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A Tsunami and a Meltdown Closer to Home

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Has anyone visited the emergency department recently? I know I'm preaching to the choir here, but it seems to me that increasingly the emergency department (ED) is the "canary in the coalmine" of America's health care. And because I've made my living in EDs during the past 25 years in a number of states, in a variety of hospitals, and in different types of jobs, I've had the privilege and misfortune of seeing some of the best, and the worst, of health care, human nature, and, I fear, our nation's future. Full disclosure: some of my observations may be pessimistic.

Let's start with this observation: The ED is packed, and so is the waiting room. The number of easy shifts I've worked in recent memory is few. And this is reflected by some statistics. Between 1996 and 2006, the annual number of ED visits jumped from 90.3 million in 1996 to more than 119 million in 2006, a 32% increase. During the same period, the number of EDs decreased by 9%, and hospitals have closed 198,000 beds.[1,2]

And as the number of emergency departments declines, EDs have become the main source of health care for a growing segment of the U.S. population that lacks access to primary care services. Of the approximately 100 billion outpatient visits annually, just over one-third are for acute care. Only 42% of these acute care visits are to the patients' primary physician. EDs (which account for only 4% of the physician workforce) handled 28% of acute care visits. And EDs treated a disproportionate share of uninsured patients compared with other sites.[3] This dramatic increase in emergency department use during the past several years has been driven, in large part, by the chronic shortage of primary care physicians, according to a 2009 study.[4] Increasing numbers of uninsured patients are presenting to the ED, and uninsured patients lack access to primary care. And available data also show that care in the ED is more expensive than office-based care.[5]

The critical condition of primary care has been well described.[6] A report by the American Academy of Family Physicians states that in order for the country to have sufficient family physicians to meet the demands of the population, accredited family medicine residency programs must immediately increase their residency positions, and that they must also recruit diverse candidates who will most likely serve rural, underserved, and elderly patients. The AAFP predicts that the shortage of family physicians will reach 40,000 by the year 2020.[7]

Similarly, primary pediatric care is in a state of crisis. There is an insufficient number of pediatricians, an increasing demand for their services, and inadequate funding for medical education. This lack of available care harms children and families and produces expensive alternatives to primary care.[8] In a 2006 report, the American College of Physicians stated that, while there is a growing demand for primary care due to growth in the number of people with chronic diseases and long-term care needs of an aging population, there has been a decline in the number of medical students entering primary care. The authors of the report opine that primary care, "the backbone of the nation's health care system, is at grave risk of collapse due to a dysfunctional financing and delivery system." To avert a crisis, the authors recommend a number of policies, including implementation of the advanced medical home, reforming of reimbursement policies, and creating financial incentives for improving quality and efficiency.[9]

Compounding the problem of shifting of the setting of primary care to EDs is the profound national shortage of emergency physicians. Has anyone checked out the classified ads recently? EPs are in great demand. A recent study by Dr. Carlos Camargo of the Harvard Medical School and the Harvard School of Public Health found that the supply of emergency physicians might never reach the increasing demand for their services.[10] Making

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several clearly unrealistic assumptions, such as a zero attrition rate and an ideal geographic distribution of EPs, Dr. Camargo estimates that the supply of EPs may meet the demand by the year 2019. But if the assumptions are changed to be more realistic, supply will never meet the need. In 2009, the American College of Emergency Physicians released the "National Report Card on the State of Emergency Medicine" and in the category "access to emergency care," the United States received a "D." The reason for this dismal grade is the fact that the nation has too few emergency departments to meet the needs of a growing and aging population.[11] The Institute of Medicine has concluded that emergency departments and ambulatory services are overburdened, underfunded, and highly fragmented. Patients face long waits in overcrowded emergency rooms, and they often need on-call specialists who are not available. A significant contributing factor is that more and more patients are turning to emergency departments for care because they lack insurance, they need after-hours care, or because of their limited medical options in rural communities.[12]

Regardless of how you may feel about President Obama and The Patient Protection and Affordable Care Act (PPACA) that was signed into law on March 23, 2010, the provision of health insurance is not the same as the delivery of health care. PPACA is intended to allow 32 million previously uninsured Americans to get regular care from physicians. But an unintended, if not unanticipated, consequence of the PPACA is that it will likely result in further overcrowding of EDs. This is because PPACA increases health insurance coverage, without increasing access to medical care, especially with an aging population combined with physician shortages and maldistribution. EDs will continue to be increasingly crowded under the PPACA. Insured patients visit EDs at the same rate as the uninsured. The newly insured will continue to face obstacles to primary care. About half of the newly insured will be covered under Medicaid, and many primary care physicians do not accept this insurance. A case in point: EDs remain crowded in Massachusetts after mandated health insurance for all. ED visits there rose 7%, and ED costs rose 17% over two years. And EDs continue to close despite increasing visits. PPACA requires insurers to cover costs of emergency visits, whether in- or out-of-network, to stop requiring prior authorization for emergency services, and to provide "prudent layperson" coverage. Thus, it is anticipated that ED waiting times will continue to rise above the already unsafe levels.[13] Leigh Vinocur, MD, an assistant clinical professor at the University of Maryland School of Medicine and a spokesperson for the American College of Emergency Physicians, said the average emergency department wait continues to hover around four hours.[14]

Health care is also breaking the bank. As healthcare spending in the U.S. rose above $2.5 trillion in 2009, the percentage of the GDP spent on healthcare jumped to 17.3% from 16.2% in 2008 – the largest one-year increase since 1960. At this rate of growth, healthcare costs are expected nearly to double to $4.5 trillion in 2019. At that point, they will account for 19.3% – almost a fifth of our GDP. Government health spending is growing much faster (8.7%) than spending by private payers (3%), largely because of people losing their jobs and ending up on Medicaid. And if Congress restores planned Medicare reimbursement cuts to doctors, it is predicted that the federal and state governments will be funding the majority of healthcare by next year. This increasing reliance on government programs is a bad sign. State governments are already cutting back on Medicaid, with inevitable bad results not only for patients, but also for America's primary safety net providers, its emergency departments. And when extra federal Medicaid subsidies come to an end, that trend should accelerate.

By comparison, in Australia the total health expenditures as a percentage of GDP is about 9%; in Austria 9.5%, Belgium 10%, Canada 10%, Denmark 8.5%, Finland 7%, France 10%, Germany 11%, Iceland 10.5%, Ireland 7%, Italy 8.5%, Japan 7.5%. According to Reuters, "the United States spends more on healthcare than any country in the world but has higher rates of infant mortality, diabetes, and other ills than many other developed countries." So we're paying more for healthcare, but we're not getting more. This is a problem which we, as consumers, would not tolerate in almost any other part of our lives.

Medicare's hospital fund is still projected to go bankrupt in 2017, and, unless healthcare spending is controlled, bankruptcy of the whole government is possible. Thus, if government funds the majority of healthcare, and if it is forced to cut back or go bankrupt, physicians, hospitals, other healthcare providers and, ultimately, patients themselves will suffer irreparably.

So we have a "perfect storm:" increasing demand for primary care, with shifting demand toward emergency department utilization, associated with inadequate supplies of residency-trained primary care and emergency medicine-trained physicians, increasing public funding of health care, decreasing certainty of the future for such funding, and a prohibitive percentage of the GDP diverted toward a haphazard, inefficient, and patchwork system of care.

As is often the case in a crisis, critical challenges provide the impetus for new opportunities and for creative solutions. The Board of Certification in Emergency Medicine (BCEM) is one existing and proven solution. Through both its practice track and fellowship programs, BCEM offers specialty certification

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in emergency medicine to physicians who are originally board certified in another ABMS primary care specialty residency.

Similarly, the American Academy of Family Physicians has published a position paper that outlines the role of family physicians in the future of emergency medicine. The paper states that, "Family physicians are qualified to provide emergency care in a variety of settings. In rural and remote settings, family physicians are particularly qualified to provide emergency care. Emergency department credentialing should be based on training, experience, and current competence; fellowships in emergency medicine or additional course work may be of added benefit." Combined residency programs in family medicine and emergency medicine, or additional training, may be beneficial.

Another potential solution to the workforce shortage is to increase the total number of ABMS-approved residency-training slots. This would require an increase in graduate medical education funding, which, in turn, would probably require funding of most specialties' training slots. If, as has been estimated, an average EP spends one-third of his or her work hours on administrative duties, increasing the percentage of time spent on patient care would also be beneficial.

Mid-level providers are another vital physician-extension resource that has grown from a participation in 3-5% of emergency care visits in the late 1990s to close to 20% of visits today. How these mid-level providers are optimally used and what, if any, supervision is needed for them, are questions that will need to be answered. Scribes have been investigated and in many cases confirmed anecdotally to be efficiency-amplifiers in some emergency departments. The benefit of electronic medical records and of computerized physician order entry is less apparent. Telemedicine is another potential method to relieve the mal-distribution of specialists, especially in rural settings.

Data for 2008 show that there were 10.3 EPs per 100,000 population in urban areas versus 2.3-5.3 for rural settings.[15] Loan forgiveness and combined residencies in EM-primary care (e.g., EM-IM, EM-FM, EM-pediatrics) might ameliorate the problem of mal-distribution.

Finally, as any EP well knows, there is a significant use of the nation's EDs for trivial, non-emergent, and convenient care (read: "inappropriate ED utilization"). It is quite politically incorrect to use the term "inappropriate visit" to describe any patient care in the ED, but clearly there is a disconnect between the concept of "emergency" that is held by the EP and his or her patient. The Kaiser Health Plan of Colorado has estimated that 20% of its 72,000 ED visits per year are "unnecessary."[16] After the completion of a medical screening exam that shows that no emergency medical condition exists in a patient who presents to an ED, several options may be useful. A separate waiting room, a "triage out" program, and a dedicated social worker or case manager may be employed to redirect these patients.

Conclusions

As I've watched the steady stream of humanity passing through my ED over the past two and a half decades, I know that my purpose there is to "help people." After all, that is why I became a physician in the first place. But, Houston, we have a problem. Dallas, too. And Topeka, Presque Isle, Biloxi, Walla Walla, Pascagoula, and Punxatawny. If you or someone you know has worked in, has been treated in, or has otherwise been near an ED recently, or plans to be in an ED in the foreseeable future, you will recognize that something has gone terribly wrong there. Primary care is collapsing. Health expenditures are exploding and threaten to undercut any potential for economic recovery. The cost of health care delivery is sapping the vitality out of our nation's financial security and world leadership. The "medical home" is a pipe dream for many, and the nation's EDs have become the de facto medical home for many. Supplies of EPs and other primary specialists cannot keep up with demands for their services. While emergency departments close, the number of visits to the remaining departments and the waiting times rise. Care becomes more expensive and increasingly fraught with medico-legal risk. Tough decisions are ahead of us with regard to emergency care. Dithering is not an option.

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