

Authors: Julissa Barrios, MD, Timothy Scheinert, Jessica Johnson, Austin Tsai, Steven Lauterwasser, Alister Martin

Type: Discussion

Keywords: Health equity, Cash assistance, Money as medicine, Social determinants of health, Federal benefit programs, Economic assistance

Edited By: Ahmad Hassan

Received: 2025-05-09

Published: -

Money as Medicine: Beyond the Monetary Value of Cash Assistance Programs

Abstract

Social determinants of health (SDOH)—the root causes of health disparities—often fall outside the scope of traditional clinical care. In this discussion, we argue that financial interventions, particularly cash assistance programs, can play a role in improving health outcomes by addressing SDOH. Drawing on lessons from established public health approaches, we explore the concept of "Money as Medicine," which reframes cash assistance as both economic relief and a meaningful healthcare intervention, directly impacting physical and mental well-being. To build healthier communities, we recommend integrating targeted cash assistance programs into healthcare

systems. We explore key evidence, highlight successful models, and propose pathways for integration.

Introduction

Social determinants of health (SDOH) refer to non-medical factors that shape health outcomes, such as economic stability, education, social and community contexts, healthcare access, and neighborhood environment. Research demonstrates that addressing these factors, for instance, through targeted cash assistance or “Money as Medicine” initiatives, prevents chronic disease, improves mental health, and reduces reliance on healthcare services [\[1\]](#) [\[2\]](#) [\[3\]](#).

Federal assistance programs, such as the Supplemental Nutrition Assistance Program (SNAP), Home Energy Assistance Program (HEAP), Temporary Assistance for Needy Families (TANF), and Lifeline Program, create a social safety-net for families and individuals across the United States (U.S.). These assistance programs target key SDOH, including food security, the affordability of utility services, financial stability, and digital connectivity, respectively. Evidence demonstrates that addressing these factors improves health by providing families the resources needed to meet their basic needs [\[4\]](#) [\[5\]](#). Yet, traditional healthcare approaches rarely integrate financial assistance into care delivery, missing a critical opportunity to address underlying causes of health disparities. Moreover, eligible individuals face barriers to accessing these benefits, such as complex enrollment processes, lack of awareness, and digital literacy gaps [\[6\]](#). Ultimately, healthcare systems can integrate benefit enrollment as an intervention for achieving health equity.

The Assistance Program Landscape

Discussion on the state and federal levels about investing in financial assistance programs sometimes centers on concerns about their effects on labor force participation. There is some evidence to back the claim that subsidies reduce labor participation. For instance, survey data from 2000-2013 showed that Medicaid eligibility in a Medicaid-expansion state was associated with about a 7 percentage point decreased likelihood of being employed among low-income women with a high school degree; the effect was greater for older low-income women with a high school degree (17 percentage points less likely to be employed in expansion states) [\[7\]](#). However, another study looked at changes in employer-sponsored insurance (ESI) following the 2014 Medicaid expansion, and found that during this time, Medicaid coverage increased substantially while there was little decrease in ESI, suggesting employment participation may have been stable over the study period [\[8\]](#).

When evaluating assistance programs such as SNAP, the Center on Budget and Policy Priorities argues that SNAP may actually incentivize work. In the mid-2000s, an estimated 96% of households that worked in the year prior to receiving SNAP continued to work after starting to receive SNAP, though this finding was derived from a small sample [\[9\]](#). But in recent years, the share of recipient households with earnings has declined, which researchers have attributed to an aging U.S. population [\[10\]](#).

Historically, economic assistance and voucher programs are deliberate government mechanisms to efficiently allocate resources, and when implemented effectively, they may increase consumer willingness to engage in the economy. This increases demand in specific markets, benefiting sellers, manufacturers, and producers [\[11\]](#). This is referred to as the economic multiplier effect—that every dollar transferred and spent, rather than saved, can increase total income in the economy [\[12\]](#).

The Commonwealth Fund explains the multiplier effect in the context of the 2025 Congressional Budget Reconciliation Plan's cuts to Medicaid and SNAP. In short, cuts to Medicaid result in reduced budgets for the states to spend on the associated healthcare services. Subsequent losses of insurance coverage lead to lost revenue for healthcare providers, including hospitals, pharmacies and nursing homes. Indirectly, these organizations reduce their spending, resulting in decreased compensation or lay-offs [13]. In the case of SNAP, the transactions made at supermarkets and other stores that accept SNAP dollars would be lost, harming would-be customers, the businesses, and their employees [13].

The economic context for various political views on assistance programs is helpful in understanding their public spotlight, but these conversations tend to neglect the health benefits derived from enrollment in these programs. In this article, we argue that financial assistance is a form of medicine and use examples from the literature to illustrate its flexibility in addressing SDOH.

Money as Medicine: Financial Stability as a Health Intervention

The concept of "Money as Medicine" challenges conventional boundaries of healthcare, presenting cash assistance as a potent health intervention. Financial support has the power to provide economic relief, which in turn has been shown to reduce stress, improve mental health, and facilitate access to essential resources like food, shelter, and healthcare [1].

Research shows that financial well-being (FWB), which refers to an individual's subjective sense of financial security [14], and socioeconomic status (SES) are tied with health outcomes, including chronic conditions such as hypertension [15], diabetes [16], and mental illness [17]. Individuals with lower FWB are less likely to engage in regular health services; they report poorer general health and experience higher rates of physical and mental health challenges [14]. Enhancing FWB through cash assistance can reduce financial stress, enabling individuals to seek necessary medical care, prioritize healthier behaviors, and improve their overall quality of life [14]. Moreover, various programs demonstrate how financial stability can prevent health crises before they require costly medical intervention, ultimately reducing strain on the healthcare system.

This connection between financial support and improved health outcomes ultimately underscores the potential of integrating financial interventions into healthcare. Cash assistance programs are thus a promising yet underutilized tool in improving population health. By directly addressing economic instability, these programs enhance both short- and long-term health and reduce healthcare utilization. This paradigm shift empowers individuals to achieve better health outcomes while redefining healthcare as a holistic system that recognizes the impact of SDOH.

Cash Assistance Programs: Case Studies and Health Impacts

Several public health initiatives demonstrate the impact of cash assistance programs. These efforts operate under two different models: conditional transfers are based on requirements or eligibility criteria. They usually involve money being given to people with stipulations (i.e., the expectation that providing the money will result in a behavioral change) [18]. Unconditional transfers, on the other hand, are free from restrictions—there are no conditions or rules about their use [18]. The following initiatives fall into these categories and demonstrate how financial stability translates into improved health and well-being.

Selection Criteria for Case Studies

We selected case studies based on public availability of health-related outcomes data, diversity of implementation models, and relevance to U.S. healthcare integration efforts. We sought programs that addressed a variety of SDOH and that impacted individuals of varying demographics. Both conditional and unconditional cash transfer programs were selected to create opportunities for qualitative comparison.

Stockton Economic Empowerment Demonstration

The Stockton Economic Empowerment Demonstration (SEED), in Stockton, California, was a guaranteed income project organized by a mayoral administration, funded philanthropically, and administered by a non-profit. This randomized controlled trial operated using an unconditional cash transfer model, providing \$500 per month to 125 participants during an 18-month period [\[19\]](#) [\[20\]](#). Qualifying characteristics for recipients were age of at least 18 years, residence in Stockton, and living in a neighborhood with a median income at or below \$46,033 [\[21\]](#). After one year, there were improvements in employment, mental health, and financial stability. Participants in the treatment group obtained full-time employment at more than twice the rate compared to the control group and reported reduced depression, anxiety, and fatigue levels [\[22\]](#). The project was discontinued after the initial study period and with a change in Stockton's mayor [\[23\]](#). Still, SEED challenges the notion that cash assistance discourages work, instead showing that financial stability promotes psychological well-being and job-market participation [\[24\]](#).

Alaska Permanent Fund Dividend

Alaska's Permanent Fund Dividend (PFD) is another unconditional cash transfer program, which provides annual dividends averaging \$1,600 per resident with the goal to distribute a share of the state's oil revenues. Over three years of follow-up, the program led to a 9.6% reduction ($p < 0.01$) in unsubstantiated child maltreatment referrals and a 15% reduction ($p < 0.01$) in substantiated neglect referrals [\[25\]](#). They also find that an additional \$1,000 in PFD funds by the age of four reduces childhood mortality by around 30% ($p < 0.01$), with this effect seen through age five [\[25\]](#). These findings illustrate that cash assistance can have far-reaching effects on family stability and child welfare, underscoring the long-term social benefits of financial security.

Eastern Band of Cherokee Indians' Casino Revenue Dividend

The Eastern Band of Cherokee Indians implemented the Casino Revenue Dividend as part of a broader strategy to enhance economic well-being and community resilience [\[26\]](#) [\[27\]](#). Analyses of this program found that providing unconditional transfers of approximately \$4,000 annually to adult tribal members is correlated with a 15 percentage point increase in high school graduation rates. They also found fewer depressive symptoms (RR 0.51, 95% CI 0.42-0.62) and anxiety symptoms (RR 0.33, 95% CI 0.25-0.44) among participants whose families received cash transfers during childhood [\[26\]](#) [\[27\]](#). This model demonstrates that unconditional cash assistance initiatives may impact both educational and mental health outcomes, fostering a cycle of generational health and well-being.

Chelsea Eats Program

The Chelsea Eats Program in Massachusetts offered up to \$400 per month for nine months in 2020 to 2,000 households. After six months, recipients of these unconditional cash transfers reported improvements in financial and food security and no negative impact on their willingness to work [\[28\]](#). The program also led to a 27% reduction in overall ED visits (87 fewer visits per 1000 persons, [95% CI -160.2 - -13.8, $p = 0.02$]), a 62% reduction in behavioral health-related ED visits (21.6 fewer visits per 1000 persons, [95% CI -40.2 - -3.1]), and an 87% reduction in substance

use-related ED visits (12.8 fewer visits per 1000 persons, [95% CI -25.0 - -0.6]) when compared to a control group that did not receive a cash benefit and was matched based on distance to nearby hospitals [29]. These striking positive outcomes and reductions in healthcare utilization, particularly in mental health crises and substance use, demonstrate the impact that financial support can have on individual and community health.

Opportunity NYC—Family Rewards Program

Opportunity NYC, the first conditional cash transfer program in the U.S., linked financial assistance to specific educational, health, and work outcomes for low-income families. By the end of its three-year implementation period, the program resulted in a reduced percentage of families living in poverty from 68.2% to 56%, a relative reduction of 17.9% ($p < 0.001$). The percentage of families in severe poverty (50% below the federal poverty line) declined from 27.4% to 16.3%, a 40.5% relative reduction ($p < 0.001$). However, the study showed mixed results in terms of health and children's school outcomes [30]. Despite this, the program's success in poverty alleviation highlights a broader debate: while conditional programs aim to promote specific behaviors like school attendance or health checkups, unconditional cash transfers offer support without requirements, emphasizing autonomy.

Progresa: An International Cash Assistance Program

While the programs and policies discussed have predominantly been those that are U.S. based, healthcare systems can also draw on similar programs within international settings. Progresa was a conditional cash transfer program established in Mexico in 1997. The eligibility was based on school attendance of children and participation in preventive health check-ups for members of the household. Additional conditions were added later to account for attendance at health and nutrition classes by the mother. Cash assistance in the 1990s was set at 125 Mexican Pesos for health and nutrition with education stipends varying between 90–255 Mexican pesos according to student grade level and sex. Initial evaluations of the program found an increase in middle school enrollment of 5–6% ($p < .05$) among males, and 7–9% among females ($p < .01$) [31]. Improvements to health and nutrition outcomes were also present: Preventive health visits increased by 18%, and infants ages 12–36 months were an average of 1 centimeter taller than the control group ($p < .05$) [32]. The incidence of infant anemia fell by 10% ($p = .03$) between 1997 and 2000 [33]. In 2019, the program was rebranded to Becas Benito Juárez (BBJ), at the time of the transition, the program's payment format shifted to a direct transfer to students. Attendance was no longer monitored. The only remaining conditions for the BBJ were that students were enrolled in the public school system and were of low income households. This transition was met with a decline in school enrollment. The notable drop was among males aged 15–17 years at 12.3% ($p < .01$), followed by males 12–14 years of age with a 6.1% drop ($p < .01$) and males 6–11 with a 1.9% decrease with marginal significance [34]. The Progresa program, from its beginning to its final transition in 2019, has been a longstanding feature of cash assistance policy in Mexico and has had positive outcomes for the people in rural areas, especially those with limited resources.

Insurance and Nonprofit Programs' Impacts on Health Promotion

The Oregon Health Insurance Experiment

The previous initiatives support the use of targeted conditional and unconditional cash assistance initiatives as means to promote psychological wellbeing, better outcomes for children, and to reduce ED visits and poverty. A complete appraisal requires discussion of Medicaid and the successes and failure of expanded enrollment in the program. This is important to frame

conversations on cash assistance, as many of those who are signed up for assistance programs are also beneficiaries of public insurance.

Data from the Oregon Health Insurance Experiment has been used to better categorize the impacts of Medicaid enrollment on health outcomes and mixed results have been reported. In 2008, Oregon conducted random lottery drawings over 7 months to allow individuals between 19 to 64 years old and who were state residents to apply for the Oregon Health Plan Standard—a Medicaid program for uninsured, low-income adults ineligible for other public insurance [35].

Researchers found increases in ED visits over 1.5 years, including for “non-emergent,” and “primary care treatable” cases, while there was no statistically significant effect on diagnoses of or medication use for hypercholesterolemia or hypertension. Additionally, no significant changes in measures of physical health, such as blood pressure, cholesterol, glycated hemoglobin, or 10-year cardiovascular risk were observed [36].

An evaluation of the Experiment was published in the New England Journal of Medicine and looked at survey results from 6387 adults randomly selected to apply for Medicaid versus 5842 adults not selected. Respondents reported increases in preventive care, including an increase in cholesterol monitoring by 14.57 percentage point (95% CI, 7.09-22.03, $p<0.001$) and increased mammograms by 29.67 percentage points (95% CI 11.96-47.37, $p=0.001$) [37].

Link Health: Bridging Healthcare and Cash Assistance

Nonprofit organizations have recognized the impact that cash assistance and insurance coverage can have on communities. Link Health, a Boston-based nonprofit, demonstrates how cash assistance can be effectively integrated into healthcare settings to address SDOH [38] [39]. Link Health partners with federally-qualified health centers to provide benefit enrollment services to underserved groups, including families with low incomes, low digital literacy, complex health and social statuses, and immigrant backgrounds. Its model embeds cash assistance and insurance enrollment into patient visits, combining clinical care to address immediate health needs with interventions to tackle SDOH and reduce access barriers. From November 2022 to November 2024, the organization screened over 27,000 individuals for eligibility and enrolled 3,086, distributing over \$3 million in financial assistance to a largely Hispanic, non-English-speaking, and publicly-insured demographic [39].

Programs like SNAP, Lifeline, HEAP, and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) form the backbone of Link Health’s interventions. For instance, SNAP helps alleviate food insecurity, a key factor in chronic disease prevention [40]. The Lifeline Program provides low-income individuals access to telehealth services and educational resources [41]. Families enrolled in WIC benefit from improved nutritional outcomes, which, in turn, reduce the prevalence of conditions such as hypertension and diabetes [42]. HEAP ensures safe home environments by offsetting energy costs and reducing the health risks associated with extreme temperatures, particularly for vulnerable populations such as the elderly [43]. By directly addressing these economic obstacles, Link Health creates a foundation for long-term health improvement, from reducing food insecurity to preventing chronic illness.

Policy Implications and a Path Forward

To actualize the potential of cash assistance programs, healthcare providers and policymakers should adopt an integrated approach. Healthcare providers can embed benefit enrollment services into routine care, leveraging their position to screen for SDOH and connect patients to financial

resources. By partnering with organizations like Link Health, providers can address root causes of health disparities, particularly in marginalized communities.

“Anti-Poverty Medicine” is an approach that complements the “Money as Medicine” movements and may be of value to stakeholders in health system administration. In this approach, Medical Financial Partnerships, which are cross-sector collaborations where health care systems and financial service organizations work together to reduce patient financial stress, are leveraged to provide health center or community-based tax preparation, financial coaching, and employment assistance services [\[44\]](#).

Hospital networks should also incorporate screening for cash assistance programs into the electronic health record (EHR) and incentivize providers to address SDOH as part of patient care. Screening tools within the EHR could prompt providers to ask questions about financial instability, such as household size or income level, and trigger referrals to cash assistance programs. Moving beyond the clinical visit, clinics and hospitals can collaborate with financial service programs in their communities to connect patients with the appropriate resources [\[45\]](#).

Policymakers must simplify federal benefit enrollment processes, raise public awareness, and remove barriers such as digital literacy gaps; this will ensure that essential services reach those in need. Expanding access to cash assistance and streamlining its integration into healthcare settings would magnify its impact on health outcomes and promote equity.

Limitations and Considerations

The models described in this discussion provide evidence that cash assistance programs supporting low-income and vulnerable communities can impact a diverse set of SDOH. It is important not to generalize these findings to all social assistance programs, as the rationale and objectives differ amongst these models. For instance, some programs may be designed with the purpose of providing resources for consumption needs, while others are meant to support asset accumulation [\[46\]](#). As interventions for public health, these models must be economically sustainable, scalable, and their impacts on employment, health, and other outcomes tested over appropriate periods and with ample sample sizes. Policymakers and healthcare providers must align on the purpose of their interventions, their economic rationale, the theoretical sustainability of those models, as well as their conditionality and how their impacts should be evaluated over time.

Cash assistance programs can be optimized to positively impact health and financial outcomes through supplementary education. Sen’s capability has been applied to welfare, previously, and describes an approach in which the outcome of providing resources may be dependent on the circumstances and ability of the person [\[47\]](#). This can be applied to cash assistance programs, for instance SNAP. While SNAP itself provides dollars to spend on food, which can be utilized for accessing fresh fruits, whole grains, and other nutritious products, further education on healthy nutrition through programs like SNAP-Ed can offer families additional tools to make healthy choices. Improved financial literacy might also help individuals make conscientious decisions about how they spend their allocated SNAP dollars [\[48\]](#).

Finally, cash assistance programs are only as beneficial as the environments in which they are allocated. Returning to SNAP, individuals can only access fresh food items if they are within a reasonable distance of a supermarket or a grocer that sells these products. In areas where people access food from corner shops and convenient stores, these options are limited or entirely unavailable. The systemic barriers that prohibit individuals from making healthy decisions are not

limited to SNAP only. Subsidized healthcare is only so helpful if there are few primary care physicians in the area.

Conclusion

Cash assistance programs can have a profound and measurable impact on health outcomes. Whether through reduced ED visits, improved mental health, or long-term family stability, programs like SEED, PFD, Chelsea Eats, and Link Health exemplify the potential of financial stability to act as a form of medicine. By expanding and integrating these programs into the healthcare system, we can move toward a model of care that addresses the full spectrum of factors influencing health—economic, social, and medical—and that has lasting, intergenerational effects on both individual and community health.

Contributions

JB, TS, JJ, AM conceptualized the paper. TS and JJ wrote the original draft. JB, TS, JJ, AT, SL, and AM reviewed and edited the original draft. All authors contributed equally to literature searches, analysis, and review of the writing.

References

- 1 Reinhart E. Money as Medicine—clinicism, cash transfers, and the political-economic determinants of health. *N Engl J Med* 2024; 390:1333–8. doi:10.1056/NEJMms2311216.
- 2 Whitman A, De Lew N, Chappel A, Aysola V, Zuckerman R, Sommers BD. Addressing social determinants of health: examples of successful evidence-based strategies and current federal efforts. Office of the Assistant Secretary for Planning and Evaluation. 2022. <https://aspe.hhs.gov/sites/default/files/documents/e2b650cd64cf84aae8ff0fae7474af82/SDOH-Evidence-Review.pdf> (accessed Nov 6, 2024).
- 3 Alegría M, NeMoyer A, Bagué IF, Wang Y, Alvarez K. Social determinants of mental health: where we are and where we need to go. *Curr Psychiatry Rep* 2018; 20. doi:10.1007/s11920-018-0969-9.
- 4 Orkin K. The evidence behind putting money directly in the pockets of the poor. University of Oxford. May 12, 2020. <https://www.ox.ac.uk/news/science-blog/evidence-behind-putting-money-directly-pockets-poor> (accessed Nov 6, 2024).
- 5 Finkelstein DM, Harding JF, Paulsell D, English B, Hijjawi GR, Ng'andu J. Economic well-being and health: the role of income support programs in promoting health and advancing health equity. *Health Aff* 2022; 41: 1700–6. doi:10.1377/hlthaff.2022.00846.
- 6 How To Address the Administrative Burdens of Accessing the Safety Net. (2022, May 5). *Center for American Progress*. <https://www.americanprogress.org/article/how-to-address-the-administrative-burdens-of-accessing-the-safety-net/>
- 7 Bradley CJ, Sabik LM. Medicaid expansions and labor supply among low-income childless adults: evidence from 2000 to 2013. *Int J Health Econ Manag*. 2019 Dec;19(3-4):235-272. doi: 10.1007/s10754-018-9248-x. Epub 2018 Aug 25. PMID: 30145691.
- 8 Frisvold DE, Jung Y. The impact of expanding Medicaid on health insurance coverage and labor market outcomes. *Int J Health Econ Manag*. 2018 Jun;18(2):99-121. doi: 10.1007/s10754-017-9226-8. Epub 2017 Sep 22. PMID: 28940021).

- 9 *The Relationship Between SNAP and Work Among Low-Income Households* | Center on Budget and Policy Priorities. (2013, January 30). <https://www.cbpp.org/research/the-relationship-between-snap-and-work-among-low-income-households>).
- 10 *Policy Basics: The Supplemental Nutrition Assistance Program (SNAP)* | Center on Budget and Policy Priorities. (2008, December 17). <https://www.cbpp.org/research/food-assistance/the-supplemental-nutrition-assistance-program-snap>
- 11 Parkin, M. (2019) *Economics*. 13th Edition, Pearson Education Ltd., Harlow.
- 12 *How Government Payments to the Vulnerable can Multiply to Create Economic Growth for Everyone*. (2025, July 23). United Nations University. <https://unu.edu/merit/news/how-government-payments-vulnerable-can-multiply-create-economic-growth-everyone>
- 13 *How Potential Federal Cuts to Medicaid and SNAP Could Trigger the Loss of a Million-Plus Jobs, Reduced Economic Activity, and Less State Revenue*. (2025, March 25). [The Commonwealth Fund. https://doi.org/10.26099/x2q9-7027](https://doi.org/10.26099/x2q9-7027)
- 14 Mercado C, Bullard KM, Bolduc MLF, et al. Exploring associations of financial well-being with health behaviours and physical and mental health: a cross-sectional study among US adults. *BMJ Public Health* 2024; 2: e000720. doi:10.1136/bmjph-2023-000720.
- 15 Becker NV, Scott JW, Moniz MH, Carlton EF, Ayanian JZ. Association of Chronic Disease With Patient Financial Outcomes Among Commercially Insured Adults. *JAMA Intern Med*. 2022 Oct 1;182(10):1044-1051. doi: 10.1001/jamainternmed.2022.3687. PMID: 35994265; PMCID: PMC9396471
- 16 Walker RJ, Smalls BL, Campbell JA, Strom Williams JL, Egede LE. Impact of social determinants of health on outcomes for type 2 diabetes: a systematic review. *Endocrine*. 2014 Sep;47(1):29-48. doi: 10.1007/s12020-014-0195-0. Epub 2014 Feb 15. PMID: 24532079; PMCID: PMC7029167
- 17 Sørensen CLB, Plana-Ripoll O, Bültmann U, Winding TN, Steen PB, Biering K. Developmental trajectories in mental health through adolescence and adulthood: does socio-economic status matter? *Epidemiol Psychiatr Sci*. 2025 Jun 20;34:e33. doi: 10.1017/S2045796025100073. PMID: 40539247; PMCID: PMC12188275
- 18 Yoshino, C. A., Sidney-Annerstedt, K., Wingfield, T., Kirubi, B., Viney, K., Boccia, D., & Atkins, S. (2023). Experiences of conditional and unconditional cash transfers intended for improving health outcomes and health service use: A qualitative evidence synthesis. *The Cochrane Database of Systematic Reviews*, 2023(3), CD013635. <https://doi.org/10.1002/14651858.CD013635.pub2>
- 19 *About SEED*. (2021, May 1). SEED. <https://www.stocktondemonstration.org/about-seed>
- 20 Martin-West, S., Baker, A. C., Balakrishnan, S., Rao, K., & You, G. (n.d.). *Stockton Economic Empowerment Demonstration*.
- 21 Baker, D. A. C., Samra, S., Coltrera, E., Addo, M., Carlson, M., Crowder, P., Cusack, M., Elliott, S., Horn, D., Steckel, J., & Zaghloul, T. (n.d.). *Preliminary Analysis: SEED's First Year*.
- 22 McConville S. Guaranteed income increases employment, improves financial and physical health. SEED. March 3, 2021. <https://www.stocktondemonstration.org/press-landing/guaranteed-income-increases-employment-improves-financial-and-physical-health> (accessed Nov 6, 2024).

- 23 Treisman, R. (2021, March 4). California Program Giving \$500 No-Strings-Attached Stipends Pays Off, Study Finds. *NPR*. <https://www.npr.org/2021/03/04/973653719/california-program-giving-500-no-strings-attached-stipends-pays-off-study-finds>
- 24 Shapiro I, Greenstein R, Trisi D, DaSilva B. It pays to work: work incentives and the safety net. Center on Budget and Policy Priorities. March 3, 2016. <https://www.cbpp.org/research/it-pays-to-work-work-incentives-and-the-safety-net> (accessed Aug 7, 2025).
- 25 [Preprint] Bullinger L, Packham A, Raissian K. Effects of universal and unconditional cash transfers on child abuse and neglect. 2023. doi:10.3386/w31733.
- 26 Akee RKQ, Copeland WE, Keeler G, Angold A, Costello EJ. Parents' incomes and children's outcomes: a quasi-experiment using transfer payments from casino profits. *Am Econ J Appl Econ* 2009; 2: 86–115. doi:10.1257/app.2.1.86.
- 27 Copeland WE, Tong G, Gaydos L, et al. Long-term outcomes of childhood family income supplements on adult functioning. *JAMA Pediatr* 2022; 176: 1020–6. doi:10.1001/jamapediatrics.2022.2946.
- 28 Liebman J, Carlson K, Novick E, Portocarrero P. The Chelsea Eats Program: experimental impacts. Rappaport Institute for Greater Boston. December, 2022. <https://www.hks.harvard.edu/centers/taubman/programs-research/rappaport/research-and-publications/special-collections/covid-19-relief-chelsea-ma> (accessed Nov 6, 2024).
- 29 Agarwal SD, Cook BL, Liebman JB. Effect of cash benefits on health care utilization and health. *JAMA* 2024; 332: 1455–63. doi:10.1001/jama.2024.13004.
- 30 Riccio J, Miller C. New York City's first conditional cash transfer program: what worked, what didn't. MDRC. 2016. https://nocache.mdrc.org/sites/default/files/NYC_First_Conditional_Cash_Transfer_Full_Report_0.pdf (accessed Nov 6, 2024).
- 31 Behrman JR, Sengupta P, Todd P. Progressing through PROGRESA: An Impact Assessment of a School Subsidy Experiment in Rural Mexico. Washington, DC: International Food Policy Research Institute; 2000. Accessed July 30, 2025. <https://ebrary.ifpri.org/utils/getfile/collection/p15738coll2/id/125290/filename/125501.pdf>
- 32 Gertler P. Do conditional cash transfers improve child health? Evidence from PROGRESA's control randomized experiment. *Am Econ Rev*. 2004;94(2):336-341. doi:10.1257/0002828041302109. Accessed July 31, 2025.
- 33 Rivera JA, Sotres-Alvarez D, Habicht JP, Shamah T, Villalpando S. Impact of the Mexican program for education, health, and nutrition (Progresa) on rates of growth and anemia in infants and young children: a randomized effectiveness study. *JAMA*. 2004;291(21):2563-2570. doi:10.1001/jama.291.21.2563. Accessed July 30, 2025.
- 34 Parker SW, Scott J, Teruel G. The Impact of Program Reductions on Human Capital Accumulation: Evidence from Mexico's PROSPERA/Oportunidades/Progresa Program. APC Working Paper Series. New York, NY: Population Council; 2024. Accessed July 31, 2025.
- 35 Baicker, K., Taubman, S. L., Allen, H. L., Bernstein, M., Gruber, J. H., Newhouse, J. P., Schneider, E. C., Wright, B. J., Zaslavsky, A. M., & Finkelstein, A. N. (2013). The Oregon Experiment—Effects of Medicaid on Clinical Outcomes. *New England Journal of Medicine*, 368(18), 1713–1722. <https://doi.org/10.1056/NEJMsa1212321>

- 36 Oregon Health Insurance Experiment—Results. (n.d.). NBER. Retrieved August 3, 2025, from <https://www.nber.org/programs-projects/projects-and-centers/oregon-health-insurance-experiment/oregon-health-insurance-experiment-results>
- 37 Baicker, K., Taubman, S. L., Allen, H. L., Bernstein, M., Gruber, J. H., Newhouse, J. P., Schneider, E. C., Wright, B. J., Zaslavsky, A. M., & Finkelstein, A. N. (2013). The Oregon Experiment—Effects of Medicaid on Clinical Outcomes. *New England Journal of Medicine*, 368(18), 1713–1722. <https://doi.org/10.1056/NEJMsa1212321>
- 38 Joseph NP, Hider AM, Contreras D, Velasquez DE, Martin A. Bridging the digital divide through on-site, health center-based internet clinics. *NEJM Catal Innov Care Deliv* 2023; published online July 6. doi:10.1056/CAT.23.0099.
- 39 Green RJF, Scheinert T, Krishnamurthy S, Nyamongo N, Lauterwasser S, Martin A. Removing Barriers to Government Benefits: Link Health’s Role in Advancing Health Equity Through Expanded Enrollment. He S, ed. *ConductScience Journal*. 2025;8(1):1-12.
- 40 Carlson S, Llobrera J. SNAP is linked with improved health outcomes and lower health care costs. Center on Budget and Policy Priorities. December 14, 2022. <https://www.cbpp.org/research/food-assistance/snap-is-linked-with-improved-health-outcomes-and-lower-health-care-costs> (accessed Nov 6, 2024).
- 41 Lifeline Support for Affordable Communications | Federal Communications Commission. (2025, May 28). <https://www.fcc.gov/lifeline-consumers>
- 42 Carlson S, Neuberger Z. WIC works: addressing the nutrition and health needs of low-income families for more than four decades. Center on Budget and Policy Priorities. January 27, 2021. <https://www.cbpp.org/research/food-assistance/wic-works-addressing-the-nutrition-and-health-needs-of-low-income-families> (accessed Nov 6, 2024).
- 43 Contreras J. LIHEAP and extreme heat: how the Low-Income Home Energy Assistance Program is assisting families with staying safe, healthy, and prepared for extreme heat events. Administration for Children and Families, U.S. Department of Health and Human Services. April 12, 2022. <https://www.acf.hhs.gov/blog/2022/04/liheap-and-extreme-heat> (accessed Nov 6, 2024) https://knowledgecommons.popcouncil.org/departments_sbsr-pgy/1671
- 44 Marcil, L. E., Hole, M. K., Jackson, J., Markowitz, M. A., Rosen, L., Sude, L., Rosenthal, A., Bennett, M. B., Sarkar, S., Jones, N., Topel, K., Chamberlain, L. J., Zuckerman, B., Kemper, A. R., Solomon, B. S., Bair-Merritt, M. H., Schickedanz, A., & Vinci, R. J. (2021).
- 45 Anti-Poverty Medicine Through Medical-Financial Partnerships: A New Approach to Child Poverty. *Academic Pediatrics*, 21(8 Suppl), S169–S176. <https://doi.org/10.1016/j.acap.2021.03.017>
- 46 Sun, S., Huang, J., Hudson, D. L., & Sherraden, M. (2021). Cash Transfers and Health. *Annual Review of Public Health*, 42(1), 363–380. <https://doi.org/10.1146/annurev-publhealth-090419-102442>
- 47 Sen A. Development as Freedom. New York, NY: Knopf; 1999. P87.
- 48 U.S. Department of Agriculture, Food and Nutrition Service. SNAP-Ed Connection. USDA FNS SNAP-Ed website. Accessed August 06, 2025. <https://snaped.fns.usda.gov/>

ARTICLE IN PRESS
CONDUCTSCIENCE