

## Healthcare Hardship before and during COVID-19: Financial Protective Factors

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**Abstract:** Households face significant financial hardship due to medical expenses. Using data from the 2018 and 2021 National Financial Capability Study, this research examines three healthcare hardship indicators: emergency savings, health insurance, and income. Results indicate respondents experienced an average of 0.56 (SD = 0.98) and 0.51 (SD = 0.94) hardships in 2018 and 2021, respectively. Medical debt was the strongest predictor, while emergency savings and health insurance were linked to fewer hardships. Statistically significant interactions between medical debt and these factors were observed. We discuss implications for social work in healthcare settings, particularly regarding financial support and policy.

**Keywords:** Medical/health care social work; financial hardship; financial protective factors; National Financial Capability Study

### Introduction

#### Healthcare Hardship in the Context of COVID-19

The COVID-19 pandemic provides an important context for studying healthcare hardship as the crisis inflicted an immediate and profound effect on societies, halting social and economic life and imposing tremendous pressure on healthcare systems worldwide (Haldane et al., 2020; Rawaf et al., 2020). This acute period created significant healthcare hardship by modifying the organization and processes of primary care and requiring rapid adaptations to new health needs (Rawaf et al., 2020). At the same time, resource issues, such as essential supplies like personal protective equipment (PPE) being disproportionately allocated away from primary care, created hardship (Rawaf et al., 2020), and this critical worldwide shortage posed a serious threat to the quality care (Haldane et al., 2020).

The importance of studying financial protective factors arises from the unique environment created by COVID-19, which necessitated urgent research on and synthesis of policy responses (Haldane et al., 2020), allowing for a critical comparison between existing pre-COVID-19 welfare state support and the rapid financial mechanisms implemented during the crisis. These protective responses included the swift arrangement of additional financial support for primary care (Rawaf et al., 2020), and the development of reimbursement codes or new billing fee codes for virtual consultations and telephone prescribing to ensure continuity of service delivery and minimizing healthcare-related transmissions (Haldane et al., 2020; Rawaf et al., 2020).

Unfortunately, COVID-19 exacerbated existing medical debt for United States (U.S) households. Prior to COVID-19 and despite passage of the Affordable Care Act (ACA) in 2010, U.S. households report near \$200 billion in medical debt while 47% say it is difficult to afford healthcare costs and a third say they or a family member skipped care due to cost (Sommers, 2020). Healthcare services in the U.S. are among the most expensive in the world (Yabroff et al., 2019), making it difficult for many individuals to afford necessary care, especially those without adequate insurance coverage (Lee et al., 2020; Romo et al., 2022). Following COVID-19, the average yearly health insurance deductible for an individual in 2024 was \$5,101, while the average for families was \$10,310 (Folland et al., 2024) creating heavier financial barriers to accessing care (Yabroff et al., 2019).

### **Medical Debt and Healthcare Hardship**

Medical debt has increased due to rising healthcare costs, lack of insurance coverage, and unexpected medical emergencies (Cavalier et al., 2023; Kluender et al., 2021; Schoen & DesRoches, 2000). Further, the rising cost of prescription medications can pose a significant financial barrier to individuals, particularly for those with chronic conditions who require ongoing medication (Mello, 2017). Additionally, serious illness or injury can result in individuals needing to take time off work for treatment, recovery, or caregiving responsibilities. This loss of income can further exacerbate financial strain, making it difficult for families to cover both medical expenses and everyday living expenses (Mello, 2017). The need to allocate resources towards medical bills may also delay or prevent achieving individuals' and families' long-term financial goals, such as saving for retirement, purchasing a home, or funding education, leading to increased financial insecurity (Ezzat, 2023).

### **Financial Determinants of Health and Financial Protective Factors**

Difficulties affording healthcare and holding medical debt diminish healthcare use, especially among people with serious illness like breast cancer and diabetes (Wharam et al., 2018, 2019), and thus act as a financial determinant of health. The financial determinants of health refer to the economic factors that influence individuals' and communities' health outcomes (Weida et al., 2020). The financial determinants of health include income level, employment status, education and literacy, wealth and assets, debt and financial strain, access to financial services, and social and economic policies (Weida et al., 2020). These determinants play a significant role in shaping people's access to healthcare, living conditions, and overall well-being.

Financial protective factors, on the other hand, are aspects of an individual's financial situation or broader societal support systems that mitigate the negative impact of financial stressors on health (Weida et al., 2020). Financial protective factors include health insurance coverage, emergency savings and insurance, employment benefits, social support networks, financial education and literacy, public assistance programs, and other community resources (Weida et al., 2020).

### **The Role of Social Workers**

Addressing the issue of medical expense burden requires comprehensive solutions, including healthcare system reforms to improve affordability and access, policies to regulate drug prices, expansion of insurance coverage, and initiatives to promote preventive care and early intervention (Bell et al., 2020). Financial assistance programs, charitable organizations, and community resources can provide support to individuals and families facing financial hardship due to medical expenses (Bell et al., 2020). Social workers are crucial in identifying the intersections between financial hardship and healthcare access, advocating for policy

change, and providing direct support to individuals and families navigating the complex healthcare landscape.

Some individuals fall into coverage gaps, such as those who earn too much to qualify for Medicaid but too little to afford private insurance (Sommers, 2020). Those without adequate insurance coverage may face steep medical bills that they are unable to afford, leading to debt accumulation or forgoing necessary medical care altogether (Schoen & DesRoches, 2000). Social workers advocate for expanding coverage and work to connect individuals in these gaps with community-based resources to reduce financial strain and access needed care. They also provide essential crisis intervention and emotional support during these times of financial distress. Additionally, certain regions may have limited access to healthcare providers, particularly in rural areas, making it difficult for residents to receive timely and affordable care (Coombs et al., 2022). Social workers can serve as intermediaries, helping connect underserved populations to healthcare providers and offering support to mitigate the challenges of geographic isolation.

### **Objectives**

In this study, we focus on the impact of medical debt on healthcare hardship and the important role of social workers in addressing these disparities. We examine how household financial factors interact to affect decisions to skip or delay needed healthcare and discuss implications for social work considering these household financial factors.

### **Methods**

#### **Data and Sample**

Data for this study come from the 2018 (N = 27,091) and 2021 (N = 27,118) National Financial Capability Study (NFCS) surveys. The NFCS survey is sponsored by the FINRA Investor Education Foundation and fielded in 2021 by FGS Global using non-probability quota sampling from online panels provided by Dynata and EMI Online Research Solutions. The 2018 survey was fielded by ARC Research with panels offered by Survey Sampling International and EMI Online Research Solutions, and Research Now. In both survey years, about 500 respondents were sampled per state and the District of Columbia using quotas within each state based on the U.S. Census Bureau's American Community Survey based on age, gender, ethnicity, education level, and income.

#### *Dependent variables*

Three types of healthcare hardship – not filling a prescription, skipping medical care, and putting off medical care were chosen as dependent variables. Respondents were asked, “In the last 12 months, was there any time when you did not fill a prescription for medicine / skipped a medical test, treatment or follow-up recommended by a doctor / had a medical problem but did not go to a doctor or clinic because of the cost?”. Responses were coded as 1 = yes and 0 = no, with responses of “don’t know” and “prefer not to say” coded as missing. Also, a count variable was created to measure how many hardship experiences respondents had.

#### *Independent variables*

Predictor variables of interest included medical debt, health insurance, emergency savings, and living in a state with comprehensive financial assistance laws. Medical debt, health insurance, and emergency savings were measured based on responses to the following

questions “Do you currently have any unpaid bills from a healthcare or medical service provider (e.g., a hospital, a doctor's office, or a testing lab) that are past due?”, “Are you covered by health insurance?”, and “Have you set aside emergency or rainy day funds that would cover your expenses for 3 months, in case of sickness, job loss, economic downturn, or other emergencies?”, respectively. Living in a state with broad financial assistance rules for nonprofit and for-profit hospitals was based on a definition offered by the National Consumer Law Center (Stark & Bosco, 2022). Responses were coded as 1 = yes and 0 = no, with responses of “don’t know” and “prefer not to say” coded as missing. Covariates included age, income (10 income ranges e.g., “At least \$35,000 but less than \$50,000”), ethnicity (White non-Hispanic or non-White), gender, education level (high school or less, some college, college, postgraduate), dependents in the household (yes/no), marital/partner status (single, living with partner, married) and residence (U.S. Census division).

### Analysis

Probit regression was used to examine each of the three healthcare hardship indicators and produce predicted probabilities with the margins command in Stata 17. Because a likelihood ratio test of the dispersion parameter alpha being equal to zero was statistically significant for the unweighted model predicting a count of healthcare hardships ( $\chi^2 = 1175.46$ ,  $p < .001$ ) indicating over-dispersion, negative binomial regression was chosen over Poisson regression used for hardship count models. Probit and negative binomial models were used with covariance control and sampling weights<sup>1</sup>. Interaction terms were added to models predicting a count of hardships to examine whether the effects of medical debt were moderated by having emergency savings, health insurance, or higher income.

### Results

The main 2018 and 2021 NFCS survey reports offering sample characteristics can be found online<sup>2</sup>. Out of three possible healthcare hardships, respondents experienced an average of 0.56 (SD = 0.98) and 0.51 (SD = 0.94) hardships in 2018 and 2021, respectively. Over a quarter (29.46 and 27.38%) experienced at least one hardship in 2018 and 2021, respectively. Specific types of hardship were somewhat higher in 2018 than in 2021, including skipping prescription medications (16.99 and 15.06%) and medical care (19.48% and 17.55%), and not receiving needed medical care (21.55% and 19.68%).

Table 1 shows that the predicted probabilities of all three hardships nearly doubled among those with medical debt in 2018, while hardship probabilities were lower among those with emergency savings and health insurance. However, living in a state with broad financial assistance requirements of hospitals did not predict hardship experiences. A very similar set of findings is seen in Table 2 concerning the 2021 sample. In both years, having medical debt was the strongest predictor of hardship; those with medical debt were on average 273% and 285% more likely to experience a hardship in 2018 and 2021, respectively, followed by having health insurance (44% and 47%, respectively) and emergency savings (10% and 26%, respectively).

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<sup>1</sup> NFCS survey data are weighted based on the U.S. Census Bureau American Community Survey.

<sup>2</sup> See <https://finrafoundation.org/knowledge-we-gain-share/nfcs/data-and-downloads>.

Table 1: Predictors of Healthcare Hardships:2018 NFCS

Predictor	$\beta$	<i>SE</i>	<i>z</i>	<i>p</i>	<i>AME</i>
Not filling a prescription medication					
Medical debt	0.980	.028	35.49	***	36.5% (9.2%)
Emergency savings	-0.045	.028	1.61	.107	13.2% (14.2%)
Health insurance	-0.284	.039	7.31	***	13.1% (20.1%)
Financial assistance state	0.010	.035	0.31	.758	13.9% (13.7%)
Constant	-1.012	.098	10.38	***	17.2%
Skipping medical care					
Medical debt	0.984	.027	36.36	***	39.7% (10.7%)
Emergency savings	-0.069	.027	2.56	*	14.8% (16.5%)
Health insurance	-0.402	.038	10.51	***	14.6% (25.8%)
Financial assistance state	-0.014	.034	0.42	.676	15.3% (15.7%)
Constant	-0.950	.096	9.91	***	19.6%
Not receiving needed medical care					
Medical debt	0.959	.027	35.76	***	40.7% (11.6%)
Emergency savings	-0.088	.026	3.31	**	15.6% (17.8%)
Health insurance	-0.573	.037	15.43	***	15.2% (32.5%)
Financial assistance state	-0.039	.034	1.17	.242	15.9% (16.9%)
Constant	-0.467	.093	5.01	***	21.1%

*Note.* Results are from Probit regression; \*\*\*  $p < .001$ ; AME = Average Marginal Effect which is the predicted probability of hardship relative to the predictor: yes (no).

Table 2: Predictors of Healthcare Hardships:2021 NFCS

Predictor	$\beta$	<i>SE</i>	<i>z</i>	<i>p</i>	<i>AME</i>
Not filling a prescription medication					
Medical debt	0.917	.028	32.30	***	30.3% (7.6%)
Emergency savings	-0.168	.029	5.73	***	9.8% (13.0%)
Health insurance	-0.290	.039	7.45	***	10.6% (16.8%)
Financial assistance state	0.046	.037	1.23	.218	11.8% (10.9%)
Constant	-0.941	.102	9.22	***	14.6%
Skipping medical care					
Medical debt	0.948	.028	34.06	***	34.5% (8.9%)
Emergency savings	-0.208	.029	7.24	***	11.1% (15.5%)
Health insurance	-0.437	.039	11.31	***	12.0% (23.0%)
Financial assistance state	0.043	.035	1.23	.218	13.6% (12.7%)
Constant	-0.748	.098	7.61	***	16.7%
Not receiving needed medical care					
Medical debt	0.945	.027	34.41	***	36.8% (10.0%)
Emergency savings	-0.197	.028	7.06	***	12.5% (17.0%)
Health insurance	-0.575	.037	15.51	***	13.1% (29.2%)
Financial assistance state	0.001	.035	0.04	.966	14.4% (14.3%)
Constant	-0.181	.095	1.90	.058	18.8%

*Note.* Results are from Probit regression; \*\*\*  $p < .001$ ; AME = Average Marginal Effect which is the predicted probability of hardship relative to the predictor: yes (no).

Table 3 displays results of negative binomial regressions predicting a count of healthcare hardship experiences (range: 0-3) in 2018 and 2021. Results indicate the increase or decrease in hardships based on each predictor. Results are similar to Tables 1 and 2; having medical debt was the strongest predictor, accounting for an increase of more than one hardship in both study years, while emergency savings and health insurance, but not state financial assistance policies, were associated with a decrease in hardships.

Model results also indicated that income predicted the number of healthcare hardships in both study years. Compared to respondents with less than \$15,000 in income, respondents with incomes in ranges between \$15,000 and \$50,000 had a statistically significant greater number of hardships (except \$35,000 to \$50,000 in 2018,  $p = .058$ ). In 2018 and 2021, respondents in income ranges \$100,000 and above and \$75,000 and above had a statistically significant lesser number of hardships, respectively.

Table 3: Predictors of the Number of Healthcare Hardships

Predictor	$\beta$	SE	$z$	$p$
2018 NFCS				
Medical debt	1.180	.027	44.06	***
Emergency savings	-0.137	.030	4.61	***
Health insurance	-0.430	.035	12.45	***
Financial assistance state	-0.025	.038	0.67	.505
Constant	-0.670	.099	6.76	***
2021 NFCS				
Medical debt	1.212	.029	41.82	***
Emergency savings	-0.314	.033	9.60	***
Health insurance	-0.484	.037	13.23	***
Financial assistance state	0.044	.041	1.07	.283
Constant	-0.392	.106	3.69	***

*Note.* Results are from negative binomial regression; \*\*\*  $p < .001$ .

Coefficients represent the increase (decrease) in number of hardships (range of 0-3).

## Interaction Effects

Results of interaction tests indicate the extent to which emergency savings, health insurance, and income moderate the relationship between medical debt and healthcare hardship. Concerning a count of healthcare hardships, statistically significant effects were found for the interaction of medical debt and emergency savings ( $\beta = 0.595$ ,  $SE = .057$ ,  $p < .001$ ), health insurance ( $\beta = 0.503$ ,  $SE = .065$ ,  $p < .001$ ), and income ( $\beta = 0.108$ ,  $SE = .012$ ,  $p < .001$ ). Among respondents with medical debt, the number of healthcare hardships was 74% lower when they had emergency savings (0.56) versus not (0.98) and 107% lower when they had health insurance (0.58) versus not (1.20). Concerning income, respondents with medical debt and income under \$15,000 had a lower number of hardships (0.75) than those in the next two highest income brackets (\$15,000 to \$25,000: 0.81 and \$25,000 to \$35,000: 0.83). However, starting with the \$35,000 to \$50,000 bracket, the number of hardships decreased as income rose.

An additional analysis showed that a statistically significant interaction effect was found for health insurance and state financial assistance policies ( $\beta = 0.207$ ,  $SE = .103$ ,  $p < .05$ ), with both 2021 insured and uninsured respondents in states with comprehensive policies having a lower probability of not receiving medical care when it was needed. However, this interaction was not statistically significant for skipping medical care or prescription medications nor for any of the three hardships in the 2018 sample.

## Discussion

We examined how household financial factors interact to affect decisions to skip or delay needed healthcare. Results were very stable in both study years and consistent before and during COVID-19. Medical debt is a risk factor for hardship, while health insurance and emergency savings are protective factors, but not as strong as the risk medical debt poses. Medical debt is a significant risk factor for financial hardship due to several reasons. First, medical treatments, procedures, and hospital stays can be extremely expensive, even for individuals with health insurance (Cutler, 2005). High deductibles, copayments, and uncovered services can lead to substantial out-of-pocket expenses, resulting in medical debt (Cutler, 2005). Even with health insurance coverage, many individuals may still face financial strain due to high deductibles, limited coverage for certain treatments or medications, or gaps in coverage. For uninsured individuals, the entire burden of medical expenses falls on them, often resulting in substantial debt (Cutler, 2005).

Health insurance and emergency savings serve as protective factors against medical debt and financial hardship, but they may not be as strong as the risk posed by medical debt alone (Kluender et al., 2021; Schoen & DesRoches, 2000). Health insurance provides financial protection by covering a portion of medical expenses, reducing the out-of-pocket costs for individuals. However, the extent of coverage and the level of out-of-pocket expenses (e.g., deductibles, copayments, coinsurance) vary depending on the type of insurance plan. Some individuals may still face significant financial burdens despite having health insurance, especially if their plan has high deductibles or limited coverage for certain services (Abdus et al., 2016). Emergency savings may also help individuals cover unexpected expenses, including medical bills. However, not everyone has sufficient emergency savings to cover the high costs of healthcare, particularly if they experience a severe or prolonged illness or if they face other financial challenges (Cutler, 2005).

For both the direct relationship between income and healthcare hardship and the role of income as a moderator concerning the relationship between medical debt and healthcare



hardship, the role of income was not linear. Respondents with incomes in the \$15,000 to \$50,000 range had a greater number of healthcare hardships than respondents with incomes below and above this range. People in the lowest income group may be protected against healthcare hardship thanks to Medicaid, which has exceptionally low out-of-pocket costs for enrollees. However, individuals with low- to moderate-incomes (\$15,000 to \$50,000) may have higher out-of-pocket expenses relative to their income (Yabroff et al., 2019) because they earn too much for Medicaid and have trouble affording the health coverage they receive. For those living paycheck to paycheck, coming up with the funds to cover these costs can be challenging, leading some to delay or forgo necessary medical care (Ezzat, 2023).

We found that state policies did not make a difference. It may be that state policies do not alter hospitals' financial assistance to a significant enough extent to affect whether individuals go without healthcare. If an individual experiences a sudden illness, injury, or worsening of symptoms, they are likely to prioritize seeking medical attention regardless of whether they received financial assistance for previous care (Ezzat, 2023). Further, even if assistance was provided for one instance of care, individuals may still worry about their ability to afford future medical expenses, especially if they have ongoing health conditions or anticipate the need for additional treatments (Ezzat, 2023).

### **Study Limitations and Strengths**

The study has several limitations that should be acknowledged. First, we compared data from two years, which may restrict the ability to identify long-term trends or changes in healthcare hardship over time. Additionally, the analysis focused on three types of healthcare hardship as dependent variables, potentially overlooking other relevant factors. Furthermore, medical debt was measured as a categorical variable (yes or no), which means we were unable to measure the severity of having past due medical bills with respect to healthcare hardship. Perhaps having small amounts of past due bills or a single past due bill does not predict healthcare hardship. Or maybe having several past due bills totaling large amounts does not discourage additional care seeking because people give up trying to pay or simply ignore their medical debt. These constraints suggest that further research with a broader scope and more detailed data collection methods would be beneficial for a more nuanced understanding of healthcare hardships. This study uses survey data from the NFCS which employs quotas within each state based on demographic characteristics derived from the U.S. Census Bureau's American Community Survey (ACS). In addition, we used population weights in models based on ACS data to help ensure results are nationally representative. However, NFCS surveys use non-probability sampling which may introduce response bias because individuals are not randomly selected from the U.S. population. Consequently, we cannot ensure that results are truly representative of the adult population in the U.S.

### **Implications for Social Work**

**Practice.** Medical debt can accumulate rapidly for individuals and families with limited financial resources, particularly following a sudden illness, injury, or medical emergency. This debt often leads to challenges in covering other essential expenses like housing, utilities, food, and transportation, exacerbating overall financial hardship (Cutler, 2005). Social workers may use specific skills to empower clients to manage their finances and build security by providing individualized or group sessions on basic budgeting, debt management, and understanding credit. The goal isn't just to provide a lesson, but to make financial concepts relevant to the client's current situation (e.g., managing utility bills, transportation costs, and medical expenses). Social workers may also actively assist clients in setting up and contributing to emergency savings programs, even if the amounts are small. This often

involves connecting clients to programs like matched savings accounts (Individual Development Accounts - IDAs) or integrating savings goals into their broader case plan (Birkenmaier et al., 2022). Further, social workers are well positioned to help clients understand and maximize their existing public benefits (e.g., Medicaid, SNAP, housing assistance) to free up personal funds that can be allocated toward emergency needs or debt reduction. Beyond education, social workers provide direct assistance by connecting clients to immediate financial resources, such as food banks, temporary financial aid programs, and legal aid for debt resolution.

**Policy.** Addressing the healthcare affordability challenges faced by low- to moderate-income individuals necessitates a multifaceted approach, including policies to expand access to affordable health insurance coverage, reduce out-of-pocket costs, increase funding for safety net programs, improve access to preventive and primary care services, and tackle social determinants of health like income inequality and housing insecurity (Ezzat, 2023). While health insurance and emergency savings can offer some protection against medical debt and financial hardship, unexpected medical expenses can swiftly deplete these savings, leaving individuals vulnerable to financial instability. Addressing the root causes of medical debt—such as high healthcare costs, inadequate insurance coverage, and limited access to affordable care—is crucial for reducing the prevalence of financial hardship linked to healthcare expenses (Yabroff et al., 2019). Policy reforms should focus on mechanisms to ensure the long-term financial sustainability of healthcare systems so that they can reliably cover chronic care without bankrupting individuals. Reducing the burden of medical expenses involves advocating for changes including capping or eliminating high deductibles and co-pays for essential chronic care, medications, and equipment, expanding coverage for long-term care services, including home and community-based care, to prevent unnecessary institutionalization and high out-of-pocket costs, and improving prescription drug policies to negotiate lower costs for maintenance medications vital for chronic conditions. Social workers can play a key role in influencing policies that aim to lower healthcare costs and improve insurance coverage, particularly for marginalized populations. Additionally, they can work towards establishing programs that support financial literacy and resource navigation for individuals facing medical debt.

**Research.** Future research can explore how expanded insurance coverage and reduced out-of-pocket costs impact health disparities and financial stability. Additionally, examining the role of safety net programs and their effectiveness in promoting access to preventive and primary care will provide valuable insights. By focusing on the intersection of healthcare affordability and social determinants, researchers can inform policies and practices that address the root causes of health inequities.

## References:

- Abdus, S., Selden, T. M., & Keenan, P.** (2016). The financial burdens of high-deductible plans. *Health Affairs*, 35(12), 2297-2301. <https://doi.org/10.1377/hlthaff.2016.0842>.
- Bell, O. N., Hole, M. K., Johnson, K., Marcil, L. E., Solomon, B. S., & Schickedanz, A.** (2020). Medical-financial partnerships: Cross-sector collaborations between medical and financial services to improve health. *Academic Pediatrics*, 20(2), 166-174. <https://doi.org/10.1016/j.acap.2019.10.001>.
- Birkenmaier, J., Kim, Y., & Maynard, B.** (2022). Financial outcomes of interventions designed to improve financial capability through Individual Development Accounts: A systematic review. *Journal of Evidence-Based Social Work*, 19(4), 408-439. <https://doi.org/10.1080/26408066.2022.2059427>.
- Cavalier, D., Doherty, B., Geonnotti, G., Patel, A., Peters, W., Zona, S., & Shea, L.** (2023). Patient perceptions of copay card utilization and policies. *Journal of Market Access & Health Policy*, 11(1), 2254586. <https://doi.org/10.1080/26408066.2023.2254586>.
- Coombs, N. C., Campbell, D. G., & Caringi, J.** (2022). A qualitative study of rural healthcare providers' views of social, cultural, and programmatic barriers to healthcare access. *BMC Health Services Research*, 22(438), 1-16. <https://doi.org/10.1186/s12913-022-07829-2>.
- Cutler, D. M.** (2005). *Your money or your life: Strong medicine for America's health care system*. Oxford University Press.
- Ezzat, M. A.** (2023). Identifying barriers to healthcare access among underserved populations: A descriptive study. *Journal of Advanced Analytics in Healthcare Management*, 7(1), 1-17. <https://research.tensorgate.org/index.php/JAAHM/article/view/22>.
- Folland, S., Goodman, A. C., Stano, M., & Danagouliau, S.** (2024). *The economics of health and health care*. Routledge.
- Haldane, V., Zhang, Z., Abbas, R. F., Dodd, W., Lau, L. L., Kidd, M. R., Rouleau, K., Zou, G., Chao, Z., Upshur, R. E. G., Walley, J., & Wei, X.** (2020). National primary care responses to COVID-19: A rapid review of the literature. *BMJ Open*, 10, e041622. <https://doi.org/10.1136/bmjopen-2020-041622>.
- Kluender, R., Mahoney, N., Wong, F., & Yin, W.** (2021). Medical debt in the US, 2009-2020. *JAMA*, 326(3), 250-256. <https://doi.org/10.1001/jama.2021.8694>.
- Lee, A. A., James, A. S., & Hunleth, J. M.** (2020). Waiting for care: Chronic illness and health system uncertainties in the United States. *Social Science & Medicine*, 264, 113296. <https://doi.org/10.1016/j.socscimed.2020.113296>.
- Mello, M. M.** (2017). What makes ensuring access to affordable prescription drugs the hardest problem in health policy. *Minnesota Law Review*, 102(6), 2273-2305. <https://heinonline.org/HOL/P?h=hein.journals/mnlr102&i=2345>.
- Rawaf, S., Allen, L. N., Stigler, F. L., Kringos, D., Quezada Yamamoto, H., van Weel, C., & On behalf of the Global Forum on Universal Health Coverage and Primary Health Care.** (2020). Lessons on the COVID-19 pandemic, for and by primary care professionals worldwide. *European Journal of General Practice*, 26(1), 129-133. <https://doi.org/10.1080/13814788.2020.1820479>.
- Romo, L. K., Thompson, C. M., & Ben-Israel, P.** (2022). An examination of how people appraise and manage health-related financial uncertainty. *Health Communication*, 37(8), 935-943. <https://doi.org/10.1080/10410236.2021.1876813>.
- Schoen, C., & DesRoches, C.** (2000). Uninsured and unstably insured: The importance of continuous insurance coverage. *Health Services Research*, 35(1 Pt 2), 187-206. <https://pubmed.ncbi.nlm.nih.gov/articles/PMC1089095/>.
- Sommers, B. D.** (2020). Health insurance coverage: What comes after the ACA? *Health Affairs*, 39(3), 502-508. <https://doi.org/10.1377/hlthaff.2019.01416>.

**Stark, A. B., & Bosco, J.** (2022). *An ounce of prevention: A review of hospital financial assistance policies in the states*. *National Consumer Law Center*. [https://www.nclc.org/wp-content/uploads/2022/09/Rpt\\_Ounce\\_of\\_Prevention.pdf](https://www.nclc.org/wp-content/uploads/2022/09/Rpt_Ounce_of_Prevention.pdf).

**Weida, E. B., Phojanakong, P., Patel, F., & Chilton, M.** (2020). Financial health as a measurable social determinant of health. *PloS One*, 15(5), e0233359. <https://doi.org/10.1371/journal.pone.0233359>.

**Yabroff, K. R., Zhao, J., Han, X., & Zheng, Z.** (2019). Prevalence and correlates of medical financial hardship in the USA. *Journal of General Internal Medicine: JGIM*, 34(8), 1494- 1502. <https://doi.org/10.1007/s11606-019-05002-w>.

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