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Health Care Organizations and Community Development

FROM THE EDITOR

Evolving Roles of Health Care Organizations in Community Development
Austin J. Hilt, MPH

Social, environmental, and economic inequities are widely recognized as major drivers of health disparities.[1] As the US health care system shifts towards greater emphasis on these nonmedical determinants of health, a rethinking of relationships between clinicians, health care organizations, patients, and communities is essential to address existing and future challenges in achieving population health goals.[2] Increasingly, community development stakeholders have become active partners in the fields of clinical and public health.[3]

Community development is broadly defined as an "industry" that focuses on the revitalization of disenfranchised communities and the empowerment of community members.[3,4] It acts through a variety of public and private institutions and funding streams to improve economic opportunity, housing and public spaces, food access, and other sequelae of poverty.[3,4] Addressing the social determinants of health is integral to community development's core functions. Although hospitals and other health care organizations ultimately respond to the manifestations of these root causes of ill health through direct patient care, the social determinants of health have not received sufficient attention by hospital systems and other health care organizations. What is less discussed is the level of responsibility health care organizations have in our health care system—particularly to their surrounding communities—and to society at large.

The Patient Protection and Affordable Care Act of 2010 specified tax exemption requirements for nonprofit hospitals—78% of US hospitals in 2014.[5] They must perform a community health needs assessment (CHNA) every 3 years and invest in community benefit through uncompensated charity care, health improvement, or community building activities that can be justified as health improvement.[6-8] While not all hospitals are subject to these regulations, they provide a platform to consider the roles and actions of health care organizations across settings and structures. CHNA and community benefit investment are examples of how health care organizations can target nonmedical determinants of health and meaningfully engage in community development.[9-11] However, community benefit programs might not be fully leveraged in health promotion. In 2013, only half of nonprofit hospitals reported having community partnerships to develop CHNA implementation plans, suggesting a gap between community priorities and hospital action.[12] Additionally, a majority of hospital community benefit spending was cited as uncompensated care as opposed to direct investment in

community health improvement or building activities.[5,13] Nevertheless, areas served by greater numbers of for-profit institutions, which have no regulatory mandate to invest in community benefit, had less per capita spending on community benefit.[9]

Socioeconomic contrasts between hospital campuses and adjacent neighborhoods have recently been highlighted, calling attention to increases in hospital revenue with simultaneous cuts in charity care and community investment,[14,15] and, ultimately, injustice in the distribution of benefits and burdens. Health care organizations, as major stakeholders in the health care system and recipients of large sums of federal funding, are well positioned to engage meaningfully in community development with the aim of eliminating health inequity. Guiding principles, frameworks, and policy recommendations for strengthening community benefit contributions and enhancing population health outcomes have been published, along with reports of success and suggestions for improvement.[3,4,9,11,16,17] This issue of the *AMA Journal of Ethics* adds to a growing literature on the roles and conduct of health care organizations participating in community development within the communities they serve, highlighting successful applications, ethical dilemmas, and process challenges.

Three contributions discuss community benefit obligations and how to maximize community benefit to achieve health equity. Alex Myers, Aaron Cain, Berkeley Franz, and Daniel Skinner respond to a case in which a hospital administrator is faced with balancing the needs of patients and communities and the profitability of the emergency room by arguing that prioritizing emergency room revenue violates core legal and moral standards. Michael Rozier, Susan Goold, and Simone Singh explain the current state of community benefit regulations for nonprofit hospitals and provide recommendations for their better alignment with health equity. And Hannah R. Sullivan argues that community benefit can be increased not only through better regulation but also through innovative care delivery models.

Hospitals serve other functions beyond providing care, acting as major employers and contracting with local businesses. These economic and social impacts are sometimes so significant that hospitals are labeled "anchor institutions."[18] Numerous examples exist nationwide of the closure of entire hospitals or departments, all with lasting impacts on surrounding communities. In a case of a rural hospital closure, George Mark Holmes and Sharita R. Thomas examine the responsibilities of the health care network and clinicians in easing the transition to care in different locations, emphasizing how patients and the community might be supported.

Not all issues confronted by hospitals have clear health implications. For example, a common experience in refugee populations is isolation. Responding to a case of a resettled refugee with vitamin B_{12} deficiency, Julie M. Aultman applies the capabilities framework to understand how adverse social determinants of health can prevent full

human functioning and how physicians and health care organizations can leverage information and resources to improve refugee health related to social isolation and the social determinants of health.

Hospitals have changed greatly over the course of history—in mission, function, size, and influence, often catering to specific populations. Jeanne Kisacky provides a historical survey of the significance of building design and geographic setting in the delivery of care and in hospitals' interactions with their surrounding communities, with a focus on New York City from the mid-19th to the mid-20th centuries. And Amber Dushman examines how the American Medical Association's Physicians' Placement Service encouraged communities to develop medical facilities that would attract physicians through one of its pamphlets containing descriptions and photographs of example facilities.

As the health care system continues to evolve, so, too, must medical education and the skill sets of new graduates. Christopher R. Davis and Jed D. Gonzalo explain a new pillar of medical education—health systems science—and the benefits and challenges of training systems "citizens" who have dynamic relationships with the health care system. As an example, Gabriela Aitken describes an interpreter certification program for medical students that aims to address an interpreter shortage while simultaneously providing culturally competent care.

Adequate financing and community representation remain significant challenges to public health and community development goals. Robin Hacke and Alyia Gaskins argue that health care institutions' community investment supports not only health equity but also institutional mission and can generate a return on investment. They also discuss how clinicians can catalyze this process by leveraging data and generating demand for community development. Using Nationwide Children's Hospital as an example, Skinner, Franz, and Kelly Kelleher describe a successful partnership with a faith-based development organization to improve both housing conditions in the surrounding community and best practices for hospital community engagement.

Lastly, 4 pieces have implications for our understanding of communities in health care. Sienna Moriarty examines research on high-risk human papillomavirus (HPV) genotypes that are not protected against in the 9vHPV vaccine and that occur with greater frequency among some Mexican populations. She also describes the University of Illinois Medical Center's research on prevalence and distribution of HPV genotypes among Mexican-born immigrant women in Chicago with the aim of improving vaccine-based preventive care for this population. Doug Bradley and Omar Viswanath discuss the surprising health benefits of music and its value in helping Vietnam veterans heal from their war wounds. Anum Fasih's image of 3 physicians illustrates the continuity of ethical standards over time, and Manpreet Kaur's *Bleary Image* pictorially represents the

[personal sacrifice and fulfillment](#) that upholding those standards entails for medical students.

This issue of the *AMA Journal of Ethics* aims to increase awareness of and dialogue about the achievable benefits and existing challenges of health care organizations' engagement in community development. In turbulent political times with uncertainty about the current health care system, this discussion is not only relevant but also urgent as we continue national efforts aimed at achieving social, economic, and health equity.

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CASE AND COMMENTARY

Should Hospital Emergency Departments Be Used as Revenue Streams Despite Needs to Curb Overutilization?

Alex Myers, Aaron Cain, Berkeley Franz, PhD, and Daniel Skinner, PhD

Abstract

This case asks how a hospital should balance patients' health needs with its financial bottom line regarding emergency department utilization. Should hospitals engage in proactive population health initiatives if they result in decreased revenue from their emergency departments? Which values should guide their thinking about this question? Drawing upon emerging legal and moral consensus about hospitals' obligations to their surrounding communities, this commentary argues that treating emergency departments purely as revenue streams violates both legal and moral standards.

Case

General Hospital, located in a downtown urban center, serves a wide variety of patients from its immediate neighborhood and surrounding suburbs and counties. A significant percentage of the patient population is drawn from General's adjacent blocks, where the community has high rates of poverty and crime and many residents tend to have poor health status. Traditionally, General's programs offer charity care to local, underserved patients.

Dr Z, a health professional and senior executive, meets quarterly with each department to discuss successes, challenges, and plans moving forward. One particular area of concern has been emergency department overutilization. During this meeting, Dr X, director of emergency medicine, and Dr Y, a third-year emergency medicine resident, propose a plan to address overutilization. Dr Y presents data on asthma-related emergency department visits, which illustrates that most patients with asthma-related complaints have lower-than-average household incomes and come from demographically similar neighborhoods within 3 miles of General's campus.

Drs X and Y propose a plan to send physicians and community health workers to patients' homes to try to help reduce asthma triggers; this plan would likely improve health outcomes over the long term but would be costly to implement.

Dr Z reiterates General's commitment to treating any patient who presents to the emergency room (ER), regardless of ability to pay. Dr Z expresses concern that shifting charity efforts from emergency service provision to community outreach could compromise an important current revenue stream for General, as the hospital collected millions in revenue for asthma-related emergencies over the past 2 years. The physicians wonder what they should do to balance their competing obligations—to address emergency department overutilization and build community programs that improve health outcomes.

Commentary

How should hospitals improve community health without compromising the quality of emergency care or their bottom line? Ultimately, we argue, treating emergency departments as a major revenue source violates legal standards and core values. However, hospitals are obligated to try to reduce ER utilization not by erecting barriers but by improving communities so that local residents rely less on emergency care to meet their acute health care needs in the first place.

Hospitals' Legal Obligations to Communities

We assume that General Hospital is, like most US hospitals, a nonprofit hospital that receives funding from Medicare. As such, it is bound by 3 major legal obligations. First, the Emergency Medical Treatment and Labor Act (EMTALA) requires that emergency departments accept walk-in patients regardless of ability to pay and provides them (at a minimum) with direct medical services to a point of stabilization.[1] Second, Section 501(r)(3) of the Internal Revenue Code requires that nonprofit hospitals provide community benefit under the Affordable Care Act (ACA), with the aim of improving the health of their communities.[2] Accordingly, they must undertake community health needs assessments every 3 years and develop an accompanying implementation strategy to address those needs.[3] Third, a requirement found in Section 501(r) of the Internal Revenue Code has long mandated that nonprofits provide charity care to patients who need it, particularly by ensuring that patients who qualify for assistance get it.[4] The ACA expanded these requirements, ensuring that hospitals make public their financial assistance policy and provide services either for free or at a reduced rate to patients who qualify.[5] Hospitals also must make an effort to determine patient eligibility for financial assistance and, if patients meet these criteria, forego extensive collection practices.[6]

General Hospital's nonprofit status potentially tells us a great deal about how this dilemma should be resolved. While we do not know any details about General Hospital's financial status, we can assume that the institution receives a variety of tax benefits as a nonprofit. These benefits include not only the direct benefits of not having to pay numerous federal and state income taxes but also indirect benefits, such as being exempt from taxation on donations and opportunities to invest in tax-free bonds.[7] Although we do not know the scope or depth of General Hospital's community benefit

work, we can assume that, as required by law, the hospital has a financial assistance program in place and provides charity care as a primary source of its community benefit activities.[8] Like all nonprofit hospitals, General has an ethical obligation to its ER patients to provide them the best possible care, whether in the acute setting or through community-building initiatives that reduce the need for emergency care.

General Hospital's Deliberation About Values
In her aim to provide the best possible care to the surrounding community, Dr Y, an ER resident (hereafter "the resident"), represents ideals for which physicians should strive. A widely cited 1964 interpretation of the Hippocratic Oath, a foundation of medical ethics, makes a critical distinction between prevention and treatment: "I will apply, for the benefit of the sick, all measures [that] are required…. I will prevent disease whenever I can, for prevention is preferable to cure."[9] The Hippocratic Oath is taken by just about every medical professional at some point in his or her training, and it delivers an ethical blueprint for medical practice. Nevertheless, health care systems have responsibilities that transcend ethical patient care, including administrative and financial responsibilities. Given the multifaceted nature of hospitals as both businesses and sites for medical care, how should these institutions weigh their various responsibilities?

Enter Dr Z, the hospital administrator (hereafter "the administrator"). The case characterizes the administrator as concerned about both patients and the hospital's financial viability. Looking more closely, the administrator casts the hospital as a business in which asthma-related emergencies are viewed in one light as an "important current revenue stream." "Charity care," however, only serves to hurt hospital margins. Asthma control, in this context, becomes a commodity. Framing the administrator's outlook in this way is not to say that she lacks regard for the health of patients; she very well may, or at least may have convinced herself that she does. But how can the administrator promote health in the organization if she does not meet the bottom line? The administrator's main concern appears to be that shifting General Hospital's charity care program from emergency service provision to community outreach would compromise an important revenue stream. General would not only sacrifice current monies generated from patients with asthma in the emergency room but also lose all potential revenue from now-healthier community members who would no longer visit the ER at the same rate.

Dr X, the emergency medicine director (hereafter "the director"), attempts to provide a solution to this conflict. The director, as a physician, aims for the same ideals of health as the resident by virtue of the core professional ethics principles he has vowed to uphold. As the emergency medicine point of contact for the administrator, however, he is also tasked with making sure these ideals fit within a successful business model. More succinctly, the director represents the middle ground between the goals of improving health outcomes and maintaining financial viability within the hospital. This middle

ground reflects a more general tension within the US health care system today, as financial realities constrain health care decision making and subsequent health outcomes. And this middle ground too often becomes necessary to navigate for physicians such as the director, who are stuck between administrators' concerns about the bottom line and their own commitment to the health of their patients.

Ultimately, the above conflict requires that a choice be made that weighs moral responsibilities to ensure optimal health outcomes and protect the financial viability of the institution. Clearly both must be addressed in this scenario; however, the moral path aligns significantly better with the core values of health care professionals and the interests of patients alike. Thus, it becomes necessary to examine the current health care system and to explore meaningful changes that would both protect patient care and population health while promoting a successful business model for health care institutions.

Exploring Solutions to General Hospital's Dilemma
While EMTALA is a long-established federal law, true community outreach requires more of hospitals. Just as medicine itself is increasingly shifting to models of active (eg, preventive) engagement, community-building activities can be considered "active" while charity care is mostly "reactive." Charity care is, at the end of the day, aimed not at improving health conditions in communities but rather at swallowing the bill for care—either entirely or by delivering it at a reduced rate. Yet, as enforcement and oversight of charity care is weak, it is likely that General Hospital will face no consequences if it meets even bare minimum standards. Only a handful of hospitals have lost their nonprofit status under community benefit laws.[10]

This reality raises the question of whether new incentives are needed to push hospitals toward a more active approach to community health. Innovative models used by hospitals across the country demonstrate many ways that General could improve the quality of life for the surrounding community. One way would be implementing public health programs, such as the one presented by the resident. By shifting to preventive medicine, General Hospital would spend more time educating the community and providing tools to promote wellness. The hope is that such a shift would result in patients coming to the ER only when they truly need emergent care while the hospital would still benefit both morally and financially by keeping its patients. One consideration with regard to ER use and reimbursement is that, while Medicaid and the Medicaid expansion have greatly reduced uncompensated care provided by US hospitals,[11] the only truly profitable patients are those who have private insurance. And, even here, a sobering fact underpins this profitability: regardless of their payer (Medicare, Medicaid, private insurance), patients not experiencing a true emergency—meaning that their care could have been managed in an outpatient setting—are rarely profitable.[12] By implementing preventive measures, General Hospital would shift nonemergent care to

its more appropriate outpatient setting while allowing emergency department resources to be utilized more as they were intended.

Another possible solution is to zoom out on the presented case and look at how this situation might be different within value-based payment structures that are currently being tested in the US health care system. Coverage is undoubtedly one of the core issues that helps to drive General Hospital's conflict, as those who depend on Medicaid or self-pay account for 48% of nonurgent emergency room visits.[13] Universal health care proposals such as Medicare for All have gained significant traction among lawmakers, health care practitioners, and the public at large,[14] and such proposals would ensure that coverage is not a prohibitive factor in meeting basic health needs. In the near future, however, the move away from fee-for-service payment models toward systems that pay for value and demonstrated outcomes will force hospitals such as General to think more comprehensively about the relationship between patient care and financial considerations. Avoidable emergency department visits, in particular, jeopardize hospital profitability. Indeed, if these trends toward value-based payment continue, hospitals will no longer be paid for services provided that do not have enduring positive effects on patients—including through prevention.

Yet another option is increasing the focus on preventative social services in hospitals and having that focus reflected in compensation, a possibility discussed by Stuart Butler and Carmen Diaz of the Brookings Institution with regard to hospitals and schools as community "hubs."[15] Shifting health care further into a central role in the community could feasibly shift perception of disease from an emergent issue needing a quick fix to a preventable entity. Developing hospital-based programs to promote access to affordable, healthy food and safe housing provides an opportunity to strengthen moral commitments to local communities and develop new revenue streams for hospitals.

Conclusion
This case raises a number of difficult questions for hospitals operating in a fast-changing health care environment. The different perspectives that comprise the case's ethical core—those of Drs X, Y, and Z—represent ideal types and possibly even stereotypes of positions that certainly do exist within US hospitals. At the same time, we assume that all clinicians, be they emergency room physicians or hospital leadership, care (albeit to potentially different degrees) about health outcomes, patient needs, and ethics. Yet, this case makes clear that ethics may not always be enough to force different actors, driven by divergent roles and interests, to provide patient-centered care. Rather, legal structures such as those put in place by EMTALA, nonprofit tax code, and the Affordable Care Act serve as a guardrail for ethical lapse. Indeed, in an age of mergers, consolidation, and system competition, when patient-centricity risks being reduced to a buzzword or branding campaign, the case of General Hospital illustrates the need for

strong legal requirements, backed up by enforcement, to ensure that medical professionals put their obligations to patients first.

In recent years, innovations have arisen both in the way health care is delivered and in methods of payment. It is therefore important, as well, to consider the fast-changing nature of medicine itself in assessing this case. Promising models such as accountable care organizations, medical homes, and payment reforms emphasizing value over volume—especially those receiving strong financial and logistic support from the Centers for Medicare and Medicaid Services—are likely to both force and incentivize hospitals to take more responsibility for the well-being of the populations surrounding their campuses.

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CASE AND COMMENTARY

What Should Be the Scope of a Health Network's Obligation to Respond After a Hospital Closure?

George M. Holmes, PhD and Sharita R. Thomas, MPP

Abstract

As rural hospital closures become more common, many patients are left without sources of care, raising ethical questions about hospitals' and clinicians' responsibilities during and after closures. In many cases, such as the one considered in this article, hospitals have been economic hubs of some communities for many years and are obliged to consider short-term and long-term consequences of closures on community life. This commentary suggests that health networks can help communities transition to new service locations when they partner with community members to identify and respond to remaining gaps in access to and delivery of needed health care services.

Case

N Health Network recently announced the closure of one of its institutions, S Medical Center. In a rural location, the medical center is the area's only full-service, inpatient hospital, providing primary, emergency, and specialist care to over 20 000 residents since its opening 40 years ago. Reasons given by N Health Network for the medical center's closure include decreasing revenue, decreased patient volume, and burdensome building maintenance costs. The medical center's patients and staff of local clinicians will be consolidated and transitioned to N Health Network's main campus about 30 miles away.

Beyond medical care, S Medical Center has served as an economic anchor for this town, employing residents in a wide variety of professions and consistently contracting with local businesses. Unsurprisingly, there has been considerable public outcry since the announcement. Many residents feel that S Medical Center has become a way of life for their town and express great concern over its impending departure. Generally, the community feels unprepared for the ramifications of this decision.

The medical center's clinicians, including Dr P, acknowledge that the reasons given by N Health Network administrators are good ones, but they are concerned about the closure's impact on their and their community's livelihood. Because the medical center is one of the main employers in the community, its closure will mean job losses and reduced economic prosperity in the community and make it harder for many long-time

community members to access the clinicians they've been used to seeing when they have health problems. Dr P wonders how he should respond to his colleagues' and patients' concerns during the consolidation and transition.

Many of Dr P's long-term patients have asked for more information regarding S Medical Center's closure. Mr H, a 63-year-old man with diabetes and fatty liver disease, expresses his concern. "After all these years, I can't believe S is leaving, and that you're leaving! You're still going to be my doctor, right?" Dr P tries to reassure Mr H that everything will work out and that he will continue to care for him. Mr H responds, "How do they expect me to travel so far to see you?"

Dr P apologizes to Mr H for the distressing situation. Dr P feels frustrated, too, and wonders how the collective distress of the closure could be hurting patient-clinician relationships all over the town. Dr P wonders what to say and do.

Commentary

The last few years have seen an increase in the rate of rural hospital closures[1]; from 2010 through 2013, there were 7.5 rural hospital closures per year, compared to nearly 13 per year from 2014 through 2018.[2] The causes of rural hospital closure are varied and largely specific to a particular instance but can be roughly categorized into 4 broad groups: (1) demographics (ie, low volume due to declining or aging population or decreases in women of childbearing age), (2) economics (eg, lower insurance coverage or lower household income, which reduces ability to pay), (3) technology and market trends (eg, consolidation, decreasing use of inpatient services, staffing requirements), and (4) policy changes (eg, projected decreases in Medicare physician payment rates by 2025,[3] although improved financial performance of hospitals in states that expanded Medicaid[4] and Affordable Care Act provisions that shifted the financial costs of providing care from consumers to the federal government[5] could reduce the likelihood of hospital closure). Public policy is one tool that is often used to support rural hospitals, as a number of special Medicare payment provisions were established that recognized financial challenges facing rural hospitals by allowing cost-based reimbursement or supplemental payments.[6] The elimination of these special provisions has been identified as a potential federal cost-cutting strategy[7]; unsurprisingly, these cuts, if enacted, are projected to have considerable impact on hospital financial viability.[6]

Of course, a hospital can only serve its community if it remains open. Rural health care systems with the most generous approach to serving the community can find it challenging to generate sufficient revenue to remain open. Although some services valued by rural communities are potentially profitable (eg, surgery),[8] others are typically unprofitable (eg, obstetrics).[9] Previous research has found that rural nonprofit hospitals are more likely to offer unprofitable (and underprovided) services than rural for-profit hospitals[10] and that nonprofit hospitals face additional requirements to ensure that their

tax exempt status is consistent with their ability and commitment to meet the needs of the community.[11] Thus, although rural nonprofit hospitals can remain committed to meeting the needs of their communities, many face the stark reality of challenging financial conditions, rendering their continued operation difficult; roughly one-third of rural hospitals have a negative total margin.[12] Given this context, how can Dr P best help his patients—and his community—transition to a postclosure world?

Understanding Rural Patients' Vulnerability to Hospital Closures
By one estimate, socioeconomic factors account for 47% of health outcomes.[13] Poverty and inadequate transportation are 2 important social factors that make rural residents particularly vulnerable to a hospital closure. Rural residents experience higher rates of poverty than do urban residents and can live in communities of "persistent poverty," where the poverty rate is at least 20% over approximately 30 years.[14] Transportation is a constant issue for rural areas faced with limited public transit options, as rural residents travel farther to obtain services, including health care, than urban residents.[15] Rural residents with low income are likely to depend on their local hospital for more than just inpatient services. Multiple studies have confirmed that those with lower socioeconomic status are less likely to bypass their local rural hospital and seek care in a larger urban hospital,[16] possibly due to inability to access reliable transportation and the costs of traveling to more distant hospitals.[17] Similarly, members of communities more distant to the closest trauma center are more likely to be living in poverty, uninsured, or African-American.[18] Thus, a closure of the local rural hospital is likely to have a larger effect on the more vulnerable residents than on those with the means to travel to alternative sources of care.

Race and ethnicity, gender identification, and age compound the effects of these social factors. Racial and ethnic minorities living in rural areas are more likely to report being in a state of fair or poor health, having obesity, and having to forego health care in the last 12 months due to costs.[19] The risk of mental illness is higher for lesbian, gay, bisexual, and transgender (LGBT) people than for those who identify as heterosexual, and these risks are exacerbated for rural LGBT people who are geographically isolated and residing in areas with limited mental health care resources.[20] And the rural elderly face high rates of poverty, inadequate housing, and isolation.[21]

Understanding the Impact of Rural Hospital Closures
As discussed, rural residents are more likely to face a mix of factors that place them at increased risk of poor health outcomes—and the loss of their local hospital will not improve their health status. Of course, the effects of a hospital closure on a community are not limited to access to quality health care. In many communities, the rural hospital is a major employer, and so a closure represents a potentially seismic shift in a community's employment and economic well-being. For example, the loss of a rural community's only hospital leads to a decrease in per capita income.[22] A study of remote

hospitals in Scotland and Australia identified additional contributions that hospitals make to a community, including providing a sense of reassurance and security that health care needs will be met should the need arise (manifest as the infrastructure to age in place), a locus for community volunteering, and a career ladder for local residents.[23] Thus, rural hospital closures have a notable and diverse impact on communities. The cessation of certain services—eg, obstetric[24] and surgical units—in hospitals that remain open presents similar challenges even if they are not as dramatic as the closure of the entire hospital.

Responsibility in the Decision to Close a Rural Hospital
One way to frame the decision of whether to close the hospital is to explicitly recognize the tradeoff facing the network. Frank Harrison frames it this way: "The dilemmas present us with the ominous task of choosing one of two goods to the exclusion of the other."[25] From the perspective of the rural residents in this case, S Medical Center is a part of their lives and livelihood—a source of primary, specialty, and emergency care as well as a significant contributor to the economic and social well-being of the community. For N Health Network, S Medical Center is not a viable campus and could be consolidated with a larger campus nearby. Both hospitals and clinicians have a responsibility to the community during and after closure.

Hospitals' responsibility. Based on community and clinician perceptions of rural hospital closure, health care organizations faced with the decision of whether to close a rural hospital should also consider the potential emotional, economic, practical, and political impacts of closure for the community and for itself. A health care organization should then develop and communicate a closure process and plan. Ideally, the community, the patients, the staff, and the clinicians in partnership with the health care organization would play a role in the decision to close a hospital, as all are stakeholders. However, in any hospital closure, establishment of an advisory group incorporating the stakeholders—current hospital executives, current hospital physicians and care team members, and members of the community—to oversee the closure process can mitigate much of the uncertainty and feelings of frustration. While a health care organization is removed from the community, the clinicians who have consistently delivered care within the community are also members of the community and therefore can bring the concerns of the community to the discussion and even advocate for an advisory group or closure plan.

Even if the public announcement of a hospital closure is abrupt, a decision to close a hospital is not: it involves research, planning, and addressing legal or regulatory processes. Clinicians who have not have been involved in the decision to close their hospital might learn of a closure along with the rest of the community. During the transition, having a clear communication network with the staff and clinicians is critical.

Clinicians' responsibility. While the health network could engage the community in discussions, for patients, it would be important to hear from their clinicians and care team at the hospital. Rural residents faced with hospital closure feel distressed about increased travel time to access hospital services and loss of emergent or urgent care.[26] Dr P can take action to mitigate any potential patient backlash about the closure by taking appropriate steps to ensure continuity of care for his patients. N Health Network has decided that all patients and clinicians will transition to care at the main campus 30 miles away. At least one patient has expressed a concern over this distance, and it is likely that other rural residents will face a transportion or economic barrier to receive care 30 miles away. Dr P can provide information on his patients (eg, how many will have foreseeable transportation issues that will impact continuity of care) to N Health Network and offer potential solutions such as public or subsidized transportation or a telehealth-based approach. Ideally, N Health Network would develop a plan that Dr P could share with his patients. On the other hand, physicians and other clinicians will likely have to cope with their own feelings of anxiety and even depression.[27] The need for a consistent message about the reason for and the process of closure and transition is essential for patients, clinicians, and members of the community.

Conclusion

Hospitals need to be financially viable in order to fulfill their mission (whether it be service to indigents, a specific population, the community, or others). The old maxim "no margin, no mission" holds true; ultimately, a hospital that is financially struggling might be simply unable to continue to operate, and the closure could have a devastating impact on the community in the near and long term. In such a case, it is important for the health system and local health professionals to balance the tradeoff between financial viability and service fairly to ensure that rural residents have appropriate and timely access to quality care and to provide the supports for transitioning to new service locations when the hospital closes. The ideal—the most ethical—response will be dependent on the unique circumstances of the rural community. And these can best be ascertained by approaching the transition with the community as an active participant.

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AMA Journal of Ethics®

CASE AND COMMENTARY

How Should Health Care Professionals Address Social Determinants of Refugee Health?

Julie M. Aultman, PhD

Abstract

In the case scenario, RJ is a resettled refugee teenager who presents to his physician with vitamin B_{12} deficiency, anemia, and symptoms of mental illness. This commentary considers social determinants of refugee health and the moral importance of freedom to achieve well-being. The capabilities framework is used to analyze this case because it offers an ethical framework for understanding and evaluating social determinants of refugee health that either promote or diminish freedom to achieve well-being. By using this framework to consider social isolation as a negative social determinant of refugee health, clinicians and institutions can be caregivers as well as advocates for social justice, fulfilling 2 core ethical obligations to refugee communities.

Case

Dr G is a physician who follows up with RJ, a 17-year-old resettled refugee, about his feelings of isolation and depression revealed in an earlier visit in which RJ needed a physical exam to get a work permit. RJ was subjected to psychological trauma during his early childhood and, from 2009 to 2013, lived in a refugee camp, where he learned English. After reviewing RJ's blood work from his last visit, Dr G explains to RJ that he is anemic and has a vitamin B_{12} deficiency, probably due to poor nutrition. Dr G inquires about RJ's daily life, school, and work. RJ spends most of his free time working to help support his grandparents, mother, and sister. Job opportunities are scarce, and RJ is currently the only member of the household earning an income. After further conversation, RJ reveals that he still feels depressed and isolated. "I have to work, so I don't have time to go to the outreach programs you recommended. Besides, my family and I just don't seem to fit in. We don't belong here." He describes how his family members have similar feelings and how he is worried about their health.

Dr G and RJ discuss RJ's concerns and therapeutic options. RJ is not willing to take medication and says, "Why would I spend money on a drug just for me? It won't help. We are all so alone here."

Dr G hears similar concerns expressed by her other refugee patients and has described these patients as melancholy, fatigued, and malnourished. There are over 1000 refugees living in her city; roughly 60 receive care at Dr G's clinic. She knows that there are higher-than-average rates of mental illness and suicide among this local population. She does her best to serve these patients, but it doesn't seem to generate improved health outcomes in the community. Dr G wonders what to do.

Commentary

The hypothetical case of RJ is representative of the many refugees and asylum seekers who experience difficulty in assimilating to an unfamiliar culture while trying to manage health-related conditions attributable to the abuses, threats, and violence that they suffered within their country of origin. For RJ and other refugees, escaping persecution results in years confined to a refugee camp with a different set of problems and a lack of resources. RJ likely endured physical and emotional trauma both during his migration and his stay at the refugee camp. While refugee camps are often perceived as safe and secure environments, it is not uncommon for those living in them to experience trauma (eg, physical and sexual violence), insecurity (eg, theft of personal items), malnutrition, and loss of basic freedoms (eg, privacy).[1] However, even when refugees resettle in a safe environment, they continue to experience physical and emotional hardships, such as discrimination, isolation, and the inability to find work and housing, which forces them to resettle in different, often multiple, locations.[2]

Resettled refugees' ill health is contributed to by inaccessible public transportation, language barriers, inadequate housing, conflicting family commitments (eg, child care), and inflexible work schedules. Patients like RJ are unable to get the health care services they need without extensive support, flexible health care professionals and social services, and some creative ways to deliver care (eg, health care services offered during worship services at religious centers or primary care medical homes).[1,2] Unless clinicians pay special attention to the social determinants of health (SDH) and make a deeper connection to refugee patients, these patients will be at increased risk of mental disorders and other harms, including self-harm.[3-5] Thus, the journey to freedom for a refugee can be long, arduous, and harmful to his or her health and well-being.[5,6]

In what follows, I look more closely at RJ's narrative and the therapeutic relationship that his physician, Dr G, is trying to establish in a broader social context. It is important to understand some of the general health conditions and SDH experienced by resettled refugees like RJ. Equally important is recognition of the rights of those who have sought asylum and how past abuses and violations of basic human rights have contributed to and perpetuate existing social, emotional, and physical conditions that require attention from health care professionals, the institutions they serve, and others in the community. I then show that a *capabilities approach*—a theoretical framework attributable to the work of economist-philosopher Amartya Sen and philosopher Martha Nussbaum[7,8]—

would better equip Dr G to assess RJ's well-being, evaluate his environment or social arrangements, and have a better understanding about what it means to be a resettled refugee in a new environment. Before embarking on a discussion of the benefits of a capabilities approach in guiding refugee care, it is important to look more critically at RJ's health issues and the challenges of resettlement.

Addressing Refugee Health and the Challenges of Resettlement
With little or no income or financial support, RJ is likely unable to maintain proper nutrition or to acquire health care resources, postsecondary training, and necessary social support. He may find it difficult not only to find long-term employment and build a future career but also to be healthy enough to work. Thus, it is important for health care professionals to recognize not only SDH, or those conditions in the environment that affect health and functioning, but also how poor health outcomes can be magnified when persons resettle in unfamiliar environments and cultures.

Social determinants of health. Dr G—and all health professionals—should recognize the complex relationship of patients' environment to their health status. RJ's anemia, B_{12} deficiency, depression, and feelings of isolation may have started prior to his resettlement in the United States; however, these health conditions might only get worse when compounded by RJ's financial, familial, and social pressures and his inability to access social and economic opportunities. RJ does not want to spend money on a drug prescribed by Dr G, presumably because he is looking out for the financial welfare of his family rather than his own medical needs. Perhaps RJ even views the drug—and, by extension, his health—as a luxury. Hence, it is important for Dr G to openly discuss with RJ how valuing his own health can align with his other values and interests, such as supporting his family. Awareness of the relationship between health and work may help RJ realize that being "melancholy, fatigued, and malnourished" can negatively impact his employment opportunities and his ability to work. Furthermore, an integrated and coordinated team approach might provide Dr G with support and with additional information and resources to share with RJ. For example, social workers, case managers, and others could assist RJ and his family in securing long-term health care benefits, access to nutritious foods, and community support. Such coordinated efforts can be challenging, particularly when the patient's work life may prohibit health-based opportunities (eg, outreach programs). Thus, ongoing assessment by clinicians and flexibility within existing social structures and among community stakeholders (eg, employers) are needed to improve refugee health and to mitigate associated SDH.

Health insurance. Refugee resettlement in the United States has been described as a private-public enterprise that requires coordination among several federal agencies; national, state, and local resettlement offices and health care agencies; and primary care clinicians.[9-12] One example is insurance coverage. Refugees in the United States currently get short-term health insurance, or refugee medical assistance, which is only available

for up to 8 months.[9,10] Thereafter, some may qualify for Medicaid and the Children's Health Insurance Program (CHIP) in the state where they resettle,[10] particularly pregnant women and children. Because RJ is only 17 years old, in many states he could qualify for CHIP or comparable programs up to a certain age (eg, 19 years of age in Ohio[11]) if his family is within a designated percentage of the federal poverty line. Many refugees, however, may have to buy costly, private health insurance after the first 8 months of resettlement if they do not qualify for Medicaid. Some states will also provide cash assistance for refugees in their first 8 months living in the United States; however, such assistance may not be adequate for meeting basic needs such as housing and utilities and is inconsistent across states.[9] In some states, such as Ohio, social services are available to refugees for up to 5 years that can assist with acculturation, language education and training, job training and placement, transportation, child care, elderly assistance, and citizenship classes.[12]

Although financial, social, and educational support may be available for refugees such as RJ and his family, the reality is that not all refugees are aware of these services, which may be poorly advertised, resource depleted, or simply ineffective. Thus, professionals like Dr G and the communities in which resettled refugees live may have to be innovative in reaching this population.

Mental health. Extensive or more complex mental health care (such as might be required to treat RJ's depression and feelings of isolation) may not be widely accessible, and medical professionals often lack expertise or understanding of refugees' perceptions of mental health and their (un)willingness to seek help. Refugees may experience symptoms consistent with major depressive disorder, posttraumatic stress disorder, or any number of mental health conditions that require specialized therapeutic interventions.[4,5] It should give Dr G pause when RJ describes not fitting in and being unable to utilize outreach resources, as continued isolation is a risk factor for suicidal thoughts and acts.[4,5] For some refugee populations, the stigma of mental illness serves as a barrier to seeking help, and, for others, mental illness may not be a concept understood within the population (eg, symptoms associated with mental disorders may be attributed to diet, religious beliefs, or some other external force).

Broaching the sensitive topic of mental illness can be a challenge for health care professionals and advocates due to language barriers (ie, there may not be a term for mental illness in some cultures), cultural differences in the meaning of mental illness, or fear of disrespecting or harming patients by inviting them to share their emotionally painful stories for diagnostic and treatment purposes. Sensitivity to SDH can improve mutual communication and understanding between health care professionals and patients who are refugees, such that mental health care can be delivered in ways that are more consistent with patients' values and beliefs. For example, depression can be explained in physiological and neurochemical terms rather than as a "mental" disorder

that some cultures attribute to an immaterial, often sinister, force or spirit (which is thus a topic to be discussed not with a health care professional but with a spiritual leader). Framing health and disease around what patients understand and value can contribute to a better therapeutic relationship and serve as a starting point for improving refugee health. However, acknowledging SDH and reframing concepts of health and disease may not be sufficient for promoting RJ's health and his other capabilities essential to preserving his dignity as a human being.

Guidance From a Capabilities Framework
The 1951 Convention Relating to the Status of Refugees, a United Nations treaty, identifies the rights of refugees—including, but not limited to, the right to safe asylum, freedom of thought and movement, and the right to education.[13] When we look at these freedoms—and the ethical and social injustices impeding achievement of such freedoms—we can better understand the opportunities refugees such as RJ need in order to achieve full functioning or essential human capabilities, such as earning a living or caring for others. Part of a social justice analysis also includes identifying avoidable SDH that create unfortunate constraints on human capabilities. Through a capabilities framework, particularly one informed by Martha Nussbaum's liberal theory of justice and human rights, health care professionals can take "account of the space within which we make comparisons between individuals and across nations as to how well they are doing."[14] That is, we can ask questions such as: What is RJ actually able to do and to be? How might the existing resources for resettlement work in enabling RJ to function in a fully human way? How might SDH inhibit RJ's functioning in a fully human way?

Many refugees' families have been killed in their war-torn countries of origin or continue to be housed in refugee camps and are unable to be resettled, but, even with family support, refugee patients such as RJ can feel isolated in their new environments. And while health care professionals are not obligated to reproduce such social support in their efforts to mitigate patients' feelings of isolation and promote their capabilities, acknowledging the circumstances surrounding patients' emotional and social needs is an important step. Dr G has offered outreach programs, which could be beneficial for RJ; however, due RJ's work schedule, he is unable to access this opportunity. The conflict between 2 important commitments (work and social outreach) thus prevents RJ from functioning in a fully human way[15]; the need to financially support his family contributes to his social isolation and his being incapable of affiliation with others. While health care professionals and organizations can help alleviate social isolation by creating support groups based on cultural and supportive needs of refugees such as RJ, existing employment structures need to be more flexible to ensure that refugees can take advantage of opportunities that promote health and well-being.[2,14] Without more flexible or alternative ways for refugee patients to earn a living while being part of a community, Dr G's efforts will be ineffectual in helping her patient.

To contribute to the change that is needed to promote human capabilities and overall patient health, health care professionals and organizations need to be advocates for their refugee patients by identifying barriers to care that compromise capabilities such as lack of transportation, health illiteracy, the inability to take time off work, and the high costs of quality care, especially if a patient does not qualify for supportive programs such as Medicaid or CHIP. Of course, such problems are experienced by many citizens within the United States and continue to be a barrier to preventive care and early detection of serious, costly health conditions. Nevertheless, it is equally important to recognize this vulnerable population of refugees that is trying to navigate a new environment, language, and culture, while surviving the trauma of unfathomable past circumstances and existing discrimination that continue to threaten their human capabilities. Advocacy can promote public awareness of SDH, refugee health, and social injustices that can be repaired through community commitment and a willingness to improve human functioning by breaking down barriers and biases and creating opportunities.

Recognizing trends in mental and physical illness among particular refugee populations is another obligation that health care professionals and organizations ought to consider. Careful medical record keeping, research and quality improvement studies, and ongoing communication with refugee patient populations and their communities are critical for identifying and understanding health-related trends including nutritional deficits, mental disorders and related high suicide rates, infant morbidity and mortality, and so forth. By recognizing trends such as poor nutrition, as RJ is likely experiencing, health care professionals and organizations will be better able to inform communities and community leaders about prevention, access to vitamin B_{12}-rich foods and supplements, and the risks associated with nutritional deficits.

With evidence of barriers to health, including SDH, we are better equipped to answer questions, such as: What is RJ actually able to do and to be? If RJ's anemia and possible subsequent lethargy prevent him from working and financially supporting himself and his family such that it is difficult to put nutritious food on the table—and in a house with working utilities within a safe, nurturing community—his depression could be exacerbated. His untreated, comorbid health issues and SDH prevent RJ from fulfilling his basic human capabilities. Providing medications for RJ's poor nutrition and depression is not a viable solution without a full understanding of RJ's history, current health status, and what he strives to do and be. RJ may ignore prescriptions and recommendations and his health may continue to decline without a conscientious physician, a dedicated health care system, and a caring community.

Finally, it is important for health care professionals and institutions to recognize their general ethical obligations not only to patients but to the community. The American Medical Association's Principles of Medical Ethics outlines guiding principles that are applicable to this case. Besides "providing competent medical care, with compassion and

respect for human dignity and rights," physicians should also recognize their "responsibility to participate in activities contributing to the improvement of the community and the betterment of public health," and "support access to medical care for all people."[15] While these guiding principles do not specifically detail the obligations of physicians to refugee populations, the underlying message is to treat all persons with dignity and respect—which is consistent with the capabilities approach—and to make an effort at the bedside and within the community to improve the health and well-being of all people. It may take time to translate—or to recognize—a patient's cultural perspective and values, but with greater understanding of the social determinants contributing to population-specific illness and disability and by advocating for each RJ as a whole person with unique needs, health care professionals can best respond to those conditions that undermine their patients' health and improve those capabilities essential to all persons.

Conclusion

For refugees like RJ and his family, nutrition, mental health, child and elder care, education, employment, and social support systems to enhance well-being and mitigate isolation are all issues that can be pragmatically resolved with the help of refugee assistance programs, social workers, community leaders, and advocacy groups. Some of the more complex issues, such as identifying barriers to realization of capabilities, may require a deeper, theoretical analysis and ethical examination from a capabilities approach, which enables critical assessment of the degree to which human capabilities are compromised and personal freedoms are limited in cases such as RJ's. To trigger both community involvement and a deeper awareness of social justice issues requires the health care professional, team, and organization to identify barriers specific to the health and well-being of refugees and to those capabilities essential for them to thrive within their new communities. It may take that follow-up clinical encounter for Dr G to address RJ's immediate health needs (eg, B_{12} deficiency) and to establish supportive connections (eg, community gardens) to alleviate, if not resolve, his isolation, nutritional deficiencies, and depression. However, it will take additional time and a therapeutic commitment to identify the unnecessary social burdens bestowed upon RJ, foster a trusting relationship, and come to a mutual understanding of RJ's needs in relation to what he is or is not capable of doing or being. If RJ's freedoms are limited by a lack of such opportunities, advocacy and a call to action to secure those freedoms is recommended.

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MEDICAL EDUCATION: PEER-REVIEWED ARTICLE
Medical Students as Certified Interpreters

Gabriela Aitken

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Abstract

Spanish speakers make up 13.1% of the US population, and language barriers contribute to health disparities. Medical interpreters are essential for communication between patients with limited English proficiency (LEP) and their clinicians. However, there is a shortage of interpreters nationwide; free clinics, where a large majority of patients with LEP receive care, are especially affected by this shortage. Many medical schools are associated with a free clinic, and medical students who speak Spanish can help fill this gap. Loyola University Chicago Stritch School of Medicine, together with Interpreter Services at Loyola University Medical Center, created an interpreter certification program for medical students. Although there are challenges in certifying medical students as interpreters, doing so helps to build a workforce of well-trained, culturally competent physicians.

The Need for Certified Interpreters

According to the US Census Bureau's 2012-2016 American Community Survey 5-year estimate, 13.1% of the US population speaks Spanish, and 41.6% of these Spanish speakers report speaking English less than very well.[1] Language barriers contribute heavily to health disparities seen in limited English proficiency (LEP) populations. Indeed, studies document that patients with LEP often defer needed medical care; are at higher risk of leaving the hospital against medical advice; are less likely to have a regular health care professional; and are more likely to miss follow-up appointments, to be nonadherent with medications, and to be in fair or poor health.[2,3]

A medical interpreter is an essential component of effective communication between patients with LEP and health care professionals. A systematic review of the literature revealed that the use of professional interpreters (ie, interpreters who have undergone a training and certification process) is associated with an overall improvement of care for

patients with LEP.[4] Specifically, use of professional interpreters "appear[s] to decrease communication errors, increase patient comprehension, equalize health care utilization, improve clinical outcomes, and increase satisfaction with communication and clinical services" for patients with LEP.[4] A recent cross-sectional analysis of interpreter errors and their potential consequences in emergency department encounters in which professional interpreters, ad hoc interpreters, or no interpreters were present found the proportion of potentially consequential errors to be significantly lower for professional interpreters (12%) than for ad hoc interpreters (22%) and no interpreters (20%).[5] Among professional interpreters, hours of previous interpreter training "were significantly associated with error numbers, types, and potential consequences"; professional interpreters with at least 100 hours of training had a significantly lower proportion of potentially consequential errors than professional interpreters with less than 100 hours of training (2% vs 12%).[5] For reference, the National Board of Certification for Medical Interpreters requires completion of a training course of at least 40 hours for candidate eligibility for the Certified Medical Interpreter credential for those who do not become certified through college courses.[6]

There is a shortage of certified interpreters nationwide. In 2015, for example, California had 738 certified medical interpreters to serve 1.7 million people who spoke poor English.[7] Community health centers and free clinics, where many patients with LEP receive care, have a significant need for interpreter services.[8,9] Almost 50% of US allopathic medical schools operate at least one student-run clinic,[10] and many others are affiliated with a free clinic. Although bilingual students often volunteer as interpreters and help to fill this gap, they are not necessarily formally trained.

The Icahn School of Medicine at Mount Sinai implemented a course providing training in interpreting techniques and language skills to bilingual students, which resulted in increased participant comfort level with and understanding of interpretation as well as high ratings by patients and student clinicians in these areas.[10] Although this training program was rigorous, it is important to note that it was not an official certification program supported by a national organization. Knowing the patient care benefits of formally training and certifying interpreters, Loyola University Chicago Stritch School of Medicine (SSOM) funded and established an interpreter certification program for medical students with the help of Loyola University Medical Center (LUMC) Interpreter Services.[11] This program is expected to increase not only self-perceived interpreter efficacy but also patient and physician satisfaction.

Interpreter Certification Program Curriculum
Although any member of the care team—nurses, physician assistants, or administrators—can theoretically serve as an interpreter for a physician, staff who have other roles to fill are unable to provide this service. Bilingual medical student volunteers, therefore, provide a valuable service, helping to facilitate communication between

physicians and their patients with LEP. Since three-fourths of student interpreter volunteers at LUMC reported that they had never received formal interpreter training, SSOM funded and established a certification program for medical students to ensure that patients receive quality communication that is standardized and meets hospitals' certified interpreter criteria.

It is important to note that Spanish interpreter certification is not the same as certification as a Spanish-speaking clinician. A professional interpreter knows and practices the principles and rules of interpretation and can facilitate communication between a clinician and a patient who speak different languages. A Spanish-speaking clinician is one who can safely provide care to Spanish-speaking patients with LEP without the use of an interpreter.

Purpose. The SSOM Interpreter Certification Program was established primarily to provide interpretation services for Spanish-speaking patients with LEP at Loyola's Access to Care (ATC) Clinic, which provides primary care services to a low-income, uninsured, underserved population. Although the number changes from year to year, approximately 50% to 60% of clinic resident physicians do not speak Spanish. At the same time, 80% of the roughly 1500 patients who receive health care services at the ATC Clinic list Spanish as their primary language.

Qualifications and training. First-year and second-year medical students with fluency in Spanish are eligible to participate. The certification process consists of 4 parts, which can be completed at any time according to student availability. During the 2-hour preassessment, the student shadows an LUMC professional interpreter, and the interpreter assesses the student's Spanish proficiency. If deemed proficient, the student takes the ALTA Language Services Qualified Bilingual Staff (QBS) Assessment via phone, which consists of 5 sections: conversational/social, customer service, nursing diagnosis and instructions, medical terminology, and sight translation.[12] This national exam is designed to assess the examinee's ability to communicate directly with target language-speaking patients in a medical setting by measuring interpreting skills for a range of medical terminology and tasks. Once the student achieves proficiency at Level 2 ("ability to provide services in the target language in various healthcare settings"[12]), he or she proceeds to the next step, which consists of a 3-hour QBS training session. This workshop, offered by LUMC Interpreter Services for both student and community interpreters, reviews the principles of medical interpreting. In addition, time is allotted for practice, with the instructor providing supervision and guidance. Following this training, the student participates in 4 hours of direct demonstration, during which an LUMC professional interpreter observes the student interpret during a number of encounters in the hospital. (Of note, the interpreters who assist with this program are senior interpreters who receive program-specific training and instruction from the director of LUMC Interpreter Services.) The interpreter performs a final evaluation of the student,

and if the student is deemed safe to serve as an interpreter in an unsupervised setting, he or she receives a certificate of completion as well as a Level 2 qualified medical interpreter badge. The student is then certified to serve as a volunteer interpreter at Loyola hospitals and clinics.

Growth and impact. Approximately 20 students serve as volunteer interpreters each year, of which a small percentage have undergone the certification process. During the 2015-2016 academic year, 4 students were certified as interpreters; during the 2016-2017 academic year, 6 students were certified. Of note, during the 2016-2017 academic year, 28 students attended a QBS training workshop, as the curriculum did not yet include a preassessment.

The impact that student volunteers have on patient care is significant, especially given that LUMC Interpreter Services is unable to meet the clinic's interpreter needs; the clinic does not have any LUMC interpreters onsite and only has access to phone interpreters. During the 2016-2017 academic year, SSOM students provided more than 550 interpreter volunteer hours and served roughly 400 Spanish-speaking patients (see Table). Due to the significant need for in-person interpretation, the time it takes to complete the certification process, and medical students' demanding academic schedules, the ATC Clinic has continued to welcome noncertified student interpreters.

Table. Impact of Student Interpreter Volunteers[a] at the Loyola University Medical Center Access to Care Clinic in the 2016-2017 Academic Year

Impact	Shifts (10 mo)	Hours (3.5 h/Shift)	Patients (2-3/Shift)
Estimated total no.	165	578	330-495
Estimated average/mo	17	58	33-50
[a] Most volunteers are not certified interpreters.			

Ethics of Certifying Students
There are both benefits and risks to certifying medical students as interpreters. On one hand, permitting students to serve as interpreters increases in-person interpreter availability. Clinicians and interpreters prefer in-person interpretation over phone and video interpretation because this arrangement allows for improved nonverbal communication and greater physician satisfaction.[13] Furthermore, serving as interpreters provides students with additional experience as well as opportunities to observe patient care during their preclinical years. Student volunteers gain perspective through participation in a multidisciplinary clinic team, and routine exposure to an underserved population helps to build their cultural competency through interactions with patients from different backgrounds. On the other hand, maintaining a distinction between their clinician and interpreter roles can be a challenge for medical students. As physicians in

training, medical students are taught to conduct medical encounters: they know what questions to ask, what to clarify, and what the next steps are. As interpreters, their duty is to translate what the physician and the patient say verbatim. As medical students advance in their training, following the rules of interpretation can become increasingly difficult as a result of their urge to use their clinical training. If having medical knowledge interferes with the principles of interpretation, certifying students as interpreters can create ethical dilemmas for students and could be a legal liability if the conversation is edited in any way, such as through additions, omissions, or assumptions. Moreover, student interpreters are more likely to have limited skills compared to professional interpreters due to their relative inexperience, even after meeting the basic standards of interpreter training and certification.

Although asking ever-busy medical students to complete a 9-hour certification process is certainly demanding, doing so is best for the vulnerable patients who require interpreter services. The need to provide quality patient care must be balanced against the risks of volunteer interpreters applying their clinical training to the detriment of their interpreter role. By certifying medical students as interpreters, the SSOM Interpreter Certification Program is creating a path for students to become well-trained, culturally humble, Spanish-speaking clinicians.

Next Steps for the Interpreter Certification Program
After 3 years of pilot programs, an optimal certification curriculum was developed, as presented above. Evaluation of the 2018-2019 program is underway based on satisfaction surveys from interpreters, physicians who use student interpreters, and patients. Moving forward, SSOM plans to expand the Interpreter Certification Program with the goal of certifying a higher proportion of student interpreters. Since it is widely documented that patients with LEP receive inferior quality of care and that more interpreter errors occur with untrained ad hoc interpreters,[14] making certification mandatory for student volunteers could be considered in the future if doing so does not significantly decrease the number of interpreters available to the clinic. Finally, curriculum improvement will continue, perhaps with the addition of follow-up training, practice, and evaluation after certification.

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MEDICAL EDUCATION

How Medical Schools Can Promote Community Collaboration Through Health Systems Science Education

Christopher R. Davis and Jed D. Gonzalo, MD, MSc

Abstract

Traditional focus areas of medical education are insufficient for preparing future clinicians to function well in the rapidly evolving US health care system. In response, many medical schools and residency programs are integrating into their curricula health systems science (HSS), which includes health care policy, public and population health, interprofessional collaboration, value-based care, health system improvement, and systems thinking. To illustrate the value of HSS, the authors draw upon their experiences as a medical student immersed in HSS and as an educator facilitating students' cultivation of HSS skills.

The Need for Health Systems Science

US health care delivery systems are rapidly and extensively changing. A significant component of this change concerns organizational structures and processes, such as shifting reimbursement models towards value-based care, increasing the use of care coordinators, and implementing patient-centered medical homes.[1-3] Yet there has also been a concomitant transformation in the outlook of physicians, who are becoming increasingly aware, for instance, that what occurs outside of the clinic or hospital and in a patient's community has a significant impact on health. As these changes require physicians to view their role and contribution to patient care in a new and different way, medical schools and residencies are faced with the corresponding challenge of changing the way students and residents are educated.

For nearly a century, medical education has focused on the basic and clinical sciences,[4] but this paradigm has been changing with the emergence of health systems science (HSS). This change started in the 1990s, when increasing evidence of the high incidence of medical errors catalyzed a movement to improve care delivery models.[5-7] In 1999, the Accreditation Council for Graduate Medical Education and the American Board of Medical Specialties adopted systems-based practice as one of the 6 core competencies in both undergraduate and graduate medical education.[8] Medical schools slowly began to integrate quality improvement,[9,10] interprofessional education and collaboration, and social determinants of health into curricula, while residency programs increased their focus on quality improvement and patient safety.[11,12] However, by 2012, these systems

competencies were not yet a significant component of educational programs, and educators lacked a formal framework to guide curricular redesign.[13,14] Following national calls for change, many medical schools have re-envisioned a "third pillar" of medical education—HSS.[13,15,16] Complementing the basic and clinical sciences, HSS includes competencies related to health care policy, public and population health, interprofessional collaboration, clinical informatics, value-based care, health system improvement, and systems thinking.[15] The HSS framework is now being embraced by many medical schools, residency programs, and academic health systems to better align education with care delivery.[17,18]

This article draws upon the first author's (CRD's) experience as a medical student immersed in a comprehensive HSS curriculum and the second author's (JDG's) experience as a medical educator focused on advancing HSS programming to (1) describe the HSS pillar of medical education and the *systems citizenship* professional identity it espouses, (2) highlight how HSS competencies facilitate alignment between medical schools and communities, and (3) explore the student perspective on challenges to implementing HSS curricula.

Health Systems Science Competencies and a New Systems Citizenship Professional Identity
HSS addresses a growing need in medical education to help trainees think differently about their role in health care systems. As these systems grow increasingly complex, so does the task of providing quality patient care to individuals and populations. Additionally, large-scale health system challenges, such as increasing medical costs and the opioid crisis, pose threats that cannot be solved solely by individual physicians practicing traditional medicine.[19] These issues highlight the need for physicians to be proficient in HSS competencies, which provide the roadmap necessary for them to function not only within clinical practice but within the health care delivery system as a whole. These competencies (see Table) help trainees learn how to operate effectively as a member and leader of health care teams, working to improve health systems and the quality of patient care.[1]

Table. Examples of Health Systems Science Competencies
Patient-centered care
Health care structures, processes, and collaboration
Clinical informatics, data, and tools
Population and public health, social determinants of health
Policy, payment, and economics

High-value care
Health systems improvement
Systems thinking
Change agency and management
Teaming
Leadership
Adapted from Gonzalo, et al[13]; Skochelak, et al[15]; and Gonzalo, et al.[18]

For example, these competencies might change how a surgery service responds to performance data indicating lower-than-expected quality measures (eg, delayed procedure start times, above-expected infection rates). Traditionally, surgery administrators would review performance metrics and disseminate recommendations for indicated changes. Yet HSS competencies such as teamwork and collaboration, health care processes, systems thinking, leadership, and health system improvement might lead individual surgeons on the team to collaborate with other clinicians and quality department teams to make transparent potential drivers of lower performance metrics and to explore potential solutions, while also reflecting on potential gaps in personal practice that could impact lower-than-expected outcomes.

Perhaps most important in the shift towards HSS is the new professional identity it promotes. With rapidly changing health care delivery models, physicians must now extend their roles as accurate diagnosticians and caregivers to become leaders of and collaborators within health care teams.[20] This shift ultimately represents a change in clinicians' professional identities, which now extend beyond individual behaviors or attributes (eg, altruism) to incorporate systems citizenship, which confers an obligation to enter into a synergistic relationship with the health care system because physicians are citizens of that system.[21-24] The HSS competencies and systems citizenship identity seek to transform health care delivery and, subsequently, patient health.

The mindset and behavior associated with this identity can differ by level of training. For students, systems citizenship can involve exploring how social determinants of health and cost of care impact patients' daily lives, identifying patients who cannot afford their medications and working with physicians to switch patients' medications to cheaper alternatives, or helping patients with low income sign up for medical assistance programs. Residents could work with other health care professionals to identify and improve inefficiencies in clinical processes (eg, patient flow, laboratory testing utilization) or to address social and environmental factors leading to patient falls. Faculty educators might use hospital length of stay data as an impetus to review their inpatient teams' discharge practices and collaborate with team members to proactively address the

factors that keep their patients admitted for nonmedical reasons. The possible ways to apply HSS and practice systems citizenship are nearly limitless.

Aligning Medical Schools and Communities

Just as physicians need to work with other health professionals to provide team-based, high-value care, medical schools and their institutional and community partners need to collaborate more effectively to promote high-value care and population health.[25,26] Medical schools have traditionally left such opportunities unexplored but should now seek ways to address the needs of the health system as a whole, the communities served by that system, and patients in their daily lives (eg, food or housing insecurity). Using the HSS framework and clinicians who espouse systems citizenship as the connecting bridge, medical schools could work with outside institutions like social work programs, community-based counseling services, and drug rehabilitation programs. The positive impacts that could result from such collaborations between institutions that treat patients and train physicians and community programs that help patients meet their day-to-day needs are numerous. Patients would likely experience increased satisfaction and improved health outcomes from the additional communication between those that provide them with various types of care, such as improved information exchange between their physician and community social worker. Medical students would receive practical support as they develop into systems citizens, perhaps from community care coordinators teaching them about transportation services available to patients without vehicles. The localities surrounding the medical school would also naturally benefit from the increased attention and resources that come with such collaborations, helping align the academic health center with its core mission of serving its community.[27,28] Furthermore, as students trained in HSS competencies become physicians, the clinical workforce will increasingly become one that can proficiently collaborate with community organizations.

There are many methods for incorporating HSS into medical curricula in ways that help align students' training with the needs of patients and communities. At the authors' institution (Penn State College of Medicine [PSCOM]), the HSS curriculum extends across all 4 years of medical school training and focuses on understanding, improving, and functioning within the health care system.[29,30] In coursework, for example, medical students serve as patient navigators with the goals of understanding patients' needs and assisting them in their lived environments while improving both patients' and their own ability to navigate the health care system. Additionally, these students pursue activities catalyzed by the HSS curriculum that focus on learning about and improving health systems, such as population and public health projects.[31-35] For example, after a panel discussion with community leaders involved in a free medical clinic, food pantry, and transitional housing program, several students at PSCOM developed a program that was ultimately funded by the institution to provide fresh produce to at-risk patients.[31]

Such activities allow learners to explore the impact of the patient and community context on care delivery.

Student Perspective on Challenges to HSS Education
Based on the first author's experiences, one reason it is challenging for students to understand the complexity of HSS is that it is fundamentally different from the basic and clinical sciences taught in medical school. While the latter tend to be fact-driven—focusing on pharmacokinetics, disease pathology, diagnostic algorithms, and so on—HSS is more experiential and is contextualized within complex, collaborative situations or environments.[36] For instance, learning that social determinants of health exist and should be considered when caring for patients is easily discussed in a classroom lecture, but deeply appreciating the profound impact that these determinants can have on patient care—and how they might be practically assessed and addressed—is something much more difficult to learn through didactics. It took the first author years of medical school HSS training (and an additional year of master of public health coursework) to more fully appreciate these concepts. Students who do fully embrace this component of medical education can experience a shift in their learning processes or perspectives, changing the way they study or the questions they ask patients and preceptors.

Another challenge is that not all students believe HSS topics are worth learning in medical school. In the first author's experience, some students do not want to receive HSS training because they simply do not believe it improves their ability to practice medicine at all; this perspective seems to stem from not fully understanding the profound impact that HSS topics like social determinants of health play in patients' lives, as discussed in the previous paragraph. Other students might see some value in HSS training but do not value its presence in undergraduate medical education because they think it can simply be learned later in their careers, if necessary. After all, time is incredibly limited in medical school, and students are forced to prioritize what seems most important, which is rarely HSS.[37,38] Instead, basic science tests, board examinations, clinical rotations, and residency preparation assume greater urgency and have a more ostensible impact on their careers, thus demanding more of their time.

Conclusion
The changing health care landscape necessitates a change in the way physicians are educated. Such a change needs to incorporate HSS competencies into medical education curricula, which will better prepare future physicians to be systems citizens who are able to contribute to the team-based, high-value care that will be expected of them. Transforming medical education is no small task and requires a significant cultural shift among students, educators, and health care professionals, but doing so is critical if medicine is to adapt to the changing demands being placed upon it.

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Hospitals' Obligations to Address Social Determinants of Health

Hannah R. Sullivan

Abstract

Federal health care reform has expanded medical insurance to millions of people, altering the role that hospitals play in improving community health. However, current federal and state community benefit policy is an ineffective tool for ensuring that hospitals address the social determinants of health afflicting their communities. Policy shifts and other incentives that promote improved population health outcomes can encourage health care organizations to do the same.

Hospitals' Responsiveness to Community Needs

In the early 19th century, hospitals emerged as welfare institutions, or as branches of cities' almshouses.[1] The municipal almshouse served as a haven for its elderly, unemployed, ill, disabled, delinquent, minors, and incompetent. In the words of Charles Rosenberg, the internal composition of the almshouse "inevitably reflected the diversity of misfortunes afflicting its clients."[1] Physicians became widely engaged to care for clientele at almshouses, where staff positions were sought after as valuable learning and teaching opportunities. Thus, at no point when the hospital first emerged, was "public medicine" detached from medical careers or "distinguishable from the more pervasive problem of dependency."[1] However, beginning in the early 20th century, the welfare hospital for the "rootless and dependent"[1] gradually transformed into a market institution, potentially profitable and powered by patient payments.[1,2] Simultaneously, physicians became increasingly employed by national medical networks and academic institutions whose clientele were less marked by dependency.[2] As a result, market forces in today's medical system may be opposed to the charitable interests of hospitals' past.

Nevertheless, nongovernmental nonprofit hospitals retain remnants of their historical mission—a "charitable purpose."[3] In 2019, the American Hospital Association reported that 56% of community hospitals in the United States are organized as nongovernment nonprofit organizations, and, government hospitals included, nearly 80% of community hospitals enjoy tax-exempt status.[4] In return, they are exempt from billions in state and federal tax liability (an estimated $24.6 billion in 2011[5]). Courts typically describe the indirect subsidy as a quid pro quo that charitable hospitals receive for alleviating a substantial government burden through the care they provide.[6,7] In other words, the tax

revenue lost through exemption may be considered offset by the hospitals' contributions to society.

Are current legal standards adequate to ensure that hospitals fulfill the role for which massive subsidies are granted? Consistent with the goal of the Affordable Care Act (ACA) to "support innovative medical care delivery methods designed to lower the costs of health care generally,"[8] hospitals may consider spending less of their charitable budgets on the cost of uncompensated clinical care and more on the social determinants of health. According to Thomas Frieden, "interventions that address social determinants of health have the greatest potential public health benefit."[9] Easterling and McDuffee report that modern health care consumers' socioeconomic backgrounds create a diverse "mix of resources, opportunities, obstacles and threats which determine to a great extent the level of health that can be achieved."[10] Emphasizing this point in a June 2018 address to the American Medical Association House of Delegates, the US Surgeon General, Jerome Adams, urged physicians to resist responding to national health with clinical solutions alone.[11] Cogently, he iterated that today's most urgent health issues—whether "opioid addiction or unwanted pregnancies, gun violence or suicide, heart disease or cancer"—share risk factors.[11] Solving them requires addressing the root causes of poor community health. While ACA-enacted tax exemption requirements encourage hospital accountability in community health improvement,[12] hospitals that seek to provide innovative care that lowers costs may need to go above and beyond what is required.

Federal Community Benefit Standards Following Health Reform
Before Medicare and Medicaid were implemented in 1966,[13,14] the Internal Revenue Service (IRS) required nonprofit hospitals to provide free or discounted care to indigent and uninsured patients to qualify for exemptions (the "charity" care standard).[15] Upon the federal programs' drastic reduction of the uninsured and consequentially diminished need for charity care, the IRS relaxed its standard such that hospitals could maintain exempt status if they provided "community benefit."[16]

Community benefit following Medicare and Medicaid. Under a broader standard, expenditures recognized by the IRS as providing community benefit include unreimbursed research, health professions education and training, unpaid costs of public programs, and other community health improvement activities, in addition to free or discounted care provided under the traditional charity care standard.[17] Significantly, federal law does not set a minimum amount of benefits; rather, the IRS considers the "facts and circumstances"[18] of each case to determine whether a hospital's contributions are sufficient for tax exemption.[18,19] Following suit, 23 states enacted legislation requiring nonprofit hospitals to provide community benefits.[20]

Community benefit following the ACA. Like Medicare and Medicaid, the ACA has reduced the number of America's uninsured, extending coverage to an estimated 20 million individuals since its enactment.[21] Unlike the preceding programs, the ACA's enactment was not accompanied by more lenient tax-exemption standards. Instead, the IRS added regulations to Internal Revenue Code that require charitable hospitals at least once every 3 years to conduct a community health needs assessment (CHNA) and adopt an implementation strategy that includes a description of how the hospital plans to meet identified needs and incorporates input from community representatives.[22,23] However, the new regulations do not identify particular mechanisms for addressing community needs, nor do they mandate any specific infrastructure for intervention. To monitor CHNA compliance, the IRS uses Form 990 Schedule H, which requires hospitals to report their community benefits.[17] For hospitals that fail to comply, a $50 000 excise tax is imposed,[24] and tax-exempt status may be revoked.[25] However, only 2 hospitals have lost tax-exempt status in consequence.[26,27] According to an estimate of community benefit spending in 2009 based on Schedule H data, before the enactment of the ACA, tax-exempt hospitals spent about 7.5% of their total operating budgets on community benefits.[28,29] Post-ACA estimates reflect only a modest increase, at 8.5% in 2012 and 8.1% in 2014.[29,30]

Rethinking Community Benefit to Address Community-Based Social Issues
Tax-exempt hospitals continue to spend the most community benefit resources on unreimbursed care, not community health improvement.[5] Although federal health care reform has freed up hospitals' financial resources, one potential explanation for this spending trend is, according to Gary Young and colleagues, that "many hospitals may lack the infrastructure and competencies necessary for effectively engaging in community health initiatives."[28] However, population health is substantially determined by community-based issues that fall outside the purview of basic clinical care. Known as social determinants of health, these factors include education, income security, neighborhood safety, food access, and presence of support networks, among others.[10] Thus, instead of addressing a diminishing need for charity care, more community benefit expenditures should address community-based issues that expose people to illness and injury.

According to Kenneth McLeroy and colleagues, multiple models of community-based interventions for health promotion currently exist.[31] However, 3 specific categories of community-based projects may particularly strengthen public health while building community capacity to address health-related issues. Because individual behaviors are the result of multiple social influences at varying levels, interventions in any model must mobilize social influences, which may include family support, social networks, neighborhood characteristics, organizational policies and practices, community factors, public policy, the physical environment, and culture.[31] In a "setting" model, the community may be understood as the geographical setting where interventions are

implemented, and the purpose of projects is to change individual behavior in order to reduce the population's risk of disease.[31] "Setting" projects may use mass media to convey community-wide initiatives, include educational strategies and public policy, and engage community committees or advisory groups that provide input in developing interventions for specific target groups or in tailoring programs to community characteristics. In a second model, the community is understood as the "target of change," such that the goal of projects is to create "healthy community environments through broad systemic changes in public policy and community-wide institutions and services" by using interventions to improve characteristics that are thought to be related to poor public health.[31] For example, community indicators may include poor air quality, limited amount of park space per capita, and number of residents living below the federal poverty level. Finally, in a model often utilized for health promotion, interventions engage the community as a resource, based on the "belief that a high degree of community ownership and participation is essential for sustained success in population-level health outcomes."[31] Such programs align a community's existing resources with a strategically targeted set of identified health-related priorities. Often, these methods may involve external resources or actors that seek to achieve health outcomes by working through an array of community institutions and across different sectors.

Socially-oriented state policy enhancements. One way that community-based interventions may be achieved is through more stringent state regulation that requires hospitals to exceed federal requirements.[20] Such methods can be understood as broad, setting, or resource-based models that seek to influence organizational or institutional behavior to improve state-wide health. For example, California requires community benefit activities to address community priorities specifically and primarily through disease prevention and health status improvement.[32] The relevant statute lists approved activities, including health education, prevention, and social services, which are offered without cost because they meet identified needs in the hospital's service area.[33] The California Hospital Association provides notable examples of services that meet state standards in a guide for community benefit planning.[34] For example, San Diego's City Heights Wellness Center, a joint project of 2 local hospitals, offers multilingual cooking classes to combat high rates of diabetes and obesity, tailored to the unique needs of its culturally diverse community.[34,35] Recognizing that California's homeless population has particular difficulty accessing health care—especially up-to-date immunizations for children—Cedars-Sinai Hospital dispatches mobile units to homeless shelters in Los Angeles.[34,36] Similarly, the Street Nurse Program at Sutter Medical Center in Sacramento connects the "fragile homeless population" surrounding the medical center with on-demand medical care or advice.[37] Nurses personally drive patients to the clinic or help them access other services. Working in close partnership with another Sutter program, hospital personnel build relationships with local homeless persons and eventually help them access services such as housing, medical care, and substance use treatment.[37]

Other states may place additional requirements on the CHNA process, adding public input requirements or stricter standards for implementation plans. In Vermont, hospitals must identify a "process for achieving openness, inclusiveness, and meaningful public participation"[38] in community benefit planning and publicize yearly progress on proposed initiatives.[39] Texas and California require hospitals to include community groups or organizations and government officials in prioritizing needs[40-43] and to identify goals to be achieved over a specific timeline.[43-45] Washington State requires hospitals to publicize geographic and population descriptions of areas they serve if not already provided in the IRS-mandated CHNA. Descriptions must include information such as "leading causes of death, levels of chronic illness, and descriptions of the medically underserved, low-income, and minority, or chronically ill populations in the community."[46] According to McLeroy and colleagues, effective community-based interventions require an "insider's understanding" and "careful assessment of community structures" in advance of implementation.[31] Presumably, hospitals that abide by these more stringent requirements will be in a better position to identify and address community-specific needs and prioritize them when developing implementation strategies. Furthermore, higher legal standards may incentivize more exacting community benefit planning among hospitals that seek to maintain their tax-exempt status.

Nonregulatory Approaches to Community Benefit

Aside from regulatory interventions, hospitals may engage in federal initiatives or accountable care organizations (ACOs) that advance community benefit through innovative delivery models. Such models employ a "resource" approach to community-based interventions, because the federal government or a health care organization plays the role of an external actor working in order to align various community resources to advance population-level health priorities using an established infrastructure. Examples of such efforts include the federal Accountable Health Communities Model (AHCM), the federal Next Generation ACO Model, Vermont Blueprint for Health, and OneCare Vermont.

Accountable Health Communities Model. AHCM is a federal model employed by hospitals that seek to reduce clinical spending by addressing the social determinants of health, including "housing instability, food insecurity, utility needs, interpersonal violence and transportation" though clinical-community connections.[47] The program promotes clinical screening for unmet social needs and assists patients in accessing the appropriate community services.[48] Significantly, funding is not invested in community programs. Rather than dispersing funding across services, AHCM creates infrastructure that aligns different sectors, ensuring services' availability and responsiveness to beneficiaries' needs.[48]

Next Generation ACO Model. Next Generation is a federal model built upon experiences from the Pioneer ACO Model and Medicare Shared Savings Program. ACOs are groups of

health care providers, including hospitals, payers, and physicians and other caregivers, who collaborate to give high-quality, coordinated care. Through coordination, health care organizations can ensure that patients get appropriate care while avoiding unnecessary spending and ineffective treatments.[49] Currently, 51 ACOs are participating in Next Generation.[50] The model offers Medicare ACOs (groups of providers serving original Medicare beneficiaries) opportunities to test whether financial incentives, paired with tools supporting patient engagement and care management, can reduce spending and improve health outcomes for Medicare beneficiaries.[50]

By providing hospitals with fixed funding per beneficiary and requiring hospitals to assume financial risk if spending exceeds fixed amounts, the model advances a national goal of value-based (instead of volume-based) payment, disincentivizes providing costly clinical care, and incentivizes prevention.[51] As previously discussed, preventive measures to address the social determinants of health at the community level may have the greatest effect on public health. Health care organizations, seeking to improve health outcomes while reducing spending, may consider such preventive measures in developing intervention strategies.

Federal, state, and organizational collaboration: OneCare Vermont. In partnership with the federal Centers for Medicare and Medicaid Services and the State of Vermont, OneCare Vermont (an ACO) seeks to promote effective treatment models and derive greater value from a fragmented health care system. The collaboration is a good example of federal, state, and organizational efforts converging to improve community health and may provide a solution for hospitals that believe they lack the infrastructure or resources to proving meaningful community benefit on their own.

Extending the federal Next Generation Medicare model to Medicaid beneficiaries and Blue Cross/Blue Shield members, OneCare is accountable for beneficiaries at 10 of Vermont's 14 hospitals, 21 of its 40 nursing homes, and a majority of primary and specialty care practices.[52] Like AHCM, OneCare's ACO model seeks to create infrastructure that connects health care organizations with other community social services in order to appropriately outsource care. To do so, OneCare relies on services available through Vermont's state-led Blueprint for Health, which focuses on collaboration for "providers across the spectrum of care"[53] and directly invests in community health teams and initiatives, such as patient-centered medical homes, home support services, opioid addiction treatment programs, and healthy living workshops.[54] OneCare offers coordinators additional funding, training, and resources to collaborate with hospitals, including analytic tools for panel management, performance tracking, and communication.[52,55]

Shifting towards value-based payment, OneCare rewards cost containment and quality benchmarks by allowing providers to retain excess capital if their expenditures for care fall below the amount budgeted by OneCare.[52,56] In Vermont's all-payer ACO model,

insurers and hospitals alike contribute additional funding to OneCare for care coordination of high-risk beneficiaries.[52] OneCare then distributes funding between Blueprint community organizations and hospitals in fixed payments per patient. Because hospitals assume financial risk if their clinical expenditures exceed the fixed payments, the model encourages effective collaboration with community partners beyond the hospitals' walls, driving down costs within them.

Moving Beyond Individual-Focused Care to Support Community Health
Federal health reforms such as the ACA have reduced the national need for charity care, creating opportunities for state governments and health care organizations to intervene upstream in poor population health through community-based initiatives. State legislatures may establish regulation when federal standards are insufficient or take a back seat as new federal policy takes shape. Hospitals, lacking appropriate infrastructure, may choose to participate in initiatives that align state, federal, and organizational efforts.

Realizing individual and shared health care goals requires partnership. In the words of US Surgeon General Adams, providers must be "at the table together, sharing lessons learned, and challenging each other to do more, to do it better, and to do it together."[11] Providers must also be willing to accept financial risk to be truly accountable for the communities they serve. Value-based, collaborative approaches can maximize community health benefits by incentivizing smarter, more effective health care decisions.

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AMA Journal of Ethics®

AMA Policies and *Code of Medical Ethics'* Opinions Related to Health Promotion and Community Development

Sienna Moriarty

Abstract

Physicians play important roles in community development. They seek not only to increase patients' overall well-being and the quality of care in clinical settings, but also to engage communities in health promotion and public health efforts. The AMA *Code of Medical Ethics* offers guidance to physicians developing community health initiatives, especially regarding health promotion, community development, and rural health care access.

Medicine and Public Health

The effects that health care organizations have on surrounding communities is recognized in the American Medical Association (AMA) *Code of Medical Ethics*[1] and in several policies put forth by the AMA.[2-4] By extending care beyond clinical encounters, physicians become integrated within a community with a goal of motivating positive health outcomes.

Health Promotion

Opinion 8.11 of the AMA *Code*, "Health Promotion and Preventive Care," states that, alongside diagnosis and treatment, "physicians also have a professional commitment to prevent disease and promote health and well-being for their patients and the community."[1] Physicians can promote healthy lifestyles by educating patients, helping them create and maintain a healthy lifestyle, and, "when appropriate, delegate[ing] health promotion activities to other professionals or other resources available in the community who can help counsel and educate patients." Beyond clinical encounters, AMA policy "Healthy Living Behaviors," H-170.984, "encourages all physicians to provide advocacy by working with parents, schools and community organizations to develop programs and services for the children and youth populations."[2] That is, physicians should help both adults and children create healthy lifestyles to reduce health risks. Physicians are uniquely suited to use their medical knowledge and expertise in aiding the community in which they are situated. In doing so, the health of the entire community can be elevated.

Community Development

Physicians' roles in a community's health extend beyond diagnosis and treatment of individual patients. Physicians and health care organizations can help communities develop into healthier, safer environments. Because physicians are obligated to support patients' well-being, Opinion 8.11 urges physicians to "advocate for community resources designed to promote health and provide access to preventive services."[1] Resources and services offered might include vaccinations, screenings, or public health programs. Physicians should also appreciate the influence of social determinants of health and "encourage an open dialogue regarding circumstances that may make it difficult to manage chronic conditions or maintain a healthy lifestyle, such as transportation, work and home environments, and social support systems."[1] Physicians are thus obligated to participate in upstream community-based public health campaigns to reduce risk of poor health status downstream. In short, this means that physicians should consider factors outside of the clinical setting when thinking about healthy lifestyles and be active in areas that are lacking in development.

Rural Health

The AMA has 2 notable policies pertaining to rural health and rural communities. The first of these, "Rural Health," H-465.989, establishes the AMA's obligation to closely monitor implementation of and compliance with state and federal legislation concerning hospital access and the quality of patient care.[3] This policy also addresses clinical, professional, and social challenges faced by rural physicians in community practice. Nevertheless, the AMA describes the organization of rural community health networks as intertwinements of health systems and economies in a rural setting that should be managed by those directly affected by the actions of the network. The policy "Rural Community Health Networks," H-465.980, states that "participation in rural community health networks should be voluntary, but open to all qualified rural physicians and other health care providers wishing to participate."[4] This policy also proposes scholarships and loan-repayment programs as solutions to rural physician shortages. Such proposals are designed to incentivize physicians to work in underserved areas. As more physicians become involved in these rural community health networks, the overall health of the rural community should improve.

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STATE OF THE ART AND SCIENCE

How Can Clinicians Catalyze Investments to Improve Community Health?

Robin Hacke, MBA and Alyia Gaskins, MPH

Abstract

Where people live and work influences how long and how well they live. Clinicians can help keep patients healthy by encouraging health care organizations to support community investments that improve conditions that contribute to health risks, outcomes, and costs. These conditions—the social determinants of health—include housing, transportation, jobs, and educational opportunities. Hospitals and health systems have assets—financial capital, land, and expertise, for example—that can be used to help support community health. Clinicians are uniquely positioned to collect data and ask questions in support of effective partnerships that address the root causes of poor health.

Social Determinants of Health and Community Investment

If you asked a group of clinicians why they pursued careers in health care, many clinicians would probably say they wanted to help people lead healthier lives. Yet research based on health measures from nearly all US counties demonstrates that medical care is just a small part of what determines whether a person is healthy.[1] In fact, 50% of health outcomes—in terms of length and quality of life—can be attributed to nonmedical and nonbehavioral factors related to the places and spaces where people live, work, and study.[1] To be healthy, people need clean air and water, fresh food, safe and affordable housing, good jobs, and educational opportunities. Yet, far too many communities in our country lack these essential elements, especially low-income communities of color, which have endured decades of racial and economic segregation, resulting in deeply entrenched poverty, aging infrastructure, and poor living conditions. In Richmond, Virginia, for instance, people who live just miles apart can face a 20-year difference in life expectancy due to the different conditions in which they grow up and live their whole lives.[2] These social, economic, and environmental factors—known as the social determinants of health—go beyond what clinicians can address within the walls of their institutions.

Clinicians all too commonly observe the health consequences stemming from neighborhoods with poor housing, unsafe conditions, lack of green space and recreational opportunities, and insufficient healthy food options. For example, Children's HealthWatch reported in 2017 that "unstable housing among families with children will

cost the US $111 billion in avoidable health and education expenditures over the next ten years."[3] Clinicians see firsthand the higher incidence of chronic disease, lower life expectancies, and increased utilization of health care services among patients who live in these neighborhoods.[4] Even when clinicians provide the highest quality medical care, the conditions their patients return to after leaving the health care setting may limit the success of their interventions. Achieving the triple aim of health care[5]—enhancing quality of care, improving health outcomes, and reducing costs—will require clinicians and their institutions to address the root causes of poor health in the communities they serve. This paper provides examples of how clinicians can help do so by generating the data and demand for greater investment in these communities.

How Community Investment Can Drive Community Health
Building more resilient and thriving communities is the focus of the community investment field, which, since the 1960s, has been working to drive capital to disadvantaged neighborhoods and regions that are underserved by mainstream financial systems.[6] Community investment finances small businesses, affordable housing, grocery stores, and other community improvements.[6,7] That is, it seeks to reduce many of the negative social determinants that affect health risks and outcomes and to provide the opportunities people need to thrive.

The community investment field includes mission-driven investors, banks, community leaders, foundations, developers, and public officials. Each of these stakeholders plays a critical role in assessing community needs, identifying or creating investments to address them, and changing policies and practices to support better environments for such investment. For instance, neighborhood organizations such as community development corporations—nonprofits that empower residents of low-income communities to take action to solve local problems—can spot opportunities to develop multifamily housing with rents that low-income people can afford. Community development financial institutions (such as the Enterprise Community Loan Fund[8] and the Local Initiatives Support Corporation [LISC][9]) operate in regions across the country, bringing together funds from government, philanthropy, and banks to finance community centers, small businesses, and other facilities. By engaging diverse stakeholders and blending public, private, and philanthropic resources, community investment can overcome the difficulties of obtaining purely private financing for much-needed improvements in disadvantaged neighborhoods.

Community investment stakeholders and medical professionals strive to make people's lives better. However, they have traditionally labored side by side rather than together. While all health institutions have a mission of healing the sick and promoting good health, tax-exempt hospitals have a specific legal obligation to serve their communities,[10] often called community benefit. While tax-exempt hospitals have long provided charity care as part of their community benefit obligation, the Patient

Protection and Affordable Care Act of 2010 ushered in new requirements for meeting this obligation, including conducting a community health needs assessment (CHNA) every 3 years and developing a specific plan to address the needs identified in the CHNA.[11] Some institutions continue to meet this obligation primarily by providing charity care and doing research. However, several pioneering institutions are meeting this obligation by addressing the root causes of poor health. For example, Bon Secours Baltimore Health System has constructed or rehabilitated more than 800 units of affordable rental housing to address the needs of communities surrounding its campus.[12]

In "Improving Community Health by Strengthening Community Investment: Roles for Hospitals and Health Systems," the first author and Katie Grace Deane (both staff members of the Center for Community Investment [CCI]) argue that hospitals and health institutions have an array of assets—financial capital, land, and expertise—that can bring new resources to community investment and thereby support better health outcomes for their patients, employees, and communities.[13] Furthermore, deploying these resources in community investment can support institutional mission, enhance institutional reputation and competitiveness, strengthen community relationships, and—last but certainly not least—generate a financial return as, unlike grants, money that is invested is repaid over time.[13] This influx of new ideas, expertise, and capital can, in turn, help the community investment field initiate and expand projects that broaden opportunities for good health.

So, what would it take to build stronger relationships between medical professionals and the community investment sector to achieve their individual and shared goals?

How Clinicians Can Help Catalyze Community Investment
Clinicians are uniquely positioned to support partnerships between health institutions and the community investment field. Their daily experience of interacting with patients and their credibility as health experts make them valuable voices to and for their patients, institutions, and communities. Their positions enable them to marshal both the data that provides the rationale for community investment and the demand for that investment. By asking questions about patients' lives, clinicians can treat not only symptoms but also the underlying causes of poor health. By asking questions of hospital leadership, they can guide their own institutions to higher levels of impact. And by encouraging their institutions to add their weight to advocacy efforts, they can help make the case for neighborhood revitalization projects that strengthen health outcomes. The CCI has witnessed the power of all of these actions, described in more detail below, through its Accelerating Investments for Healthy Communities initiative,[14] which is supporting 8 nonprofit health care organizations that are investing in health-promoting social determinants such as affordable housing with coaching and technical assistance.

Collecting data. Asking questions about patients' home and work environments is recognized as helpful for improving their care experiences, compliance with medical treatment, and health outcomes,[15] while at the same time providing important social determinants data to guide institutional investments. Clinicians at ProMedica, an integrated health system in Toledo, Ohio, use a social determinants screening tool to assess patient employment, food, housing, and transportation needs.[16] Answers from the screen are entered into the patient's electronic medical record and used to connect the patient to support services, while the aggregated data about the patient population as a whole is used to inform institutional investments, including a $45 million partnership between ProMedica and LISC to finance affordable housing and economic development projects in surrounding neighborhoods.[16]

Clinicians can also advance policy and system changes by leveraging data to raise broader awareness of health needs. As mentioned previously, under the Affordable Care Act, nonprofit health care organizations are required every 3 years to conduct a CHNA that solicits input from residents and experts and to develop a community health improvement plan to meet the health needs of the communities they serve.[10] Clinicians can push their institutions to use their CHNAs to engage their communities more effectively by asking meaningful questions about social determinants rather than just focusing on diseases, sharing aggregated and deidentified data with decision makers to improve the quality of planning and programs, and cooperating with other health systems to produce joint CHNAs that delve more deeply into the needs of historically underserved communities and nurture the relationships that can undergird joint action.

Creating demand. By asking administrators in finance and in community and government relations departments what their hospitals are doing to meet their community benefit obligations, as well as by asking patients what their communities need, clinicians can help create demand for interventions that address underlying causes of health problems, not just for research and charity care. Similarly, clinicians can ask human relations, finance, and administration departments whether their institutions are hiring, buying, and investing locally, all of which can play a big role in improving surrounding neighborhoods. Clinicians can—and should—be active in asking questions about community benefit and involvement throughout their careers, from the start of the recruiting process through every stage of their employment.

Clinicians can push their employers to harness not only their operations but also their assets to promote health. Hospitals and health institutions have an array of assets—financial capital, land, expertise—that can be put to work to address the social determinants of health. As health care institutions consider engaging in community investment, they have many options as to how to deploy these assets. Through its Healthy Neighborhoods Healthy Families initiative, for instance, Nationwide Children's Hospital leverages its staff, financial capital, data analysis capabilities, and government

relations expertise to support affordable housing, education, and workforce development for children and families on the South Side of Columbus, Ohio.[17] Kaiser Permanente recently dedicated $200 million of its investment portfolio to create its Thriving Communities Fund to address housing stability and homelessness.[18] Among other activities, Dignity Health developed partnerships with local banks that directly support small business lending and affordable housing loans in the communities they serve throughout the country; one such partnership jumpstarted a housing and community revitalization project in San Bernardino, California.[19] Clinicians can make it clear to senior institutional leaders that being part of institutions like these that invest in their communities is key to their sense of mission and job satisfaction and their ability to keep their patients healthy.

Conclusion

Every day, clinicians witness the effects of social and environmental factors on the health of their patients. At the same time, they are under tremendous pressure to see more patients, reduce health care costs, deal with changing regulations and electronic medical records, and more. These burdens can make addressing the social determinants of health seem overwhelming, even when they know it is one of the most important things they can do for their patients. Fortunately, clinicians and hospitals are not alone. The community investment sector exists to do this work and would welcome partnering with the health sector to support better outcomes for communities. Clinicians can promote community investment by helping to create the data and demand that will catalyze efforts to address the root causes of ill health. Ultimately, hospitals investing in communities will result in healthier environments and healthier patients.

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Investigating How Geography, Citizenship, and Insurance Influence HPV Vaccination

Sienna Moriarty

Abstract

Research on the human papillomavirus (HPV) suggests a possible relation between HPV type and geography. It also demonstrates that insurance status affects HPV vaccine uptake, which currently provides protection against 9 of the high-risk HPV types known to cause HPV-related cancers. This article reviews this literature with a focus on health justice in HPV vaccination programs. It also describes University of Illinois Health System research with members of Chicago communities to determine the prevalence of HPV, the distribution of HPV types, and strategies for better serving this population.

Possible Influence of Geography on HPV Genotype

Several studies have noted a high frequency of atypical high-risk HPV genotypes. Researchers in Michoacán, Mexico, noticed that there was a high frequency of "unusual virus genotypes" when they introduced a different type of testing into their methodology.[1] Specifically, it was found that HPV59 was most prevalent, along with other types (51, 45, 31, 58, 35, 39, 52, and 67) and "that HPV16 was only found in 3 coinfections and HPV18 was not found at all." Similarly, high rates of other high-risk HPV (ohrHPV) genotypes were found in patients in the Montefiore Medical Center, the Bronx, New York, which serves a racially diverse population.[2] Another study on the Midwestern population serviced by the Mayo Clinic in Rochester, Minnesota, also reported ohrHPV genotypes in its dominant diagnoses.[3]

The Michoacán and Montefiore studies suggest that there might be a relation between geography and HPV genotype. If the frequency of "unusual virus genotypes" in the Michoacán study is related to ethnicity, it might help to account for the high frequency of ohrHPV genotypes in the Montefiore sample, which was 52% Hispanic and "other,"[2] as high numbers of migrants from Michoacán and other nearby Mexican states have come to the United States in the last 30 years.[4,5]

The findings also have implications for vaccination programs. The unusual or ohrHPV genotypes refer to high-risk HPV types that are not either HPV16 or HPV18, which are the 2 types typically targeted in current research, as they have been identified across the

board in cases of low-grade lesions, high-grade lesions, and cervical cancer.[6] Many genotypes reported by the researchers in Michoacán, however, are not included in the 9 high-risk HPV types known to cause HPV-related cancers that the 9-valent HPV vaccine protects against.[7] Because researchers in Michoacán found high rates of oncogenic high-risk HPV genotypes that were not HPV16 or HPV18,[2] if there is a relation between ethnicity and HPV type, it follows that quadvalent or nonvalent vaccines would be less effective when administered to Mexican-American populations than other populations. Further research is needed on geography and HPV genotype and to determine whether changes should be made to current vaccination programs.

Access to HPV Preventative Care and Insurance Coverage

Research has shown that different racial groups experience the health care system differently with respect to HPV preventative care. For example, a National Vaccine Advisory Committee report showed that Hispanic adolescents are more likely than non-Hispanic white adolescents and non-Hispanic black adolescents to be covered by the latest HPV vaccine.[8] However, the report does not specify what percentage of the Hispanic population surveyed was native born, although a 2009 survey indicates that nearly two-thirds of those who identify as Hispanic are born in the United States.[5] Thus, if the Hispanic sample in the survey was representative, a high proportion of the Hispanic respondents could be expected to be eligible for private or public health insurance coverage. Other research has found that insurance status is associated with HPV vaccination uptake.[9] Citizenship is also relevant to HPV vaccination uptake; one study found that foreign-born women who were US citizens were more likely than noncitizens to report HPV vaccination initiation.[10] However, Mexican-born immigrants—both naturalized and non-naturalized—face lower rates of insurance.[10] In fact, the number of Mexican-born immigrants lacking insurance has nearly doubled in the last 20 years.

Current HPV Research

In Illinois, the population of international migrants from Mexico has nearly doubled in the last 30 years.[4] Most of this population resides in Cook County, totaling between 500 000 and 1 000 000 Mexican-born residents.[11] HPV prevalence among Mexican-born immigrants living in Chicago communities will be investigated by the University of Illinois Health System in collaboration with members of these communities, with special attention to high-risk genotypes among women, barriers to health care access, and prevention through vaccination (R. Barrett, M. Patel, G. Goba, S. Moriarty, unpublished data, 2018). By analyzing HPV genotypes and health assessments[12] in Chicago communities, special attention can be focused on direct benefit to those with HPV.

Vaccinations and Health Justice

Cofie et al. note "there is a need for targeted outreach across various immigrant communities to improve access to health care in general, and to develop population-specific strategies to address the vaccination needs of different groups of foreign-born

women."[10] Such outreach would entail educating populations about vaccinations and preventive care (ie, HPV testing and condom use). Community-level populations are in need of meaningful study, effective interventions, and positive health outcomes.

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How Should Nonprofit Hospitals' Community Benefit Be More Responsive to Health Disparities?

Michael Rozier, PhD, MHS, Susan Goold, MD, MA, MHSA, and Simone Singh, PhD

Abstract

In 1956, the Internal Revenue Service created the expectation that nonprofit hospitals would offer uncompensated care for those unable to pay; this was the beginning of Community Benefit (CB). CB efforts tend to prioritize inpatient medical care over developing community-based health improvements, and few CB resources are directed toward responding to health disparities. Changes to federal policy should address these concerns by (1) requiring community partners' involvement in CB implementation strategies, (2) requiring that community health needs assessments (CHNAs) be completed every 5 years instead of every 3 years, (3) changing the Internal Revenue Code to recognize organizations' work on social determinants as CB, and (4) requiring CHNAs to describe a community's health disparities and clarify how their implementation strategies address them. These changes would likely promote hospitals' engagement with public health departments, collaboration with community-based nonprofit organizations, and greater focus on health equity.

Purpose of Community Benefit

Just over half of all hospitals in the United States are nongovernmental, nonprofit community hospitals.[1] Due to their tax-exempt status, these hospitals have long had an obligation to the communities they serve. This obligation was formalized at the federal level by the Internal Revenue Service (IRS) in 1956 and created the expectation of community benefit (CB), defined as charity care. Internal Revenue Code requires that a nonprofit hospital "must be operated to the extent of its financial ability for those not able to pay for the services rendered and not exclusively for those who are able and expected to pay."[2] The enactment of Medicare and Medicaid in 1965 generated concern that nonprofit hospitals would no longer have to provide as much charity care, prompting the IRS in 1969 to broaden CB to include the "promotion of health" as long as it was "deemed beneficial to the community as a whole."[3] Most recently, the Affordable Care Act of 2010 specified that nonprofit hospitals must conduct a community health needs assessment (CHNA) and develop an implementation strategy to respond to identified community needs every 3 years.[4,5] In addition to federal regulations, some states have

additional CB regulations for state and local tax exemptions, which often specify mandatory minimum CB spending thresholds.[6]

Limitations of CB Regulations
Despite the increased attention to CB over the past decade, current CB regulations still fall short of their potential to direct nonprofit hospitals' activity toward improving the health of their communities. Publicly available documents, both state and federal, describe hospitals' community needs assessments, their annual CB spending, and their financial assistance policies. The tasks associated with these documents—assessing community needs, tracking dollars spent, and being transparent about assistance—are baseline expectations. If we want to leverage CB's true potential for improving community health, we must consider how current policy might be inadequate for doing so.[7]

The current focus of CB, like the focus in the overall health care system, is medical care. A 2015 report from the IRS to Congress indicated that approximately 92% of the $62.4 billion spent in 2011 on CB supported activities related to clinical care—charity care, payment shortfall from Medicaid or similar programs, and graduate medical education—as well as research.[8] Slightly more than 7% was divided between community health improvement and contributions to community groups.[8] There are many reasons why this distribution leans so strongly toward clinical care. Certainly, providing a health care safety net serves an important community need. Hospital experience and expertise reside in clinical care, so hospitals naturally lean toward doing what they do best. Additionally, because of the way hospital accounting systems are designed, spending in clinical areas is easier to calculate and report than spending on other community health efforts.

However, a broader perspective on how to improve community health is needed. Clinical care is only one of a wide range of activities that influence community health—and rarely the most effective. Likewise, although a fair and just health care system requires equitable access to care and treatment, health equity requires more than medical treatment. Community health and health equity could become more central goals of CB—but only if we consider how to encourage nonprofit hospitals to advance these objectives.

Four Policy Proposals
A shift toward community health improvement requires hospitals to view themselves as part of the larger community health ecosystem. Local schools, law enforcement, religious congregations, government agencies, and other nonprofits working in health, housing, and employment are part of that ecosystem and can either work in parallel or in partnership with hospitals to improve community health. A CHNA forces hospitals to look outside their walls and engage new partners to consider the breadth of community

health needs and properly prioritize those needs. Relatively simple policy changes could foster even greater collaboration with key community partners. To that end, we offer the following suggestions (see Figure).

Figure. Policy Proposals to Focus Community Benefit Spending on Community Health and Health Equity

- Require engagement of community partners in formulating a nonprofit organization's implementation strategy, as is required for the community health needs assessment (CHNA).

- Change the required frequency of CHNA from every 3 years to every 5 years.

- Clarify, for IRS Form 990 Schedule H, that community building activities intended to address a community health need count toward a nonprofit hospital's total community benefit spending.

- Require CHNAs to include a description of concerning health disparities and implementation strategies to indicate how they will address disparities and measure change.

Collaborate on implementation strategies. We should require involvement of community partners in implementation strategy, just as we do for CHNAs. This would ensure that hospitals look to their community for expertise not only in identifying community needs but also in prioritizing and addressing them. The mayor's Healthy City Initiative in Baton Rouge, Louisiana, for example, has brought together 5 area hospitals and more than 75 other community organizations to create a single CHNA and a regularly revised implementation strategy.[9]

Assess needs every 5 years. We also suggest changing the requirement that nonprofit hospitals conduct a CHNA from every 3 years to every 5 years. A 3-year cycle entails that hospitals plan their next CHNA less than 2 years after beginning implementation of their community health strategy, leaving little time to see meaningful change in health outcomes before the cycle begins again. Local health departments that seek accreditation by the Public Health Accreditation Board are required to conduct community health assessments (CHAs) at least every 5 years. Allowing the time cycles for hospitals and health departments to align could improve collaboration around the CHNA, ideally resulting in a single document endorsed by all major organizations working to improve community health. Joint CHNAs-CHAs would facilitate better coordination of community-wide health improvement and make hospitals more publicly accountable for their efforts, thus resulting in the possibility of greater hospital investment in community health activities.[10]

Include community building activities as CB. We also recommend that all activities related to the social determinants of health be counted as CB. When calculating their annual spending on CB, nonprofit hospitals can only include spending in certain categories of activity. Current regulations clearly explain the kind of spending related to charity or subsidized care that hospitals can include as part of their CB on their IRS Form 990 Schedule H. Whether hospitals can count spending that addresses the social determinants of health suffers a lack of clarity. On Schedule H, the IRS asks hospitals to report spending on community health improvement activities separately from spending on community building activities (eg, investment in housing).[11] For example, community health improvement services, such as diabetes education, testing and treating children for lead poisoning, or training community members in mental health first aid often count as CB. On the other hand, community building activities, which the IRS describes as improvements to housing, economic development, and addressing environmental hazards, are listed separately from CB, even though all of these efforts can significantly improve health.[12] Spending on community building activities is not included in the hospital's total spending on CB, unless the hospital submits additional documentation demonstrating the link between community building efforts and health. Yet such links are often difficult to prove. Given that hospitals are justifiably concerned with being compliant with the law as well as reporting as much CB spending as possible, this differential treatment of community health improvement and community building disincentivizes hospitals' spending on community building, which is often connected to the social determinants of health.

Some health care organizations nonetheless proceed with community investments. Boston Children's Hospital supports a program to reduce home triggers for asthma,[13] Bon Secours Mercy Health (formerly Bon Secours Baltimore Health System) invests in affordable housing,[14] and many others have also chosen to invest in community building activities, recognizing the value for community health in doing so. Yet, the lack of clarity in current regulations creates a situation in which, from a compliance perspective, it is easier to document clinical care than investment in the social determinants of health as CB. Instructions from the IRS should make clear that community building activities count toward a nonprofit hospital's total CB spending if the activities are intended to address a community health need.

Make addressing health disparities an explicit goal. Finally, addressing health disparities should become an explicit goal of CB. CB regulations do not mention health disparities or the role nonprofit hospitals should play in their remediation. Some regulations, however, obliquely convey the duty to reduce health disparities—for instance, the inclusion of medically underserved populations in the CHNA process and the reasonable assumption that funds for charity care and Medicaid shortfalls largely go to patients from communities of need.[15] However, there is a disconnect between hospitals' awareness of the importance of addressing health disparities and their actually doing so. A recent

study found that 65% of hospital CHNAs referenced health disparities or health equity, but only 9% of hospitals' implementation strategies included activities explicitly designed to improve health equity.[16] While some organizations choose to make health equity a strategic priority, addressing health disparities through community health interventions should not be optional. Instead, we could require hospital CHNAs to describe which health disparities in their communities are most concerning and require hospital implementation strategies to indicate how they will address the disparities and measure outcomes. A similar requirement is currently being discussed as part of upcoming changes to Public Health Accreditation Boards' accreditation process for local health departments.[17] In 2012, Oregon identified health equity as a central goal of its Medicaid program.[18] The revised Medicaid program incorporated equity in strategic goals, included community health workers in health care delivery, and established regional coalitions for advancing health equity. Early results show the Oregon Medicaid program's success in reducing key health disparities.[18]

Conclusion
Some may question whether hospitals are the right vehicles for community health improvement and advancing population-level health equity. Why push an organization with expertise in clinical care to take on work that might be done best by others? While a fair concern, we should not discount the role hospitals play as "anchor" institutions in many communities[19] and their ultimate mission to relieve suffering and improve health and well-being. If we are serious about improving community health and health equity, hospitals must be fully engaged in this work.

Community health is taking on new relevance for traditional health care organizations. Value-based and population-based payment reforms, such as the hospital readmission reductions program (which reduces Medicare reimbursements to hospitals with excess readmissions) and accountable care organizations (which incentivize providers to achieve quality measures at lower costs through upside or downside risk), have created financial incentives for hospitals to pay closer attention to community-level health determinants.[20] The hospital division responsible for CB could be a strong partner to the hospital division responsible for value-based care by raising the profile of community health programs as these new reimbursement models are implemented. At the same time, these new payment models do not always have equity as a central goal and may unintentionally contribute to inequity. For example, when providers are held accountable for patient outcomes, poor risk adjustment can result in medically complex and socially vulnerable patients being discriminated against.[21] But proper risk adjustment can appropriately compensate providers for taking on more vulnerable populations. If carried out with attention to potential pitfalls, new payment reforms and CB policies can reinforce the commitment to both community health and health equity.

The goal with regulatory changes should not be to dictate exactly how nonprofit hospitals spend CB resources. Those decisions should be community specific. Rather, the goal of regulation should be to encourage hospitals to identify and respond to the community's most significant health needs. Spending a large portion of CB resources on clinical care often represents the familiar and even the default path. We should refocus our goals so that improving community health and advancing health equity are more prominent in the minds of nonprofit health care leadership. The recommendations outlined in this article represent first steps that we can take to better align hospitals' CB activities with our health system's population-level goals.

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MEDICINE AND SOCIETY

How Should Health Care Organizations and Communities Work Together to Improve Neighborhood Conditions?

Daniel Skinner, PhD, Berkeley Franz, PhD, and Kelly Kelleher, MD, MPH

Abstract

In the past few decades, scholars have begun to establish ethical principles for public health engagement. A key tension has been how to reconcile public health improvement with local autonomy in decision making so as to express respect for community members' on-the-ground experience. This article describes the experience of one children's hospital in learning to ethically engage a surrounding community in conversations about housing development in partnership with a local faith-based development organization.

Making Neighborhoods Better

In 2008, amidst the throes of economic recession, a major crossroads confronted the Nationwide Children's Hospital (NCH) in Columbus, Ohio's South Side. The hospital had decided to remain in its location of 126 years and invest more deeply in the community. The collapse of the nation's housing markets had left hundreds of vacant properties in the area just beyond the hospital's campus, and it was clear that addressing housing was key to improving pediatric health outcomes for 3 reasons: (1) housing plays a documented role in the health of children,[1] and this neighborhood had severe housing shortage; (2) outreach efforts made clear that housing was a neighborhood priority; and (3) because of instability in housing, children were moving too frequently to make school-based or neighborhood-based programs effective. Accordingly, the new hospital administration was committed to effecting change in the neighborhood.

Because hospital collaboration with communities remains relatively uncharted territory, trial and error, financial risk, and humility would be integral components of the hospital's efforts. But the hospital needed to learn how to undertake this work ethically. Ethical problems can easily arise when large institutions work in local communities, especially communities with high levels of poverty and other socioeconomic challenges. Community members might feel ignored, or even bullied, if hospitals do not attempt to see proposed strategies for community improvement from residents' perspectives. Beginning this initiative required not only planning the practical aspects of improving

housing stock and safety but also learning how to listen to diverse local residents and to collaborate with community leaders.

Healthy Neighborhoods, Healthy Families

The result of a long planning process yielded a new initiative: Healthy Neighborhoods, Healthy Families (HNHF). HNHF is a 5-pronged program focusing on affordable housing, health and wellness, education, safe and accessible neighborhoods, and workforce and economic development.[2,3] One of these prongs, the HNHF Realty Collaborative, aims to (1) redevelop existing vacant properties to provide safe, affordable homes for low-income and moderate-income families, (2) reduce blight, (3) increase homeownership (which was a special focus during 2008-2016 after the national housing collapse and Great Recession), (4) assist existing homeowners in improving their houses through grants, and (5) cultivate a mixed-income community by developing and operating properties that rent below market rates (ie, 80% of area median income).[2,4] All of this was a challenge in Columbus, where wealth inequality is growing and the percentage of home ownership continues to decline.[3]

To achieve these goals, NCH partnered with Community Development for All People (CD4AP), a community housing development organization. CD4AP itself is an offshoot of the Church for All People, a brick-and-mortar church and faith-based organization that encompasses several programs and initiatives in its ministry. This organization provides a wide range of social services, including a free clothing store, a fresh produce market, workforce development, and after-school programming.[5] CD4AP also has been instrumental in the development of a social enterprise bike shop. With over 20 000 persons taking part in its services on the South Side, CD4AP aims to be a true neighborhood connector. To this project of neighborhood revitalization the hospital contributes funding, personnel, logistical support, and other resources.

Over a period of 10 years, NCH and CD4AP established deep levels of trust with community members who have generated effective and creative housing strategies. The foundation of these community relationships are one-on-one and small group discussions that occur in normal, day-to-day interactions and focus on collaborative neighborhood revitalization efforts, strategies for improving access to medical care, the creation of a drive-through produce stand, and inserting hospital mentors into local schools. Ongoing meetings with local civic associations also allow for focused, structured conversations about preferences related to housing development. Resident surveys supplement this work. CD4AP and NCH have the goal of ensuring nondisplacement of lower-income residents as the neighborhood becomes more opportunity rich. A decade after their partnership began, over 40 stakeholder groups and neighborhood leaders are participating in the HNHF Realty Collaborative as conditions improve and construction shifts to the development of long-term affordable rental housing.[4] NCH's experience with HNHF shows that effective and sustainable programs require good partners.

Ethical Challenges

Perhaps the biggest ethical challenge the collaborative encountered concerned tensions between the public health model underlying the hospital's aims and the community's immediate and long-term concerns.[6] These tensions arose from NCH's and CD4AP's approach to neighborhood health on a system level, on the one hand, and the tendency for residents to focus on more specific, often singular needs and wants, on the other.

Two examples illustrate this tension. First, HNHF made efforts to close a local liquor store where violence regularly occurred. Shootings decreased as a result, but there was a negative response from some community members due to the loss of several jobs. In this case, the short-term loss of jobs may have long-term benefits, but only if the lost jobs are replaced with new employment opportunities. For developments such as these to succeed, an agreement must be reached about whether a proposed change is in the best interest of all involved. Second, local residents communicated a strong preference for retaining the neighborhood's historical composition of primarily single-family homes. Although multifamily housing might have had a positive impact on local homeless individuals by providing comparatively less expensive options with greater density within the HNHF zone, HNHF honored community members' wishes and limited new housing primarily to single-family homes.[4] The compromise was not only strategically beneficial but also part of HNHF's ethical learning. Sometimes, for purposes of cultivating the relationship, doing right by the community's perspective is an end in itself.

It can be hard to resolve such ethical tensions without significant learning on the part of hospital leaders and authentic collaboration with communities. Sometimes programmers will have to accept suboptimal (from a public health perspective) approaches to retain community participation. To facilitate long-term partnerships, anchor institutions must discuss openly with community members the advantages and disadvantages of proposed changes, which requires that all parties focus less on convincing one another of the rightness of their position at each stage than on learning from each other and compromising to work toward a future together. This learning can and should take many forms. In an effort to become better integrated with the community, NCH helped fund a neighborhood leadership academy for community resident leaders, facilitated by CD4AP. This initiative created an opportunity for the neighborhood to learn about the health and development goals set by city and hospital leaders and to build capacity for resident-led change. NCH, in turn, stepped outside its comfort zone and learned from its neighbors, which informed its guiding principles going forward.

While new situations arise continually in collaborations of this nature, the key to is to learn from mistakes and be open to adjusting strategies moving forward. Over time, hospital personnel involved in HNHF, as well as those not directly involved but aware of its aims, have become increasingly comfortable with the idea that hospitals can and should be involved in this kind of community programming.

Ethics and Community Health Partnerships

In the case of HNHF, collaboration between a children's hospital, a local development group, and residents provided a forum for improving community well-being. Yet, it would be irresponsible to suggest that a system of ethical community engagement can be extrapolated from this case study and applied to other emerging hospital-community partnerships. A more accurate takeaway would be an acknowledgement of the tension at the core of HNHF, namely that public health—the NCH's key focus—and community values such as autonomy and choice cannot always be reconciled. In this case, however, views held by hospital personnel as well as by community members were far from homogenous. Priorities within the hospital spanned financial profitability, the traditional mission of healing sick children, improving the community to create a safer and more appealing perimeter for the hospital, and addressing social determinants of health to benefit low-income and marginalized families. The hospital continues to lack a single, unified perspective on these issues. Similarly, the community must also reconcile competing values such as promoting neighborhood safety, increasing neighborhood cohesion and opportunity, and ensuring that displacement is not a main outcome of collaborative efforts to improve the neighborhood's housing stock. Over time, NCH and community residents have developed a way to integrate diverse voices and address multiple priorities in the housing program.

Public health ethicists have acknowledged the importance of this type of collaboration in community-based projects. As public health practice has shifted to the "new public health," which focuses on populations and preventive models,[7] the need for sustained community engagement has required specific attention to how health care institutions, researchers, and public health agencies should engage local residents in planning, implementing, and assessing interventions.[8,9] These partnerships are challenging to build but hold significant potential for disrupting existing power dynamics between large institutions and residents and for developing models for shared decision making.

The experience of learning to engage Columbus's South Side has led us to embrace a notion of *authentic collaboration*, wherein hospitals do less leading and more listening. Hospital programmers should assume that no matter how many "open" forums they hold, they are only hearing a fraction of community voices. Helping residents—and also the mayor, the city council, the school district, and others—learn to engage with the hospital has also proven important for resident-led change. Partnering with a trusted organization like CD4AP is vital to success and establishing credibility with the community. This partnership allows for asset-based community development, which prevents hospital overreach. For example, HNHF initially focused on improving existing community assets, such as old housing stock and an abandoned school building, and sought the commitment of well-endowed local families. Over time, however, the program has transitioned to the development of new assets through job training, a "hire

local" program, and a leadership academy. This type of engagement requires dedication, time, and patience.

With the HNHF program now past its first decade of operation, we are in a position to reflect on what has and has not worked, although these lessons remain very much in progress. An ethical approach to hospital-community development requires attention to the local context and is resistant to the very idea of best practices. Based on our experience, however, we share the following lessons in the spirit of facilitating continual improvement.

1. *Know your context.* All neighborhoods contain important and unique histories. In this case, the long-standing presence of NCH, dating from 1892, was a key part of that history.
2. *Take an asset-based approach.* Developing strong relationships with community organizations can help to unify hospital and community interests. It is critical to identify real assets within the community and to connect with diverse neighborhood factions.
3. *Find new and regular ways of communicating.* Developing opportunities for local residents and hospital leaders to communicate regularly requires sustained relationships, time in place, and recurrent assessments.
4. *Make ethical critique a centerpiece and focus of collaboration.* Successful partnerships ensure that initiatives meet the aims of both the hospital and the community; initiatives should be regularly revisited to assess progress in meeting goals.
5. *Be aware that interests may not always align.* As with any relationship, both sides will not always agree, even after extended dialogue. Early engagement with the community can help cultivate relationships.
6. *Work within the hospital to clarify core values and then forthrightly articulate these in ways that build authentic solidarity and partnerships with community members.* To do so requires an openness to having these core values challenged, shaped, and enhanced by the perspectives of local residents.

Ethical approaches to hospital-community development require staying close to changes in the community. No preformulated approach allows hospitals to serve as passive funders—or residents to insist on complete governance—if programming is to have real success. To do this work ethically, hospitals must be willing to devote full-time employees to it (funded and unfunded) who can build trusting relationships with community residents. The end result will be as much about new partnerships as any new program.

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HISTORY OF MEDICINE

An Architectural History of US Community Hospitals

Jeanne Kisacky, PhD, MA, MArch

Abstract

When hospitals became places of treatment and recovery rather than places of sickness and death, hospital-based patient care also changed. This article examines relationships between design-induced practice transformations in US hospitals between the 1850s and 1980s and transformations in hospitals' roles in American communities, with a specific focus on underserved communities.

Shifts in Hospital-Community Interactions

World War II marked a turning point in community hospital history. During the 19th century, hospitals underwent a transformation[1,2]—from traditional charitable institutions that provided "a place to be sick and die" to modern medical institutions that offered "a place to live and get well."[3] An undesirable side effect of that shift, however, was an increasingly impersonal interaction between caregiver and patient and between the hospital and the community it inhabited. In reaction, postwar hospital practitioners hoped that the hospital of the future "would be inherently connected to a specific community" and thereby provide better, more personal care.[4] Although this hope—that better community integration would improve care—implied that hospitals were not sufficiently connected to a specific community, the history of hospitals reveals that each hospital was a specific, locally determined attempt to provide service to a perceived underserved community. Over time, what changed was not just the interaction of hospital and community and the nature of care provided but which community was serving and being served.

This article uses the history of architecture—particularly, hospital site choice and building layout—and the history of the changing community context and individual institutions to illuminate hospital-community interactions since the 1860s. The transformations in such interactions occurred first in urban areas, then spread across the nation; this article initially draws on examples from New York City and then expands the discussion to include smaller towns and rural areas.

A Hospital for Each Community

In 1869, a call to support a new Presbyterian hospital in New York City noted that Jewish, German, Catholic, and Episcopalian communities had founded hospitals "for the exclusive benefit of their own people"[5] but that Presbyterian community members did not yet

have a hospital of their own.[5,6] At a time when home care—whether by family members or by physicians making house calls—was the norm, these hospitals were charities, providing free or low-cost care to the sick poor. Although each hospital officially admitted patients of any creed, race, or ethnicity, each also tailored its offerings to its own community. Presbyterian services were held in the Presbyterian Hospital, Jewish services in Mount Sinai, and Catholic services in St Vincent's. German physicians practiced in the German Hospital and Jewish physicians in Mount Sinai and Beth Israel.

These hospitals' facilities were arranged in pavilion-wards—a standardized design popularized worldwide by Florence Nightingale—which promised to make hospital buildings into places of cure rather than incubators of disease. Pavilion-ward hospital buildings included hygienic materials and details, large open wards, support spaces, and little else.[7-9] Pavilion-ward designs were widely adopted in the late 19th century across the United States, whether in large cities, small towns, or rural areas. St Elizabeth Hospital in Utica, New York, offered essentially the same facilities as St Luke's Hospital in Chicago, Illinois; the Miners' Hospital in Hazleton, Pennsylvania; the Grady Memorial Hospital in Atlanta, Georgia; or the Good Samaritan Hospital in Portland, Oregon.

The greatest variation in hospital service was the result of site choice. Pavilion-ward guidelines required that sites be located beyond the built-up areas of a city, distant from their supporting community. In Manhattan of the 1870s, the centers of population remained below 23rd Street, but 8 general hospitals, including the Presbyterian Hospital, were all located above 54th Street, at least an hour horse-car ride away.[10,11] This travel distance could prove excruciating or even deadly to patients with severe injuries or in need of urgent care. A handful of hospitals, including St Vincent's and Beth Israel, did occupy sites embedded within the population center of the community they served.[11] Travel time to their doors was measured in minutes.

The distance of a hospital from its community affected its patient composition and consequently its medical service. The remote hospitals filled slowly. For the first years of its operation, a good proportion of the Presbyterian Hospital's beds were empty or occupied by nonurgent cases, and the surgeons were bored.[12,13] To attract more patients, the directors increased the amount of free care, established a dispensary (an outpatient clinic), and added an ambulance department to facilitate getting the patients safely and quickly to the hospital.[14-16] By the 1890s, one-third of the patients were delivered by ambulance from a variety of distant neighborhoods and only 10% of all inpatients were Presbyterians.[17] In contrast, the embedded hospitals quickly filled with patients drawn largely from their immediate surroundings. Even without ambulances, Beth Israel Hospital, located in the geographic center of the densely populated, largely Jewish Lower East Side, was constantly turning away applicants.[18,19] The hospital's active dispensary service compensated for the overcrowding, treating 21 875 patients in 1897 and 70 423 patients in a larger facility in 1907. The vast majority of the hospital's inpatients in the

late 1890s and early 1900s—80% to 95%—were from Russia and Central Europe; most were Jewish.[19,20] The hospital kept kosher and held Sabbath.[20]

Geographic distinctions reinforced institutional differences, creating 2 distinct types of hospital that served different communities and interacted with those communities differently. Hospitals that were physically embedded within a specific community offered care that was culturally and socially as well as medically specific to their patient community. Hospitals remote from the community they served developed a more diverse patient base and medically focused practice that de-emphasized patients' specific social, ethnic, or cultural background.

1900s-1950s: Hospitals for Physicians and for All Patients
In the first decades of the 20th century, hospitals became locations of collaborative, specialized scientific medicine (ie, medicalized) and served all classes of patients, not just the poor. These medical and social transformations imposed new spatial requirements on the ubiquitous large pavilion-ward facilities. The medicalized hospital was focused on the physician and added extensive diagnostic, treatment, therapeutic, research, and educational spaces to the ward pavilions. Yet the medicalized hospital was open to all and thus also was focused on patients, adding a socioeconomic-spatial hierarchy of private rooms (for wealthy patients who paid in full), semiprivate rooms and small wards (for middle-class patients who paid for part of their care), and large wards (for poor patients who still received care at no or minimal cost). In contrast to remote urban medicalized hospitals, embedded urban and smaller rural hospitals served a specific community in facilities that typically included only necessary medical spaces and technologies but provided more personalized care.

Medicalized hospitals. The medicalized hospital's purpose was the creation of better physicians.[21,22] According to physician E. H. Lewinski-Corwin, the most important feature of the community hospital was "the opportunity it offers for organized and supervised team work, for critical analysis of the performance, and for the advancement of standards of medical education and practice in the community."[23] Designed for physicians and the increasingly complicated medicine they practiced, facilities ranged from smaller medically specialized institutions (like the Herman Knapp Memorial Eye Hospital) to gargantuan teaching hospitals and medical centers (like the Columbia Presbyterian Medical Center). These facilities housed not only patients but also, by the 1920s, an extensive array of specialized equipment and facilities such as x-ray, surgery, hydrotherapy, electrotherapy, physical therapy, laboratories, lecture rooms, collaborative meeting spaces, physicians' lounges, medical libraries, and private physicians' offices.[7,24]

Medicalized hospitals for all classes. Medicalized hospitals drew patients from multiple socioeconomic and geographic communities, making site accessibility critical to the institution's success. The Columbia-Presbyterian Medical Center at 168th Street and

Broadway was near Riverside Drive (a major highway facilitating access by suburban physicians and their affluent private patients), adjacent to a subway stop (facilitating access by a variety of patients from across the city or even from other cities), and near densely populated Washington Heights.[25] The shifting composition of that neighborhood—from Irish to Hungarian, Polish, and German—was an indifferent factor in the care provided.

While the new medical hospitals attracted patients from all classes and diverse socioeconomic groups, accommodation of the variety of patients was far from equal. Most hospitals separated patients according to their medical condition and their economic status (whether in private rooms or charity wards). While hospitals did not officially separate patients based on their ethnicity, hospitals across the country (particularly in the South) provided separate, less attractive rooms, wings, or buildings for minority patients.[7] And many medicalized hospitals targeted a single, underserved, patient community—whether that community was socially, geographically, or economically defined. Underprivileged (ie, ethnic, immigrant) communities remained the focus of newly founded embedded hospitals for more recent immigrant groups (like the French, Italian or Hungarian hospitals), and many provided extensive free or at-cost care to their patient community in larger wards.[7]

By the 1920s, as immigrant neighborhoods turned over, the older embedded hospitals in urban areas such as New York City faced the dilemma of whether to move with their original core community or to provide service to the new surrounding community. St Vincent's Hospital remained on its original site, providing care in large wards to the remaining poorer residents but also serving the wealthier new residents in added private patient facilities.[26] Beth Israel's hospital directors chose to follow the Jewish population uptown, shifting the nature of the hospital's service to match the improved economic circumstances of its original patient community. The new building at Stuyvesant square included small single-bed rooms to encourage use by middle-class patients, not just the poor.[27] Other new hospitals (like the Fifth Avenue Hospital) also targeted the middle class by providing attractive facilities with smaller wards, comfortable patient lounges, and sites near parks.[28,29]

Hospitals for small towns. The medically specialized, all-class modern hospital and its success in treating many conditions was a hallmark of larger cities, thereby transforming small towns and rural areas into underserved communities. Many smaller towns did have existing hospitals, but they were built and operated on the old charitable model (full of wards and little else) and offered basic care by local "backwoods" physicians rather than research-based, specialized care by new professional physicians.[30-32]

Modern medicine required modern facilities, and providing an effective small modern hospital in remote areas was a design problem of intense interest but with varying

solutions. Local decisions determined not only the facility design but also the kind of practice offered in the hospital. In 1922, G. R. Egeland in Sturgeon Bay, Wisconsin, grew tired of practicing medicine without modern equipment. He studied the problem of small hospitals and built one for the town himself.[33] Some communities, believing that "the presence of hospital facilities alone appears to be one of the largest factors in attracting physicians to a community," built well-equipped modern hospitals with that hope in mind.[34] In contrast, the town of Leominster, Massachusetts, "demanded its own small but adequate hospital in preference to a large and modern one some distance away."[35] Smaller hospitals, embedded within specific communities, provided essential but limited medical facilities and equipment and offered more personal, but less medically specialized, care.

Hospitals Everywhere, With Local Variations

By the 1940s, it was clear that every geographic location deserved a modern hospital. After World War II, the Hill-Burton Act made federal funds available for hospital construction in underserved areas—quantified as 4.5 beds per 1000 persons of population.[36-39] Requisite statewide community hospital surveys revealed that small towns, rural areas, and poor urban neighborhoods occupied the gaps on the map of adequate hospital coverage.[36,40]

While the US Public Health Service imposed minimum design and equipment standards to guarantee that public funds would create modern hospitals, local customs, de facto segregation, and other social divisions could alter the nature of the service.[41] The addition of private rooms and physicians' offices to a hospital, for example, could transform the community hospital into an elite institution serving the wealthy rather than all classes. The George H. Lanier Memorial Hospital (and many other Hill-Burton funded hospitals) provided "separate-but-equal" facilities for minority patients.[42] Although the Civil Rights Act of 1964 officially ended segregation within federally funded facilities,[40] within individual institutions, desegregating facilities and increasing access to minority physicians and patients was difficult. Nevertheless, desegregation was enforceable, visible, and largely successful.[43] Geographically reinforced institutional segregation, however, has been more persistent, as hospitals embedded in poor and ethnic neighborhoods inevitably have a higher proportion of disadvantaged and minority patients than hospitals located in affluent neighborhoods; care and facilities available within these disparate institutions is far from equivalent.

In 1965, the War on Poverty shifted legislation and funding to promote neighborhood or community health centers (CHCs) in economically disadvantaged communities.[44,45] Design guidelines shifted from minimum standards for a facility (such as a minimum number of beds) to a minimum standard of care. The early CHCs opened in borrowed and repurposed buildings—the Tufts-Delta Health Center in Mississippi opened in a remodeled church.[45] These community health centers were conceived not as a medical

workshop but "as a base for multiple points of entry into the problems of health and poverty,"[45] providing care and treatment as well as jobs and training.[45,46] This development was, in many ways, a return to the late 19th century embedded charity hospital but in a new architectural package.[47]

Health Care Spaces in Communities of the Future
History reveals the complexity and variety of the communities served by community hospitals. That variety also showed up architecturally in site choice and facility designs. Remote institutions broadened patient access by drawing from multiple socioeconomic and geographic communities, but by the end of World War II the care in these large-scale, technology-filled medical workshops was far from equal. During the same period, embedded institutions targeted a specific geographic or socioeconomic community, offering more personal care but limiting the specialized facilities available and consequently the medicine practiced within them. The current idea of a medical home and its goal of coordinating care will further alter the nature of hospital service. That the medical home is not a place will require another, perhaps broader, redefinition of community.

Twenty-first century concerns are prioritizing patient communities and promoting smaller-scale embedded facilities.[47] The history of hospitals, however, makes it clear that today's institutional answer is itself subject to transformation. The takeaway is not the appropriateness of serving a specific community and tailoring service to it but an acknowledgment of the choice being made and its consequences.

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HISTORY OF MEDICINE

How Communities Attracted Physicians After World War II

Amber Dushman, MA, MLIS

Abstract

Since the end of World War II, the Council on Medical Service of the American Medical Association (AMA) has conducted a Physicians Placement Service to assist physicians seeking a practice location and communities seeking physicians. As part of this service, the AMA offered pamphlets that included articles and exhibits. This article features select images from one of those pamphlets.

Finding Each Other at the War's End

The Council on Medical Service of the American Medical Association (AMA) has helped physicians find practice communities and communities find physicians through the Physicians' Placement Service, which was established at the end of World War II. At that time, in many communities, one barrier to securing physicians' services was a lack of modern medical facilities. To encourage communities to develop medical facilities, the AMA's Committee on Medical and Related Facilities published a pamphlet, "Community Efforts Provide Medical Facilities."[1] The pamphlet provided specific descriptions and photographic examples of how some communities succeeded in attracting physicians. Images shown here are not the best or the only examples, but the facilities shown reveal a sample of community health care settings observed and documented by members of the Physicians' Placement Service and compiled in its guide. Pamphlets included articles and exhibits titled "How Little Towns Get Good Doctors" and "Bringing Doctors to Main Street" and were distributed as part of a public outreach effort.[2]

Figure 1. Reception Room
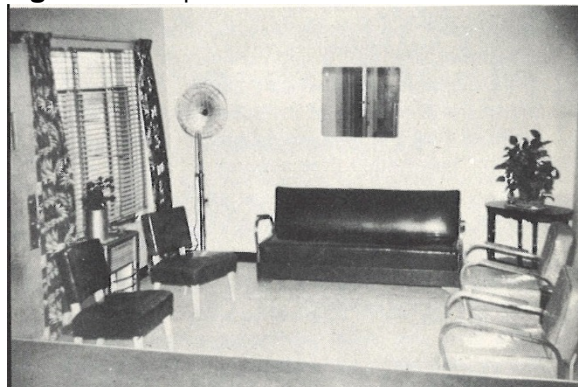
Courtesy of the American Medical Association Archives.[1]

Figure 2. Office

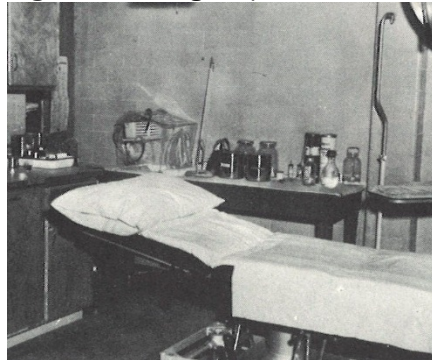

Courtesy of the American Medical Association Archives.[1]

Figure 3. Hospital Bedroom

Courtesy of the American Medical Association Archives.[1]

Figure 4. Emergency Room

Courtesy of the American Medical Association Archives.[1]

Figure 5. Kitchen

Courtesy of the American Medical Association Archives.[1]

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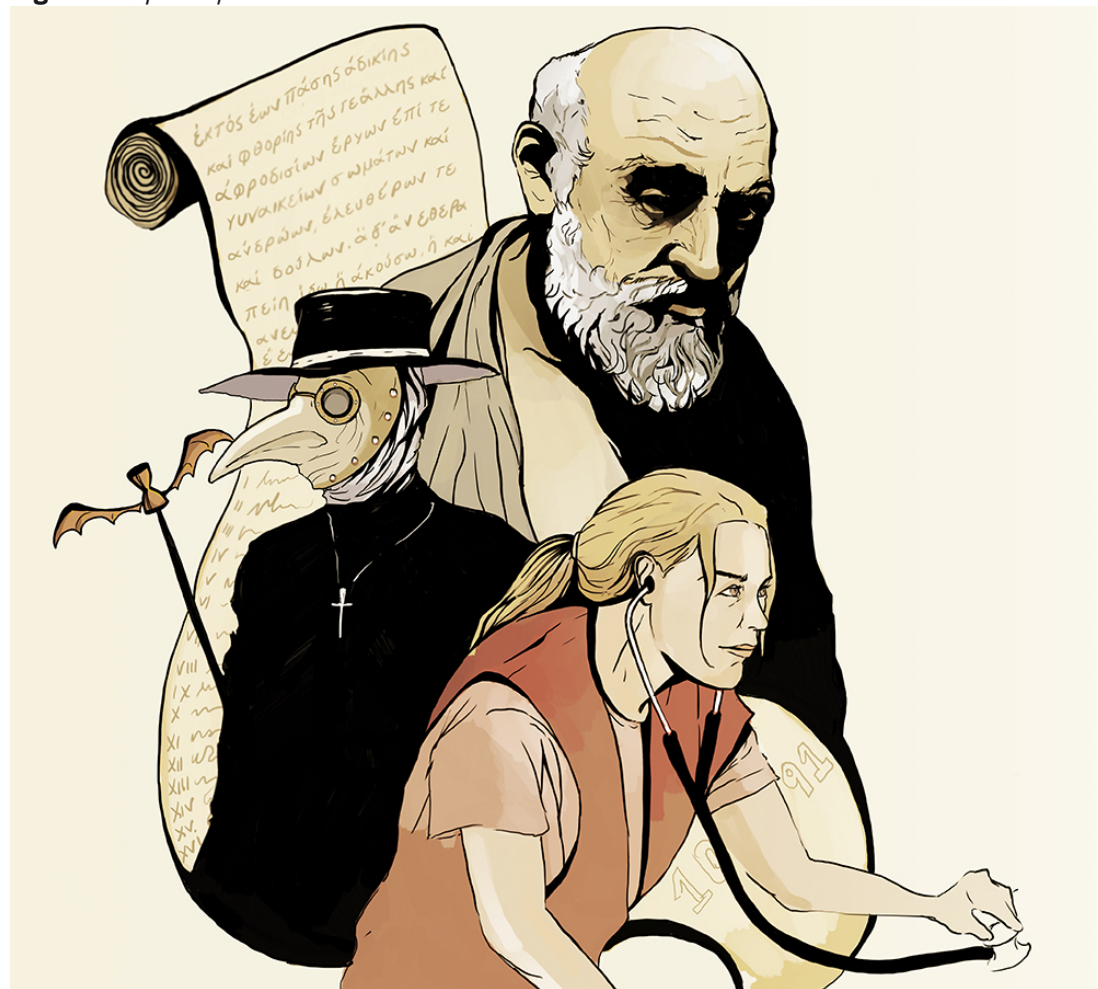
ART OF MEDICINE

Enduring Oaths

Anum Fasih, MD

Abstract

In this image, 3 figures—Hippocrates, a plague doctor, and a modern physician—represent continuity of ethical standards in ancient, medieval, and contemporary medical communities.

Figure. *Keepers of Oaths*

Media
Procreate for iPad.

Avoiding harm and expressing respect for privacy are central values of medicine, according to the Hippocratic Oath, represented here through the figure of Hippocrates and in a Greek scroll containing the oath, part of which reads:

Into whatsoever houses I enter, I will enter to help the sick, and I will abstain from all intentional wrong-doing and harm, especially from abusing the bodies of man or woman, bond or free. And whatsoever I shall see or hear in the course of my profession, as well as outside my profession in my intercourse with men, if it be what should not be published abroad, I will never divulge, holding such things to be holy secrets.[1]

The Roman numerals to the left of the middle figure—a plague doctor—represent a 16-clause contract that Giovanni de Ventura negotiated with the community of Pavia, Italy, in 1479 to treat patients ill with bubonic plague. A seminal clause in the contract stated that "the doctor must treat all patients and visit infected places as it shall be found to be necessary."[2] This clause underscores the ethical responsibility physicians have borne throughout the history of medicine. Like the figure, Italian plague doctors in the 1600s might have worn a cross to signify obedience to prevailing Church hegemony over daily life and would have worn a beak-like mask filled with fragrant substances to mitigate odors of illness and provide protection from infection.[3] The numbers at the image's bottom-right corner indicate enactment of the Health Insurance Portability and Accountability Act of 1996 (Public Law 104-191) by the 104th Congress[4] and guide the work of the third figure in the image, a contemporary physician using her stethoscope. A common theme during eras of medicine represented in this image is ethical commitment to treating everyone in need without prejudice.

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AMA Journal of Ethics®

ART OF MEDICINE

Why We Need a Music Player in Every Patient Room

Doug Bradley and Omar Viswanath, MD

Abstract

Music can influence clinicians' and patients' mental states and emotions via the capacity of rhythm and tone to entrain. Entrainment can facilitate relaxation and distraction from pain and has a role to play in experiences with and in health care. In this article, we discuss the benefits of music from the perspectives of a physician and a veteran.

Benefits of Music

Music has several distinctive features. It is time transferable: a song can take you back to a beloved childhood memory, a moment when you felt unconditional love from a parent. It can remind you of a monumental success, for example. It can elicit a memory of a nadir in your life when a low mood seemed so insurmountable you couldn't go on. In ways chemical and personal, music can move you back in time to a specific moment, as if you were experiencing it again. It is epinephrine for your motivational drive: you hear a specific song, and, unexpectedly, you are moved to take action. Music is also serotonin for your outlook on life: when a favorite song plays, things don't seem as drab and dire as they did before, and you can experience hope that your current life will get better.

What are the medical benefits of music? Here, we seek to answer this question from the perspectives of a physician and a veteran.

A Physician's Perspective

The subjective experiences of music described above deserve more attention from health care professionals. The health benefits of music have been studied and proven in a number of areas. Music has been shown to improve recovery of motor and cognitive function in stroke patients.[1] It has been shown to be an effective intervention for patients experiencing both acute and chronic pain.[2] Music accompanying exercise rehabilitation has been shown to improve the overall palliative care experience for patients nearing the end of their lives.[3] And there is evidence that music-based interventions reduce symptoms of depression in patients suffering from dementia.[4] The list of those whom it can potentially benefit goes on and on.

Positive effects of music on an ailing patient can be difficult to observe clinically or to quantify, but the studies thus far are promising. Even if these beneficial effects are

happening solely at the subconscious level, that might be all that is needed to unleash a cascade of beneficial outcomes, such as the release of the neurotransmitter serotonin,[5] which can improve mood and social functioning.[6] Serotonin levels are even associated with physical health.[7]

A Veteran's Perspective
Vietnam veterans, a group the first author is proud to be part of (see figure 1), are well known for their refusal to talk openly about their war experiences. To this day, many have never talked about their service in Vietnam, even with their spouses and family members. After more than 10 years of conversations with veterans, which ultimately resulted in the book, *We Gotta Get Out of This Place: The Soundtrack of the Vietnam War*,[8] my coauthor Craig Werner and I discovered that by asking, "Did you have a special song?," we were able to help veterans feel more comfortable and open up about their war experiences in conversation. Again and again, as we listened to more than 300 veterans, we heard, "I've never talked about Vietnam, but the music takes me back…"

Figure 1. US Army Combat Correspondent Doug Bradley
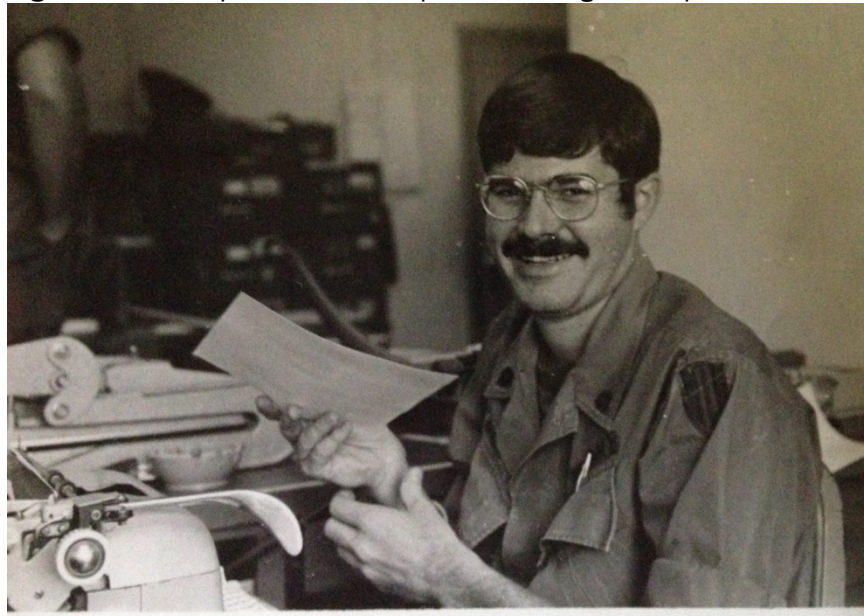
Caption
Bradley gives a thumbs up to the songs playing on the Armed forces radio in his office at army headquarters in Long Binh, South Vietnam, in September 1971. Photo courtesy of Doug Bradley.

Given Vietnam veterans' reluctance to discuss their war experiences, we began our conversations with a simple question: "What's your song?" In most cases, the floodgates opened, with the veterans telling us how music helped them and their fellow soldiers to

connect to each other (see figures 2 and 3) and to the world back home and to cope with the complexities of the war they had been sent to fight. When they recalled and talked about a song—"These Boots Are Made for Walkin'," "My Girl," "And When I Die," "Ring of Fire" and scores of others—in that moment of remembering, many of them began to finally "heal" from the war's wounds, if in no other way than by opening up and being vulnerable, yet feeling safe. They and we knew that total healing would take a while, but, thanks to the music, this was a start—one 40 or 50 years in the making.

Figure 2. US Soldiers in Vietnam Listen to Music on Reel-to-Reel Tape Decks

Photo courtesy of Doug Bradley.

Figure 3. US Soldiers in Vietnam Listen to an Army Band

Caption

They're not Blood, Sweat, and Tears, but army bands provided respite for weary US soldiers in Vietnam by playing the songs they remembered and loved. Photo courtesy of Doug Bradley.

While it wasn't our intention to write a theoretical or academic book, we did want to explore the therapeutic benefits of music for Vietnam veterans. Our understanding of stories veterans shared was influenced by ongoing research into relationships among music, memory, and trauma. A cottage industry of recent studies, sparked by Daniel Levitin's *This Is Your Brain on Music: The Science of a Human Obsession*[9] and Oliver Sacks' *Musicophilia: Tales of Music and the Brain*,[10] for example, document how—if the circumstances are right—music can help heal psychological wounds. We were aware that memory can be slippery, especially when connected to traumatic experiences, and that the stories people tell can reveal important features of their psychological needs. Moreover, stories can change over time, sometimes because information is added, sometimes because of forgetting or repressing, sometimes in response to changes in political or cultural climate. That's why the music "hooks" were so helpful—because there was an authenticity to the musical memories that grounded the veterans' stories in truth.

On one level, then, *We Gotta Get Out of This Place* could be seen as a collective portrait of a group of individuals using music to try to make sense of a multifaceted experience that mostly didn't make much sense to many. In the end, what emerged from more than 10 years of research and interviews was a group portrait unlike any other, an oral history that engages rarely-asked questions of what music really means to the people who listen to it. The stories—some told shortly after events during the period between 1965 and 1974, some told decades later—document veterans' states of mind and remembrance at different points in time. While we don't directly address these stories' implications for the study of memory, we trust the veterans' stories will be of interest to scholars who wish to understand memory and to clinicians seeking to benefit patients.

Music can profoundly affect mood, outlook, and quality of life, war veterans' and patients' alike. As Ricardo Lopez, who served with the US Air Force in Vietnam and Thailand from 1967 to 1969, told us, "I listened to music whenever I could when days were dark in Vietnam. There was this cafeteria on base, and sometimes I'd go there at three or four in the morning, thinking about guys who weren't coming back. I sat there listening to the jukebox."[8]

A jukebox in every patient's room is not necessary, but any type of music player would likely be therapeutic. The songs and the memories and the brain chemistry will do the rest.

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Doug Bradley is a distinguished lecturer emeritus at the University of Wisconsin-Madison. He is the author of *DEROS Vietnam: Dispatches from the Air-Conditioned Jungle* (Warriors Publishing Group, 2012) and coauthor with Craig Werner of *We Gotta Get Out of This Place: The Soundtrack of the Vietnam War* (University of Massachusetts Press, 2015), which *Rolling Stone* named the best music book of 2015.

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ART OF MEDICINE

Bleary Image

Manpreet Kaur

Abstract

Pastel and oil paint on wood are used to investigate the importance and challenge of self-preservation during processes of medical training and professionalization. This image considers whether, why, and how self-sacrifice is necessary to become a good physician and investigates this set of themes from ethical and aesthetic perspectives.

Figure. *Bleary Image*

Media
Pastel and oil paint on wood.

This image responds to tradeoffs that I and other medical students have made in pursuing medical education. We mainly go into the field of medicine out of passion for serving others. We study for hours on end to positively influence our communities and the people within them. We hope to transform into individuals whom our patients would trust, love, and listen to. In the process of becoming that person for others, we sacrifice parts of ourselves and some things that make us happy. This is what we signed up for, right? Isn't this what we've wanted all along? I find myself asking these questions perpetually. We want to be good physicians for others, and we tend to feel guilty for wanting to make ourselves happy, too. We strive for "balance"—something physicians and trainees have grown accustomed to hearing about and striving to realize.

In this painting, vibrant and serene colors depict a sense of peace and internal joy that can come with being a physician. The abstract figure that is not clearly outlined represents a blearing of professional and personal identities. That figure—encompassed in a whirl of strong, warm red colors against a background stroked with a duller version of such colors—depicts me toning down certain aspects of my personality and life to be the best physician I can be. The painting suggests that I am the happiest I can be and grateful for being allowed to help people through medicine. Yet this painting also represents recurring internal conflict about how to establish personal and professional identities in ways that achieve balance.

Manpreet Kaur is a second-year medical student at Wayne State University School of Medicine in Detroit, Michigan. She plans to practice family medicine and pursue a fellowship in adolescent medicine.