredited length of the first program in which a resident matches. If they have to repeat a year or decide to switch to a specialty that requires more time to be board certified, the DME funds they take with them will only cover part of their new residency length. This may make it difficult (though not impossible) for a resident to switch specialties.

Indirect medical education payments are designed to offset the increased cost associated with the complex patient care that happens at teaching hospitals. IME makes up a larger portion of Medicare funds with payments of \$6.5 billion in 2010, compared to \$3 billion in DME funding.⁶ IME supports academic centers in caring for higher acuity patients, added staff, maintaining trauma or referral center status, inefficiencies secondary to having multiple learners, and increased technological costs. The 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."⁷

IME funding is an additional payment for each Medicare inpatient stay. It is based on the IME adjustment factor, which is calculated with a formula dependent on the number of residents at the hospital and a multiplier set by Congress. In the following IME formula the resident-to-bed ratio is represented as r , and a multiplier, c , is set by Congress:

$$c \times [(1 + r) \cdot 405 - 1]$$

The multiplier has fluctuated several times. Under 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.⁷

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 and can be used as the hospital sees fit.⁸ Given the difficulty in tracking the IME funds, IME has been the target of proposed funding reductions.

Medicaid

Medicaid is the second largest source of funding (behind Medicare) for GME. Unlike in the case of Medicare, the federal government has no explicit guidelines for states on how states make GME payments. Medicaid funds for GME may be through Medicaid Fee-For-Service, directly to teaching programs as part of managed care, as part of capitated rate payments, or through Medicaid DSH payments. Budget shortfalls have motivated some states to reduce their support of GME. However, total Medicaid GME payments in 2015 were estimated at \$4.26 billion, an increase from \$3.87 billion in 2012.⁹

DSH payments

Disproportionate share hospital (DSH) payments can come from either Medicare or Medicaid sources and function to help offset costs to hospitals that care for a higher percentage of uninsured or underserved patients.¹⁰ These funds impact trainees because teaching hospitals, which disproportionately serve low-income populations, receive two-thirds of all DSH payments.¹¹ Since the intent of the ACA is to reduce the number of uninsured and uncompensated care, the ACA also planned for DSH reductions originally scheduled to start in 2014. However, the cuts have been delayed multiple times before going into effect. Most recently, the Bipartisan Budget Act of 2018 delayed DSH allotment reductions until 2020, now scheduled to be a much steeper cut of \$4 billion in 2020 and \$8 billion in the years following – potentially bad news for trainees and teaching hospitals.¹²

Resident Position Allocations

The Balanced Budget Act of 1997 capped the number of residency positions CMS would fund, based on the number of residents a teaching hospital reported in 1996.¹³ However, many “above the cap” residency positions have been added since 1997. Medicare’s original cap was for existing hospitals. Hence *new* teaching hospitals, ones that did not have a previous GME program, can create a new residency program eligible for Medicare funds, after which a cap is implemented in the program’s fifth year. “Above the cap” positions can also be developed from financing via state and local support, hospital revenue, scholarships, corporate investments, targeted federal funds, and endowments.³

There are some exceptions to the Medicare residency cap. Rural hospitals are funded for residents at 130% of the 1997 cap; critical access hospitals also do not have caps, and inpatient rehab and psychiatric facilities have their own funding rules.

Additional ways residencies can create new funded slots include:

1. Rural hospitals can start new residency programs.
2. Urban teaching hospitals can start new rural training track residency programs and get additional slots for when the residents are at the urban teaching hospital as long as at least half their time is spent rural.
3. Teaching hospitals can share cap slots between each other by entering GME affiliation agreements.
4. Hospitals without teaching hospital status can start a new residency program and have a cap set after 5 years.
5. If a program or hospital closes, other hospitals can receive those slots temporarily or permanently.

Since the 1997 resident cap,¹⁴ there has been a roughly 27% increase in the number of residents, increasing to 129,291 residents in 2018.^{3,15} In fact, two-thirds of hospitals train more than their cap slots, accounting for more than 11,000 residents over the Medicare funding cap.¹⁶ Reflecting potential revenue streams for these new positions, the growth has been disproportionately large in more lucrative specialties.^{17,18} Hospitals enjoy marginal staffing benefits to adding a resident to a training program.¹⁹ Though no value calculations have been conducted for EM residents, studies of other specialties reveal the theoretical value of resident work. Surgery residents have shown potential financial contributions between \$94,871 to \$267,690.^{20,21} The value is theoretical because resident services are not directly billable. Adding to this contribution, federal funds support approximately \$120,000 per resident. In contrast, the cost to train internal medicine residents ranges from \$130,000 to approximately \$200,000.²² The estimated value of resident work compared to costs can help explain the increase in resident positions over the federal funding cap over the past two decades.

Despite concerns that the number of residency slots would not keep pace with the increase in medical school graduates, 10-year projections from 2016 show that for allopathic graduates, there are enough residency positions.²³ Since 2002, enrollment at the nation's medical schools has increased by 28%, and 35 new medical schools have been established.²⁴ In the 2018 NRMP Match, a record 43,909 applicants vied for 33,167 positions. Of the 18,818 U.S. allopathic medical school seniors who entered the 2018 Match, 17,745 matched to first-year positions, leaving 1,073 (5.7%) graduating allopathic medical students unmatched. The rate of unmatched osteopathic medical school graduates was even higher, as 844 of 4,617 (18.3%) went unmatched.²⁵

The ACA established a number of provisions that impact GME funding. These include reducing the 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.”²⁶ The ACA stipulates that unused slots from hospitals that close (§5506) also are redistributed with priority to areas with low resident-to-population ratios, Health Professional Shortage Area (HPSA) areas in highest need, and rural areas.¹⁹

Current Legislation

In 2018, there were bills in both the U.S. House and Senate aimed at increasing support of GME. The Resident Physician Shortage Reduction Act of 2017 (H.R. 2267/S. 1301) would increase the number of residency positions eligible for Medicare DGME and IME support by 15,000 slots above the current cap. One-third of the new residency slots would be available only to hospitals that already train at least 10 residents in excess of their cap and train at least 25% of their residents in primary care and general surgery. New slots would be given preferentially to hospitals in states with new medical schools, partners of VA medical centers, community-based settings, and in a rural area or a program with an integrated rural track.^{27,28}

Similarly, the Advancing Medical Resident Training in Community Hospitals Act of 2018 (H.R. 6056) would improve the GME funding system and model. This bill establishes rules for payment of GME costs at hospitals that establish a new residency training program after hosting resident rotators for short durations. It would permit community hospitals whose Medicare GME caps and/or per resident amounts were established by small numbers of resident rotators to build and receive Medicare funding for new residency programs.²⁹

Finally, H.R. 7233, the Creating Access to Residency Education (CARE) Act of 2018, routes CMS funds to states with a ratio of less than 30 medical residents per 100,000 population. This fund would help finance 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.³⁰

Outside Rotations and Rural Medicine

When EM residency programs seek to increase training opportunities, they face a potential financial penalty if rotations occur off hospital grounds. The DGME section of the Social Security Act will only count residents doing rotations towards GME if the hospital “incurs all, or substantially all, of the costs for the training program in that setting.”³¹ Thus, non-hospital settings, including non-teaching facility rural hospitals or other sites (eg, poison control centers, pediatric centers), may be ineligible for GME compensation. Such a policy is a disincentive to the development of rural EM rotations and other non-hospital-based training opportunities.

One program developed to address this issue is the Teaching Health Center Graduate Medical Education Program (THCGME), which pays teaching health centers for the expenses they incur when training medical and dental residents in underserved areas and HPSAs. This is the only program of its kind and the only increase in government GME funding that has occurred since the freeze in the 1990s. Teaching health centers (THCs) are operated by federal health centers, rural health clinics, and tribal health programs. In 2018, the program supported 59 residency programs at THCs in 24 states and trained 800 fully funded residents in 2017–2018.^{32,33}

Michigan is one state taking a proactive stance to combat physician shortages in rural and underserved areas. Four medical schools (Central Michigan University, Michigan State University, Wayne State University, and Western Michigan University) created a consortium in response to then-state Sen. John Moolenaar’s call to action. The consortium, now referred to as “MiDocs,” is set to begin in 2019 as a state-funded program to finance expanded residency positions in select specialties within the state. Residents who enter these new positions will contractually commit to practice for at least 2 years after residency in a rural or underserved setting in Michigan. In exchange, they qualify for up to \$75,000 of educational loan repayment. By 2029, MiDocs is dedicated to creating 300 new primary care physicians practicing in underserved communities throughout Michigan. While emergency medicine was not included in the initial rollout, the program could serve as a stepping stone to a nationwide commitment to rural medicine and improved access to health care.³⁴

Institute of Medicine Report Aims to Reform GME

The Institute of Medicine raised concerns with the governance and financing of the GME system in its report, “Graduate Medical Education That Meets the Nation’s Health Needs.” The report asserts that GME programs do not train adequate numbers of physicians who are prepared to work in needed specialties or underserved areas.³⁵ Instead, the IOM recommends the creation of a new GME financing system “with greater transparency, accountability, strategic direction, and capacity to innovate.”² This would be achieved by maintaining 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 HHS 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 CMS to manage the operational aspects of GME funding.

The American Hospital 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. The AMA stated, “the report provides no clear solution to increasing the overall number of GME positions... to meet actual workforce needs.”³⁶

Recent Changes to Emergency Medicine Residencies

Since 2010, at least 70 additional EM programs have entered the NRMP Match. In 2018, 29 new ACGME-accredited EM programs participated and 231 additional EM positions were offered compared to 2017. Much of this increase was due to the Single Accreditation process, merging osteopathic accreditation into the ACGME path. Additional EM residency slots arose from established programs that obtained funding to increase their class size, and from newly accredited programs.³⁷ With the residency cap from 1997 limiting federal funding, how are new programs being developed? One novel route that is becoming increasingly common is through corporate America.

There are an estimated 14 corporate-owned residency programs spread across 10 states nationwide, with more on the rise.³⁸ Corporations' creation and management of residency programs may be motivated by early recruitment and a way to supply their own workforce. One example is with Hospital Corporation of America (HCA), one of the largest for-profit hospital companies in the U.S.,

which has joined with the University of Central Florida to develop and fund multiple new residency programs, creating 550 new residency slots in the state of Florida.³⁹ The majority of residency graduates — including 78% of graduates from EM residency programs — end up practicing in the state where they trained. Paying to train these residents can mean retention and staffing for these large corporations for years to come.

Provided the ACGME can ensure the quality of training at these new privately funded programs, the benefits may be widespread. Additional training programs will mean increased access to accredited EM training, which is becoming more competitive.⁴⁰ Some physician groups have raised concerns about corporations' involvement in GME as a potential conflict of interest between fiduciary duty to their shareholders and their educational mission. However, this shift in the dynamic of residency funding could serve as a catalyst for changing the underperforming government-funded model in the future.⁴⁰

Advocating for the Value of GME

It is important to advocate for continued GME funding. 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% of all Medicaid hospitalizations. Teaching hospitals provide 40% of all charity care, amounting to \$8.4 billion in care.⁴¹ More than 37,000 medical residents receive some or most training at VA facilities, and the Veterans Access, Choice and Accountability Act of 2014 directs the Department of Veterans Affairs to add as many as 1,500 GME residency positions by 2024.⁴²

What's at risk if state and federal funds for GME decrease? One Medicare demonstration project in New York in which hospitals voluntarily participated aimed to reduce residency training positions by 4-5% per year. Programs reported negative impacts of this downsize; they had to hire additional staff and there was less time for clinical teaching. Additionally, there was decreased elective or research time, fewer pediatric shifts, and longer shift lengths.⁴³ GME funding helps shield the training mission of residency programs from the risk of service outweighing education.

WHAT'S THE ASK?

- Advocate on behalf of GME. Visit 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.
- Get involved with your state's ACEP chapter to educate your state legislators about the importance of GME.
- Be vocal in your hospital rallying support for GME both in the local residency association and at the hospital administrative level.



PHYSICIAN SHORTAGE AND PHYSICIAN WORKFORCE CHALLENGE

Ryan Koski-Vacirca; Nathan VanderVinne, DO, MPH; Bradley Burmeister, MD

A report by the Association of American Medical Colleges predicts a shortfall between 42,600 and 121,300 physicians by the year 2030 in the face of growing demand from an aging population.¹

Within emergency medicine, there has been a recent increase in the number of residents, residency-trained emergency physicians and APPs entering the workforce; however, demand is still expected to outpace supply, especially in rural areas.

Physician workforce shortages represent an increasing challenge facing the United States.

Demographics Changes

Population growth and aging continue to be the main drivers of the projected physician shortage. The 2018 AAMC study indicates that during the period of 2016–2030, the U.S. population is projected to grow by almost 11%, increasing from about 324 million to 359 million. Under the current rate of workforce growth over the same period, overall physician supply is expected to increase by 7% to 846,600. While improving, this rate of physician growth will represent a 3% decline in the physician-to-population ratio by 2030.¹

The medical system will face new strains as a result of its own population health success and an aging population. The past few decades have seen an improvement in overall public health secondary to reducing excess body weight, improving control of blood pressure, cholesterol and blood glucose levels, and reducing the prevalence of smoking.¹ With these improvements, people are expected to live longer with more comorbidities. The proportion of Americans age 65 and older will grow faster than other groups, increasing by more than 50%. Older adults also contribute to the trend in increasing ED visits; recent analysis of ED visits from 2006–2014 found that the 18.4% increase in overall ED

visits was mainly driven by patients age 50 and older, with chronic illnesses or Medicaid insurance.² The longevity associated with improved population health will result in greater demand for services by 2030.

Other factors reducing the physician supply is the trend toward physicians working reduced hours and changes in the retirement age. Between 2002 and 2016 there was a trend toward physicians of all ages working fewer hours. If this trend continues, by 2030 there will be 32,500 fewer full time equivalent physicians in the national supply. In addition to fewer hours worked, changes in retirement decisions could dramatically alter the medical landscape. Currently more than one-third of all active physicians will be 65 or older before 2030. Physicians between age 65 and older account for 13.5% of the active workforce, and those ages 55–64 make up nearly 27.2% of the active workforce.¹

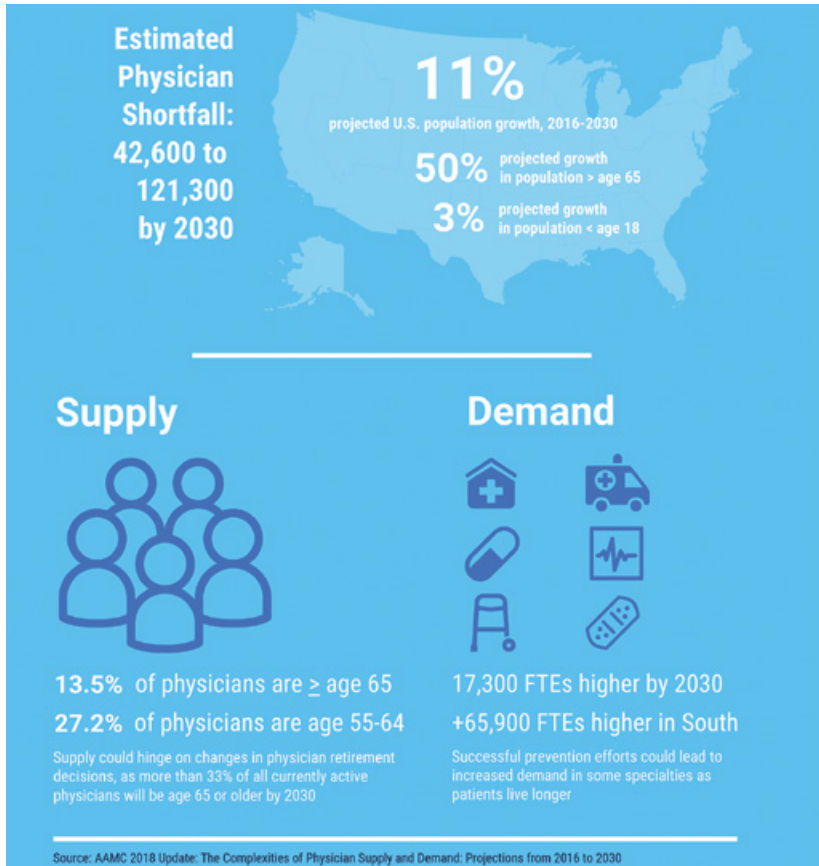
Emergency Medicine Challenges

The overall physician supply-demand mismatch affects the ED; however, there has been a dramatic increase in the number of emergency physicians entering the workforce in the past decade. Compared to primary care, the physician shortage is less severe for EM; however, the high volumes of the ED make it more sensitive to health system challenges. Emergency physicians make up less than 5% of all doctors, but they handle a quarter of all acute care encounters.³ Already carrying a disproportionate burden of acute care visits, emergency physicians have learned to do more with less: more ED visits with simultaneously fewer EDs remaining open to see patients. According to the American Hospital Association, 12.5% of all EDs and hospitals closed between 1994 and 2014, with a decrease from 4,960 to 4,408 EDs nationwide. Over this same time there was a massive 51.2% increase in ED visits, reaching 136 million visits by 2014. To make matters worse, the hospitals that closed were more likely to be safety-net hospitals serving a higher share of impoverished populations.⁴

Emergency medicine has risen to the challenge with a large influx of both residency positions and APPs to serve the community needs. Between 2000 and 2010, the number of emergency physicians increased by 44.6%, more than any other specialty.⁵ Estimates of active physicians vary by source, but more recent data suggests the number of practicing emergency physicians (including EM trained, family medicine, and internal medicine practicing EM) grew from 39,061 in 2008⁶ to 44,253 in 2014⁷ — another 13% increase. The proportion of non-emergency physicians comprising the EM workforce has fallen over time as EM residency-trained, board-certified physicians enter the workforce, dropping from 31% to 14.3%. Authors from a 2016 workforce study estimate that by 2023 there will be enough board-certified emergency physicians to care for all ED patients in the U.S. To arrive at this projection, the study accounted for 2,050 emergency medicine residents entering the workforce each year and a 1.7% attrition rate, for a net gain of approximately 1,283 board-certified physicians per year.⁸

EM training programs have increased in the past decade, and the specialty continues to be a popular selection for graduating medical students. Heeding the concerns of a physician shortage, community hospitals, private health care systems, industry groups and academic medical centers have established new graduate medical education programs. As of the 2018 Match, EM has become the fourth largest specialty for U.S. allopathic medical school seniors and third largest specialty for matched osteopathic applicants.⁹ In 2009, there were 149 allopathic residency programs, and as of 2019, there are 240 ACGME-accredited residencies. It's important to note that many of these “new” programs are osteopathic residencies transitioning into the allopathic match through the Single Accreditation process.¹⁰ Through this merger, which began in 2014 and will be complete in 2020, the ACGME Review Committee for Emergency Medicine has accredited at least 49 programs to leave the AOA match and join the NRMP match.¹¹

FIGURE 16.1. Physician Workforce Supply and Demand Outlook to 2030



Other factors contributing to the strain on EM physicians mirror the challenges faced in other parts of the health care system. The projected shortage of primary care specialties — between 14,800 to 49,300 physicians by 2030¹ — will exacerbate health care access issues, especially for Medicaid patients. With the increased difficulty in seeking primary care in a timely manner, Medicaid patients are likely to increase ED usage in response.¹² In addition to a lack of available services outside the ED, the large increase in the number of Medicaid enrollees from the ACA expansion will also increase ED volume, as this group has been shown to be one of the main drivers of increased ED use.¹³ Other health system issues contributing to ED crowding and strain include the increased availability and use of advanced testing, medical complexity of patients¹⁴ and intensity of visits,^{15,16} and burdensome governmental regulations.

Women in the Workforce

There is a tremendous gender underrepresentation of women in emergency medicine. In 2015, women represented 34% of all physicians, but only 26.6% of emergency physicians.¹⁷

While the proportion of women in emergency medicine is increasing over time, it is not to the same degree as medicine as a whole. In 2018, 48.8% of medical school matriculants were female, but only 37.3% (2015 data) of EM residents, suggesting that female medical school graduates are less likely to pursue emergency medicine training.¹⁸

Women experience disparities in income, promotions, and leadership.¹⁹ Mean overall salary was \$278,631 (SD +/- \$68,003). The mean (+/- SD) salary of women was \$19,418 (+/- \$3,736) less than men ($p < 0.001$), even after adjusting for race, region, rank, years of experience, clinical hours, core faculty status, administrative roles, board certification, and fellowship training.²⁰ Similarly, only 15% of department chair/vice chair are female.

A set of best practices for employment was developed by EM leaders in 2014 to advance women.²¹ The recommendations pertain to recruitment, support, advisory, and oversight on recruitment strategies. They are based in the belief that physicians should not have to choose between their careers and their families. The recommendations for employers include:

- Ensure unbiased recruitment and hiring, along with parity in advancement and compensation among employees.
- Support networking and mentorship opportunities
- Implement family-supportive practices that further the professional advancement and retention of employees who have childcare and other dependent care responsibilities.

- Create a culture in which family-supportive policies are visible, easily accessible, evident at recruitment, and used without fear of penalty or stigma
- Support physicians during significant life events (eg, pregnancy, childbirth, adoption, major medical illness).
- Support the needs of pregnant and postpartum women with flexible scheduling options and adequate lactation facilities.

Underrepresented Minorities in the Workforce

Black, Hispanic, and Native American physicians continue to make up a small proportion of physicians, experiencing little progress over the past two decades with representation in medicine as a whole or in EM specifically. Although 30% of the U.S. population identifies as under-represented minorities, only 9% of EM physicians self-identify that way. Because emergency physicians treat a disproportionately large percentage of Medicaid enrollees — who are majority under-represented groups — this representation gap is particularly important for our specialty.^{22,23} Equally importantly, new data continue to support the conclusion that representation in the health care workforce improves health outcomes for under-represented patients:²⁴ ACEP and EMRA have institutionally prioritized diversification of the EM workforce, holding a diversity summit in 2016 and introducing an ACEP Leadership Development Advisory Committee in 2018 charged with mentorship of under-represented ACEP members. Similarly, ACEP revised a policy statement in November 2017 endorsing the diversification of hospital staffing.²⁵ For the past several years, EMRA has worked to compile a list of diversity-oriented visiting elective scholarships available for current medical students.²⁶

Rural Emergency Medicine

Rural America is particularly affected by the shortage of emergency physicians. Research following new doctors found that 4 of every 5 new physicians start working in areas that already have a high supply, leaving rural areas perpetually underserved.²⁷ 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%) or to have graduated in the past 5 years (8% vs. 19%).⁷

Importantly, new data show that while 64% of all emergency medicine practitioners in urban counties are emergency physicians, only 45% of practitioners in rural counties are. Rural counties make up the difference largely with non-emergency trained physicians: non-emergency physicians make up 12% of EM clinicians in urban counties, but more than 28% of EM clinicians in rural counties. The percentage of EM clinicians who are advanced practice providers is relatively similar between urban and rural counties at 24.1% and 26.8%, respectively.²⁸

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 they also increase the likelihood of EM 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.²⁸

Finally, the number of EM resident spots has increased significantly in the past decade. The AAMC and others continue to predict a physician shortfall of more than 40,000 by 2030, which has spurred community hospitals, private health care systems, and academic medical centers to establish new GME programs. To this end, in 2017, 152 more EM residency spots were available than the year prior, for a total of 2,047.

Financial Incentives for Geographic Redistribution and Diversity

Governmental loan assistance programs can help improve the uneven geographic distribution of emergency physicians, but these opportunities are limited. One such example is the HRSA loan repayment program, the National Health Service Corps,²⁸ which recruits physicians to work in health professional shortage areas in return for repayment of education loans up to \$25,000 per year. Currently the NHSC covers primary care physicians including geriatrics, obstetrics/gynecology, pediatrics, internal, and family medicine, but it excludes emergency medicine. Similarly, the Indian Health Service offers a loan repayment program that repays up to \$40,000 in student loans for a 2-year service commitment to practice in health facilities serving American Indian and Alaska Native communities with the greatest staffing needs.

Another option is the Public Service Loan Forgiveness Program, established in 2007. This is a federal program that, after 10 years of qualifying monthly payments, forgives the remaining student loan debt for employees of certain public and nonprofit institutions. Many hospitals or EM employers in the U.S. are

for-profit corporations; this loan incentivizes physicians working at federal, state, or tribal government organizations and nonprofits (ie, many teaching hospitals). To be eligible, physicians need to enroll in specific payment plans that include Pay As You Earn, Income-Based Repayment, and Income-Contingent Repayment. The original loans must be federal loans from the Direct Loan Program.

Other ways in which the government could offset the financial burden of medical education in general as a method to increase the diversity of those entering medicine include resident loan forbearance and deferment and the tax deductibility of student loan payment. Given the long range planning for the PSLF, it is worth noting that recent federal legislation such as the Promoting Real Opportunity, Success, and Prosperity through Education Reform (PROSPER) Act introduced by Rep. Virginia Foxx in 2017 would have potentially eliminated the program, among other changes. The PROSPER Act did not pass the House, but often bills that are initially unsuccessful are reintroduced multiple times. Similarly, the PSLF was proposed to be eliminated in the 2019 budget by President Donald Trump; however, this was not enacted.

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 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.

WHAT'S THE ASK?

- Understand the demographic, lifestyle, and health care changes that are resulting in workforce challenges.
- Advocate for policies that address the underlying causes of physician workforce challenges, including workforce diversity, student loan forgiveness programs, etc.
- Mentor rising students to encourage entry into — and sustained careers in — emergency medicine.



ADVANCED PRACTICE PROVIDERS IN THE ED

Muhammad Shareef, MD; Petrina L. Craine, MD; Andrew I. Bern, MD, FACEP

The United States continues to face an imbalance in supply and demand for physicians. Filling this void, the number of advanced practice providers entering the health workforce and the ED specifically has increased substantially in the past few decades.¹ Nationwide, there were more than 248,000 licensed nurse practitioners (NPs) as of 2018^{2,3} and 123,000 physician assistants (PAs) certified in 2017.⁴ Though NPs outnumber PAs nationally, within the emergency department, as of 2014, there were nearly double the number of PAs compared to NPs, at about 9,822 PAs vs. 4,523 NPs.⁵

As the population ages and drives health care demand ever higher, APPs will serve as part of the team-based solution.

Advanced Practice Provider Training

Although APPs have similar levels of autonomy in EDs (more specifically dictated by individual state laws and hospital bylaws), they take different training routes. PAs typically complete 2.5–3 year training programs involving about 1,000 classroom hours and roughly double the clinical rotation hours as compared to NPs. In contrast, NPs obtain a 2-year master's degree in nursing after having completed nursing school, typically adding approximately 500 classroom hours and 500–700 more clinical hours after nursing school. While there has been an effort to require NPs to earn doctoral degrees in nursing, the provider shortage has slowed this initiative in some areas.^{6,7}

As of 2017, there were approximately 11 different EM NP fellowship/residency programs and 42 accredited PA emergency medicine residency programs ("residency" and "fellowship" are interchangeable labels for PA/NP programs, in contrast to physician programs).^{8,9} The Accreditation Review Commission on Education for PAs (ARC-PA) used to accredit PA training programs but the process has been in abeyance for several years. The Society for EM PAs (SEMPA) has created postgraduate training standards as a framework that new and existing EMPA postgraduate programs could use to improve or create EMPA postgraduate programs.¹⁰ Physician Assistant residency programs range in length

from 1–2 years, with most lasting 18 months. Many PA residencies are housed in institutions with EM residencies, and many integrate the didactic curricula so PAs join in resident educational conference, journal clubs, ICU and other clinical rotations, simulation, and in some cases a research requirement.¹¹ The number of APP EM training programs is much lower than the current 240 EM residency programs that recruit nearly 2,000 newly minted emergency medicine residency-trained physicians a year.¹² In contrast, most NPs and PAs are not required to complete residency/fellowship programs to enter emergency medicine practice. However, with APP specialty organizations attempting to standardize training, there continues to be an overall growth in the numbers of NP and PA fellowship/residency programs, as well as a push toward completing advanced training after graduating from NP/PA school.

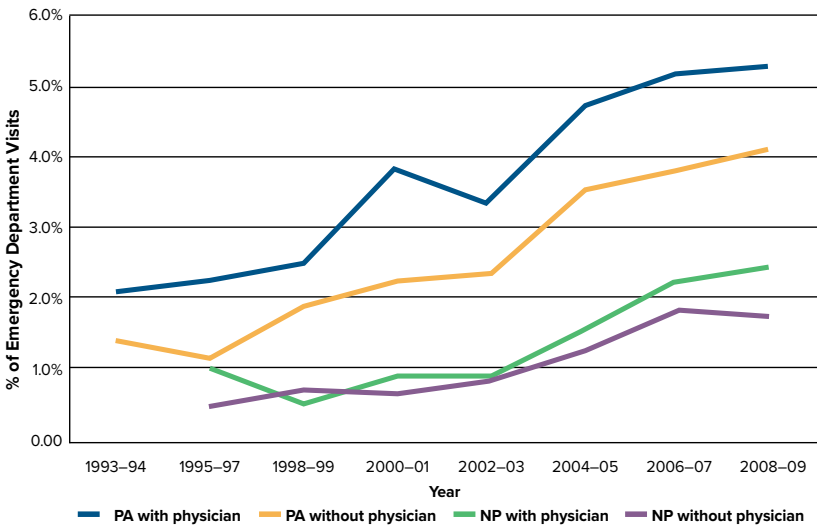
Advanced Practice Providers and the Emergency Medicine Workforce

Advanced practice providers, including NPs and PAs, make up about a quarter of the EM workforce and see about a fifth of ED visits. A cross-sectional study of Medicare data examining 58,641 EM clinicians found that 24.5% of these were composed of APPs.¹³ The proportion of ED patients seen by an APP has substantially increased over time. According to the National Hospital Ambulatory Medical Care Survey, APPs saw 5.5% of all ED patients in 1997, 12.7% in 2006, and 20.5% in 2015 (consisting of NPs [8.0%] or PAs [12.5%]).¹³ APPs see a range of acuity level patients, but most often staff high-volume, fast-track, or express care sections within EDs. Compared to physicians, APPs see more lower acuity patients, with only 11% of patients seen by APPs in the highest triage category.¹⁴

In addition to caring for a large and varied level of all ED patients, APPs have been working in more EDs and working more hours. According to surveys from the Emergency Department Benchmarking Alliance, the percent of EDs utilizing APPs ballooned from 23% in 2010 to 62% in 2016. Moreover, APPs are working more of the total hours available. In 2010, APPs worked 53% of physician staffing hours; by 2016 this number had risen to 64%.⁶ Looking ahead, APPs are projected to have continued workforce growth of about 30% between 2014 and 2024, a startling number that far outpaces the projection for physician growth.^{5,15} With ever-increasing ED volume and crowding, APPs are crucial to providing services in the ED and to the sustainability of the EM workforce.

Nonetheless, there is a perceived difference between NPs and PAs among emergency physicians: a poll revealed that EM physicians perceive NPs tend to use more resources as compared to PAs, and that APPs use more resources than physicians when seeing patients with similar emergency severity index levels.¹⁶ In addition, there was more interest in hiring younger, less-trained PAs as compared to NPs, with a possible reason cited as the clinical education for PAs was thought to be stronger than NPs.¹⁶ Although there are no robust studies to support such perceptions and the data is obscured by different state laws regarding APPs, it

FIGURE 17.1. Trends in ED Visits



Adapted from Brown DFM, Sullivan AF, Espinola JA, Camargo Jr CA. Continued rise in the use of mid-level providers in US emergency departments, 1993–2009. *Int J Emerg Med.* 2012;5:21. Copyright 2012 by Brown et al.; licensee Springer, Bio Med Central. Adapted with permission.

may partly explain differences in levels of physician oversight for APPs. In fact, from the NHAMCS respondents, only half who received care from a PA during an encounter also reported seeing a physician, as compared to two-thirds of those who received care from a NP who were also seen by an EM physician.¹³

Advanced Practice Providers and the Veterans Affairs

The health of vulnerable patient populations, such as the elderly and the underserved, are particularly sensitive to the negative effects of a physician shortage.^{15,17} One example of a medical system adapting to the increased needs of its population is the VA, through its use of telemedicine services and expanding the role and responsibilities of APPs.

The VA is the largest integrated health care system in the U.S. Since the 1990s it has used various strategies to coordinate and integrate medical care while attempting to control costs.¹⁸ In 2014, the VA was the subject of highly publicized criticism and scrutiny about long wait times for patient services. As also the largest employer of nursing providers, with nearly 6,000 advanced practice nurses available, the VA made a controversial decision to allow NPs “full practice authority” in their facilities. Thus, NPs at VA facilities can assess, diagnose, and treat (including prescribing medications) patients without direct supervision or mandatory collaboration from a physician.¹⁹ This federal permission for full practice was granted, despite conflicting with some states’ scope of practice laws.²⁰ It is

important to note that some ambiguity still exists, as prescribing authority for NPs at VA facilities can still be limited if a state has restricted its NPs from holding DEA registration that allows for the prescribing of controlled substances. Also, federal facilities have the right to opt out of the VA's NP full practice designation, thus demonstrating further uncertainty.^{20,21} Some have argued that the VA's decision could compromise the quality of care and thus potential health outcomes.²²

Although controversial, there is little to no data to support that the VA's decision would be dangerous for patients. Research on patient care outcomes from this change has not yet been explored, but previous studies on NP full practice authority and quality care suggest independent supervision of NPs is associated with non-inferior patient outcomes as well as decreases in hospital readmissions.²³⁻²⁵ Studies have shown that despite differences in training and clinical hours as compared to physicians, PAs and NPs provide safe, effective, and non-inferior care to patients.^{18,26-27} The VA states that expanding NP capabilities are essential to increasing its capacity to deliver "timely, efficient, effective, and safe" care.

The Practice of Advanced Practice Providers

Scope of practice is the regulatory way to guide the activities different medical professionals can perform. Although it is determined and governed by state laws, federal actors such as Congress, the Centers for Medicare and Medicaid Services, and the Federal Trade Commission, provide influence. As scope of practice defines what a particular medical professional can and cannot do, it also influences reimbursement.¹⁷

Various "scope of practice" bills have been introduced over the years in state and federal legislatures. Although these bills greatly differ in specifics, most have featured proposals to expand the scope of practice for APPs, including requesting full practice authority.²⁸ In response to some APPs efforts to expand their scope of practice, organized physician groups such as the AMA have supported legislation designed to oppose the expansion of non-physician medical providers scope of practice.²⁹ A common message from physician groups is that unchecked non-physician expansion of practice not only threatens the collegial relationship between physicians and APPs but also "threatens the health and safety of patients."²⁹ Although a bill addressing APP practice expansion has not yet been passed by Congress, in 2017, 37 scope of practice bills that expanded APP practice were enacted into law by nearly half of U.S. states.³⁰

With so many physician and non-physician professionals in the health care system, there is potential for misrepresentation of credentials.³¹ Expansion of scope of practice for PAs and NPs, such as increased prescribing and procedural abilities, further independence from physician oversight, and more social recognition of authority conferred through the title of "doctor" from the completion of non-physician doctorate programs (eg, "Doctor of Nursing") has been implicated as a

factor in not only fueling fraudulent efforts but also confusing patients.¹⁷ A study conducted by the AMA in 2014 showed that nearly 35% of patients believed a doctor of nursing practice was the same as a medical doctor.³²

In 2015, the AMA expanded its efforts to define the scope of practice limits with its “physician-led team-based care” campaign. A core tenet of this campaign is in defining physicians as the leaders of health care teams for patients, arguing other providers are “indispensable” but “they cannot take the place of a fully trained physician.”³³ The program is a complement to its “Truth in Advertising” campaign, an initiative to require state mandates for the proper identification and display of medical credentials of different medical professionals in an effort to prevent “confusing or misleading health care advertising that has the potential to put patient safety at risk.”³² Some APP organizations have opposed these efforts, calling them “unnecessary and inappropriate” redundancies to state requirements already in place.³³ The AMA and other physician groups like ACEP continue to advocate for transparency about the different roles of APPs and limits on scope of practice.³⁴

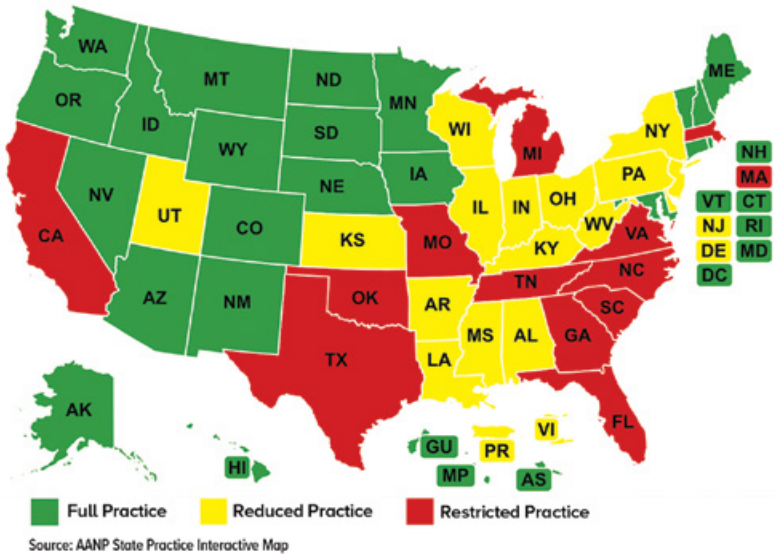
Advanced Practice Providers and Physician Oversight

As scope of practice laws are different for each state, medical professionals are subjected to various rules. While physicians’ scope of practice has little variation between states,¹⁷ for APPs the differences can be astounding.³⁵ Some practice alongside a physician, while others practice independently within the realm of their training, such as in express care/fast-track type settings where acuity is generally lower. Some states allow full practice for NPs without any physician oversight, while others employ significantly more limitations (Figure 17.2).^{36,37}

Although PAs are required to practice under physician supervision in every state, the practical application of this mandate can vary.³⁸ Some PAs practice with a mandate of a physician required to be on-site while others may only require a physician, who may be off-site, to sign off on PA medical documentation without physically interacting with the patient. Many states now allow the details of a PA’s scope to be decided at an institutional level, such as in an emergency department.³⁹

Scope of practice law differences not only create implications for APP and physician liability but also affect a state’s medical workforce.³⁵ For instance, states with fewer restrictions on PA and NP independence tend to have more APPs than actual physicians.¹⁵ With continued physician shortages, increasing health care spending, and dynamic changes in insurance coverage, the number of APPs primarily seeing ED patients will likely continue to increase, not only because of unmet need but also due to financial implications.⁴⁰ APPs are generally paid less than physicians while providing patient care that maximizes ED efficiency and throughput, important components in maximizing hospital reimbursement from payers such as Medicare and Medicaid.^{41,42} Some research has shown that more APPs in the medical workforce results in substantial savings for health care systems and patients, without sacrificing the quality of care rendered.⁴³⁻⁴⁸

FIGURE 17.2. State Practice Environment for NPs



Advanced Practice Provider Organizations and Advocacy

With the increasing need and presence of APPs in EM, APPs have created organizations to represent and advocate for their roles in the ED, including SEMPA (founded in 1990), the Emergency Nurses Association (founded in 1970), and the American Academy of Emergency Nurse Practitioners (founded in 2014). These organizations advocate for a variety of initiatives, ranging from standardizing certification and defining scope of practice guidelines to lobbying for increased independence from physicians. Though APPs are not eligible for ACEP membership, ACEP and SEMPA have had a cooperative and productive relationship over the years. In fact, SEMPA contracts with ACEP to manage daily operations, conference planning, and other organizational functions. As team-based health care becomes the norm, mutual understanding, shared aims and collaboration between health professionals of varying training backgrounds will lead to stronger health care for all our patients.

WHAT'S THE ASK?

- Increase your knowledge about federal and state laws governing the scope of practice of APPs where you practice.
- Advocate for the continued importance of physicians as health care team leaders in emergency medicine.
- Work with government representatives and APP organizations to promote a culture of transparency in providing patients accurate information about provider's credentials and roles.



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 has grown at a rapid pace. More than 220 emergency medicine residency programs now exist,¹ with more than 40,000 board-certified/board eligible emergency physicians practicing in 2018.²

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, Association of American Medical Colleges (AAMC), and the Federation of State Medical Boards (FSMB) — convened during an AMA 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 would be composed of members from each of the individual specialty boards and became known as the ABMS.⁴

The journey toward a specialty board in emergency medicine began in earnest in the 1970s. ACEP and the University Association of Emergency Medicine (UAEM), a predecessor to the Society of Academic Emergency Medicine (SAEM),

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recognized a need for the development of emergency medicine training programs, as well as a means of certification. In 1976, ABEM 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/accredited medical school.
2. Complete an ACGME or the Royal College of Physicians and Surgeons of Canada (RCPSC) accredited residency in emergency medicine OR an accredited combined training program approved by ABEM.
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 5 years following residency graduation as long as the candidate continues to meet certain conditions, including the completion of continuing medical education (CME).

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 a high standard of care and meaningful standards of assessment. There are currently 4 components:

1. LLSA (Lifelong Learning and Self-Assessment)
2. IMP (Improvement in Medical Practice)
3. ConCert (Continuous Certification Exam)
4. Maintenance of Professionalism and Professional Standing via state licensure

In addition, one must maintain an average of 25 AMA Physician’s Recognition Award (PRA) Category 1 credits (a metric for verifying participation in CME) per year or the equivalent in the first and second 5 years of initial ABEM certification.

ABMS proposes that MOC is an important form of professional self-regulation and assures the public that board-certified physicians are meeting strict standards for professional development. However, there has been controversy regarding the cost of MOC requirements, the time required for completion, and whether participation demonstrably improves physician performance and/or patient outcomes. ABMS asserts that MOC activities are based on evidence-based guidelines and specialty best practices, with each ABEM member board reviewing the standards for MOC. Yet, those who disagree with current MOC requirements often point to the lack of studies that link completion of MOC requirements to improvements in patient care. Additionally, many MOC requirements are associated with significant out-of-pocket costs for the physician. These include LLSA readings and tests, as well as the ConCert exam testing.

Lastly, there is an argument that written exams may not be the best way to test physicians' knowledge. Some propose that many study programs meant for passing certification exams are "teaching to the test." In addition, 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 practice.

The current ConCert exam assesses the medical knowledge of EM physicians seeking to maintain their board certification through a closed book examination. ABEM aims to maintain the value of its certification along with its rigorous standard without burdening physicians with unnecessary work.⁷ A nationwide survey of EM physicians demonstrated that a majority (~70%) of 13,000 respondents supported having knowledge-based testing as part of the MOC process, although ~90% voted for shorter, open-book assessment systems.⁸ Research also shows that the ConCert exam is a valid assessment of a physician's cognitive skills. As a result, ABEM has proposed to pilot MyEMCert in 2019. This new assessment process puts a high priority on flexibility, enhanced relevancy, and greater opportunities to maintain certification by allowing shorter, more frequent tests on specified and relevant clinical topics, allowing more than one attempt to pass the tests, and facilitating remote or online testing that is also open-resource.⁹ Another issue most physicians cited about the ABEM certification in addition to time and effort is the cost. At approximately \$3,000 (~\$2,000 for the initial concert and ~\$1,000 for LLSA modules over 10 years), the cost is comparable to the certification cost for other ABMS boards.¹⁰

In response to many physicians' discontent with MOC, the Texas Legislature has taken action towards decreasing MOC requirements on most Texas physicians through Texas Senate Bill 1148.¹¹ This new law passed in 2017 will prevent the Texas Medical Board from using MOC as a requirement for doctors to obtaining or renewing a medical license. SB 1148 also bars hospitals and health plans from requiring physicians to obtain MOC for credentialing or contracts, although hospitals may require MOC if their medical staff votes to support this requirement. SB 1148 has potential consequences for all physician specific privileges and

some physicians are concerned that it weakens the claim to self-regulation by establishing a precedent for additional governmental intervention into the practice of medicine.¹² Soon after this anti-MOC law was passed, Oklahoma and Michigan followed suit, although these bills were not passed. As a response to the recent atmosphere critical of MOC in the wake of Texas SB 1148, ABEM's President has noted that board certification and recertification are linked with better quality of patient care, improved adherence to clinical practice guidelines, fewer state board disciplinary actions, and decreased health care costs.¹³

The social contract that medical boards and the AMA (which recommends recertification) have with the general public is based on self-regulation, altruism, and betterment of society. A total abandonment of recertification would likely not be well-received by a public that has already begun to wonder whether medicine is more interested in defending its privileges than in maintaining its standards.¹³ Therefore, efforts to limit or eradicate recertification programs through legislative action or other means may be seen by the public as nothing more than veiled attempts to lower professional standards.¹³

While MOC has been defended by ABEM and is being updated to fit modern physicians and the public's needs, ABEM and most major EM organizations have joined together against less clinically meaningful certificates. The Coalition to Oppose Medical Merit Badges (COMMB) advocates that board-certified emergency physicians who actively maintain their board certification should not be required to complete short-course certification in core competency skills like ACLS, ATLS, PALS, NRP. These "merit badges" add no additional value for board-certified emergency physicians. Instead, they devalue the board certification process, failing to recognize the rigor of the ABEM Maintenance of Certification (MOC) Program, adding to the burden of time and finances. In essence, they set a lower bar than a diplomate's education, training, and ongoing learning, as measured by initial board certification and maintenance of certification.¹⁴

The Daniel Case

After the closure of the practice track toward ABEM certification, there remained a number of physicians practicing in EDs who had not received board certification and had not completed an EM 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.¹⁵

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, 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 seeking 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.¹⁶ 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 from an alternative board. Currently, the BCEM offers 3 different requirement tracks that make a candidate eligible to sit for its exam. Two of these tracks offer eligibility after the candidate has completed a non-EM residency program and has worked in an emergency medicine setting for a specific amount of time.

Emergency medicine organizations, including EMRA, ACEP, and AAEM, have opposed the ABPS alternative board for a host of reasons. The central issue 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 emergency physicians.

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.

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 lawsuit 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.¹⁷ Other states such as Texas have struggled with intermittent

approval of the use of the term “board-certified” for BCEM diplomates, but then reconsidered and removed that ability after objection and advocacy from the state ACEP Chapter, only to see it re-approved with minimal notice.¹⁸

Osteopathic Recognition and Training

The American Osteopathic Board of Emergency Physicians offers eligibility for board certification for doctors of osteopathy who have completed an AOA-approved residency in emergency medicine and who have either practiced for 1 year or have completed a year of subspecialty training. To meet this requirement, graduates of an AOA emergency medicine program must pass an oral and a clinical examination.

In 2012, the ACGME took the controversial step of limiting access to its fellowships by allowing eligibility only for graduates of ACGME residencies. This change prevented AOA residency graduates from participating in ACGME-accredited fellowships. This action ultimately set into motion the merger between the AOA and ACGME pathways. In July 2014, the AOA House of Delegates voted to approve a single accreditation.¹⁹ The merger toward a single-residency accreditation, called the Single Accreditation Process, is set to be complete in 2020, allowing 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 osteopathic residency programs are actively working on getting pre-certified by the ACGME. At this time, board certification and recertification remains the same, with DOs certified through AOBEM and MDs through ABEM. However, it is expected that in the future, DOs will be able to take both certifications. MDs that complete osteopathic focused training will be eligible to take the osteopathic boards as well.²⁰

Conclusion

Emergency medicine training and certification has developed rapidly since the recognition of the field in 1979. Today, EM 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 emergency physicians caring for patients in the emergency department.

WHAT'S THE ASK?

- Monitor state level attempts to include new certifications that do not meet the standards of emergency medicine residency trained physicians.
- Monitor MOC requirements and controversies, and advocate for appropriate modifications that reflect evidence-based medicine and are aligned with the current practice of emergency medicine.



MEDICAL LIABILITY REFORM

Aya Itani, MD, MPH; Cedric Dark, MD, MPH, FACEP

A medical malpractice lawsuit presents an overwhelming emotional, financial, and reputational risk to a physician. The impact of medical liability is massive; in fact, 99% of physicians in high-risk specialties by age 65 years old have already been subject to a claim, and approximately 7% of emergency physicians are sued each year.¹

The medical malpractice environment affects workforce availabilities to underserved areas and is therefore a concern to those interested in health equity and patient access to care. Moreover, physicians are torn between the competing interests of minimizing health care costs for patients (and for the overall health care system) and minimizing their own liability by practicing defensive medicine (by ordering unnecessary diagnostic tests or opting out of service to higher-acuity patients).² Threatened by the rising price of liability insurance and the negative impact on patient access to care, physicians advocated for legislative action to secure a balanced medical malpractice environment. These advocacy efforts eventually gave rise to “tort reform” in several states: legislative changes to state laws governing medical liability.³ Medical liability reform has been crucial for controlling burdensome rising malpractice premiums.⁴

Emergency medicine is a high-risk specialty for medical malpractice, with 1 out of every 14 emergency physicians getting sued each year.

Medical Malpractice Basics

State Laws

The framework that governs medical malpractice is established under the authority of individual state laws (unless overruled by a higher state court). Thus, medical malpractice law varies across different jurisdictions from state to state.

Basic Elements of a Claim

According to medical malpractice law, the injured patient — the plaintiff — must prove 4 elements to have a successful malpractice claim:⁵

1. A professional duty owed to the patient
2. Breach of such duty in delivering the standard of care
3. Causation
4. Harm and damages

The professional duty is an assumed understanding and expectation of the provider, who is said to owe a duty of reasonable professional care to the patient. The definition of breach of duty is highly heterogeneous among states, as each state has its own standard of care guidelines and expectations.³ The plaintiff's injury must be caused by such a breach of care and not explained by other causes. The plaintiff's attorney must prove that the expenses s/he claims were reasonably necessary and proximately caused by the defendant's negligence.⁶

Economic, Noneconomic, and Punitive Damages

Three types of damages can be sought against the defendant in medical malpractice cases. Economic damages include the monetary losses that the plaintiff has incurred, or is likely to incur in the future, including costs of medical care and lost wages. Noneconomic damages include non-monetary losses such as pain and suffering. On rare occasions, punitive damages may be sought if the plaintiff claims the physician practiced with an intent to harm the patient, rather than simple negligence.

State-Enacted Medical Liability Reforms (“Tort Reforms”)

Existing state medical liability reform components can be categorized in the following groups: caps on noneconomic damages, regulation of attorney contingency fees, enhancing expert witness standards, safe harbors, and statute of limitations (Table 19.1).

While some medical liability reform strategies have successfully reduced malpractice payouts and malpractice premiums for physicians, existing data has not shown a decrease in health care utilization by emergency physicians in states where liability reform has been enacted.⁷

Caps on Non-economic Damages

Caps on non-economic damages place limitations on the monetary compensation a plaintiff can receive following a malpractice claim. In states where they have been enacted (such as Texas, California, Nevada, and Indiana), caps on non-economic damages have been successful at reducing payments to plaintiffs as well as reducing the cost of malpractice insurance premiums for physicians. The effects of noneconomic damage caps on premiums vary according to the amount

of the cap.⁸ Compared to no cap, a cap of \$500,000 did not show a statistically significant reduction in malpractice insurance premiums, while a \$250,000 cap successfully reduced malpractice insurance premiums by 20%.

TABLE 19.1. Medical Malpractice Traditional Reforms

Caps on noneconomic damages	Limitations on the monetary compensation of pain and suffering losses a plaintiff can receive following a malpractice claim
Regulation of attorney contingency fees	Limitations of fees paid to plaintiff attorneys to limit incentivized legal practices
Expert witness standards	Strengthening the qualifications to serve as a medical expert and provide more specific guidelines for physician conduct
Safe harbors law	Provide extra protection to physicians who use evidence-based medicine guidelines in the practice leading to malpractice
Statute of limitations law	Provide limitations to the time allocated to plaintiff to file a malpractice claim
Enterprise liability	Allocate liability to the health care organization for the medical malpractice claim in addition to or instead of the defendant

Regulation of Attorney Contingency Fees

In the United States, lawyers for aggrieved parties (plaintiffs) are usually hired on a contingency-fee basis, meaning the lawyer gets paid only if a monetary damage is awarded. This system has been criticized as encouraging dishonest behavior by lawyers on behalf of the patient. Our current system discourages the filing of meritorious medical malpractice cases that have either a low chance of monetary recovery, or if money is recovered, a relatively small payout and, similarly, discourages lawyers from taking work-intensive cases unless the possible payout is large.⁹ Contingency fees apply to both settlements and monetary damages awarded by a court. Some states, such as California, have enacted limits on contingency fees paid to plaintiff attorneys to help remove some of these perverse incentives.

Expert Witness Standards

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 of the broad nature of this standard, 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.

Physicians serving as expert witnesses have an obligation to present complete and unbiased information to be used by the jury to ascertain whether the defendant was medically negligent and whether, as a result, the plaintiff suffered damages.

The best strategies for improving the quality of medical expert witness testimony are strengthening the qualifications for serving as a medical expert witness and providing more specific guidelines for physician conduct throughout the legal process.¹⁰ To serve as an expert witness in emergency medicine, per ACEP guidelines, a physician should be currently licensed as a doctor of medicine or osteopathic medicine, be certified by a recognized certifying body in emergency medicine, and be in the active clinical practice of emergency medicine for at least 3 years (exclusive of training) immediately preceding the date of the case.¹¹

Specific state qualifications for expert witnesses, however, may vary. Two states with favorable expert witness qualifications include West Virginia and Nevada. To qualify as an expert witness in West Virginia, a physician must not only have the appropriate experience in diagnosing or treating injuries similar to those of the plaintiff's, but also, the physician must have spent at least 60% of his or her professional time in active clinical practice at the time of injury. In Nevada, expert witnesses must be 75% clinically and/or academically active and of the same specialty as the defendant.¹²

Safe Harbors for Evidence-Based Medicine

Safe harbor laws, advocated by some physicians, would secure an added protection to physicians who use evidence-based guidelines in their practice. While this reform has been argued to improve patient safety by adhering stricter to clinical guidelines, numerous hurdles must be overcome to implement it. Some of these hurdles include building non-physician stakeholder support, obtaining legislative approval, and regularly updating guidelines. Safe harbor policies have been trialed in several states, including Florida, Maryland, Minnesota, Maine, and Vermont. The Maine program was trialed for 5 years and showed a high rate of physician opt-in, but the guidelines were only used once as a defense in a malpractice case.¹³

In addition, recent federal proposals for “safe harbor” liability protection have failed to gain traction. 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.

Statute of Limitations Law

Statute of limitations laws limit the amount of time the plaintiff has to file a malpractice claim. Many states have a statute of limitations of 2–3 years. In cases where the injury is not immediately apparent, the time period may not start until after the discovery of an injury. When the time for the statute of limitations is decreased, studies have shown a modest decrease in malpractice insurance premium growth but no significant change in malpractice payments.

Specific State Examples and Federal Response

States have adopted varying medical liability reforms over the past 40 years (Table 19.2). In California, the Medical Injury Compensation Reform Act (MICRA) passed in 1975, capping noneconomic damages at \$250,000 and limiting plaintiffs' attorneys' contingency fees. California's law is credited with slowing the growth of malpractice premiums in the state and has reduced the amount awarded to plaintiffs there.¹⁴ While proponents argue that it has improved access to care and kept health care costs down,¹⁴ detractors argue that injured patients are now unable to find lawyers and that changes in access to care and cost cannot be attributed to MICRA.¹⁵

In 2003, the Texas Legislature made significant changes to the Medical Liability and Insurance Improvement Act (MLIIA) that led to an improved medical liability environment; these include a \$250,000 cap on noneconomic damages, stricter expert witness standards, and a statute of limitations of 2 years for malpractice claims.¹⁶ A provision specific to emergency care raised the burden of proof in emergency cases to "willful and wanton negligence." As a result of these reforms, Texas has one of the most EM-friendly medical malpractice environments in the country, with low malpractice premiums and low payouts when malpractice cases occur.¹⁷

Federal proposals to enact medical liability reforms have largely failed to gain significant traction. President Bill Clinton's proposals to cap noneconomic damages and institute alternative dispute resolution forums in 1993 were dropped in the wake of opposition by physicians and managed care organizations. President George W. Bush's comprehensive federal tort reform legislation, which included a national cap on non-economic damages, failed to pass in 2005.

The Health Care Safety Net Enhancement Act (H.R. 548/S. 527 in the 2017 legislative session) would provide liability protection to physicians practicing under the EMTALA mandate as if they were federal employees acting on behalf of the Public Health Service. This protection ceases once patients are determined not to have an emergency medical condition or patients have been stabilized. Also, the legislation would extend the same legal protections that Congress had already extended to employees of community health centers and free clinics to physicians who care for patients with emergency medical conditions. ACEP supports this legislation, as it has the potential to protect access to emergency care while reducing the cost of defensive medicine.

The Protecting Access to Care Act (H.R. 1215 in the 2017 legislative session) was a package of proposed medical liability reforms that included limits on statute of limitations, a \$250,000 cap on noneconomic damages, and limits on attorney contingency fees. This package passed the House of Representatives in June

2017.¹⁸ President Trump's administration has pledged to support this tort reform package, and it is estimated that these reform efforts would reduce health care costs by reducing the practice of defensive medicine.¹⁹ According to the Congressional Budget Office, implementing the package of reforms would result in a 0.4% decrease in health care costs, resulting in a decrease of federal health expenditure of \$14 billion over the first 5 years of implementation.²⁰

Neither of these bills were passed into law in the 2017 legislative session, but both are important examples of recent federal efforts to reform the U.S. medical liability system.

Understanding the Limitations

Most medical liability reform has been focused on reducing malpractice premiums and alleviating the financial burden on health care providers. While existing state-based reforms have been successful at reducing the economic burden on providers, they have failed to reduce the overall emotional cost of medical malpractice lawsuits on physicians and have not clearly benefited society by reducing health care costs.¹² Consequently, the focus on improving the medical liability milieu is shifting toward improving the health care system overall: focusing on improving quality, reducing cost, and increasing equitable access. The climate surrounding medical liability differs between states, which allows physicians to distribute themselves based on many factors, one of which is a favorable medical liability milieu — a fact policy makers should note.⁵

Emergency medicine is a high-risk specialty for medical malpractice, with 1 out of every 14 emergency physicians getting sued each year.¹ Empirical evidence demonstrates that tort reforms, such as caps on non-economic damages and reduction of the statute of limitations, will reduce the cost of malpractice insurance premiums. Some states have seen tremendous benefits by implementing these reforms. An opportunity exists to renew efforts to pass federal legislation providing special protections for care provided under the EMTALA mandate as the political climate continues to change during future Congressional sessions.

WHAT'S THE ASK?

- Advocate for improvements in the malpractice environment in your state with sensible potential solutions such as caps on noneconomic damages, limits on attorney contingency fees, expert witness standards, and reducing time allowed to file a malpractice complaint.
- Advocate for malpractice liability reforms that control health care costs, ensure patient safety, and improve quality of care overall.



CORPORATE PRACTICE OF [EMERGENCY] MEDICINE

Jordan M. Warchol, MD, MPH

The Corporate Practice of Medicine doctrine (CPOM) is the term used for the general principle that limits the practice of medicine to licensed physicians and prohibits corporations from practicing medicine or directly employing a physician. Most, but not all, states have laws prohibiting the corporate practice of medicine. These laws can limit or prohibit non-physicians from owning, investing in, or otherwise controlling medical practices. Over the years since they were enacted, these policies have been shaped by legislation, regulation, case law (decisions within the court system), and the opinions of state attorneys general.¹

The corporate practice of medicine is a complex topic that affects many aspects of the life and practice of the emergency physician.

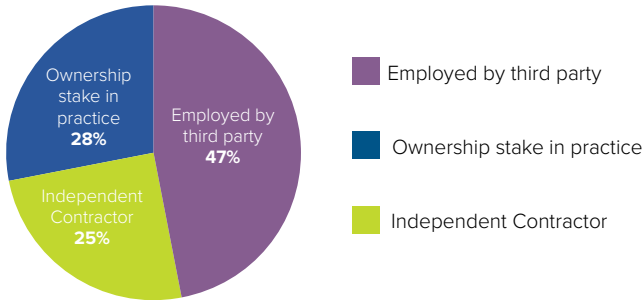
Exceptions to CPOM are relatively common. All states exempt professional corporations when they are groups formed by physicians for the purpose of rendering care. However, there are varying degrees to which states specify the structure of these corporations, such as who is able to hold shares or serve on the board of directors.² Hospitals are also exempted in many states, given the joint interest between the physician and the hospital in the care of the patient. In these arrangements, there is often stipulation that the employer not interfere with or attempt to control the independent medical judgement of the physician. Health Maintenance Organizations (HMOs), which collect fees on a per-patient basis known as capitated payments, are exempted by federal statute that preempts state laws relating to CPOM.³ Conversely, Accountable Care Organizations (ACOs) are subject to state laws and therefore not exempt from CPOM.⁴

History

Since its inception in the early 20th century, CPOM has been instrumental in shaping the U.S. health care landscape. CPOM is cited as the impetus for the separation of Medicare Part A (covering hospitalizations) and Part B (covering physician fees), based on the prohibition of “fee-splitting.” The AMA Code of Medical Ethics defines fee-splitting as “payment by or to a physician or health care institution solely for referral of a patient.”⁵ By paying physicians separately from the hospitals in which patients were cared for, such fee-splitting could be avoided.

However, as more physicians are employed by hospitals, this split is increasingly artificial. In 2016, the percentage of physicians who do not have ownership in their practice topped 50% for the first time.⁶ This percentage can vary greatly depending on the specialty, age, and gender of a physician. Many emergency physicians (47.3%) are employed, with 27.9% having an ownership stake in their practice and 24.8% practicing as independent contractors.⁶ It is not clear what effect employment has on practice autonomy. A 2014 study found that 68.2% of employed physicians indicated that their ability to make the best decisions for patients had some or many limitations, compared to 70.6% of physician owners.⁷

FIGURE 20.1. Emergency Physician Employment Landscape



Physician Autonomy and CPOM

CPOM has important ramifications on the corporate structure of physician practices and the prevention of the commercialization of medicine. The central tenet of CPOM is to protect physician autonomy. The ability of a physician to make clinical decisions independent of the influence of their employer is essential to their ability to exercise independent medical judgement. This is especially important when the fiduciary obligation of a corporation to its shareholders does not align with the physician's obligation to patients.

Maintaining physician autonomy in clinical decision-making is critical to the patient-physician relationship and to optimizing care. Still, the degree of autonomy physicians have in other aspects of their practice also influences the clinical setting and thus the treatment of patients. The following are just a few of the ways in which variations in autonomy may impact an emergency physician's day-to-day practice.

Physician Staffing^{8,9}

Few decisions impact an emergency physician's practice more than how a department is staffed. Both the length of shifts and the type of provider coverage (single physician vs. multiple physicians vs. a combination of physicians and APPs) have a significant impact on the physician and patient experience in the ED. Department staffing directly affects the number of patients per hour a physician sees, and, consequently, how much time the physician may spend with each patient. Staffing also influences quality metrics, such as door-to-doctor or door-to-discharge times,¹⁰ which may become more important as physician payment methodologies move away from volume and toward value. Inadequate physician staffing can have a significant negative impact on physician satisfaction and the quality of patient care.

Use of Advanced Practice Providers

The use of APPs to staff an ED is another important decision impacting emergency physician autonomy and patient care. As APPs practice under the license of an emergency physician,¹¹ their supervision not only places greater demands on the physician, but also exposes him/her to increased legal liability. Emergency physicians may not always be adequately compensated for these increased supervisory demands and legal liabilities.

Open-Book vs. Closed-Book Billing

In an "open-book" practice, the emergency physician can review what a patient is being billed for the services provided. When a practice is "closed-book," the physician does not know what a patient is being billed for emergency care. Without knowing what patients are being billed, it is difficult for a physician to monitor overbilling to prevent fraud.¹² Closed-book billing also limits the physician from assuring their compensation is commensurate with what a patient is being charged for those services. While often associated with physician practice management companies (PPMCs), 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 ends. The inability of a physician to relocate can have a significant impact on their autonomy to practice where and when they choose. Emergency physicians should be careful when considering any contract with a non-compete clause and consider consulting legal counsel, as these clauses are often technically complex.

Due Process¹³

The concept of due process, broadly summarized as fairness in dealings, is codified in the Fifth Amendment to the United States Constitution. However, due process in that instance is only guaranteed in dealings with the federal government. The Supreme Court has also ruled that due process applies to medical licensure, and therefore a state must abide by due process if it wants to pursue any action against a physician's license. Due process is generally not applicable to hospital employment or privileges in the same way it applies to governmental actions.

Medical staff bylaws often describe a process by which termination of a physician from the medical staff must proceed. This may protect a physician from undue dismissal, but it is important to note that these protections may be waived by an employer, with or without the physician's direct knowledge. A hospital may require that a physician contract contain a waiver of any due process afforded to the physician by medical staff bylaws. This can also be enforced by the hospital through its contract with a private group practice or PPMC instead of directly in a physician contract. Emergency physicians are combatting this practice through ACEP-supported federal legislation introduced in the 115th Congress that seeks to eliminate the ability of a third-party contract to waive a physician's due process rights.^{14,15} It is important to thoroughly explore one's due process rights as an employee or independent contractor before signing a contract.

Emergency Medicine Practice Models

Emergency medicine has a unique relationship with the principles of CPOM. Foremost, the solo physician practice model found in many specialties is impossible in emergency medicine because of the nature of the specialty. Emergency physicians also do not have a specific panel of patients for whom they are responsible, making independent contracting more feasible than for many specialties. There are many ways in which an emergency physician practice can be structured, and each has its own CPOM considerations.

Hospital or Academic Practices

Some emergency physicians are employees of a hospital or academic medical center. As employees, these physicians usually enjoy guaranteed salaries and benefits, and also avoid many of the administrative burdens of private practice. These practice arrangements often include physicians in multiple specialties.

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 practice groups are typically organized as partnerships or limited liability companies 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 practice group may have salaried physician employees who are not partners or shareholders, the expectation is often 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 PPMCs, a corporate entity contracts with multiple hospitals to provide physicians to staff the EDs. The PPMC often handles billing, scheduling, record-keeping, liability insurance, and other important (but often cumbersome) administrative tasks. It can also provide educational support, leadership training, and other advancement opportunities for physicians, but it cannot directly employ physicians or provide clinical care.

While physician input may be sought by a PPMC, its policies are ultimately determined by corporate management, which may or may not include physicians. Likewise, whether publicly or privately owned, a PPMC's profits accrue to its shareholders. For these reasons, among others, PPMCs have been a controversial aspect of emergency medicine for decades.

The forces in the health care system that have led to the proliferation of PPMCs is not altogether different than the forces that have driven more physicians to an employed practice. Ensuring adequate payment for the services one provides continues to become more complex, with mandated quality metrics, new payment arrangement schemes such as ACOs, and the move to value-based reimbursement. Physicians have also cited a lack of training on how to run a practice as a deterrent¹⁶ to pursuing ownership of a practice.

As the PPMC industry is estimated to have contracts with more than 50% of the emergency departments in the U.S.,¹⁷ the role of PPMCs in the practice of emergency medicine and the protection of physician autonomy are important issues for the specialty as a whole and physicians considering a PPMC arrangement in particular.

The corporate practice of medicine is a complex topic that affects many aspects of the life and practice of the emergency physician. This must be an essential consideration when one is deciding how and where to care for patients. Information regarding contracts for emergency physicians is available on the EMRA website at <https://www.emra.org/residents-fellows/career-planning/contracts>, including discussion of various practice arrangements and tips for negotiating the best contract for you.

WHAT'S THE ASK?

- Advocate for the protection of provider autonomy, keeping in mind concerns regarding cost and quality improvement. This could include contacting your lawmakers about legislation protecting emergency physician due process rights (such as H.R. 6372 from the 115th Congress).
- Educate yourself about the changes in the practice landscape such as employment versus private practice, the increasing utilization of PPMCs, and basics of contracts; determine what arrangement will work best for you.
- Know what safeguards are provided at the local and state level to protect your autonomous decision-making.



EHRs AND HIES: TECHNOLOGY IN PATIENT CARE

Tom Fowler, MD; Patrick Olivieri, MD

Electronic medical records (EMRs) have been proliferating in emergency departments since the 1990s. This transition from paper to electronic was expedited in 2009, when the CMS implemented the “Meaningful Use” (MU) criteria. CMS offered incentives to hospitals and providers that demonstrated use of EMRs, with the intention that EMRs would be used for more efficient collection of data that would give hospitals and government agencies the ability to produce accurate clinical reports. Increasing use of EMRs was also intended to assist providers with patient care tools such as medication warnings to decrease errors, improved information exchanges between hospitals to reduce duplicative workups.¹

Government mandates on technology affect our day-to-day in emergency medicine.

Stage 1 of meaningful use focused on patient data such as demographics, vital signs, medications, and allergies. At first, hospitals were collecting data on all ED patients, which included information from patients treated and discharged from the ED and was found to be overly burdensome. Additionally, there was no certified computerized provider order entry (CPOE) requirement in the emergency department. CMS later incorporated modifications requiring data to be collected only on ED admitted patients, along with CPOE requirements in the ED.

Stage 2 involves advanced processes to exchange patient information between facilities (for example, by using Health Information Exchanges) and promote patient engagement (such as giving patients online access to medical records).² The penalty for not meeting these goals was not only withheld CMS funds, but also an additional 3% reduction in Medicare/Medicaid reimbursements.

A provision was made for institutions to request exception to these penalties due to hardships, which CMS categorized as: limited Internet connectivity, uncontrollable circumstances, lack of certified EHR availability, and lack of face-to-face patient interactions.³

In 2015, the MU criteria were modified as part of the transition to the Merit-Based Incentive Payment System through the enactment of the Medicare Access and CHIP reauthorization Act so that “Meaningful Use Criteria” are now replaced by “Advancing Care Information.” Meaningful use was found to be overly rigid in its measures, with “all-or-nothing” incentives that were not aligned with other Medicare reporting programs and offered little flexibility for innovation. The AMA released a set of recommendations to HHS outlining an expressed need from the medical community for more flexibility with elimination of pass-fail program designs, allowing for multiple paths to end goals, removing threshold requirements for measures outside of a provider’s control, and allowing for data reuse to decrease the burden of documentation.⁴

The goal of transitioning to Advancing Care Information is to make CMS objectives more customizable, more flexible based on the size and capabilities of institutions, and more synchronized with other Medicare reporting programs.⁵ These objectives will be met through a variety of quality measures, some of which will have a significant impact on the ED. Target goals for ePrescribing rates have been set for patients discharged from the emergency department to reduce errors and improve convenience. Patient access will increase by providing online portal capabilities that patients can login to for availability of test results and messaging with providers. There are requirements for patient-specific education materials included in discharge paperwork concerning the ED diagnosis. Additional measures include specifics on appropriate security risk analysis, patient-generated health data, exchange information with patients and other physicians, and clinical information reconciliation.⁶ Advancing Care Information streamlines measures and emphasizes interoperability, information exchange, and security measures. Clinical Decision Support and Computerized Provider Order Entry are no longer required, which will likely improve efficiency with documentation and reduce alert fatigue, but may have the unintended consequence of slowing the reduction in order entry related errors and protocol-driven improvements that CPOE and Clinical Decision Support may have supported.

Health Information Exchanges

With the growing ubiquity of EMRs in the United States, the next step may be to improve patient information exchange in between medical institutions using Health Information Exchanges (HIEs).

HIEs are varied throughout the country, with wide-ranging functionalities based on EHR vendors and interoperability infrastructures. While not commonly available yet, these exchanges offer an opportunity to dramatically change the medical information available for providers to provide better care to patients. By using HIEs, an emergency physician may have the ability to access all the patient's records at all hospital facilities including labs values, EKGs, medication lists, imaging reports and discharge summaries.⁷ Having such broad access could dramatically reduce costs associated with unnecessary repeat imaging and laboratory studies and allow for comparison between current and previous EKGs, lab values and clinical situations, allowing for more informed and timely medical decision-making in the ED.

In one study, interviews were performed with providers working in an emergency department with reliable HIE capabilities to find what providers perceived to be the most beneficial aspect of having this tool available. Of the patient encounters where HIE was used during patient care, seeking specific information, 32% of HIE uses led to a change in clinical decision-making.⁸ Providers reported that HIE data contributed positively and significantly to patient care by providing lab result reference points and increasing provider confidence in their medical decision making.

HIEs have the potential to dramatically reduce information fragmentation when patients cross over between medical institutions that use different EHRs.⁹

Emergency Department Information Exchange

The Emergency Department information exchange (EDie) is an ACEP-backed way to make patient information accessible to emergency providers. Developed by Collective Medical Technologies®, EDie is intended to help coordinate care for patients. Whereas individual hospitals can be efficient for those who stay within that system, our patients don't always stay within one system. In fact, up to a quarter of ED visits can be from patients who utilize multiple emergency departments.¹⁰

Nationally, there is an increasing focus on providing value-based care. One way to achieve this value is to reduce redundant testing. Relying on patients' recollection of their prior visits and results can be risky. Repeating tests on patients transferred from another facility can cost hundreds of thousands

of dollars to the average ED annually.¹¹ Having the full picture on a patient's pathology is incredibly valuable. With easy access to outside information, the belief is that this will allow us to appropriately and safely curb redundant testing.

It is early in the process, but EDie has already shown significant promise in Washington for helping improve care for emergency department patients. This program was initiated in Washington after concerns that overutilization of the ED was leading to rising costs. Washington State ACEP, Washington State Medical Association, and the Washington State Hospital Association worked together to implement EDie, integrating it into existing EHRs and streamlining the exchange of patient information. It is important to note that EDie was only one part of a "7 best practices" plan, which also includes identifying frequent fliers, implementing narcotic guidelines, and participating in prescription drug monitoring programs.¹² After implementation, Washington saw improved outcomes in 80% of users subject to prescription drug misuse, as well as increased coordination through a primary care provider.¹³ In the first year alone, they were estimated to save \$31 million as well as cut non-essential ED use by 10%.¹⁴

Government mandates on technology affect our day-to-day in emergency medicine. Even if not intended to apply to the ED, many of us work with EMRs that are part of a larger, integrated system than is subject to these mandates. EDie is a new, exciting form of HIE that is ACEP approved and gaining rapid support. So far, EDie is available in more than 550 hospitals with widespread use in Washington, Oregon, New Mexico, and Alaska. Because of its security and efficiency, expect to see it more widely available soon.

WHAT'S THE ASK?

- Find out if your hospital EMR ready and able to work with EDie or another health information exchange.
- Advocate with your state government for support for an HIE in your state to improve your practice.



TELEHEALTH

Adam Schefkind; Bryn DeKosky, DO, MBA; Adnan Hussain, MD

Telehealth, or virtual medicine, is the transmission of a patient's medical information from an originating site to the physician or practitioner at a distant site via multimedia communication channels that minimally includes audio and video, permitting two-way, real-time interactive communication between the patient and distant site physician or practitioner.

Advancements in technology allowing virtual communication have rendered telehealth a viable replacement for face-to-face communication in many cases. This can take many forms and varies among medical specialties.¹ Importantly, disparities in available medical resources in different parts of the world have increased the need for telehealth. A Cochrane Review highlighted the utility of telemedicine, demonstrating non-inferiority to in-person care for the treatment of several chronic conditions.² However, despite technological advances and increasing acceptance of telehealth, it remains a small part of overall health care — in 2016, just 0.3% of Medicare beneficiaries used telehealth, mostly for basic office visits and mental health services. Medicare beneficiaries using telehealth tended to be younger than 65, disabled, residents of rural areas, and afflicted with chronic mental health conditions.³

Telehealth, or virtual medicine, has the potential to grow within emergency medicine — and to encompass consultations from other specialties as well.

Emergency departments have applied telehealth in a multitude of ways.⁴ Early examples included transmittals of EKGs to cardiologists for remote consultations.⁴ Similarly, telestroke systems allow emergency physicians to consult with neurologists at stroke centers regarding patients with stroke-like complaints. These consulting physicians can remotely view CT scans and lab results, then videoconference to perform a basic exam. Another innovation is tetra-trauma, a system allowing trauma surgeons, emergency physicians, and personnel on the scene of a trauma incident to communicate via video in real time.⁴ In this way, a referral center's physicians can provide immediate advice on a patient's need for imaging, surgery, transport, or transfer.⁴

As technology evolves, uses of telemedicine continue to increase. Smartphones have provided additional telehealth opportunities, a field known as “mhealth.” In 2013, emergency physicians at Los Angeles County Hospital tested a pilot system called TEXT-MED, allowing communication via text messages of instructions and reminders to high-risk diabetic patients after discharge from the ED;⁵ researchers found increased medication compliance and fewer ED bouncebacks by these patients.

Another telehealth pioneer is New York Presbyterian/Weill Cornell Medical Center, which won the 2017 Emergency Care Innovation of the Year Award for its video express care program.⁶ That center’s ED provides an option to patients who present with non-emergent conditions to avoid waiting for an in-person physician visit, and instead videoconference from a private room with board-certified emergency physicians at a remote site. ED wait times for patients using this system have decreased from 2–3 hours to approximately 35–40 minutes. Over the past few years, several hospitals nationwide have adopted similar programs.

Technology and Security

Interactions during telehealth usage commonly occur in three categories: live video consultations, remote monitoring, and “e-care” (capture and storage of patient data for future use).⁴ All three types of interactions generate significant amounts of data classified as protected health information (PHI). Under the federal Health Insurance Portability and Accountability Act (HIPAA), any transmission of these data must be secure to maintain patient confidentiality. Expansion of telehealth thus poses challenges to ensure security of data transmitted from patients to health care providers. Hospital systems take many steps to protect the information technology (IT) infrastructure, but these security provisions are not in place when information is transmitted from a patient’s home Wi-Fi or cellular data network. Under these circumstances, if data are breached, who is responsible? Who is the custodian of data created during remote monitoring of patients?⁷

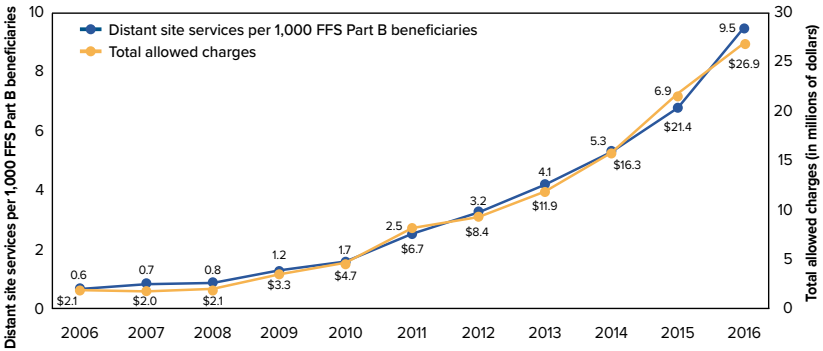
Rapid evolution of technology to support telehealth has included increased bandwidth, enabling high-definition video consultations, increased use of mobile health remote monitors, and wearable technology. With these advancements, generation of both intended and unintended health data has become ubiquitous. The legal system has yet to determine all of the liabilities and protections for this massive amount of data, and future laws and court decisions regarding this data will continue to shape the virtual health care landscape.

Reimbursements and Regulations

Early studies have shown that telehealth can reduce ED visits and increase compliance of patients afflicted with chronic conditions — reducing complications and ultimately insurance companies' costs in the long term.^{2,8} Yet the Medicare Payment Advisory Commission noted in its 2018 Report to Congress that “commercial use [of telehealth] was low (less than 1% of plan enrollees).”³ ACOs often include telehealth in their coverage plans because of improved quality of care and costs savings it can provide,^{5,6} although MedPAC reported that for private commercial insurers, “competitive pressures from employers or other insurers” are the leading drivers of coverage by telehealth services.³ However, these cost savings are not a given. A RAND Corporation study in 2017 investigated commercial claims data pertaining to more than 300,000 patients during a 3-year period.⁹ Results of that research indicated that only 12% of telehealth visits replaced an in-person visit, whereas the other 88% involved new health care utilization. Net annual spending for the studied population actually increased by \$45 per telehealth user. This study's authors concluded that telehealth can lead to increased utilization of resources, and higher costs for the health care system.

Medicare has enacted numerous changes regarding reimbursement for telehealth.^{10,11} For example, reimbursements for telestroke consultations previously had been limited to “rural health professional shortage areas” or counties “not classified as... metropolitan.”¹² The Bipartisan Budget Act of 2018 eliminated these geographic restrictions for telehealth management of acute stroke.¹¹ It also allowed Medicare to cover use of telehealth for teledermatology, teleophthalmology, and home dialysis patients. This substantial expansion of direct-to-consumer care options may significantly affect ED utilization. Over the past several years, CMS has made multiple regulatory changes to enhance the utilization of telehealth, including creating new codes to allow physicians to bill for services provided remotely and allowing Medicare Advantage plans to include additional telehealth benefits.^{13,14} A trend toward increased acceptance and reimbursement of telehealth by insurers seems clear.¹⁴

FIGURE 22.1. Utilization of Medicare physician fee schedule distant site telehealth visits per 1,000 FFS Part B beneficiaries and total allowed charges for telehealth visits, 2006 to 2016



Note: FFS (fee-for-service)

Source: CMS Carrier file claims data. Reprinted with permission.

The regulatory environment varies greatly by state and is constantly evolving.¹⁵ For example, until 2018, Texas required a face-to-face encounter prior to a telehealth encounter. Texas also required that a telehealth encounter occur at a “clinical place of service.”¹⁶ However, Texas’s 2018 Senate Bill 1107 removed both of these restrictions with the caveat that the Texas Medical Board “is still authorized to make sure patients using telehealth services receive appropriate, quality care.”¹⁶ In 2018, 6 states imposed geographic restrictions on telehealth utilization, whereas 23 states limited reimbursement to a specific list of facilities.¹⁷ The “Telehealth Parity Law” passed in Washington state in 2015 mandated that reimbursement for services delivered via telehealth equal those delivered in-person.¹⁵

Licensing across state lines can be another barrier, as many states require that a physician be licensed to practice medicine in the state where the telehealth encounter will occur. Creating mechanisms to support portability of care across state lines is a major issue for telehealth providers.¹⁸ Significant opportunities are available for engagement with providers, payers, and legislators regarding advocacy to support telehealth programs. Evolution of laws and regulatory guidelines over time will be important to ensure support for improvements in technology and appropriate compensation.

Entrepreneurial Opportunities

Many physicians are expanding beyond the direct patient care arena to explore new opportunities in the evolving world of telehealth. Some physicians are starting their own telehealth consult services for direct patient care while others are setting up online tools and resources for patients to manage their own health care. A new model has emerged allowing emergency physicians to provide care via telehealth in nursing homes and rehab centers. One company practicing in this model, Call9, embeds highly skilled first responders (known as Clinical Care Specialists [CCS]) on site at these long-term facilities, offering patients 24/7 real-time access to emergency care. Via the CCS and Call9's technology, physicians are able to meet, diagnose, and treat patients in their nursing home beds, potentially avoiding unnecessary trips to the ED and subsequent hospitalizations.¹⁹ Numerous similar companies have arisen over the past decade. For example, Teladoc employs licensed physicians (including a panel of emergency medicine doctors), and utilizes telephone and videoconferencing to offer remote urgent medical care to patients worldwide.²⁰

Recent literature underscores the increased access to health care these companies have provided, but the question of effects on cost lingers. In fact, a recent cohort study published in *JAMA* described a significant increase in telehealth encounters from less than 1 visit per 1000 patients in 2008 to 6 visits per 1000 patients in 2015. However, these authors also noted a 14% increase in spending per person per year over that same time period.²¹ More research is necessary to determine the true impact of growth of telehealth on health care costs. During evolution of telehealth from these early adoptions to a stable part of the health care landscape, adventurous physicians will have many opportunities to participate in design and delivery of telehealth within these types of programs.

Future Potential

Telehealth could revolutionize the practice of medicine. The rapid pace of technological change and innovation has led to adoptions of telehealth in the acute care setting all over the country. A study by the New England Healthcare Institute found hospital readmissions were reduced by 60% with use of remote patient monitoring compared to standard care, and by 50% compared to disease management programs without remote patient monitoring.²² The same study estimated that remote patient monitoring could prevent between 460,000 and 627,000 heart failure readmissions each year, with an annual cost saving of \$6.4 billion.²² Atrius Health, an independent health care organization, has stated that the rehospitalization rate of patients admitted to home care with their comprehensive telemonitoring program is 0-4% within the first 60 days of care. The national acute care rehospitalization rate for all patients receiving home health care services is 23%.²³

In a different patient population, cost and use of telehealth visits and in-person visits for patients seeking treatment for acute respiratory infections (one of the most common conditions treated via telehealth services) underwent study based on 2011-2013 claims data from the California Public Employees' Retirement System.²⁴ The study found that only 12% of direct-to-consumer telehealth visits replaced a visit to another provider²⁴ — despite the reasonable assertion that an individual may be less inclined to visit his/her primary-care doctor or visit the ED if afflicted with a common cold or a high fever, and that easy access and low cost of telemedicine should motivate people to seek a remote clinical consultation.²⁴

Within the ED, telehealth has much room to grow. For example, integration of telehealth training into most residency programs has not yet occurred.²⁵ Moreover, as telestroke and teletrauma become more widespread, potential expansion of telehealth to other specialty consultations (such as cardiothoracic surgery or ophthalmology) appears reasonable.²⁶ Telehealth resources are currently underutilized in the ED, and their financial impact is yet to be determined.

WHAT'S THE ASK?

- Promote the adoption of a standard for transmission and storage of protected health information (PHI), so health care providers do not pre-emptively limit their adoption of virtual medicine due to privacy concerns.
- Advocate for adequate reimbursement to support development and integration of virtual medicine.
- Advocate for stable but responsive regulations governing the practice of virtual medicine to encourage and achieve broad adoption.



PALLIATIVE AND END-OF-LIFE CARE IN THE ED

Jason K. Bowman, MD; Chadd K. Kraus, DO, DrPH, MPH, FACEP

The World Health Organization (WHO) 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

The field of palliative care has evolved into a formalized medical specialty that focuses on optimizing patients’ quality of life throughout the illness spectrum (particularly in life-limiting illness) by anticipating, preventing, and treating suffering of all kinds. Hospice care is closely related, and usually defined as care and symptom management provided to patients in the last 6 months of life.

It is critically important to address goals of care with patients in the ED, particularly those with life-limiting illnesses, and not assume that their outpatient providers have done this.

Emergency Medicine and Palliative Care

In 2012, ACEP released a white paper outlining the unique aspects of palliative and hospice care in the ED.² Emergency physicians frequently care for patients with life-threatening and life-limiting illnesses and injuries. One study estimates that 75% of older adults visit the ED in the last 6 months of life.³ However, end-of-life conversations with a patient’s primary care physicians and outpatient specialists are often postponed,^{4,5} leaving those discussions to emergency physicians. A recent RAND study suggested that primary care physicians and specialists increasingly rely on EDs to evaluate complex patients with potentially serious health problems, rather than managing these patients themselves.⁶ These utilization trends and patient complexity make the ED an appropriate and increasingly important setting for meeting the palliative care needs of patients with a broad range of advanced, chronic, and/or life-limiting illnesses.⁷⁻²⁰

There are multiple challenges to providing palliative and end-of-life care in the ED, including a paucity of hospice and palliative subspecialists for consultation, time constraints, management of multiple patients, and the lack of a long-term physician-patient relationship between emergency physicians and their patients.¹¹⁻²⁰ As such, it is especially important for emergency physicians to have basic palliative care skills.^{11,21} 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.”^{22,23}

Integrating palliative care into the ED setting is becoming increasingly common, especially for specific groups of patients with palliative care needs, such as patients with dementia²⁴ and patients with cancer.^{25,26} With the rise of geriatric-specific emergency care, incorporating ways to identify patients with palliative and/or hospice needs, even as early as in triage, has become a way to provide expedient palliative care.²⁷⁻³¹ ACEP developed a Geriatric Emergency Department Accreditation Program to “ensure that older patients receive well-coordinated, quality care at the appropriate level at every ED encounter.”³²

When hospice and palliative care specialists are available, the ED is an appropriate setting for initiating palliative care consults.³³⁻³⁷ In its initial Choosing Wisely recommendations, ACEP 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.”³⁸ Early palliative and hospice services can benefit patients and families by ensuring the patient’s goals of care are respected and followed, and potentially reducing unwanted or unnecessary care at the end of life. Patients who receive timely palliative and hospice services might have improved quality of life and potentially longer life expectancy.^{34,36,37} Palliative care initiated in the ED offers the opportunity for patients to experience symptom relief, to obtain referrals to community resources and home services, and, when appropriate, to avoid hospitalization.^{7,17,34,39,40}

Advance Planning Documents

In 2014, the Institute of Medicine 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.”⁴¹ A focus area in order to meet this goal is improved clinician-patient communication for advance care planning.

Advance care planning can take a variety of forms and can be represented in a range of documents and directives that can help guide clinical decisions in a patient-centered way that respects the patient's goals and values. (Table 23.1)

TABLE 23.1. Advance Planning Documents

Document	Description	Limitations
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 (eg, 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	Does 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 physicians regarding the interpretation of the orders

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

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 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.⁴² As a physician's order, POLSTs are potentially an improvement over traditional advance directives.⁴³ 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.

As of April 2018, the National POLST Paradigm has classified POLST programs by state/territories into “mature” (3 states), “endorsed” (23 states), “developing” (24 states), and “not conforming” (4 states).⁴⁴ 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 emergencies.⁴⁵⁻⁴⁸

Despite the growing use of POLST forms, there is frequently 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 the patient’s goals and values are being carried out in treatment decisions.⁴⁹⁻⁵¹

One limitation of advance planning documents for end-of-life and palliative care decision-making is that these documents might not consider or list the many possible interventions during critical illnesses or account for the dynamic nature of an illness. For example, they 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 is also difficult to identify. Thus, these documents often are more of a starting place for a conversation with patients, rather than a prescription to be followed without consideration for changing situations.

Medico-Legal and Ethical 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 or hospice care needs receive a medical screening exam to determine if an emergency medical condition, including uncontrolled pain, 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, and may even need admission to an ICU.⁵² There is a risk of incorrectly assuming that a patient who does not want aggressive interventions does not require care. Rather, patients with palliative and end-of-life needs still should receive the best, intense, expert possible — but guided by and consistent with their goals and as outlined by them, family, and/or 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 emergency physicians to understand the surrogacy laws and regulations in their state.⁵³ After a patient is incapacitated, each state has a statute governing the order in which decision-maker(s) is/are appointed. In most cases, a court-appointed guardian, followed by any legal power of attorney has medical 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. Because the designees represent the goals and values of the patient, they have the authority to change any documents such as DNR and POLST forms.

Current Issues and Future Directions

Broader public and legislative discussions of these topics are likely to impact ED care in the future. Since 2015, Medicare has reimbursed providers for having goals of care conversations with patients.⁵⁴ However, further efforts are needed to ensure these goals of care conversations occur (and are appropriately documented) more uniformly. Currently, national completion rates for advance directives are just over one-third of all adults.⁵⁵ Thus, it is critically important to address goals of care with patients in the ED, particularly those with life-limiting illnesses, and not assume that their outpatient providers have done this. While the chaotic environment of the ED is not ideal for such conversations, doing otherwise risks violating patient autonomy and causing harm.

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 around decisions made by and for patients near the end-of-life. One example of this controversy is physician-assisted dying, which, as of June 2018, was legal in 6 states: Oregon, Washington, Vermont, Montana, New Mexico, California, and the District of Columbia.⁵⁵ The exact role of emergency physicians with regard to physician-assisted dying in states where laws exist is yet to be determined, although emergency physicians could conceivably care for patients who have chosen this route.

For emergency physicians, the opioid epidemic has important implications for palliative care provided in the ED. According to the HHS using data from 2016 and 2017, an estimated 2.1 million Americans have an opioid use disorder, leading to approximately 42,000 deaths annually.⁵⁷ Patients with cancer-related pain are also at risk for opioid misuse, with one study estimating that nearly one-third of patients with cancer presenting to the ED of a comprehensive cancer center were at high risk of opioid misuse.⁵⁸ Many patients with life-limiting illnesses often do not receive adequate symptom management and experience intense suffering.⁵⁹ Balancing effective pain management with the iatrogenic risk of harm from opioids is a complex challenge, and an area of intense research and discussion currently within palliative care.

Finally, while the rate of deaths occurring in the ED dropped by nearly half between 1997 to 2011,⁶⁰ deaths still occur frequently in the ED. Most current providers received no formal training in residency on how to care for the imminently dying patient (and their loved ones) in the ED, or on primary palliative care skills.²¹ However, recent research suggests that such training is beginning to be incorporated into residency training.²¹ Understanding how to provide appropriate, intensive symptomatic and supportive care is a critical skill for emergency physicians. Equally important is the fundamental role played by emergency physicians in advocating with legislators, regulators, and other stakeholders to advance appropriate care for patients with palliative needs in the ED. This advocacy is necessary across the spectrum of topics, from education about and promotion of POLSTs, to ensuring adequate reimbursement for palliative care provided in the ED.

WHAT'S THE ASK?

- Advocate for inclusion of primary palliative care skills into EM residency training programs.
- Advocate for broader adoption of POLST and related forms and to improve EMS/emergency physician education and training on how to apply POLST.
- Advocate for the continued recognition of the value of and reimbursement for palliative care services in the ED.

RESOURCES

- ACEP Palliative Care Section
<https://www.acep.org/how-we-serve/sections/palliative-medicine>
- AAHPM EM Special Interest Group (SIG)
http://aaahpm.org/uploads/List_of_AAHPM__HPNA_SIGs_Final.pdf
- Emergency Medicine Resident Palliative Interest Group (ACEP + AAHPM)
<https://goo.gl/forms/uw9m58H1DVr8XWbY2>
- EMRA Palliative Care Sub-Committee
<https://www.emra.org/be-involved/committees/critical-care-committee>



MENTAL HEALTH IN THE ED

Jonathan W. Meadows, DO, MS, MPH, CPH; Veronica Tucci, MD, JD, FACEP

The landscape of mental health services has drastically evolved over the past two centuries. Once centered on the asylum (theorized as a protected sanctuary for long-term psychiatric care) and the long-term institutionalized care of patients with the most severe and chronic mental health problems, several key events — from transinstitutionalization to deinstitutionalization to the rise of pharmaceutical therapies — shifted care to the outpatient setting.¹ The U.S. mental health system has become more community-based, decentralized, heterogeneous, and fragmented, leading to an array of outpatient services and more episodic treatment.¹ 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. This, coupled with dwindling psychiatric hospital beds, has created a mental health care crisis in the U.S.

Emergency physicians should work to improve outpatient access, reduce regulatory barriers to integrated health, and provide additional resources for mental health treatment.

Psychiatric beds nationwide dropped from approximately 400,000 in 1970 to 50,000 in 2006, with 80% of states reporting a shortage of beds.^{2,3} In 2015, the U.S. ranked 30th of the 34 OECD countries reporting the number of psychiatric care beds in hospitals per 1,000 persons. The U.S. reported 0.21, while New Zealand was 0.24, Great Britain 0.42, Belgium 1.4, and Japan ranked the highest with 2.65.⁴ 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 crisis presenting to EDs is on the rise and trending upward.⁵ Between 2006 and 2013, the rate of ED visits for depression, anxiety and stress reactions increased 55% and the rate for psychoses and bipolar disorder increased 52%.⁶

Incarceration of the Mentally Ill

Data from the Bureau of Justice Statistics from 2011–2017 illustrated that 37% of state and federal prisoners and 44% of local jail inmates had a mental disorder.⁷ 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.”⁸ This has caused significant strain on U.S. law enforcement agencies and correctional facilities for several reasons and has been part of a growing trend of “transinstitutionalization.”¹ First, individuals with mental illness are jailed on average 2–3 times longer than individuals without a mental illness arrested for a similar crime.⁹ Next, jails incur significant costs associated with the oversight of mental health prisoners for medication and other health care services.⁹ 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.⁹

Medication non-compliance is one major reason psychiatric patients decompensate and begin acting erratically and/or commit crimes. One study showed that monthly medication possession and receipt of outpatient services reduced the likelihood of any arrests.¹⁰ This study further concluded there was “an additional protective effect against arrest for individuals in possession of their prescribed pharmacological medications for 90 days after hospital discharge.”¹⁰ Thus, increasing community access to outpatient psychiatric services after incarceration for medication management should be a cornerstone of mental health reform to ensure reintegration into the health care and the mental health system.

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.¹¹ 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.

Causes of Increased Behavioral Health Treatment in EDs

There are several salient factors contributing to increased behavioral health treatment 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 4 times higher than non-behavioral health visits.¹²

Insurance companies, state and federal government payers, and managed care organizations have reduced reimbursement rates for mental health care, making it difficult for outpatient facilities to operate.¹³ This lack of funding has led to operational shortfalls 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 6 of its 9 outpatient clinics due to inadequate payments.¹⁴ As a result, this decline in outpatient and inpatient resources has led to an escalating access crisis, even among those who are insured. More than 50% of U.S. counties do not have practicing behavioral health providers, creating 4,000 designated mental health professional shortage areas.¹³

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 under the ACA, there were still 29.3 million Americans lacking health insurance in 2017.^{15,16} According to a 2009 survey, 61% of those needing but not receiving mental health care listed cost as a barrier.¹⁷ Adults with mental illness are much more likely to lack insurance coverage than those without mental illness.¹⁸ Moreover, an AHRQ/ Substance Abuse and Mental Health Services Administration (SAMHSA) 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 in the ED, and were less likely to be admitted to inpatient units.^{13,19}

TABLE 24.1. Reasons for Not Receiving Mental Health Services in the Past Year

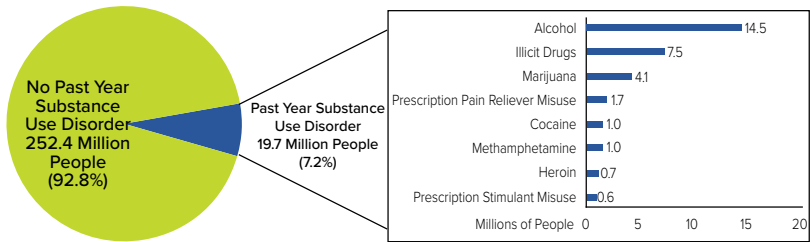
Among adults aged 18 years or older with any mental illness who did not receive mental health services (in percentages)

Reason	2016	2017
Could not afford cost	39.6	42.2
Might cause neighbors/community to have a negative opinion	11.0	11.5
Might have negative effect on job	10.7	11.1
Health insurance does not cover any mental health services	7.0	8.0
Health insurance does not pay enough for mental health services	13.2	15.7
Did not know where to go for services	21.7	25.6
Concerned about confidentiality	9.8	9.7
Concerned about being committed/having to take medicine	14.5	12.9
Did not feel need for treatment at the time	9.9	9.3
Thought could handle the problem without treatment	28.0	28.6
Treatment would not help	11.2	12.1
Did not have time	20.1	19.9
Did not want others to find out	8.6	9.1
No transportation/inconvenient	6.9	5.0
Some other reason	10.2	9.4

(From Substance Abuse and Mental Health Services Administration. Key substance use and mental health indicators in the United States: Results from the 2017 National Survey on Drug Use and Health (HHS Publication No. SMA 18-5068, NSDUH Series H-53). Retrieved from <https://www.samhsa.gov/data>, with permission.)

On another front, according to the SAMHSA 2017 report, substance abuse continues to rise, including first-time users of heroin and marijuana (including synthetic marijuana such as Kush, Spice, and K2); the main drivers are marijuana use and the misuse of prescription pain relievers.²⁰ 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. SAMHSA reported 7.9 million Americans have a co-occurring disorder with mental health issue and a substance use disorder as of 2014.²¹ 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.²²

FIGURE 24.1. Numbers of People Age 12 or Older with a Past Year Substance Use Disorder: 2017



From Substance Abuse and Mental Health Services Administration. (2018). Key substance use and mental health indicators in the United States: Results from the 2017 National Survey on Drug Use and Health (HHS Publication No. SMA 18-5068, NSDUH Series H-53). Retrieved from <https://www.samhsa.gov/data/>, with permission.)

Given the insufficient community resources, lack of mental health insurance coverage, high numbers of uninsured persons in the U.S., shortages of behavioral health providers, and reduced reimbursement rates, it is not surprising that many Americans have unmet behavioral health needs. Increasing rates of substance abuse further compound this problem. This leads to downstream implications that impact treatment in the ED for all patients.

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 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.²³

Boarding ties up ED resources including patient beds, care providers, ED staff, and ultimately, health care dollars. It delays the definitive care of psychiatric patients who typically need acute interventions, often exacerbating their conditions and, at times, making it unsafe for these patients and the staff caring for them. Ultimately, psychiatric boarding contributes to ED crowding,²⁴ which can increase wait times, prevent timely evaluation and treatment of those seeking care, increase patient walk-outs, and even increase inpatient mortality.²⁵

A 2015 survey revealed that nearly 70% of emergency physicians boarded psychiatric patients because of the paucity of available inpatient hospital beds or psychiatric evaluation services.²⁶ 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.²⁷ In another study, 1 in 12 patients with psychiatric complaints had an ED length of stay of greater than 24 hours.²⁸ A 2012 survey from the National Association of State Mental Health Program Directors found that 10% of hospitals are boarding patients for several weeks.²⁹

There have been several proposals to help decrease boarding in EDs nationwide; however, more research is needed to validate their impact. First and foremost, access to outpatient and inpatient psychiatric care needs to improve. More state and federal funding should be used to increase access points into the mental health system. Additionally, some states have changed regulations around telemedicine to allow psychiatrists to evaluate and screen boarded patients remotely rather than waiting in overcrowded EDs; additional research on the role of telemedicine in this setting is underway.^{30,31} Furthermore, improved psychiatry case management, coupled with outpatient capacity increases, can help reduce acute psychiatric emergency visits.³²

One proposal is to establish benchmarks in ED care of psychiatric patients, such as measuring the number of visits lasting greater than 24 hours.²⁸ This statistic could be used as a quality metric tied to hospital reimbursement rates, incentivizing hospitals to address the problem. Furthermore, concurrent medical and psychiatric evaluation instead of a step-wise evaluation protocol can reduce delays in treating psychiatric patients in the ED.³³

Some states have already taken action. 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.²⁹ However, experts point out the decision conflicts with federal law preventing EDs from discharging unstable patients (ie, those who are suicidal or homicidal). Other states, such as New Hampshire, have similar statutory language as in Washington.³⁴ Virginia created an acute psychiatric bed registry, which strengthens the tracking of inpatient psychiatric bed availability via daily updates.³⁵⁻³⁷

Suboptimal Psychiatric Care and Safety in EDs

Exacerbating the complex problem of boarding, some ED staff may lack adequate understanding of mental illness and resources for safe interventions.¹³ ED staff often report a sense of fear and anger provoked by psychiatric patients' aggressive or bizarre behavior.³⁸ Additionally, the “revolving door” nature of many presentations along with poor follow-up care and medication non-compliance results in a sense of hopelessness in some ED staff.³⁸

If ED providers do not receive adequate training in caring for mental health patients,³⁹ they may lack the de-escalation skills and safety techniques that can ensure a safe environment for the patient and themselves. Without these skills, ED staff may 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 and lead to unnecessary hospital admissions.

It has been postulated that patients who receive higher quality initial care are more likely to go home than stay in the ED as boarders.⁴⁰ For example, hospitals that participated in the Institute for Behavioral Healthcare Improvement's 2008 learning collaborative 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.⁴⁰ By providing additional staff training in de-escalation techniques, they were able to significantly reduce boarding times and improve patient experiences.⁴⁰ Expert policies for de-escalation techniques have been published by groups such as the American Association for Emergency Psychiatry.⁴¹

As the number of psychiatric emergencies presenting to EDs will likely not subside anytime soon, it would be prudent to consider increasing psychiatric training for all ED care providers. To promote increased training, funding should be allocated and training programs should be implemented (for example, within residency training and CME frameworks) that target unique features of psychiatric care within emergency medicine.

While proposals have been made at the hospital level and local and state branches of government, there is an immense need to address these problems — boarding of psychiatric patients, ED crowding, psychiatric bed tracking and transfer systems for psychiatric patients — through national legislation. While these local and state efforts are positive steps, more comprehensive legislation is needed to target the numerous problems.

Two examples of ACEP-supported legislation to strengthen behavioral health care in EDs are:

21st Century Cures Act⁴² (signed into law)

- An amalgamation of multiple mental health reform bills, such as the Mental Health Reform Act of 2016 and the Helping Families in Mental Health Crisis Act of 2015^{43,44}
- Helped expand the mental health workforce and promote efforts to implement mental health parity in health plans
- Created an Assistant Secretary for Mental Health and Substance Use Disorders and a National Mental Health Policy Lab
- Promoted the use of telemedicine services
- Signed into law on Dec. 13, 2016

The “Excellence in Mental Health and Addiction Treatment Expansion Act” of 2017 (HR 3931/S. 1905)^{45,46} (introduced in 2017^{47,48})

- Would extend successful pilot programs that do the following:
- Provide much-needed outpatient services for patients with mental or behavioral health needs
- Help transition these patients from inpatient to outpatient status more readily
- Make inpatient psychiatric beds available on a timelier basis for the patients who are waiting for them in the ED
- Would expand available funding beyond the 8 currently participating states to an additional 11 states:
- Helps prevent more patients from reaching a crisis point requiring acute ED services

There are other state, federal, and local bills being actively considered and explored,⁴⁹ 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.

For more information go to <https://www.acep.org/federal-advocacy/mental-health>.

WHAT'S THE ASK?

- Advocate for improved resources for comprehensive and preventative outpatient psychiatric care to stem the tide of diminishing acute psychiatric care beds.
- Promote institution-specific solutions that improve the care of the acutely ill psychiatric patient.
- 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.



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 (EMTs) beyond that of traditional emergency care. The uninsured, chronically ill, elderly, homeless, and disabled are often referred to the emergency department because there are no other options available for them to receive care. Community paramedicine can potentially address this gap by offering services such as management for chronic disease, substance abuse, and mental health, as well as support for hospice care, injury prevention outreach, medication reminders, and patient advocacy.¹ 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.

Many pilot programs in community paramedicine 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.

Diversion to Alternative Care Centers

According to the National Center for Health Statistics, the number of ED visits crested at 136.9 million in 2015, a steady rise compared to the prior 5 years.^{2,3} Frequently, when emergency departments have exhausted their resources because of overcrowding or boarding, the hospital is put on “ambulance diversion” to steer emergency services toward hospitals with appropriate capacity.

However, in the wake of increasing utilization of EDs by increasingly ill patients, many systems have opted to move lower acuity patients to primary care settings, essentially preemptively diverting these patients from the ED. Defining an appropriate population of “non-emergent” or lower acuity patients has proven challenging. A study conducted by the RAND Corporation estimated that 14–27% of all ED visits can be handled at alternative care and urgent care centers, saving up to \$4.4 billion annually.⁴ However, a recent retrospective analysis which conservatively defined “avoidable” ED visits as discharged ED visits not requiring any diagnostic tests, procedures or medications, found a much lower incidence of 3.3%.⁵ Programs to transport “non-emergent patients” to alternative sites of care are seen as a potential intervention to target this group.

The **Emergency Room Diversion Grant Program**, part of the Deficit Reduction Program of 2005, allocated \$50 million to states to extend hours of clinics, educate patients about appropriate usage of the ED, and establish new community health care centers.⁶ Upon the program’s completion in 2011, CMS used the findings to identify strategies to reduce ED use, which can be condensed to the following approaches:⁷

- Broaden access to primary care centers
- Target frequent ED users with interventions aimed at diversion to appropriate outpatient care
- Target patients with behavioral health problems by increasing access to comprehensive mental health care

ED visits for behavioral and substance abuse problems continue to skyrocket, increasing 55.5% from 2006 to 2013.⁸ 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.⁹

As EMS transport services strive to engage in alternate destination diversion, a major barrier for agencies has been highlighted: current CMS payment policy reimburses for ambulance transport exclusively to emergency departments, but not to other destinations.^{10,11} The result is a strong financial incentive for ambulances to continue exclusively transporting patients to EDs. It has been estimated that an annual \$283–\$560 million could be saved if CMS reimbursement for out-of-hospital services allowed for more flexibility in transport destinations.¹²

While diversion to alternative care centers may reduce “non-emergent” ED utilization, one must also be cognizant of potential dangers in tasking EMS personnel with making decisions involving ED diversion. Without the full arsenal of diagnostic tools available in the emergency department, and the expert training of an emergency physician, patients may be incorrectly triaged as “non-urgent” when in fact they require further emergency medical care. While paramedics and EMTs are trained to recognize patients requiring emergency medical attention, specifically identifying “non-emergent” patients is beyond their normal scope of care. It remains unclear if pre-hospital triage protocols can reliably guide paramedics to make appropriate field decisions regarding “non-emergent” transport destinations.¹³

Another obstacle involves EMTALA, 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 a violation of these obligations, if done in the ED setting. While certain provisions of EMTALA allow for physician surrogates (in this case, pre-hospital professionals) to perform an MSE, there are strict requirements for phone consultation with an ED physician. Even where EMTALA requirements are met, private clinics and urgent care centers have no EMTALA constraint requiring evaluation, and thus could choose not to accept low-income, under-insured, or uninsured patients who are deemed to be “non-emergent.” This could result in progressive destabilization of payer mixes as EDs are forced to take on a larger percentage of uncompensated care while the adequately-insured are diverted to alternative care sites.

In 2014, the Houston Fire Department launched the Emergency Telehealth and Navigation (ETHAN) program, which employs real-time, audiovisual communication directly between a pre-hospital patient and an emergency physician. After EMS personnel arrive on scene and identify a non-emergent-appearing patient that meets inclusion criteria, a tablet PC is used to connect with an ETHAN Project call center emergency physician, who can then remotely interview and visually assess the patient. If appropriate, non-emergent transport (ie, free taxi voucher) is provided to an ED or a primary care clinic.¹⁵ A retrospective analysis of early data from the ETHAN Project shows some promise. During the 1-year study period, there was a 44% decrease in ambulance transports to the ED, and there were no deaths in either the low-risk control group or the low-risk group with ETHAN physician assessment.¹⁶ While early results from ETHAN are encouraging, it is currently unclear if this program has

had an impact on crowding in the 60+ EDs — accounting for 1.4 million ED visits per year — in the Houston area. 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.

The Push for Alternative Providers in the Field

Since the publication of the “EMS Agenda for the Future” in 1996 by the NHTSA, there has been a continued effort to integrate EMS systems into the health care system at large and to collaborate to bring illness and injury prevention programs into the community.¹⁷ This plan has included the development of community paramedics, mobile integrated health programs, and advanced practice paramedics. These groups are tasked with reducing EMS calls and ED utilization by specific groups of high utilizers, primarily by coordinating care for patients with chronic conditions on a non-emergent basis.

A key component in the development of community paramedicine and mobile integrated health care (MIH) solutions involves the incorporation of alternative and supplemental providers into the EMS response system, including nonclinical providers. One such example is the MIH behavioral health program at Colorado Springs Fire Department, started in 2012. This example of a community assistance referral and education services program (CARES) was designed to provide special attention to frequent 9-1-1 users with behavioral health issues. Specifically, paramedics made home visits and assisted with directing repeat 9-1-1 users with chronic conditions to community resources. They were successful in decreasing 9-1-1 use by 50% in a subset of the program participants over a one-year period.¹⁸ This program was developed as a non-emergent program and involved intervention after multiple EMS activations and ED presentations. Colorado Springs later developed a community response team (CRT) to provide emergency care to behavioral health 9-1-1 callers. This included a prehospital medical care provider doing on-scene triage within a specific protocol as well as a social worker providing on-scene guidance and care. Ultimately, the social worker and medical provider collaborated on referrals to outpatient resources versus disposition to a behavioral health facility or the emergency department. Overall, this program allowed 86% of behavioral health callers to achieve disposition and follow up without an ED visit.¹⁸

Clinical providers with advanced training in community health care needs — including primary care, preventive medicine, mental health and even definitive minor acute care — are the foundation of an EMS-based solution to enhance primary care access. Initiatives such as the CRT in Colorado Springs suggest the

potential for improving utilization of resources and patient care by allowing EMS providers to offer alternative interventions beyond ED transport.¹⁹ Several EMS and government agencies throughout the nation have successfully experimented with incorporating social workers, case managers, and even clinical pharmacists into their MIH pilot programs.^{20,21} It is clear that collaboration with additional allied health providers has great opportunity for the delivery of high-quality care in the pre-hospital environment. This can potentially be 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. However, there remain roadblocks to incorporation of these new paramedicine models at both the financial and legislative level. These include concerns over funding, liability in unconventional practice environments, and concerns that these community activities may be outside the traditional scope of practice for these providers. Future MIH related legislation and regulation should focus on leveraging potential cost savings, delineating liability, protocols, improving patient care, and the 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. EMS-driven MIH programs stand uniquely poised to have a broad impact on improving the care of our patients.²²

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 disparity in the availability of comprehensive integrated care.²³ Community paramedicine, in conjunction with additional health providers, can potentially serve to fill this void, and in the process, reduce avoidable ED utilization. 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 visiting the ED.²³

WHAT'S THE ASK?

- Advocate for bills that provide enhanced liability protections for providers rendering care required under EMTALA.
- Support legislation that increases access to community support, including support using community paramedicine, for patients with mental health conditions and other patients at high risk of avoidable emergency department visits.
- Advocate for appropriate use of telemedicine to allow emergency physicians to assist in the evaluation of patients with acute complaints in cooperation with EMS professionals.



OPIOIDS

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America's New Epidemic

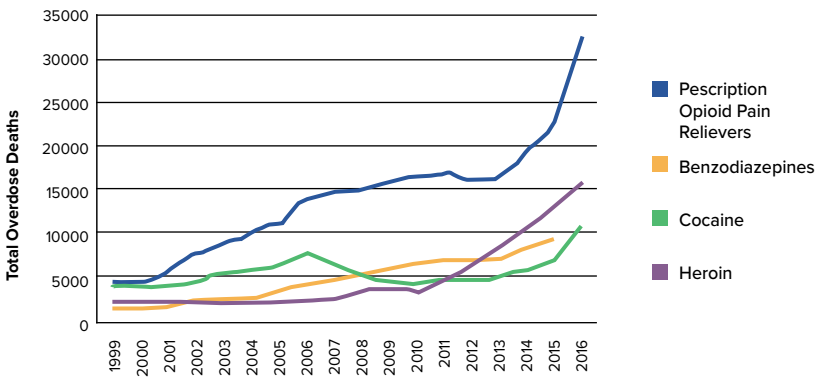
In the 1980s, an expert in the field of pain management, Dr. Russell Portenoy, brought attention to opioids as an option for non-cancer pain control, portraying it as a medication without significant risk of addiction.¹ Pharmaceutical companies propagated

this stance with aggressive marketing and continued downplaying risks, while emphasis on pain control grabbed the attention of regulatory bodies (including The Joint Commission), resulting in hospitals focusing on pain as the “fifth vital sign.”² The unintended consequences of this movement have resulted in an epidemic of opioid use in America. ACEP has recognized the opioid epidemic as “one of the most devastating public health crises in a generation.”³ Despite the opioid epidemic being a front-page topic, in both the medical field and media outlets, CDC data shows the U.S. opioid overdose epidemic continues to worsen (Figure 26.1).

Emergency physicians serving on the front lines are seeing patients with opioid addiction, often in their darkest hours.

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FIGURE 26.1. Overdose Deaths per Year by Drug Substance³⁻⁵



Emergency Medicine Providers Face Difficult Decisions

Data shows opioid-related inpatient stays and ED visits have increased for both sexes and all age groups, showing no patient population has been left untouched by this health crisis.⁶ Nationally, the rate of opioid-related inpatient stays has increased by 64% and opioid-related ED visits doubled.⁶

Large-scale analyses have shown that in 2012 alone, 259 million prescriptions for opioid pain medications were written by medical providers.⁷ While pain control is a frequent reason for presentation to the ED, it is crucial to note that the same analyses found less than 5% of the nation's total opioid pain pills were prescribed by emergency physicians.⁷ In one study that reviewed more than 27,000 ED visits, only 17% of discharged patients received prescriptions for opiate medications.⁷

Emergency physicians serving on the front lines are seeing these patients with addiction, often in their darkest hours. The CDC published data regarding opiate prescribing among all physician providers, which showed more than 19% reduction from 2006 to 2017, with a peak in 2012 of highest prescribing rates.⁸ Emergency physicians are becoming increasingly educated regarding risks associated with prescription opiate use and are showing awareness and balance between exercising appropriate caution in providing these medications, while still attempting to provide adequate pain control for our patients.⁷

Medication-Assisted Treatment and Its Implementation in the ED

For patients suffering from addiction and opioid use disorder (OUD), the emergency physician may be the only physician they regularly encounter, and it is crucial for EM providers to understand treatment guidelines for opioid addiction. Medication-assisted treatment (MAT) combines behavioral therapy and medications to treat substance use disorders.⁹ This process utilizes U.S. Food and Drug Administration (FDA) approved medications in combination with counseling, with the goal of targeting a “whole-patient” approach to treatment of substance use disorders. Currently, there are three commonly used medications: methadone, naltrexone, and buprenorphine. The prescribed medication helps to block the euphoric effects of the abused drug, relieve physiologic craving, and normalize body functions without the negative effects and risks of the abused drug. All patients enrolled in MAT are required to receive counseling. Treatment programs are approved and regulated by the Substance Abuse and Mental Health Services Administration, structured by federal legislation, regulations, and guidelines.¹⁰ Research assessing effectiveness of MAT has demonstrated significant results, showing increased likelihood of patients avoiding relapse, improved overall social functioning, and reduced risk of infectious disease

transmission and engagement in criminal activities.¹¹ A study looking at heroin overdose-related deaths in Baltimore between 1995–2009 found approximately 50% decrease in fatal overdoses associated with increased availability of methadone and buprenorphine.¹²

The Drug Addiction Treatment Act of 2000 permits physicians who meet specific criteria to treat opioid use disorder with schedule III-V controlled substances (such as buprenorphine and suboxone) in settings outside of opioid treatment programs. In general, a practitioner who dispenses scheduled medications for maintenance of detoxification must be separately registered as a narcotic treatment program as per the Narcotic Addict Treatment Act of 1974.¹² This registration and separate licensing allows the practitioner to dispense, but not prescribe these medications. An exception to separate licensing is what is known as the “3 Day Rule,” or 72-hour rule.¹³ This allows a provider who is not separately registered as a treatment program to administer, but not prescribe, the narcotic medication in an emergency setting. This medication is administered to the patient with the goal of relieving acute withdrawal symptoms, in conjunction with referral for further treatment. Restrictions do remain, in that no more than one day’s worth of medication may be administered to the patient at one single time. This treatment cannot extend for greater than 72 hours, and the 72-hour time period cannot be extended or renewed. Randomized clinical trial data has shown that ED-initiated buprenorphine treatment, with coordinated outpatient follow-up for ongoing treatment, resulted in a greater percentage of patients remaining in treatment with fewer self-reported days of illicit drug use when compared to ED referral only (with or without brief intervention).¹³ Traditionally, patients with OUD or those treated for overdose are discharged with follow up information for addiction resources, with impending or ongoing opiate withdrawal symptoms. Emergency physicians who administer ED-initiated MAT, may alleviate withdrawal symptoms, as well as offering patients motivation through a positive interaction with health care providers and a first step toward forming a plan for recovery.

Monitoring Programs and State Legislation Regarding Opiate Prescribing

Prescription drug monitoring programs (PDMPs) were created as early as 1940 in California. These programs have recently become more prevalent, with 49 of 50 states now fully participating in hopes of detecting and monitoring high-risk prescribing and patient behaviors. While these programs vary across state lines regarding design, inclusion of selected controlled substance schedules, and how data is collected and reported, the common goal of all PDMPs is to reduce prescription drug diversion and abuse.

Missouri, despite having a PDMP developed in 2017 at the order of the governor, lacks proper funding, as state lawmakers have attempted to defund the program due to concerns that primary goal of the Missouri PDMP is to investigate and punish prescribers and pharmacists, rather than allowing providers to monitor patient behaviors.¹⁴

A study reported by the National Institute of Drug Abuse found an average reduction of 1.12 opioid-related overdose deaths per 100,000 persons, within one year of a given state's PDMP implementation.¹⁵ While there has been proven benefit to instituting PDMPs, limitations have also been recognized.¹⁶ EM providers have identified that while the goal of PDMPs is to aid in medical decision making and prescribing, access can be a restrictive factor in that it can be time consuming and take away from bedside patient care. Thirty-five states mandate the use of PDMPs in specific contexts. Studies have shown that the mandated use of PDMPs did not significantly decrease opioid prescribing of EM providers, when compared to mandated registration and allowing providers to access the data at their discretion.¹⁶

Individual state legislation has placed further limitations on the prescribing of opiate medications by physicians. Federal law does not impose prescribing restrictions on duration or quantity of supply of controlled substances, however 18 states currently have legislation restricting prescribing practices.¹⁷ While there has been a reduction in opioid prescribing with this regulation, there is concern amongst providers that proper exceptions have not been instated for populations at risk for being undertreated, include but not limited to hospice and palliative patients.

Naloxone

Naloxone is an opioid receptor antagonist, a medication that can rapidly reverse the respiratory and CNS depression seen in opioid overdoses. The FDA classifies naloxone as a prescription medication, however in light of the opioid epidemic, health care providers have identified the critical role layperson naloxone administration has played in mortality reduction.¹⁸ Individual states control access to this medication, some of which have permitted over the counter distribution by health departments and pharmacies. In patients identified as "high-risk" for misuse or abuse of opioid medications, naloxone is becoming a more frequently prescribed home medication by health care providers, including emergency physicians. While lives have been saved by EMS and family member administration of naloxone, there remains the debate of legal liability. As outlined in the Model Naloxone Access Act by National Alliance for Model State Drug Laws, ACEP supports legislation to protect health care providers and civilians from "civil, professional, and criminal liability for failure or misuse of bystander naloxone."¹⁹

Federal Action

On October 26, 2017, the HHS Secretary declared the opioid epidemic to be a national public health emergency.²⁰ While the opioid crisis had been ongoing for years, opioid-related overdoses had increased by nearly 30% from 2016 to 2017.²¹ This increase provided some of the driving force for stronger preventative measures to protect patients from not only the risk of opioid prescribing, but to provide patients who had developed dependence and addiction with a way to gain access to resources to prevent future overdoses. Realizing that the ED was on the forefront of these issues in the opioid crisis, Dr. Mark Rosenberg and other members of the ACEP Board of Directors decided it was imperative to advocate for legislation that could affect ED patients on a national scale. With the experience gained by Dr. Rosenberg at his home institution in New Jersey in developing an alternative to opioids (ALTO) program and a MAT program for those seeking addiction treatment from the ED, two bills were introduced into congress to address this important national issue.²² These two bills were eventually integrated into the “Opioid Crisis Response Act” and signed into law in October 2018.^{27,28,29}

The Preventing Overdoses While in the Emergency Room Act (POWER Act²³) will help families and patients who are at high risk for opioid abuse to gain access to life saving medications, such as naloxone, as well as provide an infrastructure to those patients seeking treatment in the ED due to significant opioid dependence and addiction. It will allow for grants to institutions to not only establish MAT, but also to develop infrastructure in assessing and coordinating care of these patients through processes such as the “warm handoff.” These “warm handoff” programs are being implemented in order to recognize and refer patients with OUD directly from the ED for appropriate outpatient or inpatient behavioral therapy follow-up. For example, in the state of Pennsylvania through the Department of Drug and Alcohol Programs in cooperation with the DOH, they have developed a flow chart that helps EM providers to recognize and risk stratify these patients. They can then either admit these patients where this warm handoff assessment would continue, or discharge the patients with lifesaving medications and referral for outpatient treatment after assessment by a Substance Use Disorder (SUD) Specialist, and communicating to their PMD or other appropriate Substance Use Disorder Specialist to ensure outpatient follow-up and MAT.^{24,25}

The second bill, the ALTO Act²⁶, will address the primary prevention of opioid addiction by helping to fund and develop programs that treat acute and chronic pain in the ED without the use of opioids. Programs like these have already been instituted in some states such as Colorado, where they have been able to demonstrate a reduction of approximately 36% in opioid prescribing.²²

ACEP Advocates for Harm Reduction

As emergency physicians we routinely deal with acute injuries and illness as well as acute exacerbations of chronic conditions that cause our patients pain. It is our duty as physicians to attempt to relieve suffering in a reasonable way. In June 2012, ACEP released a Clinical Policy on “Issues in the Prescribing of Opioids for Adult Patients in the Emergency Department,” including a number of evidence-based recommendations on the prescribing of opioids in the ED for adult patients with non-cancer related pain.³⁰ Following suit, many state ACEP chapters, such as Colorado, have also developed their own recommendations on pain treatment and opioid prescribing in the ED.³¹

FIGURE 26.2. Recommendations for Prescribing Opioids in the ED³⁰

Recommendation	Grade
In patients with low back pain, opioids should be reserved for those patients in severe pain refractory to other alternative forms of analgesia	C
For acute exacerbations of chronic non-cancer pain, the emergency physician should attempt to avoid prescribing opioids if possible	C
Emergency physicians should honor existing pain contracts with patient’s outpatient providers	C
For acute MSK pain, opioids can be prescribed if ineffective treatment with other reasonable alternative medical therapy does not provide effective relief	C
If prescribing opioids, emergency physicians should use short-acting opioids (such as schedule II opioids like oxycodone) for short-term relief	B
If prescribing opioids, use immediate release formulations at the smallest effective dose for a limited duration (< 7 days)	C

***Footnote Evidence Grades:

A — Generally accepted principles for patient management that reflect a high degree of clinical certainty (High level evidence trials).

B — Recommendations for patient management that may identify a particular strategy or range of management strategies that reflect moderate clinical certainty (Moderate level of evidence).

C — Other strategies for patient management that are based on Class III studies, or in the absence of any adequate published literature, based on panel consensus.

ACEP recognizes that as EM providers, we are at the forefront of being able to identify, initiate, and even prescribe medications in the care of those patients who have problems with opioid use disorder, opioid dependence, addiction, or who are at high risk for overdosing. The E-QUAL Collaborative was created by ACEP to help EDs throughout the country study and learn from their own prescribing habits. The goal of the initiative is to help EDs implement ALTO programs, improve opioid prescribing, and adopt harm-reduction programs.³²

ACEP has encouraged widespread training for first-responders in the administration of naloxone for opioid overdose, as well as recognized that prescribing naloxone to those patient who are at high risk for opioid overdose is one option in the chain of prevention.^{33,34} Recent ACEP resolutions have joined other leading medical organizations, such as the AMA, in supporting needle exchanges and development of pilot programs for supervised injection centers.³⁵ These types of programs are aimed at reducing primary overdoses, secondary morbidity from communicable diseases such as HIV and hepatitis, as well as soft tissue and hematogenous infections that lead to devastating complications such as amputations, sepsis, endocarditis, stroke and/or death.^{36,37}

ACEP and other physician-led organizations have recognized the threat of opioid misuse and addiction and led the charge in battling this terrible epidemic. However, there is still much to learn and do in order to protect our patients from the dangers of opioids, while still providing adequate pain control for emergent conditions.

WHAT'S THE ASK?

- When you treat patients at high risk of opioid overdose, consider prescribing naloxone to prevent fatal overdoses.
- Support state and federal legislation that would improve the ability of emergency physicians to initiate appropriate treatment in the ED for patients with opioid use disorder.
- Investigate the policies in your ED and the resources available in your community for the treatment of patients with opioid use disorder.
- Make sure that you are registered for your state's PDMP, and advocate for reasonable state laws surrounding PDMP usage.



DRUG SHORTAGES AND PRESCRIPTION DRUG COSTS

Udit Jain, MD; Sushant Kapoor, DO, MS; Peter S. Kim, MD; Teresa Proietti, DO

On June 12, 2018, the AMA declared drug shortages to be an urgent public health crisis.¹ Although drug shortages have become more apparent in recent times, the problem has been prevalent for over a decade. In 2005, the FDA's Drug Shortage Program reported 61 national drug shortages; by 2011, this number increased four-fold.² A similar trend was seen in the University of Utah's comprehensive drug database, with a three-fold increase in drug shortages from 2001 to 2014.³

In late 2017, Hurricane Maria damaged the main drug manufacturing infrastructure, significantly reducing the supply of saline bags.⁴ The inability to compound hundreds of drugs exacerbated an already prevalent drug shortage problem, leading to a crisis. As of late 2018, the American Society of Health-System Pharmacists listed 188 drug shortages, approximately 40% of which are medications used in the ED for resuscitation, rapid sequence intubation, and the treatment of seizure, sepsis, and acute pain.⁵

Emergency physicians rely on injectable drugs to diagnose and manage acute illnesses. In our rapid-paced and demanding environment, we recognize the negative impact of drug shortages on patient outcomes and the physician-patient relationship. Finding effective alternatives to standard medications is both challenging and costly. ED providers are well versed in the most commonly used drug names, doses, and side effects used for patients in extremis.^{2,3} Limited experience with alternative agents in high-acuity conditions may lead to medication errors and delays in care, ultimately affecting patient safety.^{2,3} The added pressure on hospital pharmacists to identify alternatives, track inventory, and determine how to best ration the limited supply, represents costly and time-consuming endeavors.^{2,6}

Drug shortages have been increasing in frequency while drug costs have been rising. Both of these issues must be addressed to protect patients and our safe practice as emergency physicians.

In addition, informing patients they cannot receive necessary, standard-of-care medication inevitably damages the physician-patient relationship.⁶

The etiology of the drug shortage problem is multifactorial. There is interplay between quality control and pharmaceutical manufacturing issues, as well as current federal policies.²⁻⁴

Quality Control and Pharmaceutical Manufacturing

The landscape of pharmaceutical manufacturing has changed in recent years. In 2015, Pfizer acquired Hospira, the world's leading provider of generic sterile injectable drugs.⁷ Prior to and following the acquisition, poor quality control, faulty manufacturing equipment, and contamination issues have caused significant delays in generic drug development.⁷ Another problem is difficulty in obtaining raw materials.⁷ This is best demonstrated in the case of intravenous opiates, 75% of which are produced by Pfizer.⁷ The Drug Enforcement Agency (DEA) strictly allocates the core ingredient to manufacturers based on previous sales.⁷ Preventing access to raw materials to the already small number of generic drug manufacturers further exacerbates the drug shortage problem. Petitions to the DEA from various medical societies has improved the allotment process; however, there are still many problems with the process.⁷ Finally, the cost associated with producing generic injectable drugs is higher than the profit margin, limiting incentive for production.^{2,4,7}

Federal Policy

In 2012, the Food and Drug Administration Safety and Innovation Act (FDASIA) mandated that pharmaceutical manufacturers report drug shortages to the FDA at least 6 months in advance.^{3,4} The intent was that this process would allow the FDA to work with manufacturers to resolve production issues, identify alternative manufacturers, and expedite inspections and the review process.³ Although this law decreased the number of all new acute drug shortages, it did little to decrease the total number of active acute care drug shortages.³ The FDASIA does not:⁴

1. Obligate manufacturers to disclose the specific problem that caused the interruption
2. Obligate manufacturers to provide timeline for resolution
3. Require the manufacturer to continue making the drug
4. Penalize the manufacturer for not reporting the drug shortage
5. Require manufacturers to establish contingency planning

The FDA has also tried to mitigate drug shortages under Section 503B, which allows certain pharmacies to compound drugs in short-supply without a prescription.⁴ However, the unpredictability of drug shortages and their duration prevents quick mobilization of these outsourced pharmacies to replenish drug supplies.⁴

There is currently no policy to address the impact of mergers on drug supplies, as in the case of Pfizer and Hospira.⁴

Almost all hospitals belong to a Group Purchasing Organization (GPO), which leverages the purchasing power of multiple providers to negotiate a better contract with pharmaceutical suppliers.^{8,9} When the Medicare Anti-Kickback Safe Harbor Statute was passed in 1987, it pardoned GPOs from being criminally prosecuted for taking payments, in the form of administrative fees, from the pharmaceutical suppliers.^{8,9} This creates a conflict of interest because it changes the original role of the GPOs, which was to reduce drug costs, to becoming a representative of the pharmaceutical companies.⁹ This could drive down profit margins for the manufacturers, further limiting incentive for generic medication production and some feel that GPOs may be a significant contributor to our current drug shortage crisis.⁸

The Economics of Drug Manufacturing

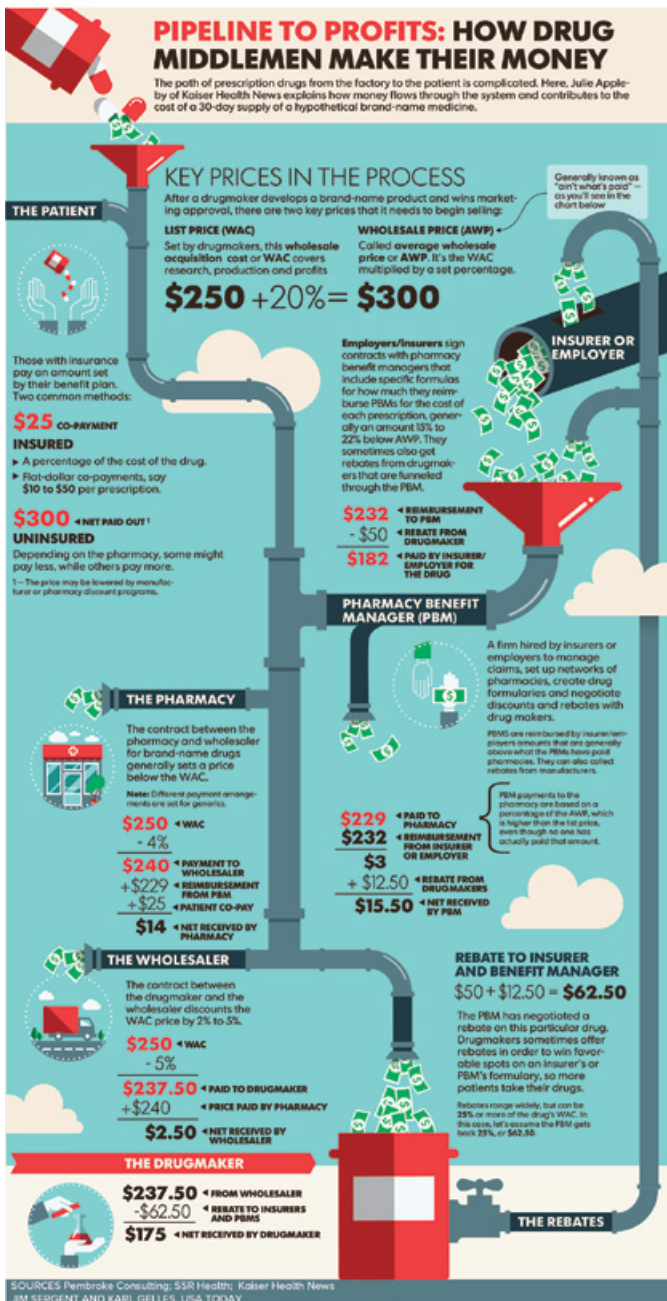
The prices of 14 common medications were increased by 20% to 85% between 2008 and 2015, according to a 2017 Government Accountability Office report.¹⁰ This pricing increase is not clearly explained by pharmaceutical companies and puts lifesaving treatments, such as insulin, out of reach for patients who rely on them. When patients are not able to access crucial treatments because of high costs, this worsens their health and indirectly causes health care costs to rise.¹¹

In some cases, patients who cannot afford their regular medications may arrive at the ED at more advanced stages of disease.¹² Consider the national increase in injectable epinephrine prices that caught national attention in 2016. The price for the commonly prescribed 2-pack of auto-injectors went from \$100 in 2009 to \$600 in 2016. Many patients may require yearly renewals for this medication, which is single-use and must be readily available at home, school, and work.¹³ Without this time-sensitive drug readily available, patients cannot treat their symptoms of anaphylaxis early, and their chance of ending up in the ED with a life-threatening allergic reaction increases.

Pharmacy benefit managers (PBMs) serve as the middleman and strike deals between drug makers and health insurers. They create formularies and make coverage decisions. PBMs negotiate rebates from drug manufacturers to insurers in exchange for better coverage terms for insured patients — often in the form of lower co-pays for brand name drugs. But the system has come under scrutiny for the lack of transparency and for the burden it places on consumers. Policyholders' co-pays and other out-of-pocket costs are typically based on the list price of the drug, not the cost after the rebate, so only insurers, and not patients, benefit from the discounts generated by the rebates.¹⁴⁻¹⁶

FIGURE 271. Infographic¹⁷

USA TODAY
REPRODUCED BY PERM



Medicare and Medicaid cover 1 out of every 3 Americans, yet they are not allowed to negotiate prices on prescription drugs.¹¹ Medicaid currently operates under the “best price” rule. This rule requires drug manufacturers to offer state Medicaid programs the “best price” they provide to any other purchaser, plus a rebate of 23.1% off that price, and in return, the Medicaid program will cover all of that manufacturer’s drugs.¹⁸ Drug manufacturers must participate in this program or risk exclusion from all federal programs (including Medicare). Critics argue this program is failing to help keep drug costs down because it inhibits the ability of private insurers to negotiate with drug manufacturers and inhibits the ability of Medicaid programs to use a formulary to keep costs down, as all drugs made by manufacturers must be covered under this program.¹⁸ The Medicare Modernization Act of 2003 (MMA), which established Medicare Part D, included a ban on the ability for CMS to negotiate directly with drug companies to set prescription drug prices.¹⁹

The Trump administration considered value-based pricing as a solution to high drug costs. This pricing model bases the cost on the product’s benefit to the customer, instead of on the cost of developing the product. In the context of medications, it is unclear whether it will truly achieve savings for the patient. Instead, highly effective drugs could be incredibly expensive — meaning the drugs that may be the most beneficial to patients could be the least affordable.¹⁹⁻²⁰

Physician Advocacy on Pharmaceutical Costs

The AMA has made efforts to improve patient access, lower costs, and reduce administrative burdens without stifling innovation. The AMA has opposed provisions in pharmacies’ contracts with PBMs that prohibit pharmacists from disclosing that a patient’s co-pay is higher than the drug’s cash price, and has advocated for policies that prohibit price gouging on prescription medications.²¹ There is also a push for price transparency via a grassroots campaign, TruthinRx.com,¹¹ a website created to hear directly from patients and physicians about their struggles to afford medications.

Physician Advocacy on Drug Shortages

To address the issue of worsening acute care drug shortages, ACEP successfully lobbied Congress to ask the FDA to establish an “interagency, interdepartmental, and multidisciplinary task force to determine the root causes of drug shortages and develop recommendations to Congress to ensure patient access to vital emergency care.” In May 2018, ACEP developed a letter to FDA calling for changes; this letter had bipartisan support from members of congress and led directly to action by the FDA.^{22,23} The FDA Drug Shortages Task Force aims to assess the adverse consequences of drug shortages on patients and health care

providers, and then identify the root causes and drivers of drug shortages so that strategies for preventing or mitigating drug shortages can be identified and enacted.²²⁻²⁴

Summary

Over the past few years, drug shortages have been increasing in frequency while drug costs have been rising. HHS and the Department of Homeland Security have been urged by multiple medical societies to view the drug shortage crisis as a national security initiative.¹ High drug costs have drawn increasing media attention as patient's lives are put at risk when they cannot afford necessary medications. Both of these issues must be addressed by policy change to protect patients and our safe practice as emergency physicians.

WHAT'S THE ASK?

- Share your stories to highlight the challenges and harm active drug shortages and high drug costs pose for our patients.
- Advocate for revisions to the current policies and regulations to mitigate the problems of high drug costs and drug shortages.



SOCIAL DETERMINANTS OF HEALTH

Callan Fockele, MD, MS; Hannah Janeway, MD; Dennis Hsieh, MD, JD

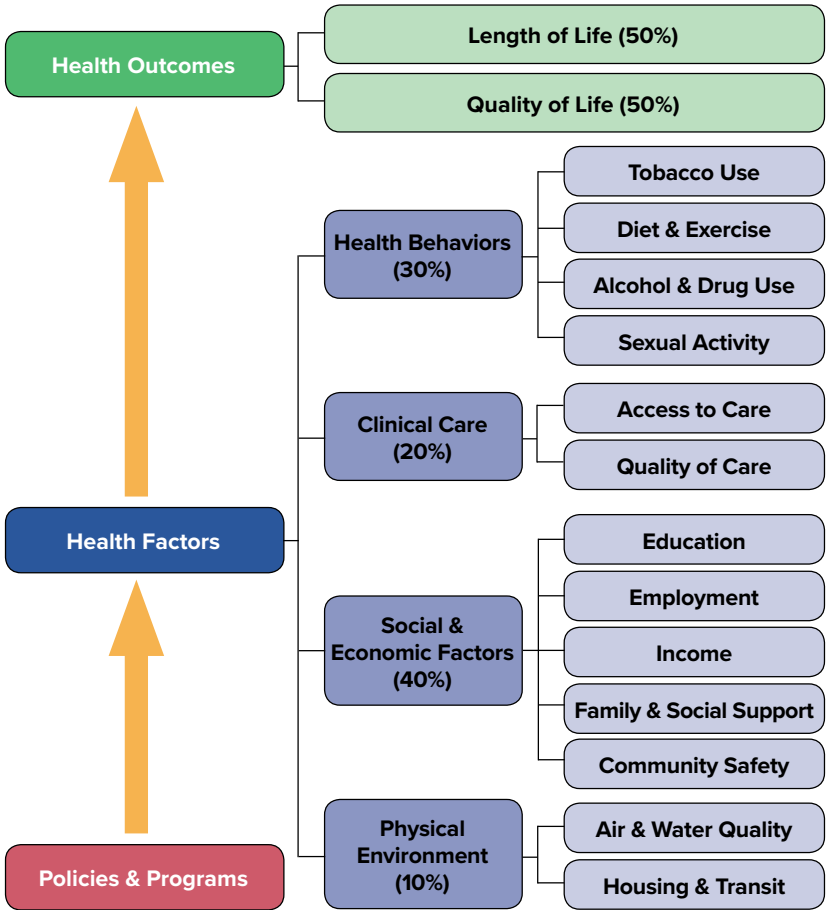
Background

Sheldon has been to the emergency department most nights this week. He is homeless, has congestive heart failure, and is here for his nightly sandwich, furosemide, and nap. Uninsured, Sheldon has given up on filling his medications. Instead, he comes to the ED for medications, food, and shelter.

Social circumstances have a significant impact on health, and these problems often manifest in the ED. As the front-line providers of the health care system, emergency physicians care for patients in crisis. Although their chief concern may be chest pain or headache, many ED patients also face issues of homelessness, food insecurity, income inequality, racial discrimination, and addiction. Collectively these social, economic, environmental, and legal issues are known as the social determinants of health (SDOH).¹ While emergency physicians focus on treating acute illness or acute manifestations of chronic illness, it is important to recognize that many of these illnesses are the downstream consequences of unaddressed SDOH. The County Health Rankings & Roadmaps created an overall modeling for length and quality of life in all counties across the U.S. and found that SDOH account for 50% of health outcomes — length of life and quality of life — whereas clinical care accounts for only 20% (Figure 28.1).² Unsurprisingly, recent research shows that addressing SDOH improves health outcomes while decreasing costs.³

Emergency physicians are experts on the social issues affecting the health and wellbeing of their community, and it is their obligation to stand up, show up, march, lobby, and advocate on behalf their patients.

FIGURE 28.1. Impact of Social Determinants of Health



County Health Rankings Model © 2014 UWPHI

Sheldon’s case exemplifies how homelessness leads to an inability to adhere to the recommended diet and medications for his condition and exacerbates his CHF. Many ED patients have chief complaints that are directly related to their living situation. Providing stable housing has shown remarkable outcomes in terms of savings, improved health, primary care connection, and decreased ED utilization.^{4,6}

However, addressing SDOH is a challenge for emergency physicians, given busy EDs with limited resources.³ Medical education does little to train physicians to address these problems.⁷ Furthermore, data compiled by the AAMC shows that most medical students come from middle or high-income families with parents who

have college or graduate degrees^{8,9} and thus may have a poor understanding of the realities of vulnerable groups. Emergency physicians are often hesitant to ask about SDOH concerns and may defer to social workers when issues arise.¹⁰⁻¹² In this chapter we put forth a framework for emergency physicians to learn, educate, screen, address, and advocate for patients' SDOH needs.

Educating Yourself

To date, there is no comprehensive website or reading list for self-directed learning on SDOH in the ED. The International and Domestic Health Equity and Leadership (IDHEAL) section at UCLA has a suggested reading list with short descriptions that have been vetted by its members.¹³ For beginners, the 2009 PBS series "Unnatural Causes...Is inequality making us sick?" (<https://www.unnaturalcauses.org>) provides an overview about SDOH. For more advanced learners, SIREN (Social Interventions Research and Evaluations Network) at UCSF has an extensive Evidence Library that contains hundreds of articles looking at social interventions in medicine.¹⁴

Educating Learners

Medical students, residents, and academic/clinical faculty should advocate for greater emphasis on SDOH throughout medical education as it is a factor in health outcomes. As the front line of the health care system, emergency physicians witness the everyday effects of homelessness, hunger, and other SDOH on patients; therefore, EM providers have a particular interest in learning how to address SDOH.

Medical School

In the pre-clinical years, a formal social medicine curriculum, similar to those at the Alpert Medical School¹⁵ and The Pritzker School of Medicine,¹⁶ should be instituted to accurately reflect the patient population and teach basic principals in SDOH. Objective Structured Clinical Examinations (OSCEs) can be reformatted with new cases highlighting SDOH and grading can include students addressing SDOH in their evaluation and plan.

In the clinical years, emergency medicine clerkships and sub-internships should teach principles related to SDOH and evaluate the student based upon these principles as part of the history taking and intervention. If a checklist is given for basic procedures, interviewing a certain number of patients in detail about their SDOH challenges/barriers should be included. Residents and faculty can also educate students during teaching rounds or at the bedside.

Residency

The ACGME recently found there is currently a "substantive deficiency in preparing residents and fellows to both identify and address disparities in health care outcomes, as well as ways to minimize or eliminate them."¹⁷ However, no

education requirement or standard has been established to remedy this. In general, SDOH should be an integral part of the residency curriculum and be incorporated as a component of resident conferences, simulations, journal club and bedside teaching and be not relegated to a single lecture.¹⁸

IDHEAL has a collection of short bedside teaching modules with teaching guides that can be taught on shift by any interested faculty or resident.¹⁹ Residents should be given real-time feedback during presentations about addressing SDOH when appropriate. Several residency programs have SDOH “tracks” for interested residents focused on SDOH research and career development. One such program is Stanford’s Global and Population Health focus in their ACCEL program, which allows residents to focus on scholarly projects and advanced professional development, or Harbor-UCLA’s Social Emergency Medicine/Health Equity Selective Track; these programs can serve as models for other residency programs. Residents should also be encouraged to interact with community organizations on social issues pertinent to their patient populations to narrow the gap between health care and the community and help them gain an improved understanding of SDOH.

Fellowships

There are SEM, health policy, and population health-related fellowships, many of which are outlined in the EMRA Fellowship Guide.²⁰ Examples include the Stanford and UCLA (IdHEAL) population and social EM fellowships and the National Clinical Scholars Program.

Addressing Social Determinants of Health in the ED

Identifying SDOH barriers through systematic screening as outlined below can remove some of the burden from the provider. However, the provider also has the responsibility to inquire about social factors that influence disease states and prevent treatment success. Not infrequently, social determinants of health are uncovered in the process of understanding treatment failures, poor management of chronic disease, or frequent recidivism. For example, since Sheldon cannot afford his CHF medications and does not have transportation to the pharmacy, he is failing outpatient CHF management.

Recognizing SDOH During a Patient Encounter

Due to the fast-paced nature of the ED and provider reliance on pattern recognition, it is easy to fall back on assumptions instead of probing for understanding. Implicit biases are attitudes, stereotypes and conditioned thinking that affect our understanding and interactions with the world and others in an unconscious manner. A recent systematic review indicates that health care professionals have the same rate of implicit bias as the general population and that this affects patient care in terms of treatment for acute myocardial infraction,

asthma, and pain.^{21,22} Sometimes it is faster and easier to blame patients for their lack of self-care than to understand the complex web of factors that affect a patient's ability to adhere to a treatment regimen. While the time-limited nature of emergency medicine makes it impossible for providers to screen patients fully for SDOH during ED encounters, emergency physicians should take the time to ask pointed questions that can improve treatment plans and improve patient outcomes.

Emergency physicians with an interest in the role of implicit bias in EM can take the Implicit Association Tests (IAT) to better understand the role of implicit bias in their practice.²³ Further reading is available through IAT modules²⁴ or through targeted readings or a video series put together by UCLA.²⁵ Based on these modules, emergency physicians can incorporate additional questions to understand potential barriers to treatment success and to probe treatment failures.

Understanding Your Role in Addressing Social Determinants

Emergency physicians are team leaders, and their attitudes and biases will set the tone for the department during any given shift. To set a positive tone, emergency physicians should remind the team that their goal in the ED is to serve as healers and advocates for the most vulnerable. Nurses can be helpful in understanding patient barriers because they spend more time at the bedside. Engaging other members of the team about potential barriers to care can emphasize the importance. The physician is also responsible for reorienting team members when disparaging comments are being made about patients. It is easy to blame patients for their disease, and a simple reminder of SDOH can be effective. For instance, in the case of an asthmatic child repetitively being brought to the ED for exacerbations, focusing on the built environment or access to affordable clean housing can set an example for other team members.

Although emergency physicians cannot always address SDOH individually, they can involve social work, convene stakeholders, and advocate the allocation of resources for identifying and addressing SDOH. Establishing programs or building community partnerships that address gaps in resources offered by social work and hospital resources can be a great benefit to emergency patients. The Levitt Center at Highland Hospital offers a resource list on its website outlining successful projects at a variety of institutions.²⁶

Emergency physicians can reorient the team and create an environment focused on understanding vulnerable patients. Emergency physicians can be a leader and work with other departments on addressing gaps in resource provision. If a physician's group or academic program has a journal or book club, dedicating a month to SEM could be beneficial for all.

Identifying/Screening for & Addressing SDOH Concerns

ED providers must perform a needs assessment in order to systematically address the SDOH that affect patients' health. We recommend implementing a SDOH screener, as providers generally have a poor understanding of patients' SDOH priorities and needs.^{27,28} Various patient screening tools have been proposed over the years to screen for upstream social issues that may contribute to poor health outcomes.^{29,30} Small studies show that concerns around housing, food, income/employment, and access to care are often the most prevalent²⁷ and should be the starting point of screening. However, questions should be discreet and actionable to avoid frustration — so base questions upon what resources are available locally.

Integrating screening questions into the ED workflow can be challenging. Most EDs do not have extra funding or staff available to implement a dedicated screen. Some of the questions, such as those screening for intimate partner violence, may already be part of the workflow. It's crucial to work with nursing, operations, and social work to determine where in the ED visit these additional questions should be added.

When a patient screens positive, a multifaceted approach is needed. Handouts and electronic resource directories such as 1 Degree (www.1deg.org) are the easiest, but the least effective. Most areas also have access to a telephonic resource directory, such as 2-1-1, where individuals can call in and receive real-time assistance with searching for resources. Social work can provide a higher level of service, but many EDs do not have 24/7 social work coverage. Finally, building out partnerships with local community organizations that are funded to address many of these issues can lead to efficacious warm handoffs where a patient is directly connected to an individual at the organization who can then work with the patient to meet his/her need. However, often there are insufficient local resources to meet patients' SDOH needs, highlighting the need for further advocacy.

Advocacy

As a physician and statesman, Rudolf Virchow saw the world as a social experiment of economic and political forces on health: "Medicine...has the obligation to point out problems and to attempt their theoretical solution: the politician, the practical anthropologist, must find the means for their actual solution. The physicians are the natural attorneys of the poor, and social problems fall to a large extent within their jurisdiction."³¹ In addition to their clinical work, emergency physicians have the power, knowledge, and privilege to advocate for their patients outside the hospital walls.

Know your power.

Emergency physicians witness the downstream effects of the SDOH every day. They are the gateway to the health care system, and their doors are always open to the most vulnerable patients. Because of their clinical exposure to patients'

SDOH concerns, emergency physicians are experts on the social issues affecting the health and wellbeing of their community, and it is their obligation to stand up, show up, march, lobby, and advocate on behalf their patients.

Some residencies have created SEM interest groups committed to meeting a couple hours per month to digest issues related to the SDOH. These events range from happy hours and journal clubs focused on public health to town hall meetings and rallies. Local work is shared with the wider EM community through social media using #SocialEM.

Know your patient population.

Although emergency physicians are intimately familiar with the social determinants of health through their clinical work, their advocacy should be informed not only by anecdotal data but also by evidence-based, community-driven issue identification. A recent systematic review of SEM literature found a high prevalence of homelessness, poverty, housing insecurity, food insecurity, unemployment, difficulty paying for health care, and difficulty affording basic expenses among emergency department patients.³² Further perspective can be provided by community based participatory research (CBPR), which actively engages community members in all aspects of the research process, providing a step toward political action. For example, a study in New Haven used CBPR to identify and interview key stakeholders working on homelessness within their community, propose the development of a medical respite for homeless patients discharged after an acute hospital visit, and advocate for funding from the Connecticut legislature. Their intervention decreased 30-day inpatient readmission rates for homeless patients from 50.8% to 21.6% during their study period.³³

Know your hospital and community partners.

Instead of advocating for patients in isolation, emergency physicians may achieve greater success by partnering with other health care and community partners. Many, such as social workers and volunteers, work within their health system. However, the issues affecting their patients are undoubtedly interdisciplinary, and many outside of medicine work on these issues from different vantage points including local government, public health, and public policy. Additionally, community organizations, including homeless shelters, hygiene centers, food banks, and needle exchange programs, already serve their patient population and are natural allies.

Organizing a SEM residency conference is a unique opportunity to invite health care and community partners to participate in panels and workshops on substance use, homelessness, immigration, and other issues related to SDOH. This will not only provide educational value but also an opportunity for consortium building.

Know your politicians.

Emergency physicians shape health policy by working with elected officials, ranging from city council members and mayors to members of Congress and the president. Despite differences in authority and influence, officeholders are elected and, thus, are dependent upon their constituents for power. For this reason, emergency physicians must target elected officials, share patients' stories, and hold them accountable for addressing SDOH.

This work begins with identifying local political allies. Good clues as to who might be helpful are officials who serve on medically related committees or task forces, have sponsored relevant bills, or whose districts are home to medical and social service facilities. Informed by this research and clad in white coats, emergency physicians can attract public attention by asking questions during town hall meetings, organizing protests during public events, publishing letters to the editor, and taking to social media. Additionally, the influence of physicians can also be felt privately through issue-focused office visits and coordinated calls.

Know your lobbying bodies.

Strengthened by numbers and, often, financial backing, medical interest groups lobby elected officials and influence health policy. These institutions vary widely in their representation and goals. Professional organizations such as EMRA and ACEP not only provide state and national advocacy for the specialty but also leadership roles that allow residents to write policy, meet with politicians, and enact systemic changes that affect their patients' lives. Both ACEP and the Society for Academic Emergency Medicine recently recognized the importance of these issues and formed the Section on SEM and the Interest Group on SEM and Population Health, respectively.

In contrast, grassroots organizations thrust their specific issues into the political dialogue. For instance, Physicians for Social Responsibility (PSR) educates policymakers around the health threats of nuclear proliferation, climate change, and income inequality, and the American Foundation for Firearm Injury Reduction in Medicine (AFFIRM) addresses the epidemic of gun violence by funding and promoting firearm injury research.

WHAT'S THE ASK?

- Ask for social determinants to be included in your didactic curriculum.
- Create a team-based environment that acknowledges and addresses patients' social needs.
- Perform a social needs assessment of your patient population, and consider using these data to inform a quality improvement project.
- Work with partners at the health system, local, state, and/or national level to advocate on behalf of patients to address patients' social needs.

WOMEN'S HEALTH

Rosalia Holzman, MD; Casey L. Lawson, MD;
Kathleen Cowling, DO, MS, MBA, FACEP

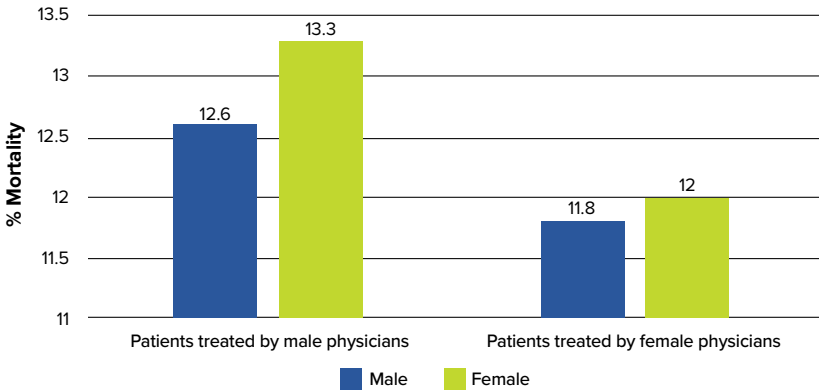
Policy and social constraints have heavily influenced both reproductive health care and women's health care in general. Researchers are increasingly investigating gender and sex-based disparities in disease diagnosis, treatment options, and outcomes across all areas of care, including emergency medicine. Women's health encompasses the science needed to provide appropriate medical and reproductive care that also addresses women's relationships, home, and work lives. The reach of women's health goes beyond research and reproductive health topics to the very core of social biases regarding women.

Research is demonstrating significant sex-based physiologic differences in acute presentations of emergent conditions that had previously been unrecognized.

Gender-Specific Emergency Medicine

Cardiovascular disease is the No. 1 cause of death in the United States for men and women. Advances in prevention, diagnosis, and treatment have led to a decline in mortality; however, this benefit has more impact in the male population. In fact, over the past 3 decades, for women under age 55 there has been an increase in mortality from heart disease.^{1,2} Studies show higher mortality after a myocardial infarction (MI) in younger women compared to their male counterparts, even after accounting for differences in medical history, the severity of the infarct, and early management.³ Interestingly, recent data also demonstrates a sex-based difference in mortality based on the gender of the treating physician.⁴ Overall, there was improved mortality in patients suffering from an MI who were treated by female physicians. In one study, male patients treated by a male physician had a 12.6% mortality rate and female patients treated by a male physician had a 13.3% mortality rate.⁴ However, if the patients were treated by a female physician, they had an 11.8% and a 12% mortality rate, respectively.⁴ This data shows how outcomes can vary significantly by sex, and also shows that the gender of the treating physician can have an impact. This may demonstrate an unconscious gender bias toward female patients that female physicians are more frequently able to avoid.

FIGURE 29.1. Patient-Physician Gender and Mortality After Myocardial Infarction³



There is growing evidence of significant sex-based differences in the pathophysiology behind common, acute, and emergent conditions.⁵ This leads to variation in the time to diagnosis and mortality of various illnesses diagnosed and treated in the ED, including cardiovascular disease, COPD, and neurologic emergencies.

Emerging studies are finding variability in the risk different factors confer. Little is understood about sex-based variances in risk scores we use for acute coronary syndrome.⁵ Estrogen has been understood to have cardiovascular protective benefits, decreasing pre-menopausal women's overall risk for cardiovascular disease. It is generally understood tobacco use increases risk for cardiovascular disease, but as nicotine down-regulates estrogen, it comparatively increases a woman's risk more than a man's.⁵ Women with migraines or on oral contraceptives have an increased risk for ischemic stroke and should make providers cautious with the use of vasoactive agents such as triptans.⁵

Women sometimes experience a delay in the diagnosis of disease due to their gender. As the number of female smokers increased, there was a subsequent increase in the incidence of COPD, which had historically been a more common diagnosis among men.⁵ Without recognizing this change, some women experienced a delay in their diagnosis of COPD as they were referred by physicians for testing less frequently than men.⁶ This lack of testing could result in misdiagnosis or delay of appropriate care for the affected women when they present to the ED with undifferentiated respiratory distress. Women are also referred less often for cardiac testing such as stress tests and cardiac catheterizations when they present with potential symptoms of ACS.⁵ In addition, women in atrial fibrillation are less frequently started on anticoagulation, likely

conferring an increased risk of future ischemic stroke. Women with ischemic stroke experience longer door-to-treatment times and are treated less frequently with tissue plasminogen activator.⁵ Research continues to demonstrate significant sex- and gender-based differences in many other areas, and it is important to remain informed of these distinctions to provide better care and improve patient outcomes.

Historical Barriers to the Inclusion of Females in Research

Historically, research studies have been focused on men. An FDA guideline in 1977 urged the exclusion of women of “child-bearing potential” from clinical trials except in life-threatening conditions.⁷ Caucasian males were the “norm” study population, and women were assumed to be an expensive test group, in part due to fluctuating hormone levels.^{7,8} This hindered physicians’ ability to properly diagnose, educate, and treat women. It wasn’t until the 1980s that the medical community realized its quality and quantity of knowledge about women’s health was lacking.

The FDA released a guidance statement in 1993 encouraging gender inclusion in early clinical trials.⁹ It was intended to be used as a drug development industry guidance standard. This new guideline came about because of concerns from the scientific community (including physicians, researchers, pharmacists, and drug manufacturers) that the effects of drugs on female physiology were not understood due to a paucity of information. Even many years after this ban was lifted, in 2001, a review of clinical trials found that almost 90% of researchers did not conduct gender-specific analysis.¹⁰ For example, heart disease is the leading cause of death for women in the United States, but only about 20% of enrolled patients in CVD research studies are women.^{11,12}

Women’s exclusion from clinical trials and their grouping along with men during data analysis affects the way that we practice medicine today. Emergency physicians can change this and be the springboard for pointing out sex and gender differences across many areas of medicine. Many of the diseases seen in the ED every day have subtle differences based on gender. Gender-specific medicine is about improving care for men and women, boys and girls, using knowledge of different risk factors and medication responses.

Sex and gender disparities exist in the participation of female patients in research, and also in the numbers of female researchers. Across the globe, as of June 2018, headcounts of persons employed in research and development show that less than 30% of researchers are women.¹³ Women who conduct research are paid less, publish less, and largely do not progress forward with their careers to the same extent that men do, which may be in part due to bias regarding

publication in journals with high impact factors.^{14,15} It is critical that more women are recruited into medicine and science, and that subtle biases and prejudices are avoided to ensure that men and women receive the same opportunities, teaching, and mentorship.

Access to Reproductive Health Care

The ACA aimed to improve access to health care for all Americans, both men and women. It addressed issues such as pre-existing conditions, along with women's health — including access to preventive health care. All health care plans are required to cover specific essential health benefits including pregnancy, maternity, and newborn care, along with preventive services¹⁶ like health screenings (such as lab tests for sexually transmitted infections and anemia), contraception, and well-women visits. Under the ACA, the number of insured women of reproductive age increased.¹⁷ Improved access to insurance and preventive services led to improved public health, including a reduction in unintended pregnancies.^{18,19}

An important indicator of national health is infant mortality. The United States' infant mortality rate remains higher than most other developed countries²⁰ and the most common causes of infant mortality include preterm birth, low birth weight, and birth defects.²¹ Many of these outcomes can be prevented or managed early when expectant mothers have access to proper prenatal care. Between 2010 and 2016, improved rates in infant mortality were noted in states that accepted Medicaid expansion under the ACA, further demonstrating the importance of access to prenatal care to reduce infant mortality.²²

Many uninsured women (especially those who are young or low-income) rely on publicly funded or nonprofit services (such as those associated with Planned Parenthood) for family planning. State policy changes in Texas decreased funding for these family planning services. This change created the opportunity to analyze the effect of these services on women's health. In the 4 years after financial cuts to the federally-funded family planning clinics in specific Texas counties, there was a 3.4% increase in teen birth rates.²³ Texas also passed a law placing restrictions on abortion centers, requiring physicians providing abortions to have admitting privileges at hospitals, and requiring facilities providing abortions to meet the standards of ambulatory surgical centers; the same law restricted medical abortions and banned abortions after 20 weeks.²⁴ These changes led to closure of 31 out of 41 abortion-providing facilities in the state, thus reducing the geographic distribution of these facilities and more than quadrupling the wait times women experienced, from 5 days to 21 days or longer.²⁴ The repercussions were many, including an increase in the number of abortions performed after 12 weeks' gestation, leading to higher

risk of complications.²⁵ Emergency providers directly see effects of these barriers when caring for women who may not have had adequate health screenings, proper access to prenatal care, or who are dealing with unintended pregnancies.

Intimate Partner Violence

Intimate partner violence (IPV) is a serious public health issue that profoundly impacts the lives of patients in the ED. More than 1 in 3 women in the United States will experience IPV in their lifetime.²⁶ IPV includes physical or psychosocial abuse, stalking, threats of harm and intimidation, and rape. By contrast, the number of women who will experience invasive breast cancer is 1 in 8.²⁷ The social and economic costs of IPV are enormous. Emergency physicians must advocate for both men and women who suffer from IPV.

It is not enough to ask patients if they are safe at home only after identifying trauma, bruising, or other marks that are suspicious. Screening protocols are vital in identifying victims of IPV. Identification of victims of IPV by physicians is low, even though most women state they would be comfortable telling a physician about their experience with IPV.²⁴ Further, screeners, whether they are triage nurses or physicians, must be educated on appropriate ways to respond. Many modern EDs are crowded with boarding patients and hallway beds, making screening even more challenging, as it should be done in a private place without any visitors.²⁵

Once a patient has divulged s/he is experiencing IPV, a few critical actions are necessary. It is imperative to ask if the patient feels safe to return home and if there are any children in the home who may be at risk or also experiencing abuse. Emergency physicians should provide resources for these patients, such as information about domestic violence shelters in the area that can provide alternate housing; social workers can be an invaluable resource in providing these materials. In addition, emergency physicians should ask if the patient would like to report the abuse to law enforcement. While elder and child abuse *must* be reported in all 50 states, the same is not true for IPV. Future policy and advocacy efforts could focus both on optimizing screening for IPV and improving the ease of reporting without putting the women at greater risk.

Sexual Assault Nurse Examiners (SANE) play a critical role in IPV treatment and forensic evidence collection. After a victim of rape or sexual abuse has reported abuse, it is incredibly important that, as emergency physicians, we provide them with the support and care they need and deserve without re-victimizing them. SANE nurses play a crucial role because they are well trained to perform evidence collection, as well as provide support, care coordination and follow up. In addition, SANE evidence is the strongest evidence for victims in the

courtroom.^{26,27} However, some facilities do not offer access to SANE nurses for their emergency physicians, possibly because of cost (especially for facilities that do not have large volumes of patients). In this instance, it is important to seek the policy and practice information needed to treat and care for victims of IPV. The paper titled “Managing Intimate Partner Violence in the Emergency Room” by Dr. Esther Choo and Dr. Debra Houry²⁵ is a suggested resource.

Summary

Research is demonstrating significant sex-based physiologic differences in acute presentations of emergent conditions that had previously been unrecognized, affecting women’s access to necessary testing and treatment. Emergency physicians can make a significant difference in this arena by conducting research that involves women and analyzing this data separately to improve clinical outcomes across a wide array of potentially life-threatening conditions. Federal and state policies also impact women’s health in both access to reproductive health services and appropriate care for patients experiencing intimate partner violence. Emergency physicians can play an important role in advocating for improved screening, resources, and awareness of intimate partner violence and learn about available resources in the geographical areas where they practice.

WHAT’S THE ASK?

- Advocate for mentorship for women in your practice and equitable evaluation practices for all members of your team, regardless of gender.
- Conduct and advocate for research that analyzes gender and sex differences.
- On a state and federal level, advocate for access to women’s health services and improved screening and resources for patients facing IPV.



HOW A BILL BECOMES A LAW

Nidal Nagib Choujaa; Tracy Marko, MD, MPH; Melanie Stanzer, DO, MMM

Becoming an effective advocate begins with developing an effective understanding of the legislative process.

When “asks” are brought to senators and representatives, it is critical that they are feasible and applicable to the role of the legislative member. Furthermore, learning where a bill stands within the legislative process (the process of becoming a law) will help you tailor a specific ask. The majority of an advocate’s time is spent requesting actions in favor of, or in opposition to, bills that have already been created and introduced to the House and/or Senate. Members of Congress want to hear from their constituents because this is who they represent and ultimately who votes to keep them in office. Advocacy work often starts here. As you progress in your advocacy, you may also meet with other senators or representatives whose roles are more strategic to specific bills, such as members of committees to which a bill is assigned. It is helpful to learn which committees your legislative members serve on to understand their niche within Congress, as well as their familiarity with your bills of interest. This chapter will focus on the U.S. Congress. However, state governments have similar proceedings.

The manner in which a bill becomes law in the United States is a powerful part of the American legislative process and is important for all citizens to understand.

What Is a Bill?

A bill is a proposal introduced to the U.S. House of Representatives and/or Senate that has the potential to become a law if enacted during the 2-year Congress in which it was introduced. Together, the House of Representatives and the Senate form Congress, the legislative branch of the United States government. Every 2 years, the entire House of Representatives is open to election. This is what constitutes the 2-year Congress. In contrast, senators serve a 6-year term, and only one-third of the Senate is up for election every 2 years. Each Congress is further divided into 2 sessions, which run from January to December.

Bills can only be introduced by a member of Congress. However, the bill doesn't have to be written by the member; it can be authored by any citizen, and increasingly bills are also written by lobbyists.¹ If a bill is introduced into the House of Representatives, it will be designated with "H.R." followed by a number, which is typically in sequence for that 2-year Congress. Similarly, if it is introduced to the Senate, it will have the designation of "S." followed by a number. In order for a bill to become a law, it must pass both the House and Senate, thus each bill has both a House and Senate form.² A bill can first be passed through one chamber and then sent to the other. More often, though, a bill is introduced simultaneously to both the House and the Senate, usually with somewhat different language that will eventually need to be reconciled before it can become a law. While they have the same general ideas, there are often specific differences that could be significant, such as mechanisms to generate revenue to support new spending.

A bill may also be referred to by the Congress in which it was introduced and further specified by the first or second year (session). For example, the bill H.R. 836: 114th Congress 1st Session was introduced to the 114th Congress in the 1st session of its 2015–2017 term.

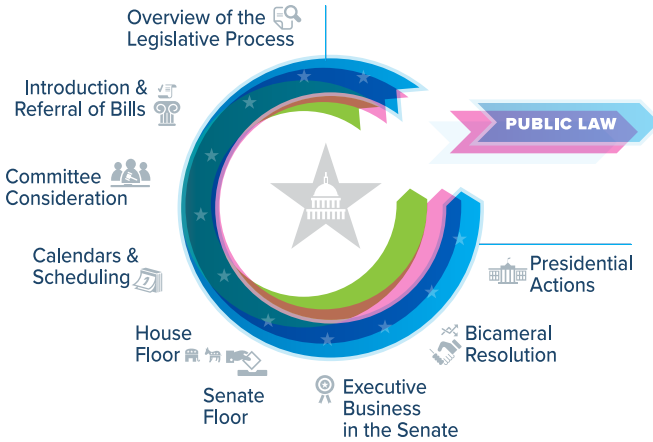
What Is a Resolution?

Another type of legislation similar to a bill is a resolution, which comes in 3 forms: joint, concurrent, and simple resolutions. A joint resolution requires approval by the Senate, House, and president to become a law. The main difference between a resolution and a bill is that joint resolutions are used for continuing or emergency appropriations. Joint resolutions are also used when proposing amendments to the Constitution, in which case approval is required by two-thirds of both Chamber and three-fourths of the states but do not require the president's signature. Concurrent resolutions are most often used to make or change rules that apply to both houses, as such they require passage in both houses but do not require the president's signature. The annual congressional budget resolution is a concurrent resolution. As compared to concurrent resolutions, simple resolutions apply to the proceedings of one house of Congress and only require passage through that house.

The Process

With a few exceptions, a bill goes through a similar process in each chamber of Congress.² However, each bill takes its own course through Congress and may have different rules for debating, amending, and voting. Thousands of bills are introduced each Congress, and only a small percent are voted on and become laws. For example, the 114th Congress ran from January 2015–January 2017 and introduced 12,063 bills and resolutions, of which 661 got a vote (5%), 329 (3%) were enacted into law, and 9 were vetoed by the president without subsequent override by Congress.

FIGURE 30.1. Legislative Process



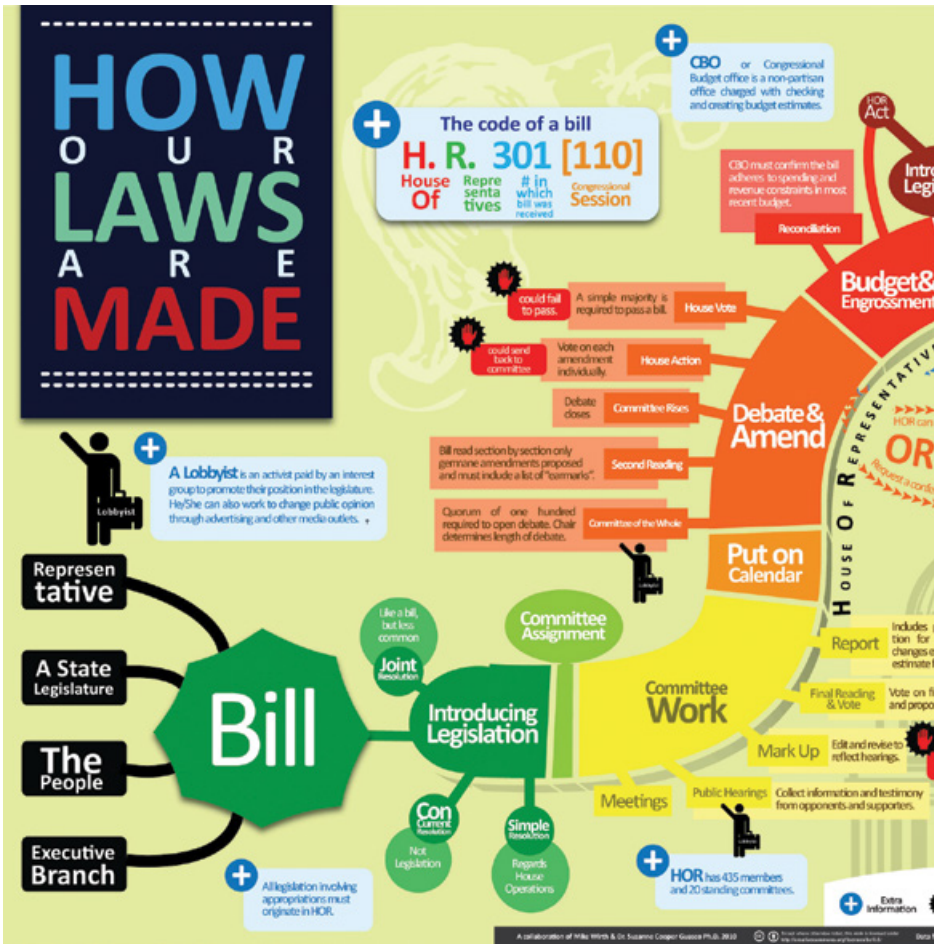
Introduction and Referral

As previously noted, any member of Congress may introduce a bill to their respective chamber of Congress. Bills can be first introduced into either chamber with the exception of revenue generation, which must originate in the House, as well as presidential nomination confirmation and treaty approval, which must be given by the Senate. Prior to introducing bills, Congressional members may ask colleagues to co-sponsor their bill to demonstrate broader support.

After introduction, bills are referred to a committee based on the provisions in the bill. Jurisdiction is determined by the chamber's standing rules and past referral decisions. Committees are comprised of a subgroup of representatives or senators who have been appointed to serve on that committee by their party's leadership and often remain on the same committees through multiple terms, becoming subject matter experts. Getting to serve on specific committees can be an important career move for members as it gives them added influence, ability to shape legislation, and may serve as a prerequisite for those interested in national campaigns. In the House, bills typically are referred to a single committee. If multiple committees are involved, each will work only on the portion of the bill under its jurisdiction. In the Senate, bills are only introduced to the committee with jurisdiction over the predominating issue.

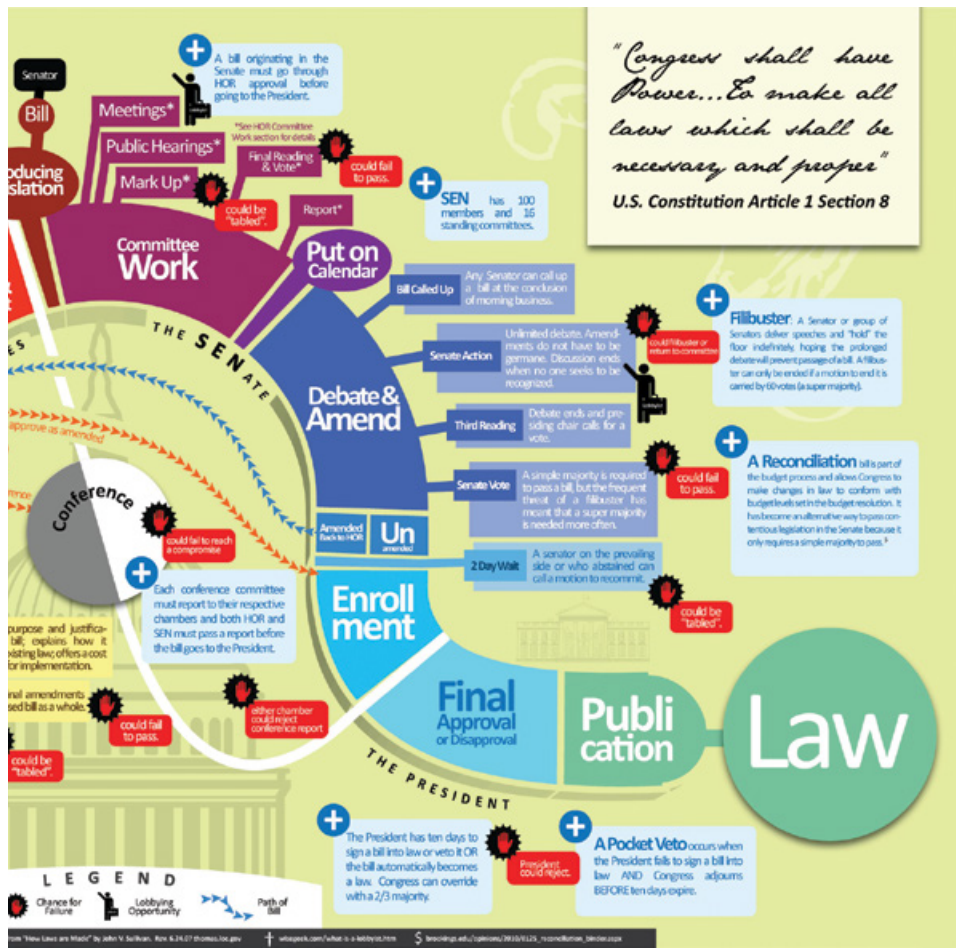
Examples of House committees include: Ways and Means (jurisdiction over tax-writing and revenue), Appropriations, Budget, and Energy and Commerce (jurisdiction includes the Department of Health and Human Services and the Food and Drug Administration). Examples of Senate committees include: Appropriations, Finance, and Health Education Labor and Pensions (HELP). A number of both Senate and House Committees have subcommittees on health care.

FIGURE 30.2. How Our Laws Are Made



Committee Work and Vote

Committees receive more bills than they can feasibly address each session. The committee chair, who is a member of the majority party, determines the agenda for the committee and what bills or issues the committee will formally hear and modify. The chair's prerogative in setting the agenda can serve as a partisan roadblock by which many reasonable bills sponsored by the opposing party never progress. Although not required, most bills considered by a committee have a hearing during which committee members and the public hear about the strengths and weaknesses of the bill from other congressional members, industry, and citizens. Committee members will also discuss bills with other members of Congress and staff in settings that are not open to the public. A committee markup is the final step that allows a bill to advance to the floor.



Committee members will discuss changes and vote on amending the bill and whether to send it to the floor for consideration. The markup is also opened to the public for all bills. Committees often have sub-committees, whose role is to hold hearings and produce markups prior to a full committee evaluation. Sub-committee roles and responsibilities vary by committee.

Calendars and Scheduling

After a committee reports a bill to the House or Senate, it is placed on the respective chamber's calendar. This does not guarantee consideration. The majority party leaders decide which bills the House and Senate will consider, although there are different procedures in each chamber to bring a bill to the floor.

Chamber Proceedings

In the House, most bills follow the “suspension of rules” procedure, which limits debate to 40 minutes and does not allow amendments to be made on the floor. To pass a bill in this way, it must receive a two-thirds vote in its favor. All other bills will be considered under a “special rule” created by the House Rules Committee and adopted by a House vote. The special rule is tailored for each bill and limits the debate time and the number and content of amendments that can be proposed.

The Senate must first vote to bring a bill to the floor for consideration. Unlike the House, there is no time limit to debate or the number of amendments that can be proposed. Senators may speak as long as they wish in an effort to delay and/or prevent a vote from occurring as scheduled, which is called a filibuster. A filibuster can be ended by cloture, which is a three-fifths vote of the Senate to end debate on the bill. One exception to overcoming a filibuster with a simple majority vote is reconciliation. In the recent decades, the use of filibuster and cloture has increased dramatically such that bills in the Senate often require a challenging new norm of a filibuster-proof 60 votes for passage, compared to the simple majority required in the House.

Reconciliation

Reconciliation is another way to avoid Senate filibusters. It can only be used for bills that address the debt limit, spending, and revenues.³ Additionally, it can only be enacted once for each of the above categories during every budget resolution, which is typically once every year. A budget resolution is a concurrent resolution that provides a framework for making budget decisions and sets overall annual spending limits for federal agencies. Although it only requires a majority vote, it is often challenging to pass as it addresses the entire Congress budget.⁴ Additionally, the Byrd rule only allows topics that are relevant to the bill to be introduced.

Reconciliation has played a major role in health care legislation.⁴ The Affordable Care Act was passed with a supermajority vote of 60 to overcome a filibuster in 2009.⁵ In 2010, a reconciliation bill, the Health Care and Education Reconciliation Act of 2010, was passed that made budget changes in the ACA. In 2017, Republicans attempted to start a repeal and replacement effort through reconciliation, which would have significantly changed the budget for the ACA and necessitated a new health care act. Three reconciliation acts were voted on and did not pass the Senate: Better Care Reconciliation Act (43-57), Obamacare Repeal and Reconciliation Act (45-55), and Health Care Freedom Act (49-51).⁶

Full Chamber Vote

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 create a joint version of the two corresponding bills to go immediately back to each chamber for a final vote. Regardless of whether one bill is passed through the two chambers, or two separate bills are combined into one by a conference committee, the final bill approved by both chambers will ultimately travel to the president’s desk if passed.

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, 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.

Actions of the President

After the same bill is passed by the House and Senate, it will be sent to the president. Often the president simply signs the bill into law. 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 two-thirds of each chamber votes 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, as 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.

For example, two separate challenges to the ACA rose to the Supreme Court for judicial review. In *National Federation of Independent Business v. Sebelius* (decided June 28, 2012), the Supreme Court ruled that the individual mandate described in the ACA was constitutional and that states had the right to choose whether or not to expand Medicaid. 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. Both of these cases had a significant impact on the ongoing implementation of the ACA.

What Happens After Passage

Before a bill becomes a law, Congress must decide how to fund it, using the current “pay as you go” budgeting rule, also known as “pay-fors.”⁷ Initially in effect from 1990–2002, and then re-enacted by the 111th Congress and President 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 or by legalizing another law that will generate enough revenue, thereby offsetting costs and making it revenue-neutral. For example, if a new health care law requires \$10 million to enact fully, then \$10 million must be cut from other programs or raised through revenue-generating programs.

Congress uses a process called sequestration to limit budgetary spending.^{8,9} If the federal budget balance is negative at the end of a Congressional session, the session’s deficit is balanced by deducting from other programs funded by the federal budget. Certain programs are exempt from sequestration, such as those considered to be direct spending. Direct spending is typically composed of “entitlement spending” like Social Security, Medicaid, all programs under the Department of Veterans Affairs, net interest on the debt, and income tax credits, among others. Medicare is not exempt; however, it is limited to a 4% reduction. This can magnify the impact of cuts on the parts of the budget deemed discretionary.

Finally, if offsetting cuts to programs or additional revenue cannot be found to fund the programs or laws that are passed, then the new law or aspects of the law may be underfunded or not funded at all.¹⁰ For example, in the ACA 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 manner in which a bill becomes law in the United States is a 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?

- Use your understanding of how a bill becomes a law to engage and participate in advocacy efforts at appropriate times in the process.
- Understand what makes a good “ask.” For example, requesting your representative or senator to co-sponsor, suggest an amendment to, or vote in favor of, or in opposition to, a bill being considered on the floor.
- Learn on which committees your legislative members serve to understand their niche and role within Congress as well as their familiarity with your bills of interest. This will enable you to appropriately tailor the background information you provide and guide your discussion.



LEGISLATIVE ADVOCACY

Michael S. Balkin, MD; Nicholas Robbins, MD; Heidi Knowles, MD, FACEP

Throughout their careers, emergency physicians will encounter patients suffering the medical consequences of broader social and political issues.

Political advocacy offers the opportunity to effect societal change that will improve the conditions for patients and physicians alike. One of the many ways to advocate is to engage with legislators directly. The following sections provide a framework for becoming engaged with legislators at all levels of government as an emergency medicine advocate.¹⁻³

Identify Your Specific Passion: Why You Advocate

According to the ACEP Code of Ethics for Emergency Physicians, emergency physicians have an ethical duty to promote population health through advocacy and to participate 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. Consider these examples:

- ACEP members urged several U.S. legislators to support bills aimed at curbing opioid use in 2018;⁶ H.R. 6 was subsequently signed into law that provides grants to support treatment for emergency patients with substance-use disorders and includes many provisions aimed at preventing opioid addictions.

Advocacy can take many forms — but in every case, it’s important to know your lawmakers, be familiar with the legislative process, and become effective in communicating with the parties who influence that process.

- In 2018, a key federal advisory committee voted to recommend an ACEP-developed Alternative Payment Model to HHS Secretary Alex Azar for full implementation; the model joins only 4 others to receive such a vote (out of 26 proposed).⁷
- After ACEP joined other specialties in directly beseeching the FDA to solve the continuing problem of drug shortages, the agency announced a new focus on mitigating critical drug shortages — with the help of the house of medicine.⁸
- During the debate about patient dumping, before EMTALA became law, Dr. Arthur Kellermann famously dumped hundreds of patient wristbands onto the table to illustrate the human toll of patient dumping — creating a pivotal point in the debate.^{9,10}

Be Informed

Research your topic thoroughly and know your subject matter. Also understand your opponents' arguments, which will enable you to address criticisms in advance. For federal or national EM issues, begin by visiting www.acepadvocacy.org to research existing issues, policy briefs, and legislative updates. Another way to stay abreast of the most recent updates on EM-specific legislative issues is to sign up for the ACEP 911 Grassroots network. For other health care issues, consider using non-partisan think tanks to acquire supportive detailed information, such as the Commonwealth Fund, Kaiser Family Foundation, and recently publicly available Congressional Research Service reports. 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 either supporting or opposing your position on the issue.

Understanding multiple sides of an issue strengthens your position when speaking to a legislator or his/her staff and strengthens the legislator's ability to discuss their position. If you are dealing with a state or local lawmaker, research when and how other states or local communities have addressed similar issues. Before contacting any lawmaker, know which committees they serve on, research their voting record, and understand their constituencies so you can make an effective advocacy pitch. Websites of elected officials contain extensive information about the personal and professional background of legislators. Attending the annual ACEP Leadership & Advocacy Conference in Washington, D.C., and attending state legislative events can advance your advocacy experience. If your state ACEP chapter does not organize a lobby day, your state medical society may host one that you could join, or you can contact the EMRA Health Policy Committee for tools on how to conduct your own.

Advocacy Through Organizations

While it is crucial to demonstrate a detailed understanding of your issue, remember you are already 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 the legitimacy of a trusted source and weight of popular opinion to your issue, making legislators more likely to respond and act. Additionally, these professional organizations may have already laid the groundwork to present your issue; their government affairs staff may have established relationships with legislators and may be able to help refine and tailor your arguments.¹³ They can offer contacts to like-minded interest groups and lobbyists. Inviting stakeholder groups to participate in your effort 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 of a lobbying team bring diverse knowledge and skills to the table, resulting in more effective advocacy.¹⁴

Advocacy Through Writing

Share your efforts with the academic and public policy community. Legislative officials and their staff read and watch various sources of media (including editorials, television, government reports, and academic publications) to keep up with the issues that matter to their constituents. Letters to the editor (LTEs) represent a popular method of advocacy that can highlight topics and shape policy debates. Many influential LTEs are published in major medical journals, such as the *Journal of American Medical Association*, the *Lancet*, the *Annals of Emergency Medicine*, as well as their supplemental online counterparts (blogs, Web articles, etc.). LTEs or op-eds in a wide array of outlets may gain even more attention with legislative staff. Op-eds may be difficult to get published via national outlets, but an important and more accessible audience is local newspapers, which are often interested in running local physician opinion pieces. Recently, some organizations have recognized the untapped power of underrepresented writers, and groups such as “The Op-Ed Project” have sprung up to mobilize potential writers into action.

Scholarly publications on advocacy remain relatively scarce. Advocacy often does not fit in the traditional scholarship model and typically has not been rewarded with promotion or tenure. Opponents of increased calls for advocacy in the medical profession even argue that advocacy may subvert academic scholarship. 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.

Core Advocacy: Direct Communication & Relationship with Elected Officials

The first step is to establish contact with your elected official or his/her office. Reach out to staff who are responsible for the daily office activities. Utilize local, state, and federal websites to get names and contact information.

Snail Mail

While traditional mail largely has been supplanted by electronic communication, hard-copy letters remain effective in advocacy. A tangible letter makes a bigger impact than an email and demonstrates that you did more than just cut and paste. Use a standard format; a single page should be sufficient, summarizing 1-2 key issues in language any 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;¹⁵ one study shows that the use of bicycle helmets can reduce the risk of head injury by 74% to 85%.¹⁶ 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. While form emails may be the most common type of email engagement, they are one of the least influential.¹⁷ Your email must demonstrate the same interest and passion as any other communication. The subject line should state you are a constituent.¹⁸ Draft your email as you would a letter: include an introduction, specific request, reasoning for your request, proposed impact of request, personal story on how constituents are affected by issues, and a thank-you.

Telephone

Taking the time to call a legislative office — in Washington, D.C., in state, or locally — can be productive and efficient, even when you speak with a staff assistant rather than your elected official. (Legislative assistants often weigh in on votes and as such have substantial influence over policy decisions. Be respectful and courteous; you may gain an ally and knowledgeable resource.) Identify yourself as a constituent, name the bill or legislative issue at hand, and be brief about your support or opposition. Telephone calls can be ideal when a bill is up for vote. Many legislative offices use specific software to log contacts and keep a tally of how many constituents are interested in an issue.

Social Media

Twitter, Facebook, Instagram, and other social media sites are avenues to advocate for important issues. One poll of House and Senate offices showed that anywhere between 1–30 comments is sufficient to garner the attention of senior staff.¹⁹ Unique comments or tweets on a subject over multiple days may be more effective than those with repeated language copied from multiple users. In general:

- Retweet and comment on posts from your legislator’s office.
- Build followers who support your issues.
- Show your engagement on issues with posts and pictures.
- Demonstrate your knowledge on issues over time.
- Remember that every post may be read by an elected official or the general public.²⁰

TABLE 31.1. Evolving Channels of Influence

NEW MEDIA	WRITTEN ADVOCACY
Twitter	Mail
Facebook	Email
YouTube	Letters to the Editor

Face to Face

Taking the time and trouble to visit a legislator’s office in person makes an impact. Contact the office scheduler to set up individual meetings, making sure to identify yourself as a constituent.

When you have your appointment set, it’s time to prepare. If you don’t know your legislator, read up — find out what issues are important to him/her, get an idea of his/her voting record, and even check to see if you have anything in common (*Same alma mater? Hometown? Drawing personal connections can sometimes make you — and your position — more memorable.*) If you plan to discuss current legislation, research where the bill is in the legislative process, who the other co-sponsors are, if the bill has previously been introduced, and what proponents and opponents are saying about it. Be ready to address these key points.

On the day of the meeting, dress professionally, arrive early, and wait patiently. Whether you meet your legislator or a staff member, 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 (ie, sponsorship or support of a bill, co-signing a letter). Tell your story, give a few pertinent facts, repeat your request, and entertain questions. But remember you are talking to real people. Be flexible and hold a normal, relaxed, and

open conversation. Maintain a pleasant, professional tone — even if you sense opposition. 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 behind a "one-pager" explaining the issue and the position you would like the legislator to take. Include your contact information and availability for further conversation. After the meeting, send a thank-you note and any additional information the office may have requested. Don't forget this step! Follow-through (or lack thereof) speaks to your level of engagement in the issue.

When to Make Contact

There are a variety of strategies for timing when to meet your legislator. Make contact when a bill of interest is coming up for a vote in committee or on the floor or if you have new bill language that has been drafted. Additionally, Congressional recesses are opportune times to meet locally with your legislator because the office will be less busy; these dates can be obtained from the local/district office. You can also invite your legislator to tour your ED for a firsthand look at issues specific to your facility, as suggested by ACEP.

Proposing a Bill

If you have scheduled a meeting to ask your lawmaker to sponsor a new bill, do your homework first. It's important to find a legislative champion for your cause, but you'll likely need multiple lawmakers to sign on. If appropriate, offer to reach out to legislators who might serve as a key sponsor, a co-sponsor, or a supporting sponsor. When a bill is in committee, offer testimony on the record.²¹ Contact your legislators again when legislation is coming to a vote; after a vote, thank them (regardless of the outcome). Maintaining contact, like building any relationship, requires effort and persistence, but it can lead to support on future projects.

Testifying Before Committee

Testifying before a legislative committee is more structured than individual meetings and is guided by the committee chair. Many who testify will have prepared remarks; at the least, bring talking points and salient facts to which you can refer.

For your testimony, start by introducing yourself, explaining your credentials, and stating whether you support or oppose the bill in question; then, make your case and be prepared to answer questions. You are there as an expert and have the ability to sway minds, so come prepared and show evidence

or examples to support your case. An example of compelling testimony was Dr. Arthur Kellerman's testimony against patient dumping before the House Intergovernmental Affairs Committee.⁹ He collected more than 300 wristbands of indigent patients who were transferred in unstable condition to the public hospital where he worked because of their inability to pay at the private hospital where they initially were seen. In delivering his testimony, he dumped a trash bag full of these wristbands onto the table, stunning the audience and making the issue immediately tangible. This is often cited as one of the critical events that contributed to the passage of EMTALA.

Conclusion

Emergency physicians are ideally situated to advocate for the health of both individual patients and communities as a whole. Advocacy can take many forms – but in every case, it's important to know your lawmakers, be familiar with the legislative process, and become effective in communicating with the parties who influence that process. 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.

WHAT'S THE ASK?

- Identify your specific passion and why you choose to advocate.
- Advocacy through leadership is central; focus on coalition-building.
- Utilize all available contact options when advocating for your position.
- Write letters to the editor and op-eds that utilize personal stories and data to advocate for your issues.
- Develop relationships with your legislative offices by creating lines of communication, while employing trusted information and reliable opinions.



GETTING INVOLVED IN THE HOUSE OF MEDICINE

William M. Ross; Nicholaus Josey, MD; Chet Schrader, MD, FACEP

Emergency medicine continues to see strong growth in the house of medicine, as the specialty expands both in size of workforce and services provided to the public. We must ensure our voice in advocacy expands as well.

Regardless of the method, we all share a common goal in advancing our specialty so that we can better serve our patients.

Emergency Medicine Residents' Association

EMRA was founded in 1974 and has more than 16,000 members. It ranks as the second-largest specialty association in emergency medicine, behind ACEP. It is the oldest and largest independent resident organization in the world. The organization works collaboratively with all the EM medical societies and groups to represent the voice of trainees in EM everywhere. EMRA operates under a shared services agreement with ACEP but retains independent operations, budget, mission, and board of directors.

EMRA represents trainees to a number of external organizations, including but not limited to the ACGME, ABEM, Emergency Department Practice Management Association (EDPMA), and National Emergency Medicine Political Action Committee (NEMPAC). Additionally, EMRA represents trainees at the ACEP Council, the policy-making body of ACEP. Within ACEP Council, EMRA holds 8 out of 463 seats. Both within Council and to external organizations, EMRA advocates based on the contents of the EMRA Policy Compendium, a living and actively updated document of policies, positions, and operating procedures created by the EMRA Board and the EMRA Representative Council (RepCo). The RepCo consists of resident representatives from all EM programs and convenes biannually to discuss and vote on resolutions concerning new policies, changes to the organization, and to elect new members of the EMRA board.

In addition to policymaking and advocacy, EMRA maintains an extensive array of on-shift clinical publications, invests in national event programming, and offers unique leadership and scholarship opportunities. Many of the projects, publications, and events of the organization are produced by the 19+ different EMRA committees and subcommittees, covering a wide range of interest areas in EM. The committees offer multiple leadership opportunities, ranging from chair and chair-elect to vice chairs in charge of subcommittees or specific initiatives. Not only are there ample committee-level opportunities, but also EMRA sponsors a health policy fellowship elective at the ACEP office in Washington, D.C., a Congressional elective with U.S. Congressman Raul Ruiz, and a mentored position within one of EDPMA's committees. Through various committees, organizations, scholarships, and benefits, EMRA is an invaluable resource for residents and a unique opportunity 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 38,000 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 and was founded to represent the interests of emergency 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 apply to be appointed to any committee, with multiple advocacy-related opportunities including the Federal Governmental Affairs, State Legislative & Regulatory, Public Health & Injury Prevention, and Quality & Patient Safety Committees. The Young Physicians Section offers residents an opportunity to transition into a group inside ACEP that has a similar perspective. Every state also has a chapter that may offer leadership opportunities for residents. States have their own important advocacy agenda and most have a committee dedicated to governmental relations and advocating for emergency physicians and patients in the state capital. Learn more at acep.org.

American College of Osteopathic Emergency Physicians

Founded in 1975, 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 focus on the academics of emergency medicine, SAEM continually strives to promote our specialty by improving and researching how we practice emergency medicine. Learn more at saem.org.

Emergency Department Practice Management Association

The Emergency Department Practice Management Association is a national trade association involved in advocacy at the state and local level. EDPMA is centered on providing quality, cost-effective care in the ED. Its diverse membership includes not only ED provider groups, but also companies involved in billing, coding, and other supporting organizations. Its members play a role in delivering or supporting the health care for around half of the U.S. emergency department visits each year. They hold an annual conference in the spring called the Solutions Summit. Learn more at edpma.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. EMRA Health Policy Committee members are instrumental in developing the *Emergency Medicine Advocacy Handbook*, the Health Policy Journal Club articles, and the Advocacy Lecture Series. Resident participation in the committee is ideal for those interested in health policy, politics, or legislation. Opportunities to get involved exist through a number of vice chair positions covering mentorship, advocacy skills, education, resolution writing, social media, and health equity. The committee also has an ongoing partnership with Policy Prescriptions, an organization that advocates for evidence-based health policy, to produce monthly reviews of health services research articles that are often also re-capped in ACEP news channels.

Leadership & Advocacy Conference

The Leadership & Advocacy Conference was created by ACEP to train and develop advocates for emergency medicine. Politicians make legislative decisions that have a long-lasting impact on the practice of medicine. This impact can be either positive or negative, but without a seat at the table of discussion, our specialty's voice can go by the wayside. Each physician must be an active voice in the political process as fundamental changes to health care delivery, organization and financing are discussed. This conference is an opportunity for physicians to learn from the nation's experts on legislative and regulatory changes on the horizon and to develop their advocacy skills to further the goal of delivering high-quality acute care. The conference includes visits to legislators' offices on Capitol Hill to lobby for critical issues relevant to emergency medicine. Past keynote speakers have included distinguished senators, congressmen, political pundits, the Secretary of Health and Human Services, and the U.S. Surgeon general.

EMRA hosts a portion of the conference, the Health Policy Primer, specifically tailored to the interests of residents, medical students, young physicians, and first-time conference attendees. With a track that involves lectures, advocacy training, and receptions with leaders in the specialty, the conference continues to provide a unique educational and networking opportunity for trainee and young physicians. EMRA and many state ACEP chapters also provide travel scholarships for residents to attend the conference.

The 9-1-1 Network

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 9-1-1 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 9-1-1 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 first-hand the operations of an ED and to meet their constituents.
- **Team Captains.** The ACEP 9-1-1 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 9-1-1 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*.

NEMPAC

Founded in 1980, 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 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 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.

NEMPAC selects candidates for contributions based on how their political priorities aligns with the legislative and regulatory agenda created by the ACEP Board and ACEP Federal Government Affairs Committee. Another large part of the selection process is the opinion of the state ACEP chapter and the relationship the candidate has been able to form with that group. Other factors include their support of ACEP legislation, their committee assignments, their leadership positions within Congress, and competitiveness of their race. Recent ACEP legislative issues have included bills on the opioid epidemic, EMS standing orders, support for mental health resources, eliminating unnecessary regulatory burdens, medical liability reform, and protecting emergency care as an essential health insurance benefit.

NEMPAC continues to support legislation to expand federal GME funding for emergency medicine residency positions and proposals that would defer student loan payments until after residency and fellowship training. 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.

Health Policy Electives

EMRA sponsors a select few residents and medical students each year to participate in a Congressional and an ACEP-based health policy fellowship in Washington, D.C. The Congressional elective is a month-long embedded fellowship for a trainee to work in Rep. Raul Ruiz's office alongside his staff on Capitol Hill. This is a unique opportunity to see firsthand how a federal legislative office operates. Tasks include developing legislative proposals, attending Congressional hearings, making recommendations on committee votes, and writing policy research white papers. Another special opportunity is the EMRA/ACEP health policy fellowship. This is also a month-long rotation (or 2 weeks for medical students) for residents to work in the ACEP D.C. office. The program includes training in advocacy and major regulatory issues, lobbying at the Capitol, and working with non-governmental organizations. For those considering advocacy as a part of their life, these are excellent opportunities to get on-the-ground experience in a way that is feasible to with a medical student or resident schedule.

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 systems level, and there are numerous fellowships dedicated to teaching residents how to effectively make that happen. Moreover, a number of these fellowships have a health services research focus and offer masters for advanced research methodology training. One such fellowship program is the National Clinical Scholars Program. Formerly known as the Robert Wood Johnson Scholars, this network of 5 academic institutions trains clinicians in policy-relevant research and community partnerships. Learn more about these programs through the EMRA Health Policy Fellowship Directory at emra.org/match/health-policy-fellowships.

WHAT'S THE ASK?

- 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 field of medicine.
- Encourage your co-residents to get active in advocacy; as residents your voice carries a fresh perspective.
- If you have a passion for building a career in health care advocacy, consider a fellowship in health policy.



HEALTH SERVICES RESEARCH

Kirstin Woody Scott, MPhil, PhD; Anna Nabel, MD; Justine Seidenfeld, MD; Brandon Maughan, MD, MHS, MSHP, FACEP

Emergency departments provide care to patients across the full socioeconomic landscape and at all levels of acuity. On a daily basis, emergency physicians face system- and individual-level barriers that make it difficult to provide appropriate, effective, and timely care to our patients. Physicians, policymakers, and advocates alike are increasingly concerned about the rising costs of health care, the unmet primary care needs of socioeconomically disadvantaged populations, the lack of availability of mental health care services, and the ever-increasing number of diagnostic and therapeutic technologies.

In an era of increasing focus on health care value and efficiency, health services researchers in EM will help revolutionize the way health care is delivered.

Health services research (HSR) is a multidisciplinary field that addresses these gaps in practice by examining the delivery, quality, cost, and access to health care services. HSR may measure the effects of past policy interventions or describe the current state of affairs to help guide future policy design.

Emergency physicians, emergency medicine residents, and medical students are well-positioned to contribute to this emerging field. Shifting political landscapes have changed the delivery of emergency care over the past several years, creating a critical need for research to examine the ways that EDs ultimately impact public health across different communities and policy environments.

What Is HSR? How Does It Differ from Other Research?

Health services research examines a diverse set of topics that relate to the organization of health care systems, the financing of those systems, the ways in which they deliver care, individuals' access to care, quality and safety of care, and the role of social factors, personal behaviors, and health technology in shaping health outcomes. It is a broad discipline that draws not only from applied sciences like public policy, epidemiology, engineering, and health administration,

but also from more traditional academic disciplines like psychology, sociology, economics, and biostatistics. Health services researchers can work in many sectors including academia, government, foundations and other nonprofit organizations, and private-sector organizations such as consulting firms or drug/device manufacturers.

They often utilize a number of research skills that differ from biomedical or clinical researchers, and they use a wide variety of both quantitative and qualitative study designs that are described below. They can work with a diverse field of stakeholders including payers, providers, pharmaceutical and drug/device companies, and patients, and the results of their research can directly influence decisions regarding clinical practice guidelines or policy implementation. HSR studies may examine a single emergency department, a hospital, or a regional or national health system.

Health services research often focuses on the real-world *effectiveness, utilization, cost, and quality* of different health care interventions or delivery tools at a system-wide level. In contrast, biomedical or clinical research often looks at the *efficacy* of interventions, meaning their effects in an ideal setting free from bias or confounding factors. HSR studies may consider provider biases, patient preferences, or barriers to access, and as a result the research may be more generalizable across different patient populations and policy environments.

What Topics and Study Designs Comprise HSR?

Health services research can encompass a broad range of topics and study designs.

- Reporting on the **utilization and outcomes of health care services** is a key component of HSR. For instance, Kocher and colleagues examined ED volumes across the United States and measured the association of volumes with mortality.¹ They found that patients admitted through high-volume EDs had lower rates of inpatient mortality, but the difference in mortality was substantially more significant for some conditions (eg, sepsis) than for others (eg, pneumonia).
- Another approach to examining ED utilization is to examine **physician attitudes and practice patterns**, such as through surveys. Lin and colleagues surveyed over 700 emergency physicians to assess their familiarity with the *Choosing Wisely* program and measure its impact on their delivery of care.²
- Health services research also examines patient **access to care** with various study designs. To examine the availability of primary care appointments, Rhodes and colleagues performed “simulated patient” studies in which they posed as real patients and called primary care practices in several different states to examine how quickly appointments would be available for new patients with different types of insurance.³

- **Comparative effectiveness studies** examine the real-world outcomes associated with two or more interventions. For example, Suzuki and colleagues published a 2016 comparative effectiveness analysis that examined outcomes associated with use of emergency thoracotomy versus closed chest compressions for critically ill blunt trauma patients.⁴ They found in a multivariable regression analysis that thoracotomy was associated with a statistically significantly lower survival rate.
- **Cost-effectiveness analysis** goes a step further to examine both the outcomes associated with different interventions, and the costs associated with them. For instance, Ward and colleagues examined the cost-effectiveness of adding a point-of-care lactate testing protocol to identify patients with suspected sepsis who could benefit from early resuscitation; they found that the protocol was effective at improving patient outcomes for a relatively small additional cost.⁵

Many other topics are often addressed by health services researchers, including (but not limited to) examining the impact of new technologies (eg, electronic health records or diagnostic tests) in the delivery of care, implementation sciences, examination of health programs on socioeconomically vulnerable populations, health care ethics, quality and safety of care, patient satisfaction, and issues facing the health services workforce (eg, workplace violence, physician burnout).

Key Tools for Conducting HSR

Data Sources

Systematic data collection in the ED can provide insight into what brings patients into the health system, how they are cared for in any given encounter, and can capture other valuable public health and societal trends in health care. As such, there are a number of large administrative databases and survey tools that capture data for the study of state, national, and global emergency care. The following highlights only a subset of the possible data tools that exist for researchers interested in EM HSR.⁶

In terms of federal resources, through the Centers for Medicare and Medicaid Services (CMS), HSR researchers can utilize claims data captured for administrative and billing purposes to study national ED utilization and trends. Further, the Centers for Disease Control and Prevention (CDC) conducts an annual survey of a sample of nonfederal hospital EDs and outpatient offices through *National Hospital Ambulatory Medical Care Survey* (NHAMCS); this broad survey includes data on patient demographics, type of ED care providers, vital signs, diagnostic tests, medications, and diagnoses. Though many more

exist, additional examples of federal resources include the CDC's *National Health Interview Survey* (NHIS) and pre-hospital data through the Office of Emergency Medical Services (EMS) *National EMS Information System* (NEMSIS).

Other EM-focused databases exist through the AHRQ *Healthcare Cost and Utilization Project*, including the hospital-based, all-payer *Nationwide Emergency Department Sample* and the longitudinal *State Emergency Department Databases*.

A number of professional societies and organizations manage data sets that are useful for monitoring aspects of EM, including the American College of Surgeons' *National Trauma Data Bank*, the hospital-level view of ED utilization and volume through the American Hospital Association's annual survey and EMS. Further, ACEP has developed the *Clinical Emergency Data Registry*, which aims to serve many functions to meet requirements set forth by CMS to capture clinical and patient data for quality reporting in EM. As this registry matures, it is expected to be a rich data source for future HSR focused on improving the quality of emergency care.

Beyond these sources, health services researchers in EM can leverage the growth of provider EHRs and dynamic nature of health information technology (HIT) as useful data repositories. In addition, nonprofit organizations also play a major role in HSR and may collect data relevant for EM researchers. Examples of these organizations include *Academy Health*, the *Robert Wood Johnson Foundation*, the *Commonwealth Fund*, *Institute for Health Metrics and Evaluation*, and the *Kaiser Family Foundation*.

Funding

There are a number of mechanisms to obtain funding for HSR in EM, including:

- Federal granting agencies
- Patient Centered Outcomes Research Institute
- National foundations (eg, Robert Wood Johnson Foundation, Commonwealth Fund)
- State-level foundations (eg, California Health Care Foundation)
- EM organizations (eg, Emergency Medicine Foundation, Society for Academic Emergency Medicine)
- Global health agencies (eg, Gates Foundation, Fogarty, Fulbright, MEPI)⁷

How Has HSR Contributed to EM Advocacy?

There are many examples in which HSR has informed advocacy efforts to strengthen the delivery of emergency care. For instance, health services research has played an important role in shaping local and federal policy responses to the opioid epidemic. In response to research showing increasing rates of opioid-related ED visits and overdose deaths, agencies took steps to improve access to treatment services and increase availability of naloxone. Several states passed legislation that require first responders such as police and firefighters to carry naloxone,⁸ and health services researchers have shown that communities with these naloxone program have lower rates of opioid-related deaths than non-participating communities.⁹

Health services research has also identified populations that suffer disproportionately high rates of morbidity and mortality from opioid abuse, such as pregnant women with substance use disorders who live in Appalachian states (which are already disproportionately affected by the opioid crisis). Patrick and colleagues conducted research which identified that providers in these states were less likely to treat or accept pregnant women and/or Medicaid patients.¹⁰ Identifying these gaps in care is the first step toward improving care for these at-risk populations.

Conclusion

Health services research will continue to guide the development, evaluation, and reform of health policy on state, federal, and international levels. With a wide variety of data and funding sources, 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 value 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?

- Emergency physicians can use health sciences research to better understand issues related to access, delivery, quality, and cost of health care, and how it may affect their practice environment.
- Health services research can provide crucial data to support advocacy and improve delivery of care to the community.
- Physicians should advocate for funding for HSR. Without funding, we cannot generate the data needed to guide future policy decisions.

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