12 Financial Insecurity

Stephen B. Brown and Karen D'Angelo

Key Points

- Due to the widening gap in American income and wealth, financial insecurity is a substantial and growing problem in the US.
- Financial insecurity directly and indirectly affects other social determinants of health. It adversely impacts patients' access to social and economic resources that contribute to health (e.g., access to healthy food, secure housing, utilities, and heat), as well as their ability to adhere to medical treatment recommendations.
- Emergency medicine staff can assess financial insecurity with screening questions and direct patients into programs that can address their financial stress. Additionally, the department and/or hospital should seek to integrate technology that identifies and refers patients to community-based resources.
- Some healthcare systems have begun to address financial insecurity beyond the individual patient level by adopting an anchor institution mission, recognizing that hospitals can play a vital economic role in the communities that they serve and can help build prosperous and healthier neighborhoods.
- Structural competency, defined as the need for healthcare systems and healthcare providers to understand and address the structural roots of poor health, should be incorporated into medical school and continuing education curricula.

S. B. Brown (✉)
Department of Emergency Medicine, University of Illinois Hospital & Health Sciences System, Chicago, IL, USA
e-mail: sbbrown9@uic.edu

K. D'Angelo
Department of Social Work, Southern Connecticut State University, New Haven, CT, USA
e-mail: dangelok1@southernct.edu

© Springer Nature Switzerland AG 2021
H. J. Alter et al. (eds.), *Social Emergency Medicine*,
https://doi.org/10.1007/978-3-030-65672-0_12

Foundations

Background

> A dramatic divergence between data and experience is confounding America's policy debates. The data seem to show that households have attained unprecedented prosperity, and wages have (at worst) held their own against inflation, or (at best) risen much faster than prices. By conventional measures, material living standards everywhere in the income distribution are at all-time highs, and technological progress continues to improve them. Yet many jobs able to support a family in the past no longer do. Millennials are in worse financial shape than were those of Generation X at the same age, who themselves had fallen behind the baby boomers. The stories appear irreconcilable [1].
>
> *–Oren Cass, Executive Director, American Compass*

Financial insecurity is a growing problem in the US. According to a national survey conducted by the Center for Financial Services Innovation, only 70 million people, or about 28% of US adults, think they are "financially healthy" [2].

Despite optimistic economic perceptions after the recovery from the Great Recession of 2008, data shows that the country has seen slow growth in the living standards of low- and middle-income Americans and rising rates of inequality [3]. In 2017, 55% of US adults, or 138 million Americans, reported struggling with some financial concerns, and 42 million (17%) were struggling with all, or nearly all, aspects of their financial lives [2]. While very high wage workers have seen increases of 41% since 1980, middle class wages have increased just 6%, and low wage workers have seen a −5% cumulative change, contributing to an ever widening wage stagnation in the lower and middle class [4]. There is also a profound Black-White wealth gap revealing the accumulated effects of inequality and discrimination, and which has resulted in decreased intergenerational wealth transfer within Black families. An examination of US family wealth in 2016 found a staggering tenfold difference between White and Black families ($171,000 versus $17,650, respectively) [5].

A generation ago, a typical male worker could cover a family's expenses of four major expenditures (housing, healthcare, transportation, and education) on 30 weeks of salary, leaving 22 weeks of pay for everything else a family wants and needs, such as food, clothing, entertainment, and savings. By 2018, it took 53 weeks just for the four major expenditures [1].

"Financial insecurity" is used broadly to describe living paycheck to paycheck and/or concerns about making ends meet. People who are financially insecure are economically vulnerable; they have little savings, often spend as much as or more than they make, and are frequently crippled by unmanageable debt [6]. The Federal Reserve Board found that 40% of adults, "if faced with an unexpected expense of $400, would either not be able to cover it or would cover it by selling something or borrowing money" [7]. Increased basic living expenses, including rising food, housing, and healthcare costs, as well as the rising cost of higher education, have the potential to lead to economic instability. Certain groups are disproportionately affected by financial insecurity, including, for example, women, Black and Hispanic individuals and families,

younger people, people with lower educational attainment, people with unstable work schedules, people living in the southern and western US, and people who grew up poor [2].

More recently, the crisis caused by COVID-19 has resulted in significant job losses and financial insecurity for many Americans [8, 9]. There are signs this is getting worse, with 32% of Americans missing house payments in July 2020 [10], mortgage delinquencies hitting a record high in April 2020, exceeding those seen during the Great Recession [11] and estimates that if the crisis persists, 28 million could become homeless [12].

The pandemic has exposed the persistent structural racial disparities related to financial security, with 73% of Black Americans and 70% of Hispanic Americans stating they do not have financial reserves to cover emergency expenses, compared to 47% of White Americans [8, 9]. Without the economic stability that comes with well-compensated and stable employment, people in the US often have limited access to vital resources [13] such as affordable housing, nutritious food, quality childcare and education, reliable transportation, safe neighborhoods for exercise and/or play, and comprehensive healthcare. For the most vulnerable in our society, the struggles to afford basic necessities are compounded by the exorbitant cost of healthcare, estimated to be two times per capita compared to other countries, coupled with the chronic underfunding of social services [14, 15]. Economic security directly and indirectly influences the social conditions in which we live and influences people's ability to maintain healthy lives and adhere to their healthcare providers' recommendations.

The federal government provides assistance to low-income families to improve overall health and decrease inequities [16]. Examples of government assistance programs are SNAP (Supplemental Nutrition Assistance Program), commonly known as food stamps, and the Housing Choice Voucher Program, also known as Section 8 [17]. Many of the federal government's programs use means-testing as a qualifying criterion. In order to be eligible, the recipient's income and assets must be below an identified threshold, often in relation to the Federal Poverty Level (FPL, currently $26,200 for a family of 4) [18]. Yet the FPL has not risen over time to account for inflation and the actual costs of living [19]. Thus, obsolete qualifying guidelines may make government programs inaccessible to those who are functionally impoverished yet considered to be too well off for aid.

Program criteria may be overly restrictive and counterintuitive and create disincentives to seek employment or self-sufficiency. For those with a medical condition(s) that renders them unable to work, even if they do not have a work history, Supplemental Security Income (SSI) provides limited income that is 30% below the FPL (approximately $750 per month) [20]. It can be further reduced by an array of disqualifying events, such as going back to work and earning more than $1220 per month or $14,640 a year. A person cannot have assets over $2000, so that someone who may own a car, no matter how old or in disrepair it may be, may see their benefits reduced or eliminated [21]. Thus, while government programs help mitigate financial strain, requirements to receive and maintain benefits are complicated. Consequently, patients may be unsure of what economic supports they may continue to receive. This may further exacerbate economic stress for these patients and potentially confound concerns about affordability of care.

Evidence Basis

Impact of Financial Insecurity on Health

In addition to providing timely, high-quality emergent care for life-threatening illness and injury, the emergency department (ED) functions as a crucial element in the social safety net that serves vulnerable populations with high rates of material and financial needs [22]. Since health in the US follows a linear socioeconomic gradient [23] but the value of a dollar is fixed, those most deprived are disproportionately affected by financial insecurity and its consequent outcomes [24, 25]. In other words, potentially preventable repeat ED visits and health crises manifesting from the social determinants of health such as food insecurity, transportation issues, difficulties paying for utilities, housing instability, and other health-related social needs may be rooted in financial insecurity [26, 27].

Financial insecurity is associated with poor health outcomes, including both physical and mental illness [28–32]. Chest pain is a common presenting concern in EDs, accounting for approximately 7 million visits [33]. Between 30–50% of patients with non-specific chest pain are found to be suffering from a panic or anxiety disorder [34]. One study of chest pain attributed to panic disorder found that financial insecurity contributed to the experience of pain [35]. Financial insecurity is not just associated with anxiety, panic, and pain however; a study published in February 2019 demonstrated that income volatility, a particular type of financial strain defined as an unexpected drop of earnings of 25% or more, was associated with a twofold risk of heart attack, heart failure, stroke, and early death. As previous research on heart health and income has shown, low-income individuals have a higher risk for heart disease than high-income earners [36].

Stress related to financial insecurity appears to exacerbate pain. A study by Chou et al. found a significant relationship between unemployment and the use of pain medication. Participants were asked to recall a time in their lives when they felt financially vulnerable. Those that reported vulnerability described almost double the amount of physical pain when compared to those who were economically stable, after controlling for age, gender, negative affect, and employment status [35].

The number of suicides in the US rose 30.4% between 1999 and 2015, now ranking as one of the top 10 leading causes of death [37], while it fell in most western European countries except the Netherlands [38]. Research has generally found that the higher the level of income inequality in the US states, the higher the probability of death by suicide. When there is a large gap between the rich and poor, those at or near the bottom struggle more, making them more susceptible to addiction, mental illness, and criminality. Controlling for other variables, states with higher per capita spending on social services had lower rates of suicide [37]. Evidence suggests that policies that improve financial security, such as increasing the minimum wage or the earned income tax credit (EITC), may reduce the suicide rate. It is estimated that raising the EITC by 10% would prevent 1230 suicides annually, according to the National Bureau of Economic Research [39].

Financial insecurity also often impacts victims of intimate partner violence (IPV). Victims of IPV have four times the odds of experiencing housing instability

as the result of economic abuse, where the perpetrator controls a person's ability to acquire, use, and maintain economic resources [40]. It is found in almost all battering relationships [41]. Thus, financial insecurity and financial dependence may reinforce IPV victims' decisions to remain with abusive partners.

Impact on Healthcare Utilization

Financial strain can be an important factor in making healthcare decisions for many low-income individuals, who often forgo medical care in favor of essential basic needs like food and rent. They are sometimes forced to make trade-offs between household and individual needs. In a 2017 survey of US adults, 27% of adults went without some form of recommended medical care. For families making $40,000 or less per year, that figure was closer to 40%. Moreover, 20% had significant, unexpected medical bills to pay, 37% of whom incurred unpaid debt from those bills [7]. This follows an income gradient, with 65% of respondents earning $50,000 or less putting off timely care [42].

The lack of flexible medical payment options hurt families with children. They are less likely to be able to pay their out-of-pocket costs in full and, compared to individuals, are twice as likely to have their medical bills sent to collections [43]. The burden of unexpected, expensive medical bills has been attributed to almost two-thirds of bankruptcies and 57% of mortgage foreclosures [44, 45]. Foreclosures have been associated with an increased probability of Child Protective Services (CPS) involvement, and increases in ED utilization [46].

Cost-related nonadherence (CRN) is patient behavior that seeks to reduce or avoid the cost of care. This is most often described in studies about prescription medications. Those individuals affected by CRN report more comorbidities. Two national studies noted significant associations between multiple chronic diseases and CRN after controlling for income and sociodemographic factors [47].

Out-of-pocket medication costs are increasing for many Americans, and as the adult population ages, the number of prescriptions may increase. Increased dependency on medications often occurs during a point in the life course when people's incomes may be decreasing, or people are living on a fixed income. Even with Medicare Part D, the prescription drug benefit for seniors, out-of-pocket expenses may be substantial. Specialty tier drugs – which Medicare defines as those costing more than $670 per month – accounted for over 20% of all Part D spending in 2019, up from 6% to 7% before 2010. Commercial Part D plans are permitted to charge coinsurance premiums that could exceed $5100 a year – unaffordable for many seniors on a fixed income [48].

Compared to patients with commercial insurance, patients with Medicaid encounter more barriers to primary care, such as lack of transportation, inability to connect on the telephone, long waits in the physician's office, and inconvenient office hours, and the presence of these are associated with higher ED utilization [49]. Yet those that seek ED care come with a wide variety of material needs related to financial insecurity [22]. Asked about their choice to use EDs, low-income patients in a Pennsylvania study (both the insured and uninsured) explained that they consciously chose the ED over nonhospital settings because they perceived that

"the care was cheaper, the quality of care was seemingly better, transportation options were more readily accessible, and, in some cases, the hospital offered more respite than a physician's office" [27].

Emergency Department and Beyond

Bedside

> *Social determinants of health is an abstract term, but for millions of Americans, it is a very tangible, frightening challenge: How can someone manage diabetes if they are constantly worrying about how they're going to afford their meals each week? How can a mother with an asthmatic son really improve his health if it's their living environment that's driving his condition? This can feel like a frustrating, almost fruitless position for a healthcare provider, who understands what is driving the health conditions they're trying to treat, who wants to help, but can't simply write a prescription for healthy meals, a new home, or clean air.* [50]
>
> –Alex M. Azar II, US Secretary of Health and Human Services

The conundrum described by Secretary Azar is one that emergency medicine providers face every shift. The challenges of addressing the excess burden of acute medical needs in communities where the health effects of deep poverty contribute to ED use and poorer outcomes can, at times, be overwhelming [38]. It can be difficult to uncover the causes of repeated utilization and poorly managed chronic disease with the unending flow of patients and time critical diagnoses in the ED. The time and effort needed to identify social needs and to intervene is not something one provider can do. Addressing social determinants of health and financial insecurity calls for a coordinated, systematic, team-based approach that includes nursing, social work, care coordinators, peer recovery specialists, and community health workers.

Because patients may feel shame, embarrassment, or guilt if directly asked about financial insecurity, they may not disclose this information. However, clinicians should remain cognizant that many unmet social needs are related to underlying financial concerns. For example, patients may struggle to pay for electricity, which is needed not only for refrigeration, cooking, heating, and cooling but also to run, for example, a nebulizer. Barriers to electricity affect compliance with medical devices and can lead to medical crises requiring emergency care [51].

Early in the course of the clinical encounter, ED providers should consider financial barriers, especially when devising a patient's discharge treatment plan. Facilitating access to no- or low-cost prescription medication is one way to do this. Prior to prescribing medications, have a conversation and ask questions to determine whether a person can afford the medications: "I need to prescribe you some medications. How do you normally pay for medicines? Do you have insurance?" Most of the major retail pharmacy chains – CVS Caremark, Walgreens, Target, Walmart – offer $4–10 formularies of commonly prescribed generic medications for 30–90 days [52, 53]. ED physicians can adjust their prescribing to align with these formularies. As an added benefit, EDs can purchase $4, $5, or $10 gift cards to be distributed to patients unable to afford their medications and

provide a list of 24-hour pharmacies near the patient's home or the hospital. The website needymeds.org offers lower-cost alternatives for some specialty care medications [54]. By working with the patient to address social care challenges, the ED provider and their team may be able to mitigate potential complications and facilitate a better outcome.

Additionally, documenting social determinants in clinical notes will begin to quantify the scope of the issue. The International Statistical Classification of Diseases and Related Health Problems taxonomy (ICD-10) of medical diagnoses and procedures has a section for factors influencing health status. These "Z codes" are intended to document social needs that impact health. These include low income (Z59.6), insufficient social insurance and welfare support (Z59.7), and problems related to housing and economic circumstances, unspecified (Z59.9) [55].

Hospital/Healthcare System

Social Determinant of Health Screening

Healthcare systems can put into place programs that screen for and mediate individual patients' health-related social needs while also more broadly addressing the upstream factors – the social determinants – that impact the health of their patients from the surrounding communities [56]. A 2017 survey by Deloitte found that 88% of hospitals are beginning to incorporate screening for social needs but that many are ad hoc or intermittent, with 40% reporting no current capability to measure outcomes [57, 58]. The largest multi-site project to date, the Centers for Medicare and Medicaid Services' (CMS) Accountable Health Communities (AHC) model, has been designed to integrate the recognition of social determinants in order to bridge the gap between healthcare and human service providers in a hospital's primary service area. The AHC supports 31 clinical-community linkages throughout the US with a goal to improve health outcomes and reduce costs by identifying and addressing health-related social needs and working within communities to increase social services. These AHCs must screen patients for five social conditions: housing instability, food insecurity, transportation needs, interpersonal violence, and utility needs. AHCs must develop an inventory of social services in their communities of service providers, identify shortages in those services, and work with community members to develop a plan to ameliorate the gap in services [59].

There are numerous screening instruments that can aid providers in identifying unmet social needs, but two are widely used. The AHC Health-Related Social Needs Screening Tool has a core module of ten questions regarding living situation, food insecurity, transportation, utilities, and safety. There are also 16 supplemental questions that cover financial strain, employment, family and community support, education, physical activity, substance use, mental health, and disabilities [60]. The National Association of Community Health Centers Protocol for Responding to and Assessing Patients' Assets, Risks and Experiences tool (PRAPARE) includes 20 questions that can be directly uploaded into many electronic health records as structured data [61]. Both instruments screen for social needs related to financial

insecurity such as housing instability, food insecurity, and utility needs. The AHC screening tool also contains a direct question about financial strain which EM providers or staff can use if a system is in place (i.e., social or case worker in the ED or referrals) to address responses indicating hardship: "How hard is it for you to pay for the very basics like food, housing, medical care, and heating?" with response options of not hard at all, somewhat hard, or very hard [57].

Hospitals and clinics commonly seek to refer their patients to community-based social service organizations that assist with non-medical needs. In the past, they generated informal lists of community-based organizations (CBO) on paper or in electronic lists that were not regularly updated. Community resource referral platforms are online web-based tools that catalog community-based social and healthcare services, provide search capabilities, and have the ability to send referrals to CBOs. A 2019 report by Social Interventions Research & Evaluation Network (SIREN) compared features of nine vendor platforms. A recent innovation is the addition of a "close-the-loop" communication which notifies healthcare providers that a patient accessed a referred agency [62].

Clinical Programs

For patients having difficulty affording their medications, pharmaceutical manufacturers have developed over 200 pharmaceutical assistance programs (PAP) that provide free to low-cost subsidies for name-brand medications [63]. There are also copay assistance programs for expensive, lifelong drugs such as transplant anti-rejection formularies. Burley et al. found that in the 12 months after PAP enrollment, patients experienced a 51% reduction in the likelihood of visiting an ED or hospital [64]. There are inconsistent eligibility requirements among these programs, so the authors of the study recommend embedding a patient prescription coordinator in the ED. Alternatively, pharmacy departments, social workers, or community-based pharmacies can assist patients to apply for benefits.

Financial Assistance

Most hospitals have financial case management departments that will apply for Medicaid or Medicare coverage on their patient's behalf. It is in the financial self-interest of hospitals to do so. Although reimbursement may be a fraction of commercial rates, hospitals recover at least a portion of what would become unrecoverable debt [65]. This service benefits patients since they otherwise would have to pay out of pocket.

A requirement of the Affordable Care Act (ACA) is that non-profit hospitals must offer charity care and the assistance to apply for it. It also encourages hospitals to add complimentary financial services [66]. Hospitals may be able to assist with Medicaid re-determination of benefits when the patient's coverage period lapses, usually after 12 months. Additional on-site or off-site medical-financial partnerships for low-income patients can provide services such as financial counseling (focusing on credit, debt reduction, savings, and budgeting), free tax preparation, job assistance, and public benefits referral [67].

The Social Security Administration (SSA) has two programs that can provide financial assistance. Supplemental Security Income (SSI) is a needs-based program for individuals who are blind, disabled, or elderly, with low income/resources. Social Security Disability Insurance (SSDI) is for blind or disabled individuals who have a work history and are insured through employee and employer contributions to the Social Security Trust Fund [20]. A sister government agency, the US Substance Abuse and Mental Health Services Administration (SAMHSA), has a program called SSI/SSDI Outreach, Access, and Recovery (SOAR), an expedited service to help qualified applicants to secure benefits [68]. The use of SOAR has been linked to an increased first-time acceptance rate compared to those applicants who do not use SOAR [68]. Having a source of income greatly improves the chances of being able to obtain housing, making SOAR a particularly valuable service to homeless patients. Some hospitals have begun training their financial case managers to be SOAR counselors.

The Anchor Mission

Today, universities and health systems play an increasingly important economic role in communities. There is a growing awareness that these institutions have considerable untapped resources to leverage in their local communities, in order to address long-standing structural deficits and poor economic vitality. This *Anchor Mission* [69] acknowledges the anchor hospital's "institutional priority to improve community health and well-being by leveraging all [its] assets, including hiring, purchasing, and investment for equitable economic impact… [This] can powerfully impact the upstream determinants of health and help build inclusive and sustainable local economies" [70]. The healthcare sector contributes $800 billion in annual expenditures to the US economy and has accumulated $500 billion in investment dollars. As "Anchor Institutions," hospitals are called to realign their traditional business practices to "consciously apply the long-term, place-based economic power of the institution, in combination with its human and intellectual resources, to better the long-term welfare of the community in which it is located" [69]. Westside United, a partnership of seven hospitals, including two university hospitals (Rush University Medical Center and University of Illinois Hospital and Health Sciences system), is an example of the Anchor Mission in Chicago. Collectively, the hospitals have agreed to support the local economy by purchasing $100 million annually of locally sourced laundry, food service, and supplies; to place a priority of hiring locally; to provide wealth management and financial guidance to increase home ownership for Chicago's Westside residents and employees who live there; and to provide paid summer internships for local high school students [71].

Societal Level

The American Medical Association and United Healthcare, the largest health insurance carrier in the US, are collaborating to standardize how social determinant data is collected, processed, and integrated. This partnership will create over 20 new

ICD-10 codes related to the social determinants of health, with an intention that the codes will trigger more systematic referrals to social and government services, connecting them to local resources [72].

As a result of a disjointed, unaffordable, and sometimes inaccessible healthcare system, ED providers in the US are confronted with a variety of unmet social and economic needs, which cause and exacerbate many illnesses. Since EDs are open 24/7 and treat all patients in need, ED providers work with many patients' who are financially insecure [73, 74]. Traditionally ED physicians have received limited education on how to address these needs, which generally fall outside the scope of clinical practice and perceived physician role.

Literature suggests this lack of agency is a source of frustration for the ED physician and may contribute to burnout as well [73, 75]. ED providers have the highest rates of burnout out of all physician specialties [76], and burnout "is directly correlated to a personal sense of disempowerment to effect change in the work environment" [73]. Marked by emotional exhaustion, depersonalization, and reduced sense of personal accomplishment that results in decreased work effectiveness, burnout may also result in suboptimal care [77]. Thus, improved medical and residency education to explicitly prepare physicians to better understand and address patients' unmet financial needs (and other social determinants of health) may empower physicians working in the ED [73, 77].

Healthcare is delivered within the overarching context and history of our surrounding communities where our patients live. Illness and injury are often complications of long-standing structural violence and the inadequate and often inequitable application of public policy (e.g., zoning regulations, food systems, housing infrastructure, labor laws, tax rules, criminal justice sentencing guidelines, public education and social programming, etc.) [73, 78].

Medical education will need to recognize that "social and economic forces produce symptoms" and facilitate gene expression, and consequently we need "medical models for structural change" [79]. Named "structural competency," this paradigm incorporates the impact of systemic and institutionalized social and economic marginalization. Training on structural competency for medical trainees may be impactful. Medical residents who attended a training on structural competency reported that this framework was particularly helpful to better understand their patients and thereby "build a partnership" with them [80]. Additionally, it helped trainees reframe thinking toward patients, away from misconceptions that lead providers to "inadvertently blame patients for harm caused by structural violence" [81].

Health systems and EM providers can also become community advocates and powerful constituents by engaging with community-based organizations that address the structural determinants that lead to financial strain [67]. EM providers can advocate for policies, practice changes, and/or community projects that aim to improve the economic security of the neighborhood through workforce development, economic development, small business loans development, and/or affordable housing. For example, the US Department of Housing & Urban Development (HUD) supports the Continuum of Care (CoC) program. It designates a lead agency

to promote communitywide commitment to the goal of ending homelessness. "Community" can be an entire state, a county, or a city [82]. Through its H2 program, HUD is encouraging systems integration between healthcare and housing.

In order to maintain tax-exempt status, nonprofit hospitals must demonstrate that the institution serves the health interests of the surrounding community. In this context, community benefit refers to "the initiatives and activities undertaken by nonprofit hospitals to improve health in the communities they serve" [83]. Many hospitals do this via a community benefits officer or a department. For example, Trinity Health Care has a Community Benefits Ministry for each of its hospitals across the US and outlines the specific ways in which it reinvests profits into the local community to improve health outcomes and improve access to healthcare [84]. These departments coordinate activities to maintain nonprofit status, such as the triennial Community Health Needs Assessment (CHNA). It supports activities by providing community action grants that promote community health, like CPR training and health fairs.

There is a large corpus of research examining the link between poverty, inequality, and their resultant impact on financial strain and poor health outcomes [22, 25, 28]. EM providers can contribute to this body of work by doing research that lends insight into actionable interventions that meaningfully reduce the disparities in health outcomes which are rooted in financial insecurity.

Recommendations for Emergency Medicine Practice

Basic

- Ask questions to determine if patients have financial insecurity and how this is related to their health, healthcare use, or other health-related social needs.
- Consider evaluating and purchasing an online community resource referral platform. Several software companies offer curated online human services directories with listings for services that address financial insecurity such as rental assistance, job training and placement, financial counseling, assistance with application to government assistance programs, rent-to-own, and free tax preparation.
- Write generic prescriptions that align with local big box retailers' low-cost formularies.
- Refer to departmental resources if available, early in the patient's ED presentation, such as a social worker or case worker/care management within your emergency department. If these resources are lacking within the ED, advocate for hiring personnel to help address these complex patient social needs.

Intermediate

- Financial insecurity is a base from which many other social needs stem. It can emerge from difficulty seeking meaningful, sustainable employment in jobs that

provide a living wage and adequate benefits or the increased risk of being fired after a workplace injury [85]. Create referral relationships with community-based organizations (CBO) that offer integrated job training, legal aid, employment services, and financial counseling.

- Training institutions can incorporate a structural competency framework to better equip the next generation of clinicians to effectively identify and address patients' unmet social and economic needs [65]. This is often best done by working collaboratively with public health departments, allied health professionals, and community health workers with indigenous knowledge of the grassroots community.

Advanced

- Engage your hospital's leadership to explore creating or joining an Anchor Mission. The process for engaging your community and setting shared priorities is explained on the Democracy Collaborative website (https://healthcareanchor.network/2020/02/anchor-mission-communications-toolkit/) [86].
- Working with hospital leadership, take a population health approach by creating the workforce necessary to identify, screen, and refer at-risk patients. Leadership should convene healthcare system stakeholders and community service providers to determine what determinants are most important to patients in the community and create referral relationships to agencies that provide those services.
- Form alliances with affordable housing, mental health, food insecurity, and other advocacy agencies to influence local, state, and federal officials to increase access to services for affordable and supportive housing, homelessness, and mental illness, among others. National agencies that have a national presence with offices in many large cities include the Corporation for Supportive Housing (CSH), National Alliance to End Homelessness (NAEH), Enterprise Community Partners, and National Alliance on Mental Illness (NAMI) [87–89]. If these agencies do not have a presence in your area, learn who the active local agencies are and seek to find shared priorities.

Teaching Case

Clinical Case

A 48-year-old male presents to the ED for shortness of breath related to asthma. This is his fifteenth ED visit in the past 3 months for a multitude of complaints. He has had three asthma exacerbations, the most recent resulting in intubation. He has also been worked up for an ankle injury, knee pain, and diarrhea and was brought in by the police twice after being assaulted. He looks unkempt with poor hygiene and soiled clothing. He arrives at 10:30 at night. During this visit, he reports that he is having shortness of breath and chest pain. The weather outside is clear with a temperature of 22 degrees Fahrenheit. His vital signs are stable with a pulse oximetry of 96%, and he has only mild wheezing on lung auscultation.

The patient is given an albuterol nebulizer treatment that appears to resolve his symptoms, but he insists he needs to be admitted, that he is not feeling well. While continuing the conversation, you ask where the patient has been living and he admits he was staying with family but was kicked out 2 weeks ago. With the help of social work, the patient agrees to be discharged to a crisis shelter.

An off-service intern who is responsible for the patient's care is discharging the patient. You walk in during the intern's instructions for follow-up care. He has written a prescription for a rescue inhaler and is handing it to the patient. The patient becomes visibly agitated, reaches over to his coat on the chair, and pulls out a handful of scripts. He says to the intern, "I told the other docs, I don't have any money - I couldn't get my meds before - what makes you think I can get them now!?"

Teaching Points

1. The patient's care is complicated by his homeless status and financial insecurity. There are many layers to untangle with the patient.
2. Although there may be a direct benefit to the patient's health by helping him find housing, this may be a solution that is out of immediate reach for the hospital.
3. The patient may qualify for Medicaid or local charity care. Verify if your hospital has a financial case manager or an embedded agency that can help the patient apply for benefits. Additionally, if the patient qualifies for SSI or SSDI, the income will significantly enhance the patient's ability to find housing.
4. Your hospital may provide the medications for free, or if there is a nearby pharmacy, check to see if they have generic equivalents in its $4, $5, or $10 formulary. Your department may be able to provide gift cards for the pharmacy.
5. If the patient is insured, check to see if the managed care organization's case manager has engaged with the patient and/or is able to work with the patient, to help provide assistance and navigation to primary care.

Discussion Questions

1. What are the factors complicating this patient's care?
2. Why did this person, unknown to the ED, suddenly appear with a rapid spike in utilization? What would be some possible explanations why the patient has had frequent visits to the ED? How would these explanations affect the care he receives in the ED?
3. How can you, as an ED provider, better meet the health-related social needs of this patient? How can you engage their support?

References

1. Cass O. The cost-of-thriving index: reevaluating the prosperity of the American family New York. New York: Manhatten Institute; 2020.
2. Garon TD, Dunn A, Govala K, Wilson E. U.S. Financial Health Pulse: 2018 baseline survey results. https://s3.amazonaws.com/cfsi-innovation-files-2018/wp-content/uploads/2019/03/06213859/Pulse_Baseline_SurveyResults-jan2019-WEB-rev-1.pdf. 2019. Accessed.
3. Durkin E. US household back to pre-recession levels, census shows. 2018. https://www.theguardian.com/business/2018/sep/12/census-household-income-us-pre-recession-levels.

4. Mishel L, Gould E, Bivens J. Wage stagnation in nine charts. 2015. https://www.epi.org/publication/charting-wage-stagnation/.
5. McIntosh K, Moss E, Nunn R, Shambaugh J. Examining the black-white wealth gap. Washington, DC: The Brookings Institute; 2020.
6. CareerBuilder.com. Living paycheck to paycheck is a way of life for majority of U.S. workers, according to new careerbuilder survey. 2017. http://press.careerbuilder.com/2017-08-24-Living-Paycheck-to-Paycheck-is-a-Way-of-Life-for-Majority-of-U-S-Workers-According-to-New-CareerBuilder-Survey.
7. Larrimore JD, Durante A, Kreiss K, Park C, Sahm C. Report on the Economic Well-Being of U.S. Households in 2017. 2018. https://www.federalreserve.gov/publications/files/2017-report-economic-well-being-us-households-201805.pdf.
8. Kochhar R. Hispanic women, immigrants, young adults, those with less education hit hardest by COVID-19 job losses. Philadelphia: Pew Charitable Trust; 2020.
9. Lopez MH, Rainie L, Budiman A. Financial and health impacts of COVID-19 vary widely by race and ethnicity. Philadelphia: Pew Charitable Trust; 2020.
10. Adamczyk A. 32% of U.S. households missed their July housing payments. 2020. https://www.cnbc.com/2020/07/08/32-percent-of-us-households-missed-their-july-housing-payments.html.
11. Van Dam A. An indicator that presaged the housing crisis is flashing red again. 2020. https://www.washingtonpost.com/business/2020/07/14/new-mortgage-delinquencies-hit-record-high/.
12. Nova A. Looming evictions may soon make 28 million homeless in U.S., expert says. 2020. https://www.cnbc.com/2020/07/10/looming-evictions-may-soon-make-28-million-homeless-expert-says.html.
13. The Supplemental Nutrition Assistance Program (SNAP). Washington DC: Center for Budget and Policy Priorities; 2019.
14. Papanicolas I, Woskie LR, Jha AK. Health care spending in the United States and other high-income countries. JAMA. 2018;319(10):1024–39. https://doi.org/10.1001/jama.2018.1150.
15. Bradley EH, Elkins BR, Herrin J, Elbel B. Health and social services expenditures: associations with health outcomes. BMJ Qual Saf. 2011;20(10):826–31. https://doi.org/10.1136/bmjqs.2010.048363.
16. Promotion OoDPH. Social determinants of health. 2019. https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health.
17. U.S. Department of Housing & Urban Development. Housing Choice Vouchers Fact Sheet. https://www.hud.gov/topics/housing_choice_voucher_program_section_8 (2020). Accessed.
18. Amadeo K, Scott G. Federal poverty level guidelines and chart. 2020. https://www.thebalance.com/federal-poverty-level-definition-guidelines-chart-3305843.
19. Schott L, Finch I. TANF benefits are low and have not kept pace with inflation: benefits are not enough to meet families' basic needs. Washington, DC: Center on budget and policy priorities; 2010.
20. Administration USSS. Social security disability benefits. https://www.ssa.gov/benefits/disability/.
21. Lawrence BK. Is there a social security disability asset limit? https://www.disabilitysecrets.com/page7-5.html#:~:text=To%20be%20eligible%20for%20SSDI,you%20or%20your%20spouse%20makes.
22. Malecha PW, Williams JH, Kunzler NM, Goldfrank LR, Alter HJ, Doran KM. Material needs of emergency department patients: a systematic review. Acad Emerg Med. 2018;25(3):330–59. https://doi.org/10.1111/acem.13370.
23. Deaton A. Policy implications of the gradient of health and wealth. Health Aff (Millwood). 2002;21(2):13–30. https://doi.org/10.1377/hlthaff.21.2.13.
24. Galobardes B, Davey Smith G, Jeffreys M, McCarron P. Childhood socioeconomic circumstances predict specific causes of death in adulthood: the Glasgow student cohort study. J Epidemiol Community Health. 2006;60(6):527–9. https://doi.org/10.1136/jech.2005.044727.
25. Wang J, Geng L. Effects of socioeconomic status on physical and psychological health: lifestyle as a mediator. Int J Environ Res Public Health. 2019;16(2). https://doi.org/10.3390/ijerph16020281.

26. Alley DE, Asomugha CN, Conway PH, Darshak MS. Accountable health communities - addressing social needs through medicare and medicaid. N Engl J Med. 2016;274(8):8–11.
27. Kangovi S, Barg FK, Carter T, Long JA, Shannon R, Grande D. Understanding why patients of low socioeconomic status prefer hospitals over ambulatory care. Health Aff (Millwood). 2013;32(7):1196–203. https://doi.org/10.1377/hlthaff.2012.0825.
28. Beck AF, Huang B, Simmons JM, Moncrief T, Sauers HS, Chen C, et al. Role of financial and social hardships in asthma racial disparities. Pediatrics. 2014;133(3):431–9. https://doi.org/10.1542/peds.2013-2437.
29. Georgiades A, Janszky I, Blom M, Laszlo KD, Ahnve S. Financial strain predicts recurrent events among women with coronary artery disease. Int J Cardiol. 2009;135(2):175–83. https://doi.org/10.1016/j.ijcard.2008.03.093.
30. Szanton SL, Thorpe RJ, Whitfield K. Life-course financial strain and health in African-Americans. Soc Sci Med. 2010;71(2):259–65. https://doi.org/10.1016/j.socscimed.2010.04.001.
31. Tucker-Seeley RD, Li Y, Subramanian SV, Sorensen G. Financial hardship and mortality among older adults using the 1996–2004 Health and Retirement Study. Ann Epidemiol. 2009;19(12):850–7. https://doi.org/10.1016/j.annepidem.2009.08.003.
32. Barnow SLM, Lucht M, Freyberger H. The importance of psychosocial factors, gender, and severity of depression in distinguishing between adjustment and depressive disorders. J Affect Disord. 2002;72:71–8.
33. Centers for Disease Control. National hospital ambulatory medical care survey: 2011 emergency department summary tabs. 2011. https://www.cdc.gov/nchs/data/ahcd/nhamcs_emergency/2011_ed_web_tables.pdf.
34. Demiryoguran NS, Karcioglu O, Topacoglu H, Kiyan S, Ozbay D, Onur E, et al. Anxiety disorder in patients with non-specific chest pain in the emergency setting. Emerg Med J. 2006;23(2):99–102. https://doi.org/10.1136/emj.2005.025163.
35. Chou EY, Parmar BL, Galinsky AD. Economic insecurity increases physical pain. Psychol Sci. 2016;27(4):443–54. https://doi.org/10.1177/0956797615625640.
36. Elfassy T, Swift SL, Glymour MM, Calonico S, Jacobs DR Jr, Mayeda ER, et al. Associations of income volatility with incident cardiovascular disease and all-cause mortality in a US cohort. Circulation. 2019;139(7):850–9. https://doi.org/10.1161/CIRCULATIONAHA.118.035521.
37. Hedegaard HC, Curtin SC, Warner M. Suicide mortality in the United States, NCHS Data Brief. 2018;330:1–8.
38. Stack S. Why is suicide on the rise in the US - but falling in most of Europe? The conversation. Washington DC: The Conversation U.S.; 2018.
39. Dow WH, Godøy A, Lowenstein CA, Reich M. In: Research NBoE, editor. Can economic policies reduce deaths of despair? Cambridge, MA; 2019.
40. Pavao J, Alvarez J, Baumrind N, Induni M, Kimerling R. Intimate partner violence and housing instability. Am J Prev Med. 2007;32(2):143–6. https://doi.org/10.1016/j.amepre.2006.10.008.
41. Nguyen OK, Higashi RT, Makam AN, Mijares JC, Lee SC. The influence of financial strain on health decision-making. J Gen Intern Med. 2018;33(4):406–8. https://doi.org/10.1007/s11606-017-4296-3.
42. Griffin P. Waiting to feel better: survey reveals cost delays timely care. 2018. https://www.earnin.com/data/waiting-feel-better.
43. International O. Analysis on how healthcare costs impact patient behavior. 2018. https://www.accessonemedcard.com/wp-content/uploads/2018/10/AccessOne_Survey2018_final.pdf.
44. Cutshaw CA, Woolhandler S, Himmelstein DU, Robertson C. Medical causes and consequences of home foreclosures. Int J Health Serv. 2016;46(1):36–47. https://doi.org/10.1177/0020731415614249.
45. Hamel L, Norton M, Pollitz K, Levitt L, Claxton G, Brodie M. The burden of medical debt: results from the Kaiser Family Foundation/New York Times Medical Bills Study. 2016. https://www.kff.org/report-section/the-burden-of-medical-debt-introduction/.
46. Berger LM, Collins JM, Font SA, Gjertson L, Slack KS, Smeeding T. Home foreclosure and child protective services involvement. Pediatrics. 2015;136(2):299–307. https://doi.org/10.1542/peds.2014-2832.

47. Briesacher BA, Gurwitz JH, Soumerai SB. Patients at-risk for cost-related medication non-adherence: a review of the literature. J Gen Intern Med. 2007;22(6):864–71. https://doi.org/10.1007/s11606-007-0180-x.
48. Foundation KF. An overview of the Medicare part D prescription drug benefit. 2019. https://www.kff.org/medicare/fact-sheet/an-overview-of-the-medicare-part-d-prescription-drug-benefit/.
49. Cheung PT, Wiler JL, Lowe RA, Ginde AA. National study of barriers to timely primary care and emergency department utilization among Medicaid beneficiaries. Ann Emerg Med. 2012;60(1):4–10 e2. https://doi.org/10.1016/j.annemergmed.2012.01.035.
50. Azar A. The root of the problem: America's social determinants of health. 2018. https://www.hhs.gov/about/leadership/secretary/speeches/2018-speeches/the-root-of-the-problem-americas-social-determinants-of-health.html.
51. Johnson T. New rules to stop utilities from shutting off power to residents who use vital medical equipment. 2019.
52. Target.com. Target pharmacy: $4 and $10 generic medication list. 2019. https://tgtfiles.target.com/pharmacy/WCMP02-032536_RxGenericsList_NM7.pdf.
53. Walmart: $4 prescriptions. 2019. https://www.walmart.com/cp/$4-prescriptions/1078664.
54. NeedyMeds.org. NeedyMeds: find help with the cost of medicine. 2019. https://www.needymeds.org/.
55. CMS.gov. ICD-10. 2019 https://www.cms.gov/Medicare/Coding/ICD10/index.html?redirect=/icd10/.
56. Miner JR, Westgard B, Olives TD, Patel R, Biros M. Hunger and food insecurity among patients in an urban emergency department. West J Emerg Med. 2013;14(3):253–62. https://doi.org/10.5811/westjem.2012.5.6890.
57. Lee J, Korba C, Cohen AB, Sharma D. Social determinants of health: how are hospitals and health systems investing in and addressing social needs? 2017. www.deloitte.com/us/social-determinants-of-health.
58. Johnson SR. Kaiser to launch social care network. 2019. https://www.modernhealthcare.com/care-delivery/kaiser-launch-social-care-network.
59. CMS.gov. The Accountable Health Communities health-related social needs screening tool. 2019. https://innovation.cms.gov/Files/worksheets/ahcm-screeningtool.pdf.
60. CMS.gov: The Accountable Health Communities Health-Related Social Needs Screening Tool. https://innovation.cms.gov/Files/worksheets/ahcm-screeningtool.pdf (2019). Accessed.
61. NACHC.org: PRAPARE: Protocol for Responding to and Assessing Patients' Assets, Risks and Experiences. http://www.nachc.org/research-and-data/prapare/ (2019). Accessed.
62. Cartier Y, Fichtenberg C, Gottlieb L. Community resource referral platforms: a guide for health care organizations. San Francisco: Social Interventions Research & Evaluation Network (SIREN); 2019.
63. RxResource.org. Prescription assistance programs. 2019. https://www.rxresource.org/prescription-assistance/default.html.
64. Burley MH, Daratha KB, Tuttle K, White JR, Wilson M, Armstrong K, et al. Connecting patients to prescription assistance programs: effects on emergency department and hospital utilization. J Manag Care Spec Pharm. 2016;22(4):381–7. https://doi.org/10.18553/jmcp.2016.22.4.381.
65. Great Lakes Medicaid. https://greatlakesmedicaid.com.
66. Chazin S, Guerra V. Impact of the affordable care act on charity care programs. 2020. https://www.chcs.org/resource/impact-of-the-affordable-care-act-on-charity-care-programs-2/.
67. Bell ON, Hole MK, Johnson K, Marcil LE, Solomon BS, Schickedanz A. Medical-financial partnerships: cross-sector collaborations between medical and financial services to improve health. Acad Pediatr. 2020;20(2):166–74. https://doi.org/10.1016/j.acap.2019.10.001.
68. What is SOAR? 2020. https://soarworks.prainc.com/article/what-soar.
69. DemocracyCollaborative.org. Building community wealth: the anchor mission. 2019. https://democracycollaborative.org.
70. HealthcareAnchorNetwork: 40 leading healthcare systems building more inclusive and sustainable local economies. 2019. https://www.healthcareanchor.network.

71. WestsideUnited.org. Westside United: building blocks to better health. 2019. https://westsideunited.org.
72. Livingston S. UnitedHealthcare, AMA unveil more medical codes for social determinants. 2019. https://www.modernhealthcare.com/technology/unitedhealthcare-ama-unveil-more-medical-codes-social-determinants.
73. Axelson DJ, Stull MJ, Coates WC. Social determinants of health: a missing link in emergency medicine training. AEM Educ Train. 2018;2(1):66–8. https://doi.org/10.1002/aet2.10056.
74. Doran KM, Vashi AA, Platis S, Curry LA, Rowe M, Gang M, et al. Navigating the boundaries of emergency department care: addressing the medical and social needs of patients who are homeless. Am J Public Health. 2013;103(Suppl 2):S355–60. https://doi.org/10.2105/AJPH.2013.301540.
75. Goldberg R, Boss RW, Chan L, Goldberg J. Burnout and its correlates in emergency physicians: four years' experience with a wellness booth. Acad Emerg Med. 1996;3(12):1156–64.
76. Shanafelt TD, Boone S, Tan L, Dyrbye LN, Sotile W, Satele D, et al. Burnout and satisfaction with work-life balance among US physicians relative to the general US population. Arch Intern Med. 2012;172(18):1377–85. https://doi.org/10.1001/archinternmed.2012.3199.
77. Lu DW, Dresden S, McCloskey C, Branzetti J, Gisondi MA. Impact of burnout on self-reported patient care among emergency physicians. West J Emerg Med. 2015;16(7):996–1001. https://doi.org/10.5811/westjem.2015.9.27945.
78. Braveman P, Egerter S, Williams DR. The social determinants of health: coming of age. Annu Rev Public Health. 2011;32(1):381–98. https://doi.org/10.1146/annurev-publhealth-031210-101218.
79. Metzl JM. Structural competency. Am Q. 2012;64(2):213–8.
80. Neff J, Knight KR, Satterwhite S, Nelson N, Matthews J, Holmes SM. Teaching structure: a qualitative evaluation of a structural competency training for resident physicians. J Gen Intern Med. 2017;32(4):430–3. https://doi.org/10.1007/s11606-016-3924-7.
81. Neff J, Holmes SM, Knight KR, Strong S, Thompson-Lastad A, McGuinness C, et al. Structural competency: curriculum for medical students, residents, and interprofessional teams on the structural factors that produce health disparities. MedEdPORTAL. 2020;16:10888. https://doi.org/10.15766/mep_2374-8265.10888.
82. Development USDoHU: Continuum of Care (CoC) program. https://www.hudexchange.info/programs/coc/.
83. Spugnardi I. Addressing the social determinants of health: the role of health care organizations. Health Prog. 2016;97(6):80–3.
84. Community Benefit. Community health needs assessment. 2020. https://www.trinity-health.org/community-health-and-well-being/community-benefit/.
85. Kennedy M. Injuries at work may increase risk of losing one's job. 2016. https://www.reuters.com/article/us-health-workplace-injury/injuries-at-work-may-increase-risk-of-losing-ones-job-idUSKCN0VE2MW.
86. Pham BH. Healthcare Anchor Network's (HAN) anchor mission communications toolkit. 2020. https://democracycollaborative.org/learn/publication/healthcare-anchor-networks-han-anchor-mission-communications-toolkit.
87. Corporation for Supportive Housing. 2020. https://www.csh.org.
88. National Alliance on Mental Illness. 2020. https://www.nami.org.
89. National Alliance to End Homelessness. 2020. https://endhomelessness.org.