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North Carolina's COVID-19 Support Services Program: Lessons for Health Policy Programs to Address Social Needs

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Policy Points

> As states consider expanding or creating health programs that address social needs, analysis of North Carolina's COVID-19 Support Services offers considerations such as building the capacity of community-based human service organizations, creating feedback channels for all providers, and more

> Working with community health workers and community leaders may also help ensure the success of health programs that address social needs

ABSTRACT

The North Carolina Department of Health and Human Services launched its COVID-19 Support Services Program in August 2020 to address multiple pandemic-related social needs in counties with COVID-19 hot spots in four target regions of the state. Lessons from the COVID-19 Support Services Program can inform other states' and payers' efforts to address social needs, as well as North Carolina's soon-to-launch $650 million Healthy Opportunities Pilots, which will pay for and provide social services through Medicaid managed care programs. To study the COVID-19 Support Services Program, we interviewed its administrators and frontline providers across the program's service regions and partnered with one of the program's largest grantee organizations to analyze survey data.

We offer key recommendations to health policymakers (e.g., state health officials, commercial payers) creating or administering health policy programs to address social needs in local populations; our findings are also relevant to frontline implementers of such programs. Key recommendations include:

- Building the capacity of historically underfunded community-based human service organizations to handle both a larger service demand and surges in demand

- Creating timely communications and feedback channels for all levels of social service providers

- Employing community health workers, who have skillsets and experience straddling both health and social services

- Partnering with local leaders and "community quarterbacks" to achieve maximum reach and equity

- Leveraging technology designed for two-way referral and tracking between health and human service providers

- Meeting the technical assistance needs of a complex program that involves many different social support services administered by providers with dissimilar processes and cultures

INTRODUCTION

Across the United States, especially in the wake of the COVID-19 pandemic, there is increased attention to social determinants of health (SDoH)[1,2] — the structural, social, and economic factors that affect community health — which contribute to inequities in individual-level social needs and health outcomes.[3] The focus on SDoH and unmet social needs is reflected in the recently released strategy for the Centers for Medicare & Medicaid Services (CMS) Innovation Center, including its focus on advancing health equity, delivering whole-person care, and partnering with diverse health care stakeholders.[4]

During the COVID-19 public health emergency, several states, counties, and cities across the United States created new programs to address social needs. The North Carolina Department of Health and Human Services (NC DHHS) launched its COVID-19 Support Services Program (SSP) to address multiple pandemic-related social needs by providing services, such as financial relief and home-delivered groceries, to help people safely quarantine or shelter in place due to COVID-19.[5] Due to similarities in design and service provision, the SSP is informally seen as a smaller-scale preview of the state's soon-to-launch $650 million Healthy Opportunities Pilots, and its lessons can guide implementation of the Pilots.[6] Lessons can also help inform the design and implementation of other state and federal efforts to address health-related social needs, especially as states consider how to leverage recent American Rescue Plan Act (ARPA) funding to build infrastructure to address SDoH and social needs.[7]

This report draws on key informant interviews with 17 different expert stakeholders: 16 involved in the SSP — including state administrators, clinical leaders, local human service organizations, frontline health and social service providers, and community health workers — and one administrator from another state with Medicaid

programs to address social needs. We also analyzed two survey datasets from one of the four SSP grantee organizations to understand clients' access to services and experiences with the program, as well as community health workers' job satisfaction and roles. Based on these lessons, we offer recommendations for other state and national health policy programs focused on beginning or expanding their efforts to address SDoH and social needs.

OVERVIEW OF NORTH CAROLINA'S COVID-19 SUPPORT SERVICES PROGRAM

Leveraging a combination of funding from the Coronavirus Aid, Relief, and Economic Security (CARES) Act and the state (H.B. 1043),[8,9] North Carolina's SSP paid for a suite of support services, including direct financial relief, transportation, food, medications, and COVID-19 protection supplies to help people safely quarantine or shelter in place due to COVID-19. Overseen by NC DHHS' Medicaid office, the SSP launched in August 2020, and provided more than 171,000 support services to nearly 42,000 households from September 2020 until April 2021. The SSP was implemented in four regions of the state and administered through four contracted organizations, also referred to as grantees or vendors. Three of the four grantees are non-profit health service provider organizations, and the fourth is a non-profit community development corporation. The grantees are responsible for coordinating community health workers (CHWs) and networks of local human service organizations (HSOs), which are responsible for frontline service delivery.[8] These grantee organizations were required to submit plans demonstrating their capacity to: ensure delivery of all covered services; manage invoicing, reimbursement, and reporting; and understand the local community and its needs.[9] During the SSP, grantee organizations were responsible for collecting invoices of services delivered by their HSO networks and sending them to the state each month. The state then provided funding to grantee organizations to retroactively reimburse HSOs for the delivered services based on payment rates set by the state.[9]

Independent of but complementary to the SSP, NC DHHS used funding from the CARES Act, Centers for Disease Control and Prevention (CDC), and Medicaid to create a

CHW program to assist with COVID-19 needs in August 2020, and CHWs were deployed into the SSP.[10] Both programs used NCCARE360, a data platform allowing for closed-loop bidirectional referrals between health and human service providers.[11] After all available funding for the original SSP was spent by May 2021, NC DHHS narrowed the focus of the program in order to sustain it.[5] The NC DHHS Office of Rural Health partnered with the Food Bank of Central & Eastern North Carolina to re-launch the SSP in October 2021 to provide food assistance to residents of 34 counties. Residents are eligible for food box deliveries if they need food access to quarantine, isolate, or shelter-in-place due to COVID-19.[12]

The SSP was unique relative to other states' COVID-19 programs to address social needs and health equity. The SSP addressed many social needs in one program such as living expenses and food, while many other programs tended to focus on one specific social need.[13–16] In addition, it was open to any North Carolina resident living in one of the four service areas and attesting to experiencing difficulty with social isolation or quarantine for COVID-19. SSP also intentionally focused on equity by prioritizing grantee organizations led and staffed by historically marginalized populations and targeting communities disproportionately affected by COVID-19. Results from the SSP show that over 70% of support services were delivered to historically marginalized populations.[17]

The SSP is a kind of forerunner to North Carolina's Healthy Opportunities Pilots, which will provide up to $650 million of Medicaid funding to deliver and evaluate pilot services related to housing, food, transportation, and interpersonal violence and toxic stress for Medicaid enrollees in three regions of the state beginning this year.[6] See the Appendix table for a high-level comparison of the two programs.

FINDINGS FROM NORTH CAROLINA'S COVID-19 SUPPORT SERVICES PROGRAM

Both clients and CHWs reported positive experiences. We analyzed multiple survey datasets from an SSP grantee organization, including a survey of clients' experiences and access to services and a survey of CHWs' job satisfaction and roles. Notably, 86% of surveyed clients reported that it was very easy or easy to access services through SSP. Additionally, 92% of surveyed CHWs reported feeling like their work with SSP was valued by the community (see Figure 1).

This positive reception may suggest that cross-sectoral health-social service programs like the SSP can strengthen client-provider relationships. Prior studies support this idea; patients offered support addressing social needs in a clinical setting report higher satisfaction with health care, improved ratings of individual self-worth in other settings, and better access to care.[18,19]

Figure 1. Provider and Client Satisfaction with Participation in One Region's COVID-19 Support Services Program
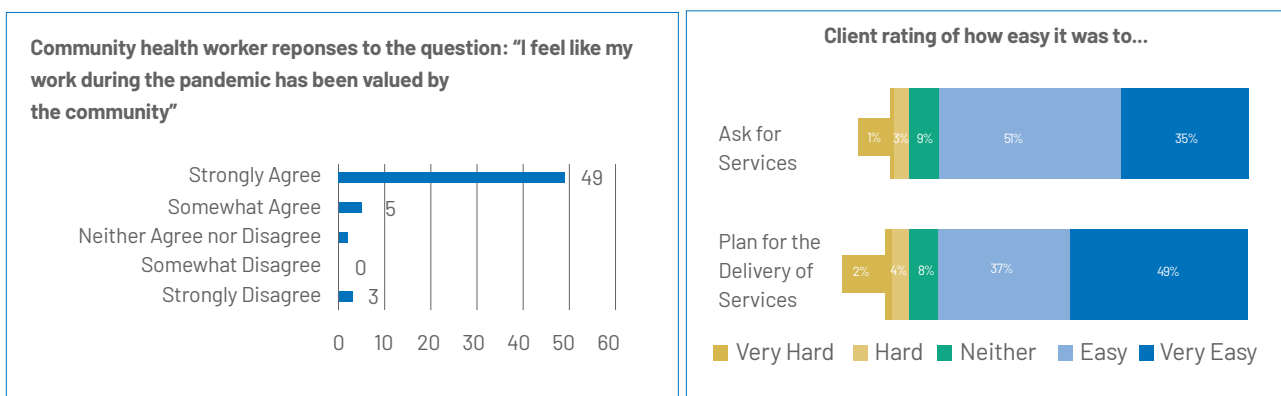
Source: Authors' analysis of one NC COVID-19 Support Services Program grantee organization's surveys of those who received services and of community health workers providing services.

Note: As with all survey results, there are potential limitations, such as challenges in demonstrating causality, e.g., whether clients who have higher satisfaction with care would be more likely to agree to receive social driver services or whether clinicians who have a stronger therapeutic alliance with clients would report seeing more value in their work.

HSOs needed more upfront capital and capacity-building support than anticipated. The SSP depended on HSOs to coordinate and deliver services, providing an opportunity to build capacity within the human services sector during a time when COVID-related increases in social needs were stretching HSOs' bandwidth.[21] However, interviewees emphasized that HSOs in SSP had to quickly adapt and build infrastructure capacity for data monitoring and reporting, billing, and referrals that were not a part of their usual operations.

> "While we are pretty financially sound as an agency, we still did not have enough money… upfront… we found ourselves upfronting money and then having to wait to get reimbursement. That was one of the biggest challenges, because we were okay until our checking account got to the point where it might interfere with daily operations."

One capacity challenge for HSOs in the SSP centered around available cash reserves. Because the SSP was developed to respond quickly to emergency needs, the model was initially based on retrospective reimbursement after service delivery. As a result, HSOs needed to use their existing capital and personnel to build infrastructure, start service provision, and handle surges in demand. Smaller HSOs, which were the majority of the HSOs in SSP, typically had fewer cash reserves to handle these tasks. Some HSOs managed their capacity by creating waitlists, triaging needs, or referring to other community resources. One SSP region, however, was in the financial position to provide its HSOs with upfront capital immediately, which helped them meet service needs from the outset. Later in the SSP's provision, the state shifted to provide 50% of HSOs' budgets as prospective payments in November 2020 and January 2021. Further context about the magnitude of upfront support needed for complex health policy programs to address social needs is evident in the *Healthy Opportunities Pilots* program, where $100 million of its $650 million budget (>15%) is allocated for upfront capacity-building funding for nine months before its service provision period begins.

Recommendations
• States and payers should provide substantial time and upfront funding for capacity-building before service delivery for providers and HSOs to expand infrastructure, hire and train additional staff, and implement new technologies.
• Providers and HSOs should monitor service demand surges, and states and payers should maintain additional capacity-building funds to use during periods of unexpectedly high demand surges.

The program needed to quickly adapt to feedback and clearly communicate about adjustments. Most evidence to date on services aimed at SDoH and social needs focuses on time-limited and targeted interventions for subpopulations.[22,23] Because of this limited evidence, and because coordinating and delivering social support services is still new to many organizations providing health services, these programs must be prepared to adjust iteratively as they learn what does and does not work for their particular circumstances. North Carolina's SSP was no exception. SSP interviewees frequently noted as challenging the rapid adjustments and resulting communications that were required throughout the program's evolution.

- **Adjustments.** Interviewees highlighted several service-level issues with the SSP early on that required flexibility. In some cases, the service descriptions were too broad, which resulted in unintended or low-quality services delivered. For example, healthy food boxes were described as "an assortment of nutritious foods,"[9] but one interviewee noted this broad definition allowed some food boxes to only contain canned goods and a starch. In other cases, payment rates were cited as insufficient for certain services. For example, some food box providers said that the initial food box payment rates were too low to cover the cost of food and delivery, and some transportation providers said that initial transportation payment rates were too low to cover rural distances. In both cases, NC DHHS was able to increase the payment rate due to flexibility in the funding sources

underlying the SSP, and made the same changes to the *Pilots* fee schedule ahead of launch.

Future programs by other states and payers should consider how to regularly update service definitions and payment rates to account for any arising issues. For instance, North Carolina's *Pilots* program has a fee schedule set and approved by CMS, which can be periodically revisited through rapid cycle evaluation findings, but not nearly as quickly or flexibly as the state could for the SSP.[24] Commercial payers contracted by North Carolina for Medicaid Managed Care could consider "add-on" or "modifier" funds as part of their voluntary Pilots investments in the short term between rapid cycle evaluations,[24,25] but other states should consider regulatory language around how and when they can make adjustments.

> "The leadership has to take the time to talk directly with people… making sure leadership, decisionmakers are accessible, regularly, to everybody… it's not enough to just listen; the voice actually has to have an influence."

- **Communication.** Interviewees cited the number and breadth of the SSP's services as a challenge when the state communicated to partners about program adjustments—as well as the number of adjustments required. The diverse set of sectors involved in the program (e.g., food, transportation, housing and living expenses, medical supplies, and health) complicated two-way conversations with administrators, clinicians, CHWs, and HSO providers involved in the program. In addition, in some instances, the state had to send out messages to administrators of grantee organizations without providing advanced notice and obtaining feedback from frontline providers for logistical or legal reasons. Further, interviewees noted that guidance and general communications from the state were sometimes inaccessible to frontline HSO providers and CHWs who spoke English as a second language.

Recommendations
• States and payers should design service definitions and payments to balance specificity with flexibility but should also build in pathways to adjust them as needed.
• States and payers should create multiple lines of communication and feedback with participating providers (including leadership to the frontline) in appropriate languages and at appropriate reading levels.

Local CHWs supported improved care delivery. North Carolina was designing a statewide "CHW Initiative" program prior to COVID-19 and began small pilots in early 2020.[8] When the COVID-19 pandemic struck, North Carolina utilized CARES Act, CDC, and Medicaid funding to create the CHW COVID-19 Program to rapidly scale the CHW Initiative across the state.[8] CHWs were hired and managed by seven contracted organizations, including community-based organizations and health care organizations, across the state.[8] The development of the CHW program and SSP happened in parallel, but, over time, the state had the two programs work in tandem.

CHWs in the SSP were charged with functioning as resource navigators who screened clients to identify social needs and make referrals to appropriate resources.[8] CHWs fulfilled multiple roles in the SSP (see Figure 2), most notably supporting community engagement and outreach, which interviewees viewed as CHWs' intended role. CHWs have a range of training and are also often asked to take on numerous roles in referral workflow and program administration, and interviewees expressed that some CHWs felt they were asked to perform more administrative duties than anticipated or desired, which limited their time in communities.

The SSP illustrated how to effectively deploy CHWs in cross-sectoral programs aimed at addressing SDoH.[8] First, interviewees reported that more effective CHWs lived in the community being served and knew the local geography, populations, and community resources. Relatedly, completed referrals were more likely for those CHWs and HSOs that had worked together before. In con-

trast, interviewees were skeptical about using national or regional contractors.

> "The CHWs should be viewed as professionals that can be part of a care management team… they should not live in a silo and should not just be focused on equity. [CHWs] need to be focused on relationship of access to the health system, where they're the expert on the person and the system and that go-between."

Second, CHWs improved identification and engagement of historically marginalized or isolated community members, according to the SSP interviewees. This finding tracks with others' experience,[26,27] and it shows how CHWs can help improve delivery of needed services.[27,28] Interviewees recommended that CHWs not only provide screening but also be integrated into care delivery by providing services, such as patient education.

Finally, technology and human capital must be strategically deployed to maximize the CHW role. In the SSP, CHWs were asked to document referrals and services using the NCCARE360 platform. Interviewees observed that CHWs spent substantial time learning the NCCARE360 technology platform and documenting screening and referrals in the field, which left less time for face-to-face conversation with clients and service delivery. Several interviewees suggested that CHWs would be

most valuable if paired with a "CHW helper" in the field to assist with administrative and technology-based tasks, and interviewees suggested the state facilitate credentialing of such a role. Additionally, standardized training programs, like the NC CHW Standardized Core Competency curriculum, are important to defining necessary skills and training for CHWs. More clarity can help ensure that CHWs serve in community-oriented roles.[29]

Recommendations

- Organizations should maximize the role of CHWs by integrating them into care delivery (in addition to community and individual liaising).

- States should develop CHW credentialing programs that include several levels of responsibility from more supportive roles to managers.

Community leaders fostered equitable community relationships. Several interviewees highlighted the importance of engaging key community members and organizations, described as "community quarterbacks," who can facilitate equitable outreach. These informal partners were able to draw on their networks and community knowledge to identify ways to reach clients and mobilize resources that complemented the role played by CHWs.[30]

Interviewees said that one way to identify community quarterbacks was to attend community events (such as farmers markets or community meetings). Some com-

Figure 2. Roles and Responsibilities of Community Health Workers in One Region's COVID-19 Support Services Program
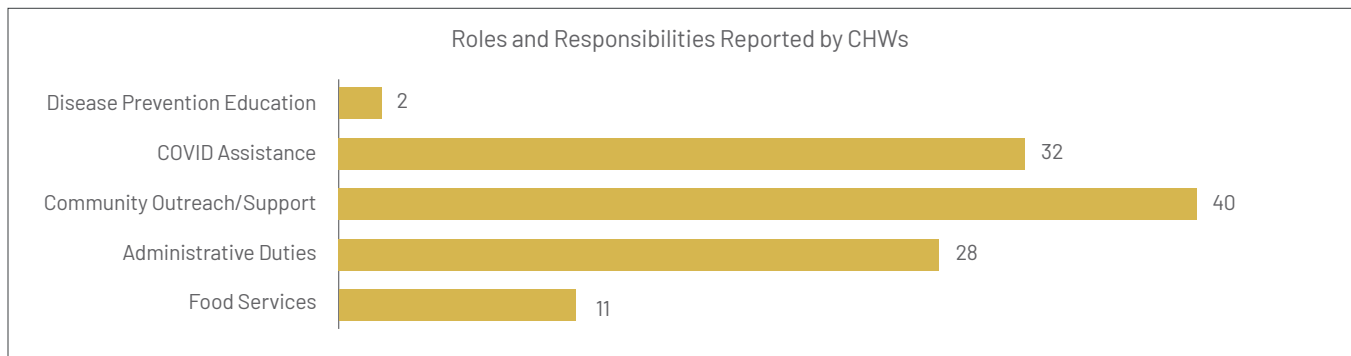
Roles and Responsibilities Reported by CHWs

Role	Value
Disease Prevention Education	2
COVID Assistance	32
Community Outreach/Support	40
Administrative Duties	28
Food Services	11

Source: Authors' analysis of one NC COVID-19 Support Services Program grantee organization's survey of community health workers providing services. *Respondents could select multiple options

munity quarterbacks mentioned by interviewees that might not be readily apparent to external collaborators included:

- Farmers market organizers

- Food pantries

- Concerned citizens groups

- Churches and other faith leaders

- Health departments

- Local indigenous communities

- Local chapters of the National Association for the Advancement of Colored People

- Community colleges

- Sheriff's offices

- Schools

- Local advocacy organizations with experience canvassing or phone-banking (such as NC Counts Coalition, an organization that assists with accurate Census counts in NC, or Black Voters Matter's NC group, which works to improve voter registration and turnout)[31,32]

To partner with community quarterbacks, interviewees suggested states, payers, and provider organizations hold "meet and greet" events — disseminated by community quarterbacks — at gathering places like houses of worship, farmers markets, grocery stores, public housing complexes, and major community events. According to interviewees, these partnerships and public events were especially critical for engaging non-English speaking communities that faced barriers to accessing care. Community quarterbacks helped increase community members' trust and willingness to accept services through the SSP. To encourage engagement of trusted community leaders, future programs, including the Pilots, should incentivize contracting with local HSOs run by and serving a higher share of historically marginalized populations.

Recommendations
• Provider organizations should identify and informally partner with trusted community leaders to capture hard-to-reach individuals in their networks and improve equitable program reach.
• States, payers, and provider organizations should hold community "meet and greet" events with community leaders to build trust.
• States and payers should incentivize contracting with local HSOs run by and serving a higher share of historically marginalized populations.

Technology needs to easily facilitate two-way referral between health and human service providers. Through a public-private collaboration, North Carolina partnered with Unite Us to create NCCARE360, the nation's first statewide system to facilitate two-way referrals between health and human service providers.[33] NCCARE360 serves as both a centralized directory of community resources and an electronic platform to streamline service delivery—and will also be used for referrals and invoicing in the *Pilots* program.[34] In June 2020, NCCARE360 launched statewide ahead of schedule to aid in COVID-19 response efforts and was used by the SSP to facilitate cross-sector referrals to services.

NCCARE360 is still evolving, and its accelerated, rapid rollout during the SSP, while necessary, caused challenges for some users who were simultaneously learning, using, and troubleshooting the software. Interviewees reported that support was initially available in near-real-time, but as demand increased, support response times grew to several days. Additionally, NCCARE360 was only available in English during the first phase of the SSP, which created barriers to access for some HSOs and CHWs. Interviewees were interested in more frequent and lay-accessible training on the platform in multiple languages.

Interviewees identified some desired functions of NCCARE360 that could streamline service delivery, including:

- The ability to refer to specific services (e.g., food boxes) rather than to specific HSOs

- Regularly updated information about the services offered by HSOs

- Real-time tracking of referrals and case monitoring to assess implementation success and inform program adjustments

- An accessible, user-friendly dashboard to highlight impact on a regular basis

Interviewees felt conflicted about how sophisticated programs like NCCARE360 should function in the future. If NCCARE360 focused on the minimum data and functionality necessary for cross-sector referrals within the SSP, it would create a simpler structure but at the cost of broader utility. Alternatively, if NCCARE360 were to function as a complete data warehouse for health and social information, it would have broader referral capabilities but become subject to multiple sectors' laws and regulations concerning the use and exchange of data. There is also a philosophical debate around whether technologies like NCCARE360 might impede building trusted relationships among HSOs and health care providers by replacing person-to-person referral processes with automated referral through the platform.

Recommendations
Cross-sectoral referral technology should: • allow for referrals to specific services, not just to specific organizations • automate processes (such as for billing and program reporting) • build in opportunities for user feedback • support capacity to be able to address urgent technology issues in near-real-time and provide substantial technical assistance and training • support the languages commonly used in the communities in which it is deployed

Multiple types of technical assistance were required. Because of the rapid design and implementation of North Carolina's SSP, the state did not establish a formal technical assistance program; instead, the state facilitated venues for communication and learning among grantee

organizations as rapidly as they could. The SSP tasked each of the four grantee organizations to coordinate CHWs and a network of local HSOs to deliver a large array of social services. Grantee organizations had to navigate payment and provision nuances for different sectors and operate within social support service delivery guidelines and fees established by the state. Given this complexity, interviewees noted that having multiple technical assistance programs tailored to the array of social services in the SSP would be useful.

Future programs that address multiple SDoH domains will need to consider how to provide timely technical assistance with specialized expertise to troubleshoot issues unique to each service domain (e.g., food, transportation, housing) as well as cross-cutting challenges.

Recommendations
• States, payers, or provider organizations should have technical assistance programs for each major human service domain given differences in service delivery. • Technical assistance should take multiple forms. For example, the technical assistance program for Oregon's Coordinated Care Organization model (Medicaid accountable care model that requires shared savings investment on interventions addressing health-related social needs and equity[35]) includes guidance documents, convenings, learning collaboratives, office hours, and individualized feedback.[36] • Real-time or near-real-time technical assistance to troubleshoot emerging issues that may be time-sensitive should be available. • Technical assistance programs should be accessible to both managers and frontline providers—matching the languages and reading levels of those requesting assistance.

CONCLUSION

North Carolina's COVID-19 Support Service Program is perhaps the most expansive health policy program to address social needs to emerge during the COVID-19 pandemic in terms of requirements to directly address many social needs domains. We identified lessons from this program, which not only informs North Carolina's Healthy Opportunities Pilots program that is about to begin to address many social needs through Medicaid managed care, but also other states and payers with health policy programs targeting SDoH and unmet social needs (See Table 1). These lessons may be particularly useful to states as they consider how to how to invest their ARPA funding for building infrastructure to address SDoH and social needs.

Table 1. Recommendations for States' and Payers' Health Policy Programs to Address Social Needs

Theme	Recommendation
Supporting HSO Capacity	• Provide upfront funding for capacity-building before service delivery begins, recognizing that infrastructure building will require more support than likely anticipated. • Reserve some capacity-building funds to use for demand surges.
Bolstering Program Adapt-ability	• Design service definitions and payments to balance specificity with flexibility and build in pathways to adjust them as needed. • Create accessible, direct lines of communication with all participating providers.
Leveraging CHWs	• Beyond work on patient engagement, maximize the role of CHWs by integrating them into care delivery model for patient engagement and outreach. • Develop CHW credentialing programs that include several levels of roles.
Partnering with Community Leaders	• Partner with trusted community leaders to improve equitable engagement. • Hold community "meet and greet" events with community leaders to build broad trust in the community. • Incentivize contracting with local HSOs run by and serving large proportions of historically marginalized populations.
Optimizing Technology	• Support capacity to address urgent issues in near-real time. • Provide substantial training on technology (and opportunities for user feedback). • Ensure that technology streamlines aspects of critical program functions (e.g., two-way referrals, billing, and reporting). • Make technology available in languages spoken by local communities.
Providing Technical Assistance	• Provide multiple forms of technical assistance for each human service domain (e.g., guidance documents, learning collaboratives, help lines, office hours, etc.). • Offer real-time technical assistance for time-sensitive, emerging issues. • Ensure technical assistance is accessible to managers and frontline providers.

Appendix Table: Comparison of NC's Support Services Program and Healthy Opportunities Pilots

	NC COVID-19 Support Services Program	NC Healthy Opportunities Pilots
Time	August 2020 launch, services September 2020 to April 2021. Available funds exhausted in May 2021 but food box delivery was re-launched in October 2021 in partnership with Food Bank of Central & Eastern North Carolina	July 2021 launch for capacity-building with service provision beginning Spring 2022 and lasting through October 2024
Population	Anyone with COVID-19 social isolation, targeted historically marginalized populations with disproportionate COVID-19 burden	Medicaid enrollees with unmet social needs
Geography	29 of 100 counties, ~42,000 households	Estimated coverage of up to 50,000 Medicaid enrollees in 3 regions of the state
Financing	CARES Act ($22.7M) plus state ($15.5M)	CMS and state ($650M; $550M for service provision, $100M for capacity building)

Social support services provided	• **Financial relief.** Direct payments for help with basic living expenses (such as rent, mortgage, bills, medical care, child care).
	
	• **Transportation.** Non-emergency (to and from doctor appointments or non-congregate shelter)
	
	• **Food.** Home delivered meals, groceries
	
	• **Other**
	
	    • **Medications.** Home-delivered.
	
	    • **COVID-19 supplies,** like face masks, hand sanitizer
		Housing. Navigation, inspections, home remediation, home goods, move-in support, utility set-up, accessibility & safety modifications, post-hospitalization housing, and some direct payments for security deposit or 1st month's rent
		
		Transportation. Reimburse non-emergency public or private medical transport or to social needs services case management
		
		Food. Food access case management, group nutrition class, diabetes prevention class, medically-tailored meal delivery, fruit/vegetable prescription, healthy food boxes and meals
		
		Interpersonal violence and toxic stress. Case management, violence services, dyadic therapy, parenting curriculum, home visiting services
		
		Other.
		
		• **Enhanced case management**
		
		• **Medical respite**
		
		• Link to **legal support**

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NOTES

1. Gray DM, Anyane-Yeboa A, Balzora S, Issaka RB, May FP. COVID-19 and the other pandemic: populations made vulnerable by systemic inequity. *Nat Rev Gastroenterol Hepatol.* 2020;17(9):520-522. doi:10.1038/s41575-020-0330-8

2. Kreuter MW, Garg R, Javed I, Golla B, Wolff J, Charles C. 3.5 Million Social Needs Requests During COVID-19: What Can We Learn From 2-1-1? Health Affairs Blog. Published August 4, 2020. https://www.healthaffairs.org/do/10.1377/hblog20200729.432088/full/

3. Castrucci BC, Auerbach J. Meeting Individual Social Needs Falls Short Of Addressing Social Determinants Of Health. Health Affairs Blog. Published January 16, 2019. Accessed October 2, 2020. https://www.healthaffairs.org/do/10.1377/hblog20190115.234942/full/

4. *Driving Health System Transformation - A Strategy for the CMS Innovation Center's Second Decade.* Centers for Medicare & Medicaid Services; 2021. https://innovation.cms.gov/strategic-direction-whitepaper

5. Support Services Program. NCDHHS COVID-19 Response. Accessed October 13, 2021. https://covid19.ncdhhs.gov/SSP

6. Healthy Opportunities Pilots. NCDHHS. Accessed October 13, 2021. https://www.ncdhhs.gov/about/department-initiatives/healthy-opportunities/healthy-opportunities-pilots

7. Walker KO, Koller CF. Using American Rescue Plan Act Funding to Help Create a More Equitable, Healthier Future. Milbank Memorial Fund. https://www.milbank.org/2021/08/using-american-rescue-plan-act-funding-to-help-create-a-more-equitable-healthier-future/

8. Resendes J, Ramirez Perez M, Van Vleet A, et al. *The North Carolina Community Health Worker and Support Services Programs: Promoting Safe Quarantine and Isolation for COVID-19 in Marginalized Populations.* Partners in Health; 2021. Accessed October 13, 2021. https://www.pih.org/sites/default/files/lc/LT-CRC_case_study_NC_march_2021_Final.pdf

9. North Carolina Department of Health and Human Services. *Request for Applications: COVID-19 Support Services Program.* North Carolina Department of Health and Human Services; 2020. Accessed May 22, 2021. https://files.nc.gov/ncdhhs/COVID%20Support%20Services%2007312020%20FINAL.pdf

10. *Community Health Worker Deployment to At-Risk Areas.* North Carolina Department of Health and Human Services; 2021. https://files.nc.gov/ncdhhs/CHW_OnePager_2021_1_11.pdf

11. NCCARE360. About NCCARE360. Published 2020. Accessed October 13, 2021. https://nccare360.org/about/

12. *COVID-19 Support Services Program Overview.* NC Department of Health and Human Services Office of Rural Health; 2021. Accessed December 21, 2021. https://covid19.ncdhhs.gov/media/3392/download?attachment

13. Kumar SL, Calvo-Friedman A, Clapp J, Brookover C, Davis NJ. Direct Cash Transfers for Patients with Covid-19 Served by New York City's Safety-Net Health System. *NEJM Catal Innov Care Deliv.* Published June 21, 2021. doi:10.1056/CAT.21.0149

14. GetFoodNYC COVID-19 Emergency Food Distribution. City of New York. Accessed October 13, 2021. https://www1.nyc.gov/assets/dsny/contact/services/COVID-19FoodAssistance.shtml

15. Oregon Worker Relief Fund. Accessed October 13, 2021. https://workerrelief.org/

16. Quarantine Fund. Oregon Worker Relief Fund. Accessed October 13, 2021. https://workerrelief.org/quarantine-fund/

17. Kinsley KH. Financing that Rewards Better Health and Well-Being. Presented at: Financing that Rewards Better Health, Equity, & Well-Being: State Innovations Leading the Way; November 16, 2021. https://nam.edu/event/financing-that-rewards-better-heath-equity-well-being-state-innovations-leading-the-way/

18. Hsu C, Cruz S, Placzek H, et al. Patient Perspectives on Addressing Social Needs in Primary Care Using a Screening and Resource Referral Intervention. *J Gen Intern Med.* 2020;35(2):481-489. doi:10.1007/s11606-019-05397-6

19. Nguyen KH, Trivedi AN, Cole MB. Receipt of Social Needs Assistance and Health Center Patient Experience of Care. *Am J Prev Med.* 2021;60(3):e139-e147. doi:10.1016/j.amepre.2020.08.030

20. Freda B, Kozick D, Spencer A. *Partnerships for Health: Lessons for Bridging Community-Based Organizations and Health Care Organizations.* Blue Cross Blue Shield of Massachusetts Foundation; 2018. https://www.chcs.org/media/CBO-HCO_Partnership_update_032018.pdf

21. Tsega M, Giantris K, Shah T. Essential Social Services Are Struggling to Survive the COVID-19 Crisis. The Commonwealth Fund. Published June 1, 2020. https://www.commonwealthfund.org/blog/2020/essential-social-services-are-struggling-survive-covid-19-crisis

22. Crook HL, Zheng J, Bleser WK, Whitaker RG, Masand J, Saunders RS. *How Are Payment Reforms Addressing Social Determinants of Health? Policy Implications and Next Steps.* Milbank Memorial Fund; 2021. https://www.milbank.org/wp-content/uploads/2021/02/Duke-SDOH-and-VBP-Issue-Brief_v3-1.pdf

23. Tsega M, Lewis C, McCarthy D, Shah T, Coutts K. *Review of Evidence on the Health Care Impacts of Interventions to Address the Social Determinants of Health.* The Commonwealth Fund; 2019:1-27. https://www.commonwealthfund.org/sites/default/files/2019-07/COMBINED_ROI_EVIDENCE_REVIEW_7.15.19.pdf

24. *First Revised and Restated Attachment M: Healthy Opportunities Pilot Service Fee Schedule.* North Carolina Department of Health and Human Services; 2019. Accessed October 13, 2021. https://www.manatt.com/Manatt/media/Documents/Articles/NC-Pilot-Service-Fee-Schedule_Final-for-Webpage.pdf

25. *Fact Sheet: NC Medicaid Managed Care Prepaid Health Plan Contract Awards.* North Carolina Department of Health and Human Services; 2019. https://www.ncdhhs.gov/media/2958/download

26. Wells KJ, Dwyer AJ, Calhoun E, Valverde PA. Community health workers and non-clinical patient navigators: A critical COVID-19 pandemic workforce. *Prev Med.* 2021;146:106464. doi:10.1016/j.ypmed.2021.106464

27. Menendez T, Barragan NC, Kuo T, Morrison JL. Using Health Navigators to Connect At-Risk Clients to Community Resources. *J Public Health Manag Pract JPHMP.* Published online June 30, 2021. doi:10.1097/PHH.0000000000001396

28. Fiori KP, Rehm CD, Sanderson D, et al. Integrating Social Needs Screening and Community Health Workers in Primary Care: The Community Linkage to Care Program. *Clin Pediatr (Phila).* 2020;59(6):547-556. doi:10.1177/0009922820908589

29. News | NCDHHS. Accessed September 23, 2021. https://www.ncdhhs.gov/divisions/office-rural-health/community-health-workers/news

30. Pastor M, Terriquez V, Lin M. How Community Organizing Promotes Health Equity, And How Health Equity Affects Organizing. *Health Aff (Millwood).* 2018;37(3). doi:https://doi.org/10.1377/hlthaff.2017.1285

31. NC Counts Coalition. Accessed October 13, 2021. https://www.nccensus.org/

32. North Carolina Resources. Black Voters Matter. Accessed October 13, 2021. https://blackvotersmatterfund.org/bvmnorthcarolina/

33. NCCARE360. North Carolina Creates Nation's First Statewide Infrastructure Connecting Healthcare and Human Services. Published online June 22, 2020. https://nccare360.org/nccare360-statewide-announcement/

34. Find Your Network. Unite Us. Accessed October 13, 2021. https://uniteus.com/networks/

35. CCO 2.0: The Future of Coordinated Care. Oregon Health Authority. Accessed October 13, 2021. https://www.oregon.gov/oha/OHPB/Pages/cco-2-0.aspx

36. Transformation and Quality Strategy Technical Assistance. Oregon Health Authority. Accessed October 13, 2021. https://www.oregon.gov/oha/HPA/dsi-tc/Pages/Transformation-Quality-Strategy-Tech-Assist.aspx

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About the Duke-Margolis Center for Health Policy

The Robert J. Margolis, MD, Center for Health Policy at Duke University is both an academic research center and a policy laboratory. Its mission is to improve health, health equity, and the value of health care through practical, innovative, and evidence-based policy solutions. To learn more, please visit healthpolicy.duke.edu.

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