
Organising social care initiatives within an urban academic medical centre

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Siqi Wang is a Health Services Researcher at Rush University Medical Center and oversees evaluation of Social Work and Community Health programmes. Her career has spanned educational data management, statistical analysis and academic research. At the State University of New York at Buffalo (SUNY-Buffalo), she led numerous projects related to departmental data-driven decision making on increasing communication efficiency and perfecting data tracking systems. During her graduate years at SUNY-Buffalo, she investigated the health outcomes of older adults in the USA with large-scale longitudinal data sets. Her empirical research on arthritis diagnosis identified health insurance coverage as one of the social determinants of health (SDOH). At Rush, she embeds herself in healthcare settings and conducts end-to-end mixed methods research and evaluation to demonstrate the impact of SDOH and ageing programmes. These experiences provide the content knowledge and research and statistics skills needed for programme evaluation.

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Bonnie Ewald is the Managing Director of the Center for Health and Social Care Integration (CHaSCI), an applied think-tank based at Rush University Medical Center in Chicago that advances practices and policies that expand access to social care. In this role, she leads CHaSCI's strategy and implementation of its workforce development trainings, care model

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Abstract Meaningfully addressing social risk factors that impact health outcomes is a complex and expensive endeavour. As healthcare systems across the USA pivot their operations to include upstream and downstream social care elements, they struggle with the operationalising screenings, intervention, staffing and sustainability. This paper shares the nearly decade-long experience of Rush Medical Center in Chicago in creating an infrastructure that identifies social needs, escalates patient cases to an interdisciplinary team intervening at different levels of intensity and simultaneously engages local community and medical entities to develop an enduring partnership to support these efforts.

KEYWORDS: social care, care coordination, integrated care, cross-sector collaboration, health equity

INTRODUCTION

It is now clear that social care and community needs directly impact patient health.¹ After decades of reluctance, healthcare organisations across the country are starting to embrace the notion of addressing social needs and social risk factors — sometimes referred to as ‘social determinants of health’ (SDOHs). Without a clear implementation roadmap, however, many are struggling to make meaningful headway.²

Every step of this work is rife with expensive pitfalls and logistical challenges — from screening and staffing to community partnerships and sustainability — that can confound even the most dedicated teams. To succeed in this endeavour, healthcare organisations must understand what social needs each patient experiences (and how their needs evolve over time), determine what disciplines to deploy when addressing uncovered needs, encourage patient

engagement, leverage existing community resources and find creative solutions to fund these largely unbillable efforts. These diverse activities span the types of social care activities described by the framework advanced by a 2019 National Academies consensus study on integrating social care in the delivery of health care³: (1) gaining awareness of social needs and social risk factors, (2) adjusting care to accommodate social needs, (3) offering assistance to address social needs, (4) aligning resources to invest in communities and (5) advocating for policy change.

Every three years, Rush University Medical Center (Rush) — an urban academic health system in Chicago, Illinois — conducts a community health needs assessment to gain awareness of the social needs and social risk factors in its catchment area. Although specific needs identified vary slightly from assessment to assessment, the overall picture is consistent —

patients in the communities around Rush experience a great deal of social care needs, and addressing them is a strong imperative.

In this paper, we will share the experiences of several coordinated teams at Rush, which have led the efforts in this area. After years of trial and error, we have made significant strides in effectively addressing social risk factors and social needs in the patients and communities we serve. Multiple strategies were utilised to tie together internal hospital operations and community network building, resulting in a multi-pronged approach that takes patients from SDOH screening (still officially referred to as this within the medical record) to longitudinal post-acute and ambulatory interventions, delivered by several coordinated disciplines, using low- and high-touch modalities as appropriate.

Here we will address effective strategies and cautionary tales for integrating SDOH screenings into in-patient, ambulatory and emergency operations, the disciplines responsible for follow-up and the interventions they utilise, and, finally, the community network capacity building, critical for successful outcomes.

SOCIAL RISK FACTOR SCREENING

Before we can intervene on the social risk factors that patients experience, we must systematically find out what they are. Two years before the electronic medical record at Rush (Epic) rolled out its population health modules, teams from Rush, as well as its neighbouring medical centres and community-based organisations (CBOs), convened for several months to determine which factors to screen for, how to phrase the questions to account for literacy and how to integrate the questionnaire into day-to-day operations.

An interdisciplinary team was convened weekly, tasked with reviewing question content and validity and alignment with institutional focus and nationwide

adoption. Based on the Accountable Health Communities (AHC) grant, the team agreed to adopt the same domains (food insecurity, housing instability, need for utilities assistance and transportation instability). One domain included in the AHC proposal — interpersonal violence — was substituted for access to primary care and insurance. The team learned that Rush nurses completed an assessment focused on violence in the home and wanted to avoid duplication. This team finalised the customised questionnaire and presented it to hospital leadership for approval to launch.

Additionally, Rush joined West Side ConnectED, a coalition involving hospitals and community health centres, with the goal of improving healthcare delivery across the target community by leveraging the west side healthcare ecosystem. ConnectED served as the forum for the partners to come together, share best practices and learn from each other. With ConnectED, each institution developed plan-do-study-act pilots within their emergency departments to test and implement new workflow processes.

The teams attempted to keep the screening burden low for healthcare personnel (already struggling to find time for existing tasks) and patients (already struggling with a battery of questions from the moment they walk through the door), while gathering enough information on social needs that impact health outcomes and that can be addressed with available interventions.

One proposed approach was to better utilise technology to deliver the screening questions in the form of a questionnaire launched seven days prior to a primary care visit via the Epic MyChart functionality. Patients with access to and comfort with technology had the ability to complete the questionnaire prior to their primary care visit, saving time for medical assistants during the appointment.

Another solution was to adopt a 'locked screen' functionality, employed in paediatric primary care that encouraged medical assistants

to complete their rooming tasks, pull up the screener on the desktop and leave the room. This practice allowed the patient (or family member/guardian) to complete the SDOH screener in privacy. This method, while successful, was limited to paediatric patients and is not an option with adult ambulatory care owing to clinic flow restrictions.

While implementation within ambulatory care was slow and laborious, adoption within the emergency department, some specialty care practices and other lines of business was swifter. The emergency department, previously chosen as the initial site to pilot social needs screening, is viewed as 'ground zero' for social needs, frequented by people experiencing homelessness, excluded from healthcare access and insurance, and facing complex barriers to care. Emergency room providers championed the need to bring on staff to expand the ability to conduct screenings and provide resource navigation. Community health workers (CHWs) and individuals serving as AmeriCorps members now provide this care in the emergency department, with their time supported by a combination of philanthropic and governmental contracts. Similarly, specialty care practices such as physical medicine and rehabilitation (PM&R) have adopted social needs screening as a part of their standard care, using a resource inventory technology to share community resources, further empowering their patients to utilise the resources within their own communities.

On the in-patient side, Rush is currently implementing social needs screening on 12 in-patient units. To encourage continued expansion of SDOH screening, the United States Centers for Medicare and Medicaid Services (CMS) recently proposed to include three measures related to social risk screening into its hospital in-patient quality reporting programme.⁴ By doing this, CMS has, for the first time, encouraged hospitals across the nation to build awareness of social risk factors and social needs into their core operations.

The first performance measure, *Hospital Commitment to Health Equity*, assesses a hospital's commitment to health equity by requiring attestation of the following equity-focused organisational competencies: equity as a strategic priority, data collection, data analysis, quality improvement and leadership engagement.

The second performance measure, *Screening for Social Drivers of Health*, indicates the rates of screening a hospital implements for all adult (18+) patients at the time of admission for one or more of the following five health-related social needs: food insecurity, housing instability, transportation challenges, interpersonal safety and utilities difficulties. The third performance measure, *Screen Positive Rate for Social Drivers of Health*, reports the resulting positive screen rates for each domain.

Although CMS is proposing that these measures be optional for calendar year 2023, and mandatory beginning with the calendar year 2024 reporting period, Rush is planning to gradually scale implementation until December 2022, planning for full operation at the start of calendar year 2023.

TEAM COMPOSITION AND INTERVENTIONS

In order to address social needs that are uncovered, many health systems have processes in place to provide resource lists to patients, often curated by community resource technology platforms⁵ that are sometimes called Social Health Access Referral Programs (SHARPs). Rush utilises NowPow for this service, which was recently acquired by Unite Us. These tools make it easier to find and share information about local social services and other types of care. At Rush, we have processes built in to automatically include a resource list into an individual's visit summary paperwork, which is tailored based on any needs they reported during the screening as well as their zip code and insurance status. SHARPs

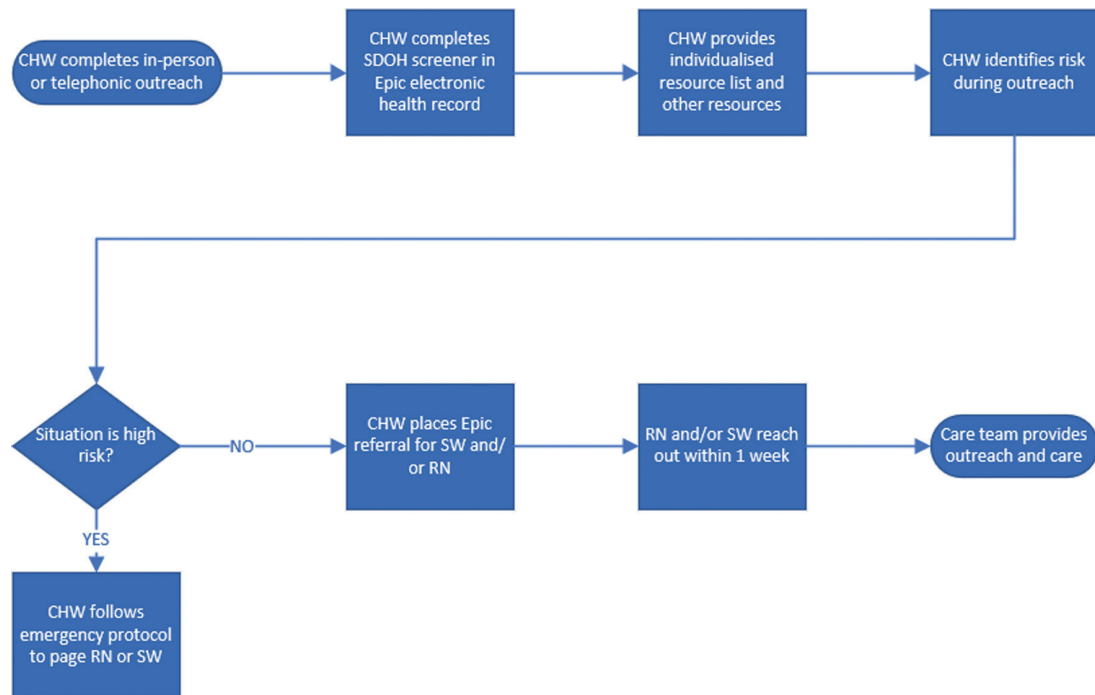


Figure 1 Rush CHW outreach and intervention protocol

often also enable direct referrals to select partner organisations that can then log in and indicate whether a referral was followed up on (Figure 1).

While SHARPs are important tools as social care scales across the USA, in many cases barriers to accessing resources go deeper than having information about local resources. There may be nuances around eligibility, appropriateness and adequacy that are not captured in an organisation's profile; for instance, funding may be sporadic, limiting an organisation to addressing those needs only at the beginning of a budget cycle. Resources also take a lot of navigation, with very specific steps — and a lot of patience — needed in order to successfully enrol in some programmes. Often individuals might be ambivalent about accessing resources to address needs, perhaps owing to stigma, a bad experience in the past, concerns with repercussions from a landlord or public charge,⁶ or feeling overwhelmed with juggling everything in their lives.

For these reasons, it is important to have providers (such as CHWs and social workers) available to discuss relevant resources and to explore and address barriers to engagement.

Engaging clinical support

Social risk screens put some patients on our radar and indicate whether a certain social driver may need an intervention. It is not unusual, however, for follow-up conversations to uncover additional, sometimes significantly more challenging needs, ranging from lack of engagement in the patient's own care to suicidality or previously undiagnosed medical concerns.

When such needs are uncovered, it is critical to have clear CHW escalation protocols for social work or medical interventions. Our CHWs are trained to escalate patient care to social workers if patients identify a need for assistance with housing or mental health care. Individuals who screen positive for any three social

needs are also referred to social work, as are any patients deemed to be at risk for self-harm or harm to others or involved in a domestic violence situation. Social workers are also available to CHW by pager for emergencies or for consultation.

All referrals to social work by CHWs are done with the knowledge and consent of patients, and if a patient requests to speak with a social worker, regardless of the outcome of the SDOH screen, that patient is referred for additional assistance.

CHWs refer to nursing staff for all patient questions related to non-emergent medical care, including information and education around medical conditions, medication side effects, guidance on whether to seek medical care and protocols surrounding COVID-19 isolation and quarantine.

The role of community health workers

Although the disciplines first intervening on identified social needs may differ depending on when and how the screen was administered, in most cases CHWs are the first line of defence for Rush patients. CHWs typically have deep familiarity with the communities they serve and leverage this familiarity to create an authentic rapport with patients and their families.

CHWs generally share the culture, language and community experience with their clients and are well-trained in skills needed for outreach, advocacy and counselling. Their work with patients is informed by their asset-based mindset, and they continually hone their ability to creatively find solutions and resources for the people they serve.⁷ Rush has over 30 CHWs on staff, with nearly half living in the neighbourhoods it serves on the west side of Chicago and nearly half being bilingual in Spanish.

Rush and local partners provide continuous training and support for CHW skill-building, including an up-front training

programme on the core competencies in alignment with the National CHW Core Consensus project and ongoing topical trainings to advance CHWs' specialisations. It also hosts monthly case consultation calls and offers ongoing vicarious trauma training programmes to support CHWs in processing the stressful situations they bear witness to and to prevent burnout.⁸

Social work care management

When social workers engage with patients referred by CHWs or AmeriCorps members, they use one of two evidence-based social work care management models to address patient needs. These models were developed at Rush University Medical Center in response to our awareness of extreme inconsistency in social work practice nationwide, as well as an almost uniform lack of standardised top-of-licence expectations.

The two models, the Bridge Model of Transitional Care (for patients discharged from an in-patient stay) and the AIMS (Ambulatory Integration of the Medical and Social) Model, both are disseminated by Rush's Center for Health and Social Care Integration (CHaSCI).

CHaSCI protocols identify seven skill areas for top-of-licence social work practice:

- Therapeutic alliance and rapport building
- Person-centredness
- Empowerment
- Person-in-environment
- A relational approach
- Cognitive restructuring and mindfulness
- Motivational interviewing

Social workers use these skills to effectively engage patients in their own care while attending to identified social needs and, importantly, to course correct the often inevitable deviations from the medical plan of care developed by the medical team. Social workers maintain

communication with CHWs as needed throughout their patient engagement. This partnership provides continuity and consistency of social care for patients. In addition, social workers use the electronic medical record to keep providers informed of social needs that may affect patients' medical status.

COMMUNITY NETWORK BUILDING

Patients do not live in the hospital or the emergency room, so it is critical for healthcare institutions to collaborate with CBOs whenever possible to most effectively support patients, families and communities. Formal and informal community resource tracking have always been essential components of hospital after visit planning. Constant referrals to everything from home health and skilled nursing facilities to senior centres and meal delivery services have created organic networks in healthcare systems' across the country.

Many patients utilise several different medical systems for their care, often having a medical home with one system, while going to an emergency room in another, simply because a given emergency room may be closer or less crowded than the one where they access primary care. At the same time, depending on their resource needs, they may engage with an alternating host of CBOs over the course of months or years. As such, having a coalition that brings together most of the important players around the same table enables the network as a whole to focus on smooth hand-offs, effective information transfer and collaborative interventions required for the longitudinal care received by patients, particularly those with multiple chronic conditions.

The Affordable Care Act (ACA) and its many opportunities to integrate social care into health care led to a concerted effort by Rush to formalise these informal organic networks of CBOs and other healthcare

providers, such as Federally Qualified Health Centers (FQHCs). Over the course of several years, following the passing of the ACA, Rush served as a convener of important network stakeholders in its area with the aim of creating a more standardised and reliable safety net of services and resources for its patients. In our experience, including the expertise of community-based providers in the development of initiatives, and securing funding to support their involvement in programme implementation, has increased the buy-in of the community as well as the durability of initiatives.

In 2016 two collaborative efforts were initiated, including West Side ConnectED, an initiative with several partnering social service agencies and hospitals to co-develop and roll out SDOH screeners across emergency rooms on the west side of Chicago.⁹ In addition, representatives from neighbouring hospitals, emergency rooms, CBOs, faith-based organisations and FQHCs created a formal entity, called West Side United to serve as a hub to provide coordinated support to neighbourhood organisations and invest in west side communities in order to improve health.¹⁰ Most recently, thanks to the effectiveness of this long-standing collaboration, West Side United applied for and successfully became one of five teams across Illinois to share a US\$150m state grant to transform care for Medicaid beneficiaries and uninsured individuals across Illinois. The grant created a new entity out of the existing collaborators, called the West Side Health Equity Collaborative (WSHEC).¹¹

Another network that Rush participates in to reduce social risk factors is the Chicago Homelessness and Health Response Group for Equity (CHHRGE).¹² CHHRGE is a multisectoral collaborative to improve the health and well-being of persons experiencing homelessness and the vulnerable housed. At the start of COVID, many people and organisations within

Chicago — including students and providers at Rush — quickly recognised the elevated health risks associated with individuals that lived in congregate settings, particularly homeless shelters. Knowing this, several organisations, people with lived experience, shelter and outreach providers, health professions students, clinical and behavioural health providers, advocates, public policy and city liaisons, supportive housing providers, legal partners, at large members and other interested parties came together and formed what is now known as CHHRGE.

One learning outcome of our participation in CHHRGE is that we could not effectively meet the needs of this population without truly examining the ways in which we collaborate. These collaborative efforts would include clinical and non-clinical staff members from diverse organisations, students and those with lived experiences of homelessness. We learned that we can contribute effectively by leveraging our institutional power to assist with fundraising and elevating the important work being led by advocates, supportive housing providers and homeless shelters.

We also learned about the need to develop a home base for homelessness response work at Rush, to have more coordinated and strategic efforts to increase access to clinical care — both physical and social care — by providing on-site, barrier-free services and linkages to specialty care for people experiencing homelessness or facing housing insecurity.

OUTCOMES

- Anecdote from one social worker: *‘For several months, I worked with one older gentleman to support his move from long-term care into supportive living. He has several chronic conditions with varying symptoms affecting his day to day, including kidney disease. Through our conversations, I learned he wasn’t able to make many of his dialysis*

treatments due to scheduling challenges. After hearing that he hadn’t been able to get a different appointment time, I advocated on his behalf for a time that worked better for him at the dialysis centre. After moving to the community, he faced barriers to reinstating his social security income and also had multiple falls and consequently hospitalisations. Since then, he’s no longer been missing treatments. I also helped him navigate the process to get in-home services to minimise the chance that he would fall, and enrolled him in a falls prevention workshop to minimise his fear of falling. The thing he was the most happy about was that we were able to work together to get his social security back in place, and we also got him enrolled in the local paratransit programme so he can get to church more easily. Now, we’re working on getting him access to a podiatrist so he can have less pain when he walks.’

Gaining awareness of social needs has been recognised as opening the door to various positive outcomes.¹³ Beyond screening, evaluations from across the country suggest that CHW and social work interventions to address social needs contribute to increased engagement in preventive care, improved health outcomes, fewer hospitalisations, higher patient satisfaction and higher provider satisfaction.^{14–16}

Rush has conducted over 26,000 SDOH screenings in fiscal year 2022 (July 2021 to June 2022) across the system, exceeding the fiscal year target by 5 per cent. A pilot evaluation at the emergency department and one primary care clinic found that the majority of SDOH-positive patients felt the screening was appropriate and were comfortable completing it. Rush is also tracking intervention data, including provision of information about resources, direct closed-loop referrals to select partner organisations, assistance with benefits enrolment and escalation to a nurse or social work in cases of complex needs. We are also monitoring follow-up rates on direct referrals we place to inform our continued

partnership development and fundraising needs. In fiscal year 2022, CHWs intervened with over 6,000 individuals, and there were nearly 900 closed-loop referrals placed (those where resource utilisation is confirmed by the receiving agency), with an average successful referral rate of 76 per cent. During that same period, CHWs placed nearly 500 referrals to a community health RN and nearly 700 referrals to social workers for them to implement a follow-up care management intervention. In addition to monitoring our reach, we are also analysing our impact on patient care experience as well as their patterns of accessing care in the emergency department, hospital and primary care.

While monitoring the quantitative impact of our social care offerings is important, we are also alive to the importance of reflecting on the successes and challenges associated with each individual that a CHW and social worker works with. We explore challenging case scenarios during our monthly clinical consultation calls, and we regularly collect patient success stories and use them to share highlights with the CHWs about the impact of their own work. Select stories that highlight the importance of offering social care in an integrated way with health care are included here:

- Anecdote from one CHW: *‘Yesterday, a COVID-positive individual I spoke with told me that she had tightness in her chest on a different day but, that it resolved itself. I asked her if she wanted to speak to a nurse regarding this and she said with reluctance, “I guess you can have her call me but, it already went away”. After I put in a referral, our Community Health RN spoke with her and forwarded the info to her cardiologist. Her cardiologist asked her to go the ED and the ED physician heard crackles in her lungs. She is still at Rush as of now getting treatment. I’m very glad I went down the list of symptoms with her one by one and we discussed chest pain/tightness. On her chart, it only listed*

cough as a symptom, but in my experience, people tend to develop new symptoms (or they forgot old ones) by the time they get home from the hospital or testing facility. I was also able to send an urgent food delivery to her because she told me that she was going to run out of food a day or two before her isolation period ended. She also had no way to obtain food because the only other person she lives with also tested positive.’

ONGOING CHALLENGES

On top of the massive and lingering effects of the COVID-19 pandemic and despite many lessons learned from years of intentionally building this work, multiple challenges continue to threaten progress. Staffing, sustainability and evaluation challenges are among the most difficult to overcome and require consistent attention.

Staffing

Staffing a team of social care providers is imperative in developing and upholding successful social care initiatives. Within any organisation, the hiring process can be time-consuming and complex, taking weeks or even months at a time. Hiring may include developing a job description and receiving HR approval; receiving the appropriate approvals to post the job requisition, which can be extensive if awaiting a grant contract to be executed; onboarding preparation and employee requirements; and leading the onboarding process. Using a standard job description and utilising the same role across grant projects and teams has proved helpful in seamless staffing transitions from one project to another.

Growing interest in and utilisation of CHWs has led to a shortage of CHWs across the Chicagoland area. Open positions remain unfilled for weeks, sometimes months. As an example, the aforementioned WSHEC project received funding for up to 200 employees

(mostly CHWs along with some social workers and nurses) to staff WSHC partner sites from emergency rooms to CBOs. Even with three months of lead-up preparation time built into the grant timeline, the project is still only about 25 per cent staffed more than six months in. The slow trickle of new staff members has created a dual challenge of ongoing training and the commensurate expansion of clinical operations as the project slowly scales. New employees must be trained in cohorts, which results in several days of inefficient staffing and support.

Given the responsive nature of social care initiatives, individual capacity and caseloads may also ebb and flow. For example, many social care initiatives supported by Rush's CHWs were paused during the Omicron surge when CHWs were dedicated entirely to COVID-19 testing and contact tracing; alternatively, there have been times when COVID-19 volumes were low and CHWs spent most of their time in the community at events and focusing on training and development opportunities as alternative programming was developed. Additionally, grant-funded staff members may be restricted by funded scopes of service. During some COVID-19 surges, for example, contact tracing CHWs could not pivot to support the testing teams given that the contract's scopes of service excluded clinical care. This can be challenging when last-minute staffing needs or opportunities arise and available staff are unable to support owing to funding scopes.

Financial sustainability

Apart from staffing, scaling and sustaining social care programmes can be challenging for a variety of reasons. First, there are few direct reimbursement mechanisms from healthcare payers or governmental sources, so many social care initiatives are funded entirely or in part by grants or philanthropic funding sources. This creates risk for sustainability

when grant funding ends, leaving staff support and programming in limbo.

Large and sporadic grants like the WSHC aside, social care remains very difficult to reliably sustain. Although social workers and nurses are able to contribute to some fee-for-service billing opportunities that physicians and other 'qualified health providers' can bill Medicare and some commercial payers for (namely, chronic care management (CCM), principal care management (PCM), transitional care management (TCM) and behavioural health integration (BHI) billing codes), the uptake of these codes across the nation has been slow, inconsistent and plagued by confusion. CHWs are able to bill Medicaid in some states but not currently in Illinois.

In addition to ongoing public and private funding opportunity applications and searches, Rush sustains its social care efforts in two ways. First, this work is counted as part of its community benefit responsibility, which allows it to maintain its non-profit status. This spurs hospital leadership to continue allocating some funds for these teams. Second, intentional focus on additional screenings (eg colorectal) and follow-up appointments helps CHWs and social workers meet several value-based contract metrics (which vary by payer), which typically come with per member per month payments and/or shared savings based on decreased healthcare utilisation costs.

The main focus of social care is to keep patients healthier longer. Healthier patients tend to utilise the health system less frequently, resulting in decreased 30-day readmission rates and ED visits, improved follow-up attendance rates as well as decreased mortality and a host of other health benefits, which lower their overall cost of care. Accurately capturing these outcomes presents the greatest source of sustainability of this work but also introduces the last of the major challenges — evaluation.

Evaluation

Simply put, studying the impact of social care interventions is complicated. Many have tried and failed to demonstrate results, and many more have demonstrated results but with less than randomised controlled trial rigour.¹⁷

There are several important explanations for this. First, standardising social care interventions is enormously challenging. Even when applying a highly researched and protocolised intervention like cognitive behavioural therapy (CBT) or motivational interviewing (MI), the actual interaction between patient and provider will never be the same from visit to visit. Two providers trained in the same manner, following the exact same protocols, may still have different outcomes with similar patients. Human factors such as creating rapport, demonstrating empathy, ability to switch modalities based on roadblocks are too numerous to account for in studies and so remain a confounding factor in all research attempts. It is also difficult to tease out what part of an intervention contributed to a given outcome — a CHW or social worker may help address multiple resource needs, while also building rapport and trust in a way that facilitates engagement in care, while also coordinating directly with care providers to advocate on the patient's behalf. In a high-touch intervention like this, it is likely that the multi-pronged approach is what enables improvements in health and care utilisation rather than concretely addressing one social need.

Next, data availability, intervention evolution and time constraints create a nearly impossible environment for effective evaluation. Total cost of care data is not always available, may only be available from a given payer or may be very expensive, as in the case of Medicare and Medicaid data. Furthermore, social care data is still very inconsistently collected, and even in best case scenarios presents us with a snapshot in time. Taking social care data points into account

longitudinally creates the additional burden of ongoing screening, and addressing social needs like housing instability can take a long time to address.

In addition, collaborating with CBOs to address social needs requires data from them to evaluate the effectiveness of direct referrals, but that demands that they have staff time to access the system to document follow-up. While SHARPs help facilitate this, it is still burdensome and challenging for many CBOs based on their funding and staffing models. Even for social needs data within one health system, electronic health data (EHR) data can be messy and difficult to analyse with a lack of dedicated staff focused on it.

It is also important to understand our reach and impact with different patient populations, in order to know if we are making progress towards equitable outcomes. EHR data on patient characteristics that may impact care access and experience — such as preferred language, sexual orientation and gender identify — may, however, be missing or inaccurate, and race and ethnicity data is generally not nuanced enough to help recognise health inequities that may exist within large categories of populations (such as Asian and Pacific Islander) or to inform partnership-building efforts with organisations that offer culturally focused programmes.¹⁸ Without reliable data on whom programmes serve, it is not possible to know whether we are making an impact on disparate outcomes experienced by different populations.

Even with great data availability and consistent protocols, the real-world environment in which these interventions take place is in a state of constant flux, with the appearance of new resources, exit of old resources, staff turnover and inadvertent overlapping interventions. It is also difficult to find a comparison group with similar health status and social needs that has similar needs but is not receiving supports to address those needs. Addressing all of these while

accounting for dozens of independent variables is a monumental task not yet successfully achieved in the USA.

Finally, most health systems and CBOs function on annual budget cycles. Trying to pilot or sustain an intervention for multiple years is often not financially possible. And yet the time horizon for a meaningful evaluation of these programmes must be significantly longer,¹⁹ three to five years or more, since many social care challenges are either deeply ingrained in patient behaviour or have nearly intractable structural components, which require municipal interventions over the course of many years.

CONCLUSION

In spite of the many ongoing challenges, addressing social care needs in our patient populations is an ethical and pragmatic prerogative. The growing body of evidence-based and evidence-informed interventions is demonstrative of the fact that we, as a country, are in a rapid state of growth with respect to these needs, and we hope that as our interventions and evaluations become more sophisticated, we will continue to make strides in changing the way health care is delivered in our communities — and ultimately achieve more equitable outcomes. Hospital systems that want to pursue this work are encouraged to begin with better understanding the social care needs of the patients in their communities. Finally, it has been our experience that the teams working in this field are deeply committed to sharing their work and experience. Interested readers are encouraged to contact the authors for advice and troubleshooting — a rising tide lifts all ships!

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