EMS Hot Spotting:
San Diego's Experience Creating a System of Care for Frequent Users of Emergency Medical Services

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BACKGROUND

Targeting expensive patients is not a new or novel approach to containing health care costs. Nonetheless there is intense interest in such a strategy from policymakers, administrators, and providers looking for ways to "bend the cost curve." While each community's profile of its costliest patients varies, the terms "frequent flier," "heavy user," and "frequent user" are commonly used to describe individuals who disproportionately utilize emergency medical services (EMS) and emergency department (ED) services, sometimes involving police and jail services as well. Malcolm Gladwell brought attention to this population when he wrote about Murray Barr, a chronically homeless alcoholic caught in the continuous cycle of police pick up for public intoxication, hospital ED visit for detoxification, jail, and release, only to begin again—ultimately at a $1 million cost to the public resources of Reno, Nevada.[1]

Not all frequent EMS users are chronically homeless,[2] but many are. Typically these patients are difficult to treat because of multiple health conditions such as diabetes and high blood pressure, in addition to mental illness and substance abuse problems. Proponents of focusing on heavy users of EMS look not only at the high costs, but also the reality that tying up these resources with frequent users who often could receive care in a more appropriate setting affects the next 911 caller who needs immediate transport and treatment, but may have to wait for it.

Notwithstanding EMTALA (Emergency Medical Treatment and Active Labor Act of 1996) requirements, the current health care financing system does not discourage hospitals across the United States from drawing billions of dollars in reimbursements

for serving frequent users of emergency services even if those in-dividuals are uninsured, because disproportionate share hospital payments (DSH) help defray such unpaid costs. Cuts to DSH pay-ments mandated by the Patient Protection and Affordable Care Act of 2010 (ACA), paired with a desire to provide better care to patients and reduce ED and EMS provider and police fatigue, are factors that are motivating stakeholders in some cities to focus on creat-ing a more organized and potentially less expensive system of care for their frequent EMS users. The consensus solution focuses on a multi-pronged approach: improving primary care access, better coordinating health care across levels and types of care (primary-specialty, inpatient-outpatient, and medical-behavioral), and pro-viding needed housing and other supportive services.

Data are an important tool for helping communities understand their patterns of health care utilization, spending, and health status, and to possibly motivate community leaders to implement policies and programs to spur improvements. The efforts of Jeffrey Brenner, MD, and the Camden Coalition of Healthcare Providers in Camden, New Jersey, have been widely publicized. They use hospital claims data to identify heavy users of health care services—dubbed "hot spotting"—and work with social services providers and health care providers to develop a coordinated system of care for those indi-viduals. San Diego's approach builds on its status as a particularly "wired" community with a federally funded Beacon program that seeks to achieve electronic exchange of health care data among pro-viders as well as a community information exchange—for social ser-vices information exchange—which is under development.

San Diego is using real-time EMS data (electronic 911 records) to identify frequent users and to work "upstream" as much as possi-ble. Once identified as a frequent user, and depending on needs and circumstances, an individual is served through the Serial Inebriate Program (SIP),[3] the Resource Access Program (RAP), or Project 25. SIP is for those repeatedly arrested for public intoxication. RAP is a paramedic-based surveillance and case management effort that links high EMS users with appropriate medical, behavioral health, and other resources.[4] Project 25 is a partnership between the United Way, City and County of San Diego, and a number of not-for-profit organizations to provide permanent housing and supportive ser-vices to at least 25 of San Diego's chronically homeless. It targets the most expensive, most vulnerable individuals.

These efforts have resulted in documented cost savings. An analysis of the SIP found that, for those who accepted services, use of EMS,

ED, and inpatient services declined by 50 percent—an estimated decrease in total monthly average charges of $5,662 for EMS; $12,006 for ED; and $55,684 for inpatient services.[5] Project 25 leaders estimate that their 35 clients consumed $4.3 million in public resources in 2010 when they began the program, but just $2 million in 2012, the second year of the three-year pilot. After the supportive services and housing costs are deducted, Project 25 believes the program saved $1.4 million in 2012.[6] Although the magnitude of these savings motivates continued stakeholder engagement in San Diego, Project 25 is in its final year with future funding and sustainability uncertain. Whether these or modified approaches could be applied to individuals with less expensive, but nonetheless costly and fragmented, care and result in enough savings and improved wellness to merit the effort is also in discussion.

SESSION

This Forum session explored the use of data to identify "hot spots" of EMS activity and the challenges and opportunities of creating a system of care to address the medical and psychosocial needs of those identified as frequent users of EMS. The applicability of these efforts to a larger, less acute population will also be discussed. **James Dunford, MD, FACEP**, is the medical director for the City of San Diego's Emergency Medical Services and is a professor emeritus of emergency medicine at the University of California, San Diego. He discussed using EMS data to identify heavy users; San Diego's efforts to connect these individuals to more suitable health care, housing, and other community resources; and the effect the strategies have had on costs and those individuals served. **David Folsom, MD, MPH**, is an associate professor of psychiatry and family medicine at the University of California, San Diego, where he directs the combined family medicine psychiatry residency program. He is also the medical director at St. Vincent de Paul Village Family Health Center, a federally qualified health center providing primary care, dental, behavioral health, and other services to a mostly homeless population in San Diego. He talked about the health center's role as the health care home for many of the individuals identified as frequent users, particularly the challenge of integrating primary care, mental health, and substance abuse services. **William York** is the chief operating officer at 2-1-1 San Diego, a model resource and information hub for community resources that also provides health navigation and application assistance for a variety of health care, energy, housing, child care, and food assistance programs. He talked about 2-1-1's

role working collaboratively with other stakeholders like EMS and St. Vincent de Paul Village to develop a system of care for San Diego's most vulnerable people.

KEY QUESTIONS

• What are the components of a successful program targeting frequent EMS users? What are the pros and cons of using EMS data versus other types of data to identify frequent users?

• What assets does a community need to launch and sustain such a program? Who is the logical payer for the data collection and care coordination components of the effort, given their cross-organizational nature? What are the challenges to creating such a system of care for some of the most vulnerable people?

• Do programs targeting frequent EMS users save money? How is success defined?

• What patient protections should be in place?

• What is known about frequent users who are not chronically homeless? Do they use more resources than those who are homeless? Is dealing with their problems more tractable? Can a system of care be developed and sustained for the next few tiers of frequent EMS users whose needs are not as acute as the chronically homeless population?

RELATED FORUM MATERIALS

• Site visit report from February 2013 visit to San Diego, "The 'Coopetition' Model: Caring for San Diego's Low-Income Population," available at www.nhpf.org/library/details.cfm/2928

ENDNOTES

1. Malcolm Gladwell, "Million-Dollar Murray: Why Problems Like Homelessness May Be Easier to Solve than to Manage," *The New Yorker* (February 13 & 20, 2006): pp. 96–107, available at http://archives.newyorker.com/?i=2006-02-13#folio=096.

2. According to the U.S. Department of Housing and Urban Development, a chronically homeless person is unaccompanied, has a disabling condition, and has been continuously homeless for a year or has had four episodes of homelessness in the past three years.

3. James V. Dunford *et al.*, "Impact of the San Diego Serial Inebriate Program on Use of Emergency Medical Resources," *Annals of Emergency Medicine*, 47, no. 4 (April 2006): pp. 328–336.

4. Anthony S. Tadros *et al.*, "The Effects of an Emergency Medical Services-Based Resource Access Program on Frequent Users of Health Services," *Prehospital Emergency Care*, 16, no. 4 (October/December 2012): pp. 541–547.

5. Dunford *et al.*, "Impact of the San Diego Serial Inebriate Program on Use of Emergency Medical Services."

6. Kelly Bennett, "Two Years In, It's Still Day by Day for Project 25 Tenants," *Voice of San Diego*, April 8, 2013, available at http://voiceofsandiego.org/2013/04/08/two-years-in-its-still-day-by-day-for-project-25-tenants/.