pcc primary care collaborative

Convening + Uniting + Transforming

Good Intentions Aren't Good Enough:

Connecting Patients to Supports to Address Social Determinants of Health

July 25, 2023 | 1:00 – 2:00pm EST

PANELISTS

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Financing and sustaining social need interventions identified by primary care clinicians

Sanjay Basu MD PhD
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Table 4.

NUMBER OF FREE AND CHARITABLE CLINICS SCREENING AND ADDRESSING SOCIAL DETERMINANTS OF HEALTH[A]

	Frequency which items are screened			How screening items are addressed		
	Always N (%)	Sometimes N (%)	Never N (%)	Directly connected to resources N (%)	Provided with information N (%)	Other N (%)
Does patient have housing	21 (38.2)	28 (50.9)	6 (10.9)	13 (26.5)	30 (61.22)	6 (12.2)
Problems with housing (e.g. mold in the home)	3 (5.5)	37 (67.3)	15 (27.3)	7 (17.5)	25 (62.5)	8 (20.0)
Food Insecurity	15 (27.3)	32 (58.2)	8 (14.6)	17 (36.2)	24 (51.1)	6 (12.8)
Lack of transportation	23 (41.8)	28 (50.9)	4 (7.3)	12 (23.5)	30 (58.8)	9 (17.7)
Concerns about utilities (e.g. electric, gas)	4 (7.3)	26 (47.3)	25 (45.5)	4 (13.3)	21 (70.0)	5 (16.7)
Has patient been physically hurt	13 (23.6)	33 (60.0)	9 (16.4)	24 (52.2)	15 (32.6)	7 (15.2)
Insulted	4 (7.3)	22 (40.0)	29 (52.7)	8 (30.8)	14 (53.9)	4 (15.4)
Threatened with harm	7 (12.7)	35 (63.6)	13 (23.6)	20 (47.6)	16 (38.1)	6 (14.3)
Screamed or cursed at	4 (7.3)	18 (32.7)	33 (60.0)	8 (36.4)	10 (45.5)	4 (18.2)

Notes:

[a]The first part of the table shows the frequency with which free and charitable clinics screen for social determinants of health (housing, food insecurity, transportation, utilities, and interpersonal violence). The second part of the table shows how clinics, who screen always or sometimes, address each social determinant of health.

Palakshappa D, Scheerer M, Semelka CT, Foley KL. Screening for Social Determinants of Health in Free and Charitable Clinics in North Carolina. J Health Care Poor Underserved. 2020;31(1):382-397.

"Five clinics withdrew from the study for various bandwidth-related reasons.

…No significant difference was seen in social risk referral rates during the intervention or post-intervention periods."

	Added effects of intervention compared to pre-intervention, RR (95% CI)	
	Updated model adjusted	
OUTCOME	*During 6-month intervention*	*Post-intervention*
All patients		
Social risk screening	**2.45 (1.32, 4.39)**	2.16 (0.64, 7.27)
Social risk referral	1.33 (0.73, 2.43)	0.89 (0.18, 1.93)
Documented need	0.79 (0.46, 1.36)	0.56 (0.21, 1.48)
No documented need	1.11 (0.60, 2.04)	0.40 (0.12, 1.34)
Abbreviations: RR = Rate Ratio; CI = Confidence Interval		

Gold R, et al. Implementation Support for a Social Risk Screening and Referral Process in Community Health Centers. NEJM Catalyst Innovations in Care Delivery 2023; 04

EXHIBIT 3

Resolution of health-related social needs among Accountable Health Communities (AHC) beneficiary survey respondents who had each need at screening, January 2020–January 2022

	Needs resolved in assistance track						Needs resolved in alignment track	
	Intervention group		Control group					
Health-related social needs[a]	No.	%	No.	%	Difference[b]	95% CI	No.	%
Food insecurity	3,671	25.1	1,522	25.6	–0.5	–3.3, 2.4	2,929	23.3
Housing instability	1,299	46.5	515	46.6	–0.1	–2.6, 2.4	1,332	44.8
Transportation needs	2,651	44.6	1,067	42.7	1.8	–2.2, 5.9	2,111	42.4
Utility needs	1,952	48.2	830	46.3	1.9	–2.4, 6.1	1,755	45.8

"Survey findings indicated that navigation—connecting eligible patients with community services—did not significantly increase the rate of community service provider connections or the rate of needs resolution, relative to a randomized control group. Findings from interviews with AHC Model staff, community service providers, and beneficiaries identified challenges connecting beneficiaries to community services. When connections were made, resources often were insufficient to resolve beneficiaries' needs."

Renaud et al. Addressing Health-Related Social Needs Via Community Resources. Health Aff. 2023 17. doi: 10.1377/hlthaff.2022.01507.

JAMA Network | Open

RCT Effects of In-Person Assistance vs Personalized Written Resources About Social Services on Social Risks and Health

POPULATION

611 Child-caregiver dyads

English- and/or Spanish-speaking children and caregivers ≥18 y

Child mean (SD) age, 6.1 (5.0) y

SETTINGS / LOCATIONS

Pediatric Urgent Care Clinic

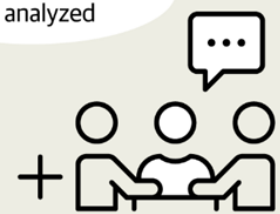
San Francisco, California

INTERVENTION

441 Dyads randomized and analyzed

225 Written resources

Written information on available social service resources



216 Written resources with in-person assistance

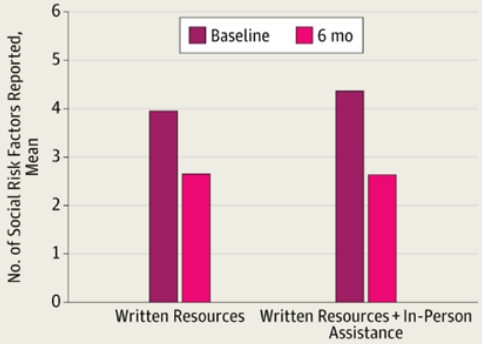
Written information + in-person assistance and telephone follow-up about social service resources

PRIMARY OUTCOME

Change in caregiver-reported number of social risks (0-18) between baseline and 6-mo follow-up

FINDINGS

No difference was detected in the primary outcome between groups (adjusted difference, −0.19 [95% CI, −0.61 to 0.24]; *P* = .39)



Mean (SE) change, social risk factors, No.

Written resources:
−1.28 (0.19)

Written resources + in-person assistance:
−1.74 (0.21)

Gottlieb LM, Adler NE, Wing H, et al. Effects of in-person assistance vs personalized written resources about social services on household social risks and child and caregiver health: a randomized clinical trial. *JAMA Netw Open*. 2020;3(3):e200701. doi:10.1001/jamanetworkopen.2020.0701

Trenton Health Team's evaluation of a closed-loop referral system for social needs observed in primary care

- Strong interest in resource directory; little interest in tracked referrals
- Lots of barriers to use, esp. for tracked referrals
  - Existing referral processes
  - Existing mandated tracking tools (e.g., HMIS)
  - Lack of comfort with e-referrals or with technology
  - Platform limitations (e.g., limited geographic reach)
  - Lack of time to learn how to use
- Enthusiasm >> actual use
- Most useful for:
  - Organizations that make lots of referrals
  - People new to the community
- The strategies we tested did not work; but requiring use (e.g., Produce Rx program) did drive usage.
- Tools developed to meet very specific need had much higher adoption (e.g., Mercer County Food Finder, Baby Item Inventory).

siren
Social Interventions Research & Evaluation Network

TrentonHealthTeam

Courtesy:
Gregory Paulson
Coiel Ricks-Stephen
Jessica Burnett

https://sirenetwork.ucsf.edu/sites/default/files/2023-03/SIREN%20HARP%20Webinar%2003-01-23.pdf

Infrastructure providing unique help

Addressing ‘referrals to nowhere’

RESEARCH ARTICLE

HEALTH AFFAIRS > VOL. 34, NO. 11: FOOD & HEALTH

A Pilot Food Bank Intervention Featuring Diabetes-Appropriate Food Improved Glycemic Control Among Clients In Three States

Hilary K. Seligman, Courtney Lyles, Michelle B. Marshall, Kimberly Prendergast, Morgan C. Smith, Amy Headings, Georgiana Bradshaw, Sophie Rosenmoss, and Elaine Waxman

AFFILIATIONS

PUBLISHED: NOVEMBER 2015 Free Access https://doi.org/10.1377/hlthaff.2015.0641

Co-management with food banks and food-as-medicine services

Centralized coordination between housing, employment and primary care services

Cal-AIM and other ‘enhanced’ co-management

https://doi.org/10.1377/hlthaff.2015.0641

“Results indicate the significant social value of the Bon Secours affordable housing program, generating between $1.30 and $1.92 of social return in the community for every dollar in yearly operating costs.”

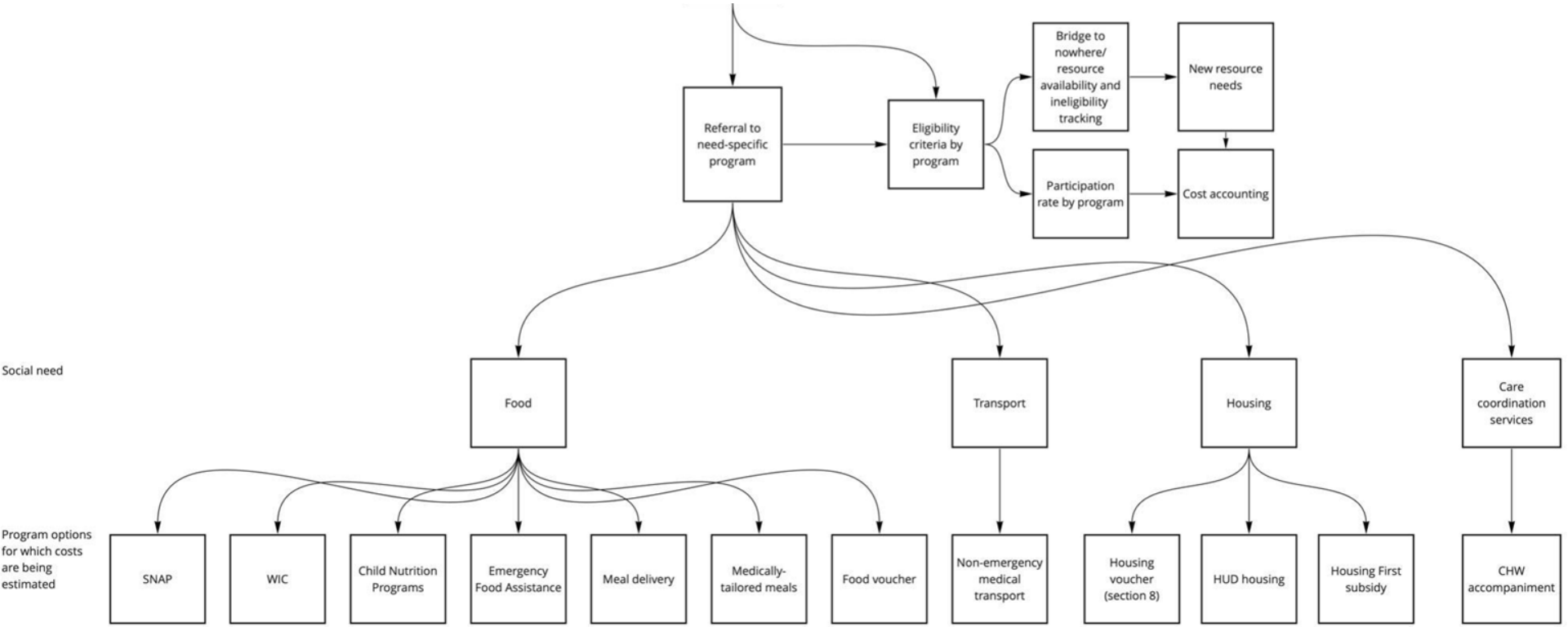
EXHIBIT 1

Estimates of the social return on investment (SROI) of the Housing for Health program, Bon Secours Hospital, in Baltimore, Maryland

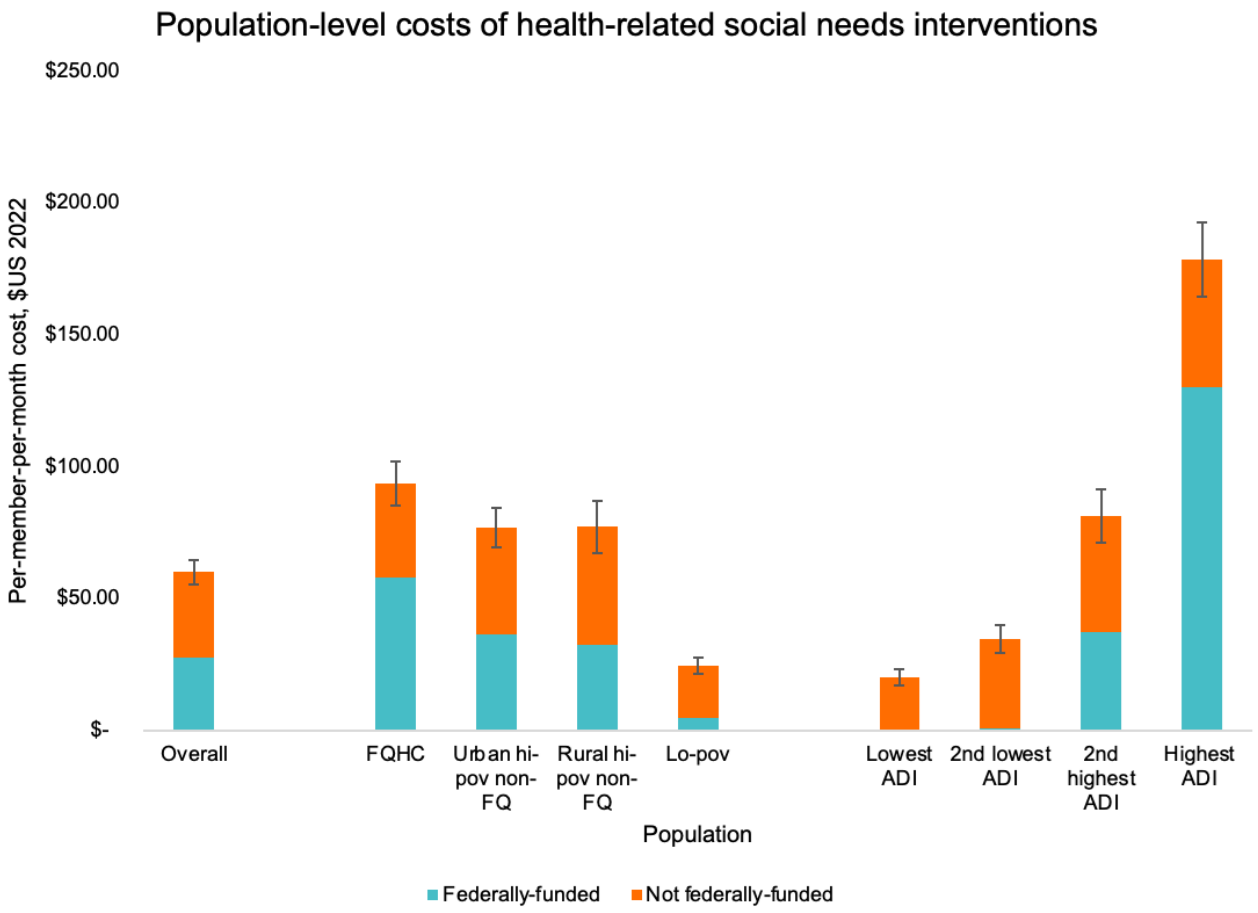
	Base case		Multivariate sensitivity analyses	
	Value	Range	Median	IQR
Total investments ($ millions)	5.7	—[a]	—[a]	—[a]
Gross effects ($ millions)	12.8	3.9–25.6	12.7	10.4–15.2
Less counterfactuals ($ millions)	3.5	0.4–13.3	3.5	2.4–4.6
Net effects ($ millions)	9.3	3.5–12.3	9.1	7.4–10.9
Gross SROI ratio	1:2.24	0.68–4.50	1:2.24	1.83–2.66
Net SROI ratio	1:1.61	0.62–2.16	1:1.59	1.30–1.92

SOURCE Authors’ analysis of data from the service coordinator interviews, Bon Secours records, and estimates from the literature.

Drabo EF, et al. A Social-Return-On-Investment Analysis Of Bon Secours Hospital's 'Housing For Health' Affordable Housing Program. Health Aff (Millwood). 2021 Mar;40(3):513 - 520. doi: 10.1377/hlthaff.2020.00998. PMID: 33646873.



Basu S, et al., Estimated costs of intervening upon health-related social needs detected in primary care: a simulation study. JAMA Internal Medicine; 2023.

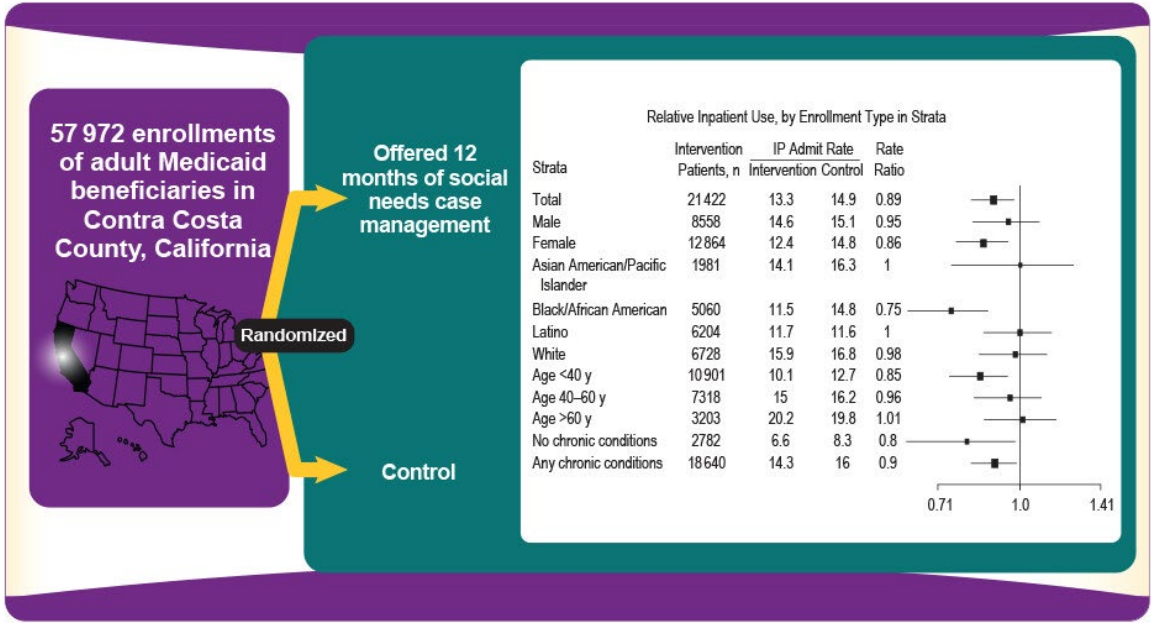


"The cost of providing evidence-based interventions for these four domains averaged $60 (95% CI: $55, $65) per-member-per-month (including ~$5 for screening and referral management in clinics), of which $27 (95% CI: $24, $31; 45.8%) was federally funded"

Basu S, et al., Estimated costs of intervening upon health-related social needs detected in primary care: a simulation study. JAMA Internal Medicine; 2023.

Does offering case management to address patients' social needs affect Medicaid enrollees' hospitalizations?

Brown DM, et al. Effect of Social Needs Case Management on Hospital Use Among Adult Medicaid Beneficiaries : A Randomized Study. Ann Intern Med. 2022 Aug;175(8):1109-1117.



$ 3,775,279	**Total utilization cost avoided in 2019**
$ 317	Per-patient cost avoided in 2019

Table 2. Impact of Case Management Intervention on Health Care Use in the 12 Months After Randomization

Outcome	Intervention Rate*	Control Rate*	Standardized Rate Ratio (95% CI)†	Standardized Rate Difference (95% CI)†
ED visits	96.1	99.6	0.96 (0.91 to 1.00)	−4.2 (−8.8 to 0.5)
Avoidable ED visits	62	63	0.97 (0.92 to 1.03)	−1.7 (−5.1 to 1.7)
Inpatient admissions	13.3	14.9	0.89 (0.81 to 0.98)	−1.5 (−2.8 to −0.2)
Avoidable inpatient admissions	2.0	2.6	0.72 (0.55 to 0.88)	−0.7 (−1.3 to −0.2)

ED = emergency department.
* Reported as events per 1000 person-months of follow-up.

Infrastructure providing unique help

Addressing the null effect in care management trials

Value Veneers And How To Enable Value In Medicaid Care Delivery

Rajaie Batniji, William H. Shrank

JUNE 23, 2023 10.1377/forefront.20230622.134741

Shift from hospital- or health plan-focused outreach to primary care practice wrap-arounds

CHWs rather than nurses as backbone

Embedding SW therapist and pharmacy teams to assist CHWs

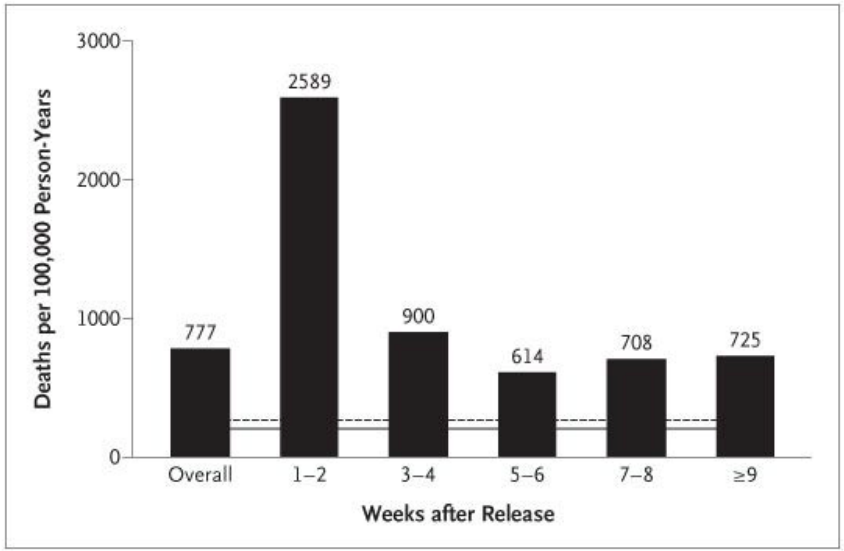
Moving from grants + FFS and ‘value veneers’ to true value-based funding

Kim SE, Michalopoulos C, Kwong RM, Warren A, Manno MS. Telephone care management's effectiveness in coordinating care for Medicaid beneficiaries in managed care: a randomized controlled study. Health Serv Res. 2013 Oct;48(5):1730-49. doi: 10.1111/1475-6773.12060. Epub 2013 Apr 5. PMID: 23557249; PMCID: PMC3796111.

Rowe JS, Gulla J, Vienneau M, Nussbaum L, Maher E, Mendu ML, Tishler LW, Weil E, Chaguturu SK, Vogeli C. Intensive care management of a complex Medicaid population: a randomized evaluation. Am J Manag Care. 2022 Sep;28(9):430-435. doi: 10.37765/ajmc.2022.89219. PMID: 36121357.

Infrastructure providing unique help

The benefits of novel data feeds



Mortality Rates among Former Inmates of the Washington State Department of Corrections in 2-Week Periods after Release
Dashed line: adjusted mortality rate for residents of the State of Washington
Solid line: Crude mortality rate among inmates of the state prison system

Opportunities for 'assigned by not attributed' patients with poor phone and address info

ADT feeds leading to within-ED engagements

Incarceration system data feeds

TABLE 2— Study Outcomes: Primary Care Utilization, Emergency Department Visits, Hospitalizations, and Incarceration by Study Group: Individuals (n = 200) Released From California State Prisons, 2007 to 2009

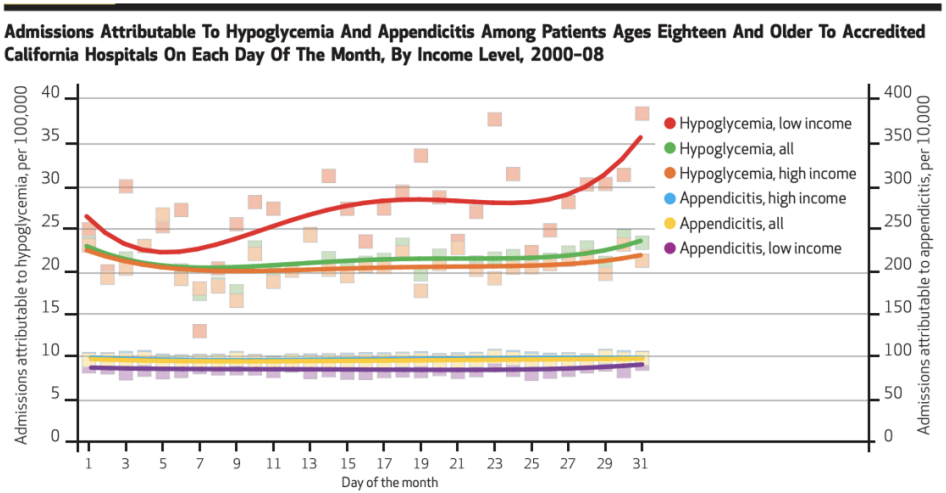
Outcome	Randomized to Transitions Clinic (n = 98), No. (%)	Randomized to Expedited Primary Care (n = 102), No. (%)	*P*
Primary care utilization: ≥ 2 visits to assigned clinic	37 (37.7)	48 (47.1)	.18
Any emergency department use at SFGH	25 (25.5)	40 (39.2)	.04
Any hospitalization at SFGH	10 (10.2)	15 (14.7)	.34
Any incarceration in San Francisco County Jail	57 (58.1)	54 (52.9)	.46

Note. SFGH = San Francisco General Hospital.

Binswanger IA, Stern MF, Deyo RA, Heagerty PJ, Cheadle A, Elmore JG, Koepsell TD. Release from prison—a high risk of death for former inmates. N Engl J Med. 2007 Jan 11;356(2):157-65. doi: 10.1056/NEJMsa064115
Wang EA, Hong CS, Shavit S, Sanders R, Kessell E, Kushel MB. Engaging individuals recently released from prison into primary care: a randomized trial. Am J Public Health. 2012 Sep;102(9):e22-9. doi: 10.2105/AJPH.2012.300894.

Moving upstream to ‘rising risk’ populations

AUC/C-statistic (95% CI)	Accuracy (95% CI)	NPV (95% CI)	PPV (95% CI)
0.795 (0.781, 0.795)	0.904 (0.902, 0.907)	0.905 (0.902, 0.908)	0.811 (0.775, 0.836)



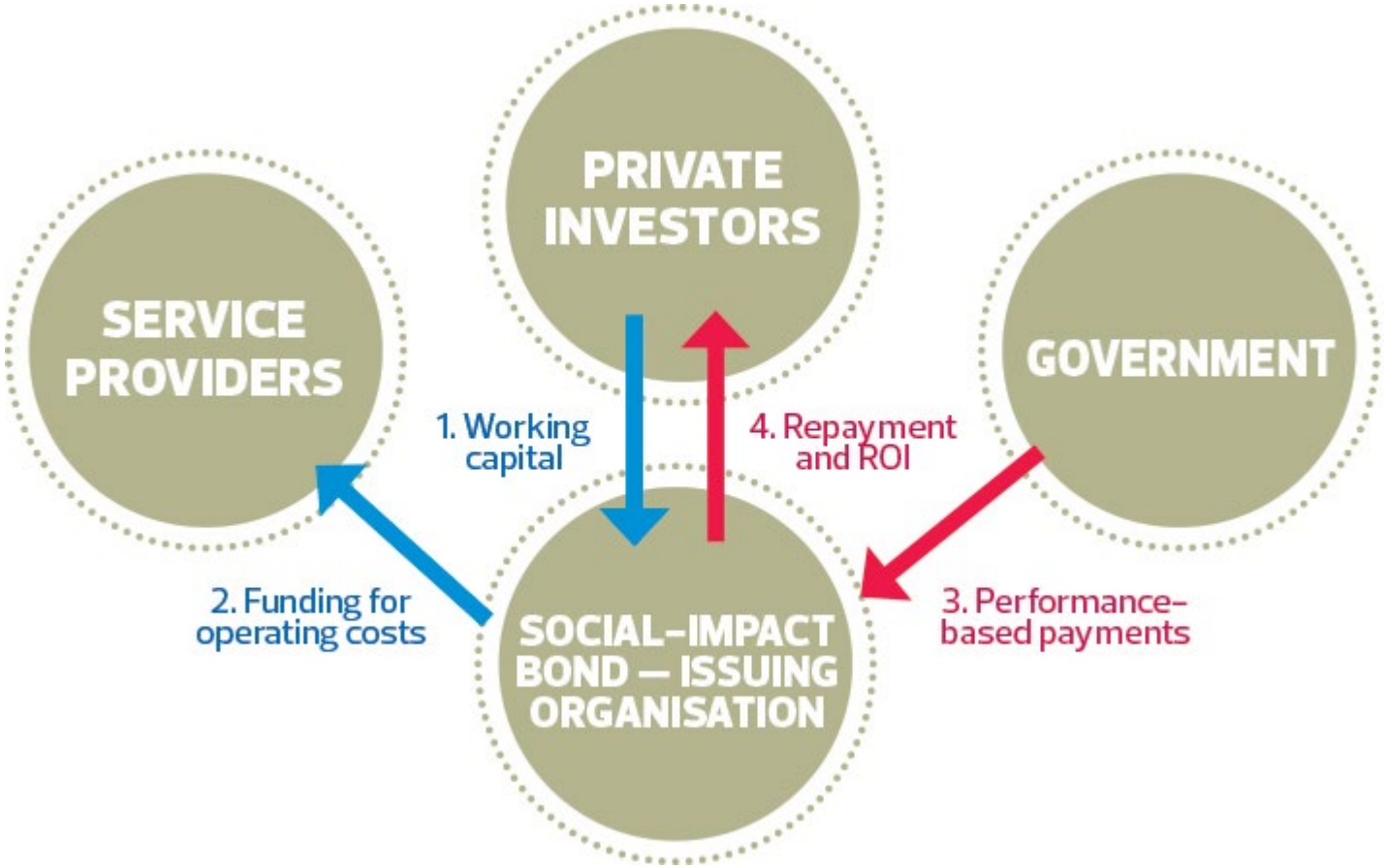
SDoH <> Chronic disease interactions leading to a clear intervention

Examples:

- Food insecurity and insulin use
- Wildfire smoke and inhalers

The Black-White prediction bias when using cost versus utilization for prediction

Patel, S. et al. Predicting non-emergent acute care utilization among patients receiving Medicaid: a comparison of risk modeling approaches. JAMA Health Policy; under review
Seligman HK, Bolger AF, Guzman D, López A, Bibbins-Domingo K. Exhaustion of food budgets at month's end and hospital admissions for hypoglycemia. Health Aff (Millwood). 2014 Jan;33(1):116-23. doi: 10.1377/hlthaff.2013.0096. Erratum in: Health Aff (Millwood). 2014 Jul;33(7):1304. PMID: 24395943; PMCID: PMC4215698.
Obermeyer, Z. et al. Dissecting racial bias in an algorithm used to manage the health of populations. Science; 366,447-453 (2019).



Courtesy Tan Zhai Yun, 2019

TABLE 1 Maternal Outcomes at 18-Year Follow-up of the Memphis Trial of NFP

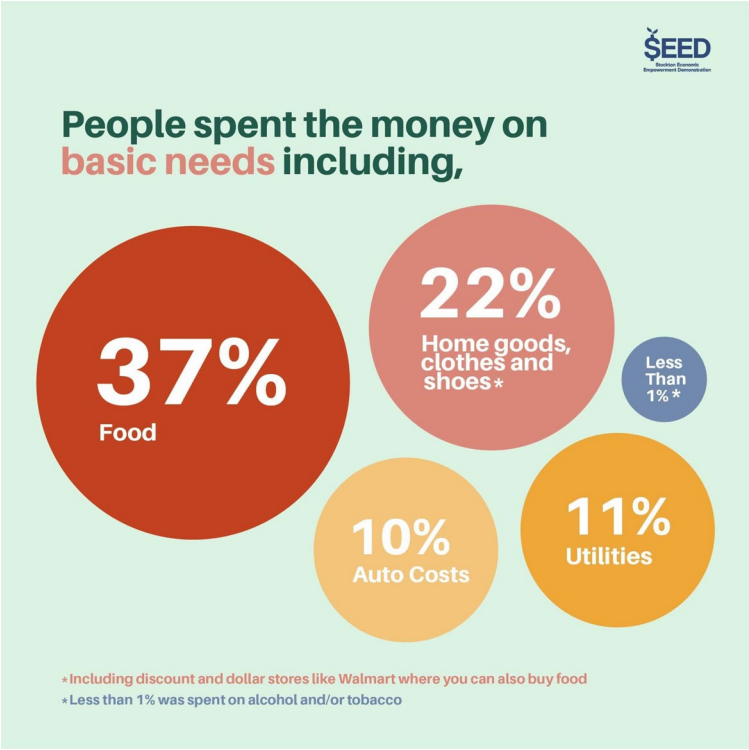
Variable	Assessment Timeframe	Control (T2)		NV (T4)		T4–T2		
		n	LS[a] Mean or % (SE)	*n*	LS[a] Mean or % (SE)	LS[a] Mean Difference (SE)	ES[b] or aOR (95% CI)	*P*
Primary outcome								
Public benefit costs, $[c,d]	0–18 y	472	$192 836 ($4435)	208	$175 525 ($6652)	$−17 310 ($8009)	−0.13 (−0.24 to −0.01)	.03*

NFP saved the government $17,310 per family in reduced public benefits and resulted in a net savings of $4,732 in 2009 dollars. This represents a 9.0% reduction in public benefit per family.

Kitzman H, Olds DL, Knudtson MD, Cole R, Anson E, Smith JA, Fishbein D, DiClemente R, Wingood G, Caliendo AM, Hopfer C, Miller T, Conti G. Prenatal and Infancy Nurse Home Visiting and 18-Year Outcomes of a Randomized Trial. Pediatrics. 2019 Dec;144(6):e20183876. doi: 10.1542/peds.2018-3876. Epub 2019 Nov 20. PMID: 31748254; PMCID: PMC6889968.

“A systematic review of historical and contemporary programs with similarities to UBI finds multiple health benefits, including improved mental health and infant birth weight, and modest effects on employment, with the largest effects for women with young children..

Another review of UBI-like programs in multiple countries finds no evidence that overall labor supply is significantly reduced.”



$500 / month

125 people vs control

24 months

University of Wisconsin Population Health Institute

Gibson M, Hearty W, Craig P. The public health effects of interventions similar to basic income: A scoping review. The Lancet Public Health. 2020;5(3):e165-e176.

de Paz-Báñez MA, Asensio-Coto MJ, Sánchez-López C, Aceytuno MT. Is there empirical evidence on how the implementation of a universal basic income (UBI) affects labour supply? A systematic review. Sustainability. 2020;12(22):9459.

“The treatment group experienced clinically and statistically significant improvements in their mental health that the control group did not - moving from likely having a mild mental health disorder to likely mental wellness over the year-long intervention.”

Stacia West, Amy Castro Baker, Sukhi Samra, Erin Coltrera. Preliminary Analysis: SEED’s First Year.

Thank you!

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- Bob Phillips
- Connor Drake
- Caitlin Davis

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R01 DK125406

P30 DK092924

U18 DP006526

R01 DK116852

Contact if questions:

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Centene Overview

WHO WE ARE

Centene provides access to high-quality healthcare, innovative programs, and a wide range of health solutions that help families and individuals get well, stay well, and be well.

PURPOSE

Transforming the health of the community, one person at a time

67,200
DIVERSE AND DEDICATED EMPLOYEES*

#26
FORTUNE 500® (2022)

#66
FORTUNE GLOBAL 500® (2022)

BRAND PILLARS

Focus on the Individual + Whole Health + Active Local Involvement

WHAT WE DO

50 states
with government-sponsored and commercial healthcare programs

Centene successfully provides **high-quality, whole health solutions for our diverse membership** by recognizing the significance of the many different cultures our members represent and by forming partnerships in communities that bridge social, ethnic, and economic gaps.

28.5 million
Managed Care Members*

$145.5B
2023 Total Revenues*

CENTENE® Corporation

As of March 31, 2023
***Represents the midpoint of our 2023 total revenue guidance range*

Centene At A Glance

Transforming the health of the community, one person at a time

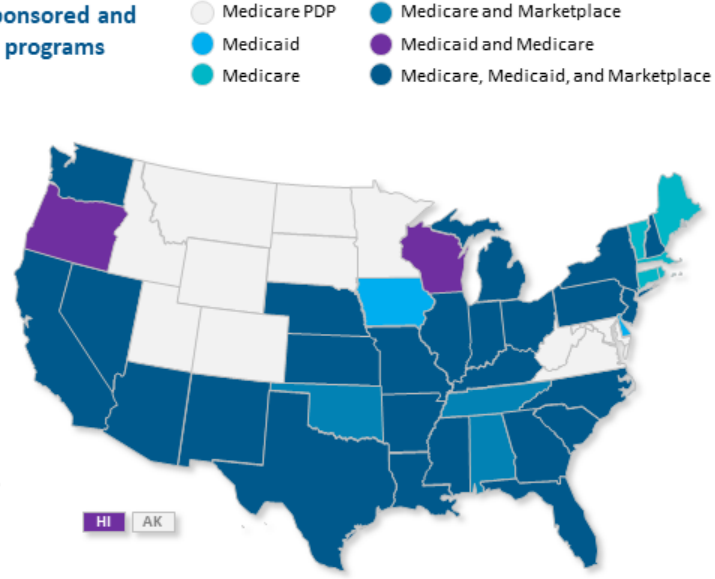
#26	#66	67,200
FORTUNE 500® (2022)	FORTUNE GLOBAL 500® (2022)	DIVERSE AND DEDICATED EMPLOYEES*

Serving **1 in 15** Individuals

28.5 million Managed Care Members*

Leading government-sponsored and commercial healthcare programs

- **16.3M** Medicaid members across **30 STATES**
- **1.3M** Medicare members across **36 STATES**
- **3.1M** Marketplace members across **28 STATES**
- **4.5M** Prescription Drug Plan members across **50 STATES**



*As of March 31, 2023

Q & A

Resources

- How 'screen and refer' systems fail to help patients (STAT First Opinion Podcast)
- "More than just giving them a piece of paper": Interviews with Primary Care on Social Needs Referrals to Community-Based Organizations (Journal of General Internal Medicine, Dec 2022)
- Health Care Impacts Of Resource Navigation For Health-Related Social Needs In The Accountable Health Communities Model (Health Affairs)
- Integrating Social Needs Care into the Delivery of Health Care to Improve the Nation's Health (2019 NASEM Report)
- Annual Review of Public Health: Community Health Worker Integration with and Effectiveness in Health Care and Public Health in the United States
- Dr. Vasan Interview on CHW programs w/ Better Care Playbook team

Thank you!

- Website: www.thepcc.org
- Twitter: @PCPCC
- LinkedIn: company/primary-care-collaborative

- Questions? Email: aclark@thepcc.org