Social Emergency Medicine: Embracing the Dual Role of the Emergency Department in Acute Care and Population Health

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INTRODUCTION

Mr. Henry (a pseudonym) has visited our emergency department (ED) an average of 3 times a week for the past 5 years. He has a medical history of AIDS and end-stage renal disease, is addicted to cocaine and prescription opioids, and is intermittently homeless. His dialysis access is a frequent issue because, without stable housing, he is prone to frequent skin and soft tissue infections, complicating both fistulas and indwelling catheters. Despite receiving regular dialysis, he often visits the ED for urgent dialysis at least in part because he has access only to fast food in his neighborhood, which wreaks havoc on his fluid status and electrolyte levels. On a slow Thanksgiving Day shift this past year, he reflected on the role the ED plays in his life beyond addressing his medical needs: refuge from the cold, a social support system, a food kitchen, and even a place to get a jacket without holes.

Mr. Henry's experience is not unique; it represents a reality in EDs all across the country. In 1999, Gordon[1] wrote that vulnerable and disadvantaged patients "define us as a specialty—as much, or more so, than the medical procedures we perform" and that "given the importance of social factors to health, emergency physicians who work daily at the interface of medicine and society have a special obligation to broaden their scope of practice."

In the modern ED, homelessness, substance abuse, and violence are as pervasive as coronary artery disease, diabetes, and hypertension, each with a clinical significance. In this environment, where does the responsibility of an ED begin and end? This question is as relevant to our daily practice as any clinical decision that we make.

Social emergency medicine is an approach to our specialty that emphasizes, enriches, and creates a framework for emergency medicine as society's medical and social safety net. This view of emergency medicine considers the interplay between social forces and the emergency care system as they together influence the health of individuals and their communities, with the goal of improving population health while decreasing system costs. Various investigators in emergency medicine already take this approach, but this framework ought to become more integrated into our clinical practice, research agenda, and training programs. Here we explore how social emergency medicine can exist within, and buttress, an already strained emergency care system.

THE HISTORY OF SOCIAL EMERGENCY MEDICINE

The connection between poverty and health far precedes our modern medical system. Rudolf Virchow, one of the earliest proponents of social medicine, wrote in 1848 that "medicine is a social science" and "the physician is the natural attorney of the poor."[2] The contemporary ED is a nidus for this interplay of medicine and social justice.

At its roots, emergency medicine is a specialty born of a societal need for equal access to medical care for all patients, regardless of their socioeconomic status. The first emergency medicine training program began after the predominantly poor community surrounding Cincinnati General Hospital protested the substandard care and long wait times in their ED.[3] As other hospitals followed suit and met the needs of their communities, the specialty of emergency medicine was born.

As emergency medicine evolved, the role of the hospital ED became central to community health as an access point to the medical system, regardless of patients' ability to pay. Hospital systems, however, did not always fulfill this service to all patients. Some EDs began to refuse treatment to indigent patients; poor patients were inappropriately discharged, transferred, or "dumped" from hospitals; and for-profit hospitals were not equally compelled to provide

medical care for patients.[4] Congress recognized the need for equal access to emergency medical care and in 1986 passed the Emergency Medical Treatment and Active Labor Act. This law codified an ED's obligation to provide care to all who seek it and in many ways formalized the role of the ED in society's medical and social safety net.

Despite attempts to decrease ED utilization during the last 20 years, the frequency and intensity of ED visits continue to increase.[5,6] Even with the passage of health care reform, ED visits are projected to increase, particularly among low-income groups through Medicaid expansions.[7] As the number of visits continues to increase, EDs play an increasingly disproportionate role in serving impoverished patients with unmet social needs.[8,9] The ability of EDs to adapt to increasing patient volumes and higher acuity must move in parallel with their founding mission to provide care "to anyone, with anything, at anytime."[3]

SOCIAL EMERGENCY MEDICINE IN THE ED

Walk through the halls of any ED and social determinants of health can be seen, heard, and felt at all times of the day. Although emergency medicine training prepares providers with the expertise to care for critically ill patients with complicated disease, as many as one third of ED visits are for primary care.[10] Under the Patient Protection and Affordable Care Act, the patient-centered medical home is charged with addressing the social determinants of health in its community. But this responsibility cannot start and end with a patient's primary care provider, and the ED is often where patients with many essential social and medical needs seek care.[8,9,11]

ED-based interventions can serve to support population health, and as such, various programs have been implemented in EDs across the country. Successful models are multidisciplinary and use various stages of ED care: intervening at triage, in the department, and on discharge. Emergency physicians do not act alone in these ventures, but serve to act as coleaders of a diverse and comprehensive team. This team may include nurses, social workers, community health workers, health coaches, and medicolegal partners. Taking our patient Mr. Henry as an example, social emergency medicine aims to intervene for patients both before and after they become medically and socially complicated frequent visitors.

Social emergency medicine must also acknowledge some substantial barriers when implementing population health interventions in the ED. In a 2009 *Academic Emergency Medicine* Consensus Conference, "Public Health in the ED: Surveillance, Screening, and Intervention," attendees articulated 4 barriers that must be overcome to implement ED-based interventions: (1) only evidence-based interventions ought to be disseminated; (2) local barriers ought to be recognized and understood before implementation; (3) any innovation must be modified to fit the local culture; and (4) external sources of funding and policy ought to support such initiatives.[12] Supporting the safety net function of the ED through interventions equipped to meet such rigorous standards requires a systematic approach by a multidisciplinary team with shared leadership and investment from emergency medicine providers.

A SOCIAL EMERGENCY MEDICINE RESEARCH AGENDA

A guiding principle of social emergency medicine is to examine the ED and its patients in relation to the acute care hospital and the surrounding community. A research agenda should emphasize the potential for expanding the role of the ED as a site of public and population health research and intervention, extend the surveillance and data collection capacity of the ED, and increase research on the cost-effectiveness of a diverse array of preventive services. This enhanced research design emphasizes that we must approach social determinants, as we would any type of innovation, from a foundation of evidence.

For example, although integrating HIV screening in the ED remains controversial, its development can act as a model for how an evidence-based approach can advance population health interventions in the ED. In 1988, researchers established the prevalence of unknown HIV infection in ED patients at a single institution.[13] Since then, work in this field has focused on various models of screening in an effort to decrease barriers to testing, minimize effects on ED flow, assess the cost-effectiveness of programs, and examine how to best connect patients to regular outpatient care.[14-22] Computer modeling of enhanced HIV screening in the highly active antiretroviral era suggests that, especially among high-risk populations, there may be improved survival with population-based screening.[14] Mr. Henry, as a former user of injection drugs, would have fallen into such a high-risk group. The ED has been his regular source of care throughout his entire adult life, and evidence suggests that ED-based HIV screening may have identified him earlier in the disease process, potentially allowing him to avoid some of the complications of his late-stage diagnosis.[14]

Mr. Henry's poor engagement in outpatient care, however, is also an example of the need for a comprehensive approach to screening measures to ensure successful linkage to the broader medical community. Investigators in Baltimore found significant barriers to outpatient HIV care and viral load suppression among