Spokes for Our Folks: Public Health Bike Tour

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ABSTRACT

Nearly half of medical care in the United States is managed through the emergency department, a large portion of which could be managed by “lateral” health services provided by public health facilities like human immunodeficiency virus (HIV) prophylaxis, alcohol and drug treatment programs, emergency psychiatric resources, and medical respite or rehabilitation centers. These options may be underutilized due to lack of knowledge of their services and demographics by patients and health care workers alike. We aimed to educate all levels of emergency medicine trainees and staff to citywide services via bike tour. Participants reported an improved understanding of health services as well as a sense of “camaraderie” toward lateral health services and other providers on the rides.

BACKGROUND

Nearly half of the medical care provided in hospitals across the United States comes from the emergency department (ED).¹ However, up to 27.1% of all ED visits could take place at alternative sites.² Appropriate use of “lateral” health services available from outpatient clinics and community health facilities allows for more appropriate allocation of services and has been regarded as a potential solution for ED overcrowding.³ What is more, emergency physicians report keeping patients in the ED longer and admit to the hospital more due to inability to arrange outpatient follow-up.³ We believe that this may be mitigated by physicians learning about the landscape of outpatient opportunities available for their patients. Furthermore, patients report higher satisfaction with their care when given options outside of the hospital.

Emergency medicine (EM) residents at the University of California at San Francisco often report unfamiliarity with the cornucopia of services available in their city and that they are less likely to utilize them due to not being sure what services are offered or who qualifies for them—despite summaries from ED social

workers as well as department of public health website information about available services.

The World Health Organization reports that inter-professional education and collaborative practice can improve health outcomes and is a necessary step in preparing a health workforce that is better prepared to respond to local health needs. It occurs when students from two or more professions learn about, from, and with each other to enable effective collaboration.⁴ Thus, now heading into its fourth year, we set out to use the public bike lanes and an multidisciplinary team to visit a subset of public health facilities from which our patients arrive, depart to, or get care from regularly. We believe that by familiarizing residents, faculty, nursing, and emergency personnel with the patient demographic and services offered by local health care facilities, we might improve the use of lateral health services and comfort recommending them.

EXPLANATION

Location selection was determined by feedback from residents and staff regarding which services they would like to learn more about in conjunction with

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recommendations from social workers and department of public health administrators as to which they observe to be regular destinations for ED patients. These included a medically assisted sobering center for alcohol intoxication, a primary care wound clinic, a medical respite for homeless patients with ongoing acute medication needs, and a psychiatric urgent care and long-term rehabilitation center (further details and demographics in Table 1). All staff (physicians, nurses, social workers, EMTs, and students) from each training program ED were invited to participate by e-mail.

Mode of transit was determined by program and city-specific features like location, sprawl, or accessibility to roads or public transit. San Francisco is a cycling city—with a high “bike score” (from www.walkscore.com) based on bike infrastructure, number of bike commuters, and over 82,000 bike trips per day.⁵ Many UCSF residents report bicycle use as a primary means of transit or own a bicycle. Participants who did not own a bicycle borrowed one from a colleague or utilized city bike shares like Jump or CitiBike. To ensure optimal safety, all participants were asked to wear helmets and reflective attire, and the ride was scheduled at a nadir between the highest commuter traffic times in the Bay Area at approximately 12:00PM. This time also coincided with the completion of our weekly departmental conference.

A unidirectional route was chosen using Google Maps (Figure 1), which maximized bike lane usage.

The average distance of each ride was approximately 7 miles. Thirty minutes were allotted at each location with a representative there awaiting our arrival. Sites were contacted at least 1 month in advance of the ride and final arrival times coordinated according to the route choice. The site representative at each location gave a brief description of the services they offer, walked the team through the facility and performed a question/answer session upon completion. Finally, trivia based on historical reports of the health care system and found in the EMS rotation background reading materials was performed to further knowledge of San Francisco medical services and history.

DESCRIPTION

Participants reported an increased understanding of the capabilities of the facilities visited as well as greater understanding of the context of medical practice within the city structure. We believe that by exposing the health care team to this wider breadth of health care delivery we may improve utilization of these services. This, in turn, may impact ED and hospital crowding but also allow for greater impact on subsequent quality improvement or EMS initiatives by residents and staff.

Furthermore, the ride engendered a sense of camaraderie and community service from the multidisciplinary team of physicians, nurses, social workers, and

Table 1
Public Health Resources Visited Over 3 Years of Bike Tours

Site	Services Offered	Patient Demographic	Setting
Dore Urgent Care Center	Psychiatric urgent care open 24 hours a day providing evaluation and short term crisis stay	All	Outpatient
Integrated Soft Tissue Infection Service (ISIS) Clinic	Acute and chronic wound care services	All	Outpatient
SF Sobering Center	12-bed facility for patients with alcohol intoxication, also providing resources for detoxification	Primarily homeless	Outpatient
Tom Waddell Urban Health Center	Primary care and drop-in services utilizing harm reduction models including office-based opiate treatment, HIV treatment, and dental and podiatry care	Homeless and marginally housed	Outpatient
SF City Clinic	Free to low-cost clinic for sexual health including diagnosis and treatment, HIV prophylaxis, and contraception	All	Outpatient
Joe Healy Medical Detoxification Center	San Francisco's only residential alcohol and opiate detoxification program that can provide medical management	All	Inpatient
Harbor Light Center	A residential 6- to 12-month program for drug and alcohol rehabilitation run by The Salvation Army	All	Inpatient
Laguna Honda Hospital	Publicly funded skilled nursing facility and rehabilitation center that provides specialties including palliative, geriatric, and HIV/AIDS care	All	Inpatient
Medical respite	60-bed facility for postacute patients with low-level medical supervision	Homeless	Inpatient

Figure 1. Example bike tour map through San Francisco—beginning at San Francisco General Hospital and ending at Laguna Honda Hospital.

EMTs. Some reported that they can now “call (the facility) directly for help in managing a patient.” Others reported exploring new quality improvement projects based on their exposure to these lateral health services. Several staff members at sites visited voiced appreciation to put “faces with names” of doctors they refer patients to and were happy to orient providers at the start of their EM careers to the services at their site.

Finally, with a portion of the EM department commuting by bicycle, the ride itself allowed for an opportunity to learn safe bikeways and practices, which can be a barrier to entry for new riders. While not all cities are as bikeable or have as moderate a climate as San Francisco, we believe that the use of approximately 4 hours (or the average EM weekly conference time) would be sufficient to arrange visits to core public health facilities by bicycle, public transportation, chartered bus, or even walking tour and might be equally efficacious at improving understanding and utilization of these lateral health services.

No injuries were reported from the six iterations of the event to date and several participants expressed their enthusiasm for an academic activity of the residency program that incorporated a wellness activity. The ride attracted participation from members of the EM faculty and fellowship programs, and has

produced at least two “spin-off” rides for those participating in ED academic retreats. In our experience, multifaceted activities embracing educational, social, and wellness benefits become easy to sustain and potential touchstones to improving organizational culture toward community awareness/service and work satisfaction.

References

1. Marcozzi D, Carr B, Liferidge A, Baehr N, Browne B. Trends in the contribution of emergency departments to the provision of hospital-associated health care in the USA. *Int J Health Serv* 2018;48:267–88.
2. Weinick RM, Burns RM, Mehrotra A. Many emergency department visits could be managed at urgent care centers and retail clinics. *Health Aff* 2010;29:1630–6.
3. Pope I, Burn H, Ismail SA, Harris T, McCoy D. A qualitative study exploring the factors influencing admission to hospital from the emergency department. *BMJ Open* 2017;7:e011543.
4. Gilbert JH, Yan J, Hoffman SJ. A WHO report: framework for action on interprofessional education and collaborative practice. *J Allied Health* 2010;39(Suppl 1):196–7.
5. Gorsi T. Bicycle Ridership Data. SFMTA. 2017. Available from: <https://www.sfmta.com/bicycle-ridership-data>. Accessed July 27, 2018.