



Bridges to Resolution

The State of the Evidence on HHS Referral Network Design and Outcomes

Network for Nonprofit and Social Impact
Northwestern University

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About Northwestern University

Northwestern University is a premier research institution based in Evanston and Chicago, Illinois, renowned for its academic excellence and ground-breaking research. Across 12 prestigious schools, the university fosters an interdisciplinary environment dedicated to driving innovation and developing global leaders. By tackling complex societal challenges, Northwestern's researchers and institutes produce high-impact insights that shape policy and advance community well-being.

About NNSI

The Network for Nonprofit and Social Impact (NNSI) at Northwestern University is dedicated to answering the question: How can nonprofit networks be rewired for maximum social impact? Since its establishment in 2012, NNSI has collaborated with organizations to produce rigorously studied results, actionable metrics, and practical applications for the social impact sector. To learn more about NNSI, visit <https://nnsi.northwestern.edu>.

About This Report

The fragmented nature of the American Health and Human Services (HHS) system forces vulnerable individuals to navigate a complex system to access essential support. *Bridges to Resolution* serves as a critical roadmap for federal, state, and municipal leaders by evaluating how specific design features of HHS referral networks influence outcomes. The report aims to move beyond viewing these networks as mere technological tools, instead framing them as active inter-organizational management strategies that require deliberate architectural choices to successfully connect clients to the services they need.

Research highlights that network success is not automatic but contingent on specific design elements that prioritize human infrastructure over passive technology. Key findings include:

- **Design matters:** Networks with centralized coordination or human navigation models significantly outperform peer-to-peer, technology-only approaches, achieving service receipt rates as high as 88% compared to just 21%.
- **Human infrastructure is essential:** Success relies on “human connectors” — backbone staff and navigators — rather than just software; investments in these roles are crucial for verifying referral completion and preventing burnout.
- **System capacity:** A network’s scope must align with actual community service availability; otherwise, referrals become “bridges to nowhere” that erode trust and fail to address social needs.
- **Positive health impacts:** When high-touch navigation models and robust compensation for community-based organizations (CBOs) are integrated, these networks can successfully reduce healthcare utilization, emergency department (ED) visits, and overall system costs.

About NNSI at Northwestern University

NNSI is a research lab at Northwestern University dedicated to understanding how networks can have a greater social impact. We thrive on projects that produce rigorously studied results and practical applications for the social impact sector. Our work has been funded by the National Science Foundation, the Bill & Melinda Gates Foundation, and the Army Research Office. Our research is featured in academic journals and in venues such as *Stanford Social Innovation Review* and *Nonprofit Quarterly*. The lab has developed metrics to evaluate client outcomes over time based on clients’ requests. In addition, it has worked with dozens of HHS referral networks to assess their impact.

Funding

This research was funded by The Heinz Endowments. The Heinz Endowments works to grow an exemplary, sustainable Pittsburgh region where everyone prospers and belongs. Our work in Arts & Culture, Civic Participation, Climate, Environment & Health, Community & Economic Development, Food systems, Veterans, and Workforce is supported by reliable data based on results-focused goals. The Heinz Endowments was formed in 2007 when two philanthropic organizations — Howard Heinz Endowment and the Vira I. Heinz Endowment — merged their individual charitable organizations into one. The Heinz Endowments is among the 60 largest philanthropic organizations in the United States, distributing approximately \$90 million in grants annually.

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Executive Summary

Defining HHS referral networks

Health and Human Services (HHS) referral networks are collaborative arrangements between autonomous health and human service organizations to use agreed-upon processes to identify client needs and facilitate client connections to services. Unlike a simple resource list or directory, these networks involve formal inter-organizational relationships and shared infrastructure designed to manage the entire lifecycle of a referral. These networks could fundamentally shift the United States towards integrated community care by ensuring those seeking services are not forced to piece together help from a fractured system of support.

Scope of review

This state-of-the-evidence report provides a roadmap for federal, state, and municipal leaders to evaluate which design features of HHS referral networks produce the best outcomes for vulnerable populations. The findings and recommendations are based on a comprehensive review of the available evidence in both academic research and evaluation reports.

Included in this report:

- **Evidence base:** Academic and evaluation literature on service receipt rates, fiscal impacts, and clinical outcomes
- **Pillar I — Network design elements:** High-level architectural choices including network scope, partner selection strategies, and governance models
- **Pillar II — Intervention design elements:** Operational features such as outreach methods, referral workflows, staffing roles, technology platforms, and financial compensation structures

Excluded from this report:

Implementation and evaluation: Strategies for day-to-day management, overcoming operational roadblocks, and detailed methodologies for performance monitoring are included in the companion report: *Implementing and Evaluating HHS Referral Networks*.

Does it work? The state of the evidence

Evidence indicates that referral networks significantly outperform passive “information-only” models when specific design elements are present. Referral networks are not a “set-and-forget” technology; they are an active management strategy whose success is contingent on human infrastructure.

Referral effectiveness: service receipt rates

The primary metric for network success is “service receipt rate,” or the percentage of referrals that lead to a client actually receiving the services they need.

Passive vs. active models

Passive models, in which individuals seeking help are given referral information, result in significantly fewer services received than active models, in which organizations manage referrals on behalf of clients. Passive directories assist roughly **25%** of clients. In contrast, high-functioning networks with centralized coordination and human navigation achieve service receipt rates as high as **88%**.

Impact of funding

Success is fragile and tied directly to resource availability.

Example: In North Carolina’s **NCCARE360** pilot, service receipt rates reached **88%** when community-based organizations (CBOs) were paid to provide services, but plummeted to **30%** once pilot funding ended.

Health and fiscal impacts

Under certain conditions, successful referral networks can act as clinical interventions that change health trajectories and reduce system-wide costs.

Cost reduction

Referral networks that improved health benefits, reduced healthcare utilization, or reduced cost per beneficiary had design elements like high-touch care coordinators, direct compensation for agencies providing services, and designated agencies to process referrals.

Example: Evidence from the **Accountable Health Communities (AHC)** pilot showed significant reductions in total expenditures for Medicare and Medicaid clients who received navigation support. The savings ranged between 3-7% compared to those who didn’t receive navigation support, equivalent to between \$375 to \$1,100 per member per year.

Improved health outcomes

Referral networks that provide social care coordination through centralized hubs have been shown to improve health outcomes.

Example: A 2025 study of the **Pathways model** in Ohio found that high-risk women receiving care coordination through a centralized hub had **43% lower adjusted odds** of having a baby with low birth weight.

The logic model: A pathway to outcomes

The success of an HHS network follows a logical sequence from inputs to long-term social stability.

Network activities

These include screening, outreach, navigation, status tracking, and enrollment support.

System context

Outcomes are heavily influenced by factors outside the network's direct control, such as **service availability, provider capacity, and service quality.**

Example: Without available housing services, housing referrals effectively build a “bridge to nowhere,” regardless of the referral network design.

Pillar I: Network design

Design is the primary driver of outcomes. Leaders must address these architectural elements in the initial founding phase. These include network scope, partner selection and engagement, and network governance.

Network scope

Scope determines whether a network is general (addressing dozens of needs) or specialized (focusing on one).

Example: **Area Agencies on Aging** typically focus on dozens of needs for the aging population, whereas **U.S. Department of Housing and Urban Development (HUD) Continuum of Care** networks focus primarily on housing.

Strategy

Leaders should align scope with local service availability in mind or build capacity in areas that are lacking to protect system credibility.

Partner selection and engagement

Securing the right partners is critical; organizational participation in referral networks and the services they provide determine client outcomes.

Strategy

Using a hybrid model of recruitment combines curated partner selection and allows organizations to volunteer their participation, balancing the need for specific partners with maintaining broad community buy-in.

Equity

The selection process must account for the administrative burdens of smaller providers that serve specific sub-populations to ensure they are not unintentionally excluded.

Governance models

Governance refers to determining the rules of the network and conflict management. Centralized models, in which one organization takes leadership over the network, are generally more effective than shared governance models. There are two common forms of centralized governance.

Network Administrative Organization (NAO)

An independent entity is created to manage the network.

Example: The **Community Partnership of Southern Arizona** functions as a Regional Behavioral Health Authority to oversee network management.

Lead organization

A member agency coordinates the network while providing services.

Example: In North Carolina, the **Asheville Buncombe Community Christian Ministry** is both a provider and operates as the lead organization convening the NCServes network.

Pillar II: Intervention design elements

Operational choices determine whether the responsibility for connecting a person with services lies with the client, the staff, or the technology. The intervention analysis includes workflow and technology design.

Workflow

Workflows determine the “last mile” of the referral. Leaders must decide where to place the administrative load (see [TABLE 1](#)).

TABLE 1 Workflow and Its Impact on Client Burden

Workflow Model	Description	Client Burden	Example
Centralized coordination (hub)	A central “clearinghouse” manages intake, triage, and assignment of a client to a provider.	Lowest: clients tell their story once; the hub manages the handoff	AmericaServes
Human navigator (high-touch)	Dedicated staff (social workers, CHWs) guide clients through every step.	Low: relationship-centered; staff remove logistical barriers	Pathways HUB
Peer-to-peer (closed-loop)	There are direct electronic handoffs between referring and receiving providers.	Moderate: client must navigate the “last mile” to the provider	Connect Oregon

Technology and integration

Technology should support communication among organizations.

Critical features

Effective systems require a robust resource directory, accurate referral tracking (closed-loop), and facilitates systems integration.

- A **resource directory** is a searchable list of benefits, programs, and services available in a community.
- **Referral tracking** refers to systems that capture the status of referrals, including when an organization begins to work on the request and whether services are rendered.
- **Systems integration** refers to connecting existing Electronic Health Records and case management systems to technology for managing referrals between organizations.

Recommendations

The following recommendations provide a strategic framework for leaders to ensure referral networks move beyond technology pilots to become stable, high-impact systems of care.

1. Prioritize network design over intervention design

Foundational network design — including aims, scope, and governance — must be established before selecting technology platforms or intervention workflows. Rushing into technology selection too early often undercuts the essential inter-organizational foundations required for social impact, as these foundational decisions shape the system's ultimate capabilities. For example, a network must determine its governance model, such as an NAO, because centralized governance is typically more effective than shared membership governance. Without these clear rules and human oversight, a **peer-to-peer** technology model may see referrals stall if providers do not actively log in to update statuses, shifting the burden back to the vulnerable client.

2. Invest in human infrastructure and backbone management

Effective networks function as active **inter-organizational management strategies** rather than simple technology solutions, requiring a heavy investment in both “backbone staff” for logistics and human navigators for client support. By shifting the referral burden from the client to the provider, these networks are more successful; for instance, high-functioning networks with human navigation (e.g., AmericaServes, NCCARE360 with enhanced funding) reach service receipt rates of **74–88%**. In contrast, peer-to-peer networks without human navigators, like Connect Oregon, had service receipt rates of **21%**.

3. Pay attention to community capacity to address social needs

To maintain trust with both clients and providers, a network's scope must be aligned with **service availability**. This “reality check” ensures the network focuses on pressing needs that the community can realistically meet and protects the integrity of the referral process. One

of the key insights from the AHC study was that many communities lacked the services needed to meet patients' social needs. Aligning supply and demand is particularly critical in lower-capacity or rural contexts to ensure every referral is actionable.

The human infrastructure requirement

Evidence from **Duke Health** shows that even with a sophisticated technology platform, a “human connector” is still essential to facilitate follow-up and verify referral completion for NCCARE360. Leaders must fund **people**, not just software.

Conclusion

HHS referral networks represent an integral element in U.S. health and social service policy, supported by **Section 1115 waivers** and major state pilots like California's **Whole Person Care** and North Carolina's **Healthy Opportunities Pilots**. For these systems to succeed, they must be treated as **inter-organizational management strategies** rather than purely technological or financial solutions. By focusing on deliberate design and human infrastructure, leaders can finally build the “Bridges to Resolution” that vulnerable citizens require.

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Introduction

The fragmented nature of the American health and human services (HHS) system fails to serve citizens effectively, forcing individuals to act as “system integrators” within a fractured state. When individuals are unable to access the help they need, such as food, income support, healthcare, and housing, they face long-term outcomes including poorer healthcare outcomes, family stress, violence, and poorer mental health.¹ In response to this gap, healthcare and social service sectors are increasingly finding ways to integrate health and social care. HHS referral networks represent one model that fundamentally shifts the United States (U.S.) system toward integrated community care.

Referral networks have been a staple of U.S. policy for decades, seen in models like the **HUD Continuum of Care** and **Area Agencies on Aging**. Today, the health and human services field is at a critical juncture. Many states have also made investments in referral networks and pilot initiatives, supported by Center for Medicare and Medicaid Section **1115 waivers**. Other policy levers and pilot initiatives, such as North Carolina’s Healthy Opportunities Pilots and California’s Whole Person Care Pilots, have reached an early evaluation stage. The time is ripe to evaluate the evidence due to the rapid proliferation of closed-loop **referral technologies**, a narrowing window for federal and state policy decisions regarding sustainable spending, and looming decision

for states, municipalities, and philanthropic organizations that have invested heavily in these systems about whether to continue to fund them.

The goal of this state-of-the-evidence review is to present current knowledge on HHS referral networks in the U.S. This review includes the best academic and evaluation literature available to date on the success of these referral networks.

This report takes a comprehensive review approach, drawing on research from medicine, public administration, and social work to learn about best-in-practice intervention components and network designs. As such, this report does not just focus on studies of HHS referral networks, but draws more broadly on what we know about effective inter-organizational network design and effective referrals. For example, when we describe the various design choices for HHS referral networks, we draw on over 40 years of research on human service delivery network effectiveness.

¹ Katherine E. Marçal, “Domains of Housing Insecurity: Associations with Child Maltreatment Risk,” *Child Abuse & Neglect* 131 (September 2022): 105696, <https://doi.org/10.1016/j.chiabu.2022.105696>; Laura E. Gultekin, et al., “Health Risks and Outcomes of Homelessness in School-Age Children and Youth: A Scoping Review of the Literature,” *The Journal of School Nursing* 36, no. 1 (2020): 10–18; Aarti C. Bhat et al., “A Longitudinal Analysis of the Relationship between Housing Insecurity and Physical Health among Midlife and Aging Adults in the United States,” *SSM - Population Health* 18 (June 2022): 101128, <https://doi.org/10.1016/j.ssmph.2022.101128>; Craig Gundersen and James P. Ziliak, “Food Insecurity and Health Outcomes,” *Health Affairs* 34, no. 11 (2015): 1830–39, <https://doi.org/https://doi.org/10.1377/hlthaff.2015.0645>; Ali Pourmotabbed et al., “Food Insecurity and Mental Health: A Systematic Review and Meta-Analysis,” *Public Health Nutrition* 23, no. 10 (2020): 1778–90, <https://doi.org/10.1017/S136898001900435X>; K. Robin Yabroff et al., “Association of Cancer History and Medical Financial Hardship with Mortality in the United States,” *Journal of Clinical Oncology* 38, no. 29_suppl (2020): 86–86, https://doi.org/10.1200/JCO.2020.38.29_suppl.86; Tony G. Reames et al., “Exploring the Nexus of Energy Burden, Social Capital, and Environmental Quality in Shaping Health in US Counties,” *International Journal of Environmental Research and Public Health* 18, no. 2 (2021): 2, <https://doi.org/10.3390/ijerph18020620>; Samantha J. Boch et al., “‘Home Is Where the Health Is’: Housing Quality and Adult Health Outcomes in the Survey of Income and Program Participation,” *Preventive Medicine* 132 (March 2020): 105990, <https://doi.org/10.1016/j.ypmed.2020.105990>; Christine Liddell and Chris Morris, “Fuel Poverty and Human Health: A Review of Recent Evidence,” *Energy Policy*, The Role of Trust in Managing Uncertainties in the Transition to a Sustainable Energy Economy, Special Section with Regular Papers, vol. 38, no. 6 (2010): 2987–97, <https://doi.org/10.1016/j.enpol.2010.01.037>; Jeremiah Bohr and Anna C. McCreery, “Do Energy Burdens Contribute to Economic Poverty in the United States? A Panel Analysis,” *Social Forces* 99, no. 1 (2020): 155–77, <https://doi.org/10.1093/sf/soz131>.

Defining HHS referral networks

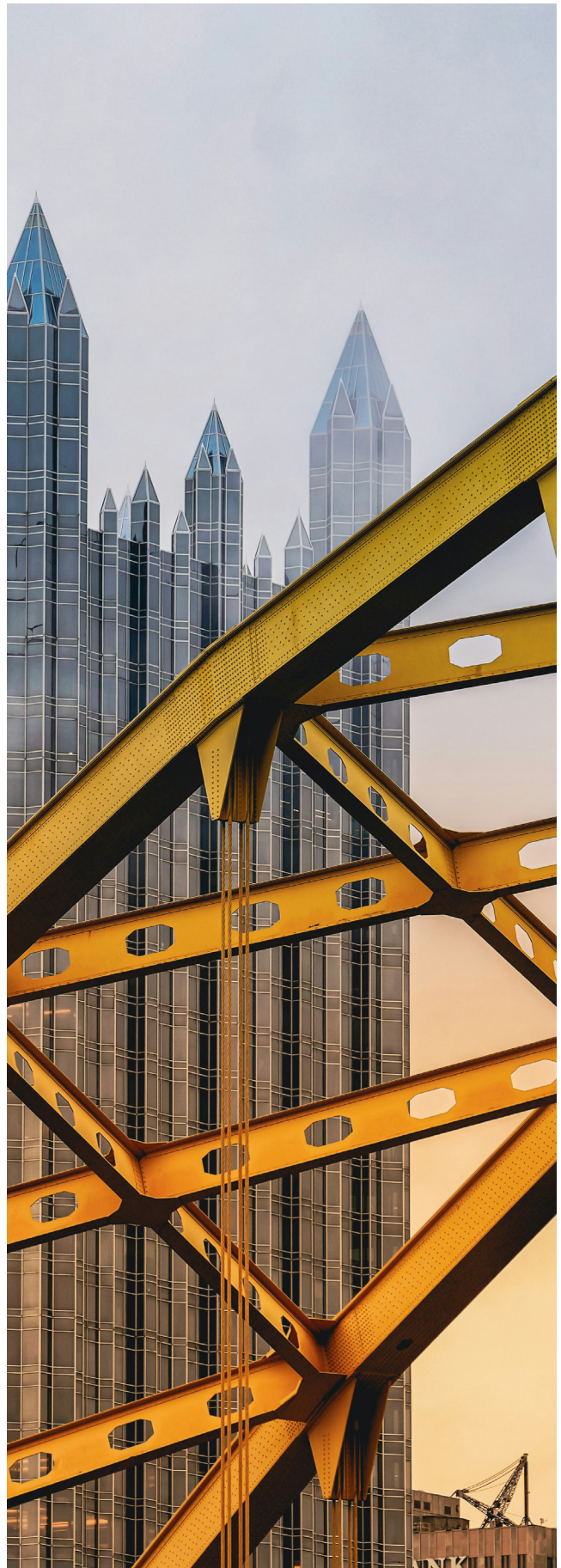
An HHS referral network is a collaborative arrangement of autonomous health and human service organizations that use agreed-upon processes to identify client needs and facilitate connections to services. Unlike a simple resource list, these networks involve formal inter-organizational relationships and shared infrastructure designed to manage the lifecycle of a referral.

The critical role of design

A central thesis of this report is that “referral networks” are not a monolithic intervention; rather, they are a diverse set of inter-organizational management strategies. Conclusions about whether these networks’ “work” are inseparable from their specific design choices. Referral networks are not stand-alone interventions. They enable social and health outcomes by connecting people to existing programs, services, and benefits.

Design is the primary driver of outcomes. For instance, a network designed with a **centralized coordination** model — where a hub manages the handoff — often sees the highest service receipt rates, because it lowers the burden on the client and has greater organizational accountability. Conversely, a **peer-to-peer** model that relies solely on technology with no human oversight may see referrals stall if providers do not actively log in to update statuses. Without distinguishing between these designs, policymakers may incorrectly dismiss the entire strategy based on the failure of a specific, poorly supported implementation.

This report aims to move the question from “Do referral networks work?” to “**Which design features** produce **which outcomes** for **which populations**, and under **what funding conditions**?” By reviewing the evidence on referral effectiveness, efficiency, and health impacts, we provide a roadmap for leaders to design networks that are not just technologically advanced but functionally effective and socially equitable as well.



Part I: Design features of HHS networks

This report begins by introducing a logic model of HHS referral networks. There has been robust discussion in both academic and policy circles about what referral networks are supposed to do and how they lead to outcomes, including lower healthcare costs and improved client well-being.² This report introduces a logic model that describes how HHS referral networks should work. The discussion of how they work, especially in the face of implementation challenges, is the subject of the companion report (*Implementing and Evaluating HHS Referral Networks*). The logic model in **FIGURE 1** illuminates how core functions of referral networks (Activities) translate into better inter-organizational processes (Outputs), which then contribute to immediate and long-term outcomes by helping those with unmet needs connect to services that address their social needs and achieve better health, while potentially reducing costs of care for member organizations (Outcomes).

In the logic model, the Client row illustrates a general sequence through which addressing social needs is believed to improve well-being. Broadly, an individual's needs are identified and referrals are made to local social service providers that may be able to help address the needs. Individuals must then connect with the provider organization, which completes an intake process to determine eligibility. Eligible clients may then receive services that help resolve their needs, even if only in the short term. Resolution of unmet social needs may then reduce stress and increase cognitive bandwidth, and possibly lead to improvements in other indicators. These improvements may enhance well-being and reduce the need for and use of services in the future.

However, client outcomes are affected by several key factors, including service availability, provider capacity, and service quality. Service availability is a noted issue in many evaluations; simply put, without the services available to meet needs (e.g., housing), HHS networks build a “bridge to nowhere.” Provider capacity also influences organizations participation in networks. For instance, overburdened frontline staff struggle to send or receive referrals. Finally, service quality is a key moderator for outcomes. If a client receives poor-quality services, they are unlikely to reap benefits from their referrals.

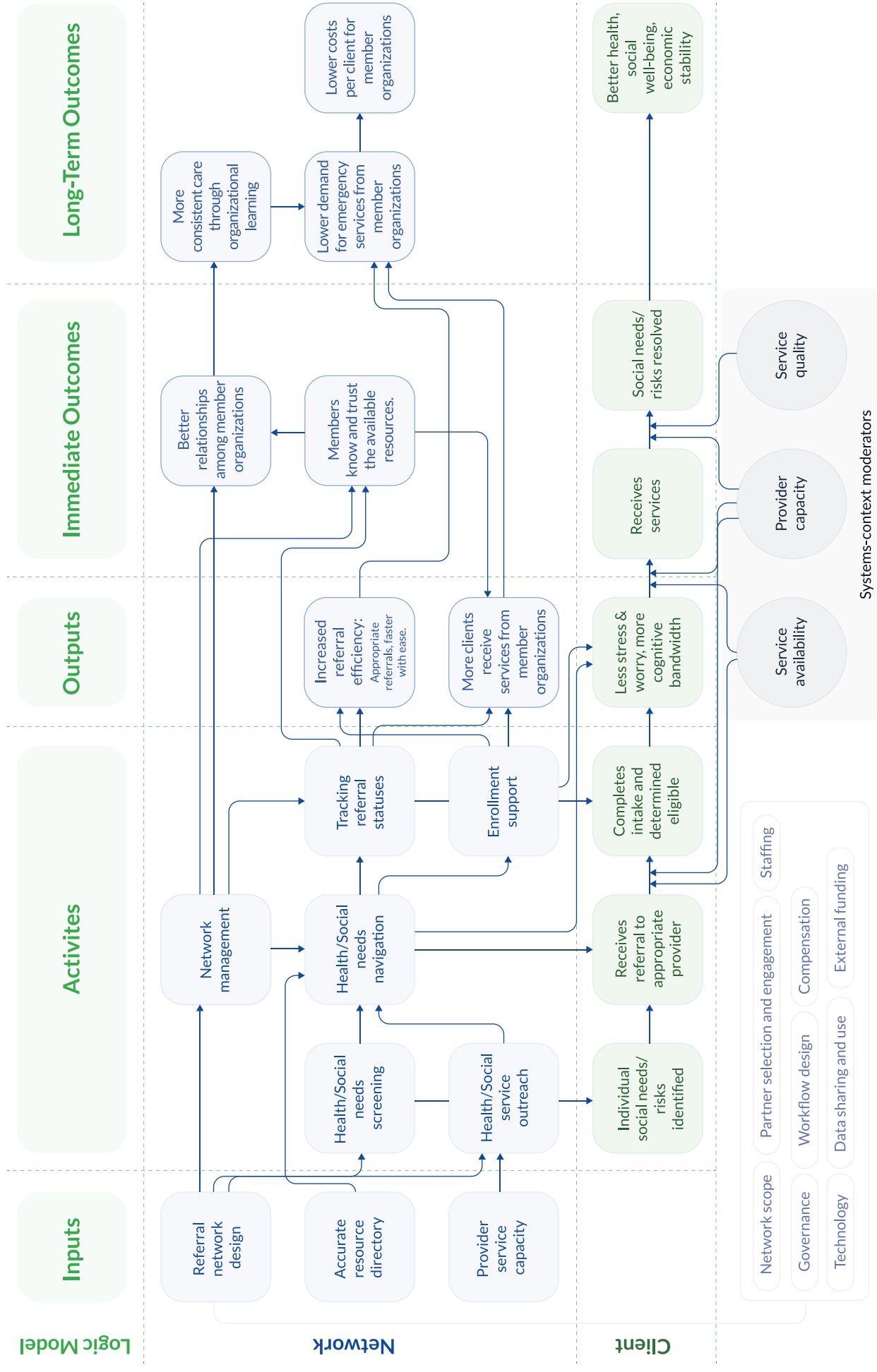
The Network row illustrates the unique activities that inter-organizational referral networks carry out and how they can translate into immediate and long-term organizational outcomes. Core inputs shape network activities.

- **Funding** may predate network formation, catalyzing networks and providing guidance on scope, design, and expected outcomes. Such funding influences referral network design and provider capacity.
- **Referral network design**, as described in the Design Features section, includes network scope, partner selection and engagement, governance model, workflow design, staffing, technology, data sharing and use, and compensation (described in greater detail later in this chapter).
- An **accurate and current resource directory** and provider capacity are also important resources. Each of these inputs influences how the referral network carries out its activities.

² RTI International, *Accountable Health Communities (AHC) Model Evaluation Final Report* (Centers for Medicare & Medicaid Services, 2026), <https://www.cms.gov/priorities/innovation/data-and-reports/2026/ahc-final-report>; Laura M. Gottlieb et al., “Revising the Logic Model Behind Health Care’s Social Care Investments,” *The Milbank Quarterly* 102, no. 2 (2024): 325–35, <https://doi.org/10.1111/1468-0009.12690>.

A Logic Model for Health and Human Service Referral Networks

This logic model depicts how health and human service networks may influence long-term outcomes. However, not all health and human service networks perform the activities listed. We expect those that do will produce better outcomes.



Core activities conducted by the network, the details of which are shaped by network design features, help clients by facilitating screening, referral, and eligibility determination for services. Core activities include:

- **Health/social needs screening and outreach:** organizations identify individuals who have social needs through clients self-identifying, social needs screening, or proactive outreach strategies.
- **Health/social needs navigation:** navigators help clients by facilitating the connection of clients to benefits, programs, and services that meet their needs
- **Tracking referral status:** coordinators monitor the status of referrals for services, including when and whether organizations provide clients with services or resources to meet their needs
- **Enrollment support:** specialists assist clients in completing forms and providing necessary documentation needed to receive benefits and services or to enroll in programs
- **Network management:** backbone organizations work with providers of benefits, programs, and services to improve coordination and align system capacity with client demand.

Network activities may be performed by member organizations, a centralized network-staffed office, or by individual healthcare systems or social service providers outside of a network. As with client activities, each activity in the sequence enhances the efficacy of the remaining activities. For example, networks may skip outreach and/or social needs screening, but in doing so, they are likely to replicate

existing take-up gaps (i.e., the difference between the number of people eligible for a benefit or service and the number of people who actually enroll and use it). Thus, they may not achieve the same outcomes as networks that are able to reach people who are not currently connected to health or human services.

The potential added value of networks includes activities related to network management and referral tracking, which can improve efficiency in identifying client needs and more successfully connecting them with services tailored to their needs. Immediate network outcomes may include improved knowledge of and confidence in available resources across providers and better relationships among member organizations. In the long term, high-functioning networks may contribute to greater consistency in receiving services across service providers (fostered through organizational learning and communication), lower demand for avoidable and emergency services from member organizations, and lower per-client costs as clients access preventive rather than emergency care.

Elements of HHS referral network design

HHS referral network design includes two phases. In the first phase, inter-organizational network design elements should be addressed. These include aims, scope, members, and governance. This report describes these features as the founding network design. In the second phase, greater attention is needed to the intervention's design, or how referrals will work ([TABLE 2](#)).

TABLE 2 Elements of Health and Human Services Referral Network Intervention Designs

External factors	Funding	Some networks form as a result of funding opportunities. These funding opportunities both enable new networks to form and influence their design.
Inter-organizational network design	Network scope	The aims and number of social needs that the HHS referral network will address, and the requirements for clients to receive referrals
	Partner selection and engagement	Which and how many partners will participate in the network, and what their responsibilities will be
	Governance	How decisions about the HHS referral operations will be made and who will oversee the network
Intervention design	Outreach	How clients will enter the network
	Workflow	How clients will make their way through the HHS referral network, including the client's responsibilities for managing the referral
	Staffing	The staff who will be assigned to manage the network and their responsibilities
	Technology	The case management or referral management system that will be used to track workflows
	Data sharing and use	How client and referral data will be shared across the network, and how the network will use it
	Compensation	Whether/how network support and agency participation will be incentivized or rewarded

Network funding

Some HHS form in response to funding opportunities from federal, state, or local governments or philanthropic organizations. These funding opportunities not only provide the needed resources to begin a network, they often also stipulate certain aspects of the network design. For example, the Centers for Medicare and Medicaid funded 28 networks as part of the AHC study. By responding to the funding opportunity, communities had to propose how they would meet the requirements of screening beneficiaries, making referrals to community services, providing navigation services to those clients, and encouraging alignment between clinical and community services. In cases like the AHC study where funding opportunities pre-date the formation of at least some of the 28 networks, the funding can shape how the network is designed.

Inter-organizational network design

Network scope

HHS networks' focus ranges from general, addressing more than a dozen different types of social needs, to specialized, focusing primarily on one social need. For example, the HUD Continuum of Care networks focus on housing. In contrast, Area Agencies on Aging networks focus on dozens of needs of America's aging population. Both types of networks, incentivized by federal policy, offer referral management. However, the scope of referrals managed by the networks is substantially different.

Scope decisions focus on identifying communities that need the most support and understanding how much these communities will benefit from specific activities or interventions relative to others. When a network has a narrow scope, such as only focusing on adults experiencing homelessness, resources are concentrated and allocated to those populations. This may exclude or overlook clients with other needs. In contrast, networks with a broader scope may include

a variety of health and human services, but this wider scope requires monitoring the capacity of providers to meet multiple types of needs. Network leaders should anticipate and navigate potential misalignment between community needs and institutional priorities, policies, and mandates. They should strive to design networks to assist those with the greatest needs.

Partner selection

One of the keys to network success is securing the right partners. These providers deliver the programs and services necessary for referral networks to achieve their aims (e.g., reduce childhood obesity, prevent suicide). The providers and the services they offer ultimately determine the types and quality of interventions available to clients.

Research on interorganizational networks suggests three common recruitment methods:³

- **Grassroots recruitment:** This “bottom-up” approach effectively builds broad buy-in and legitimacy by inviting all interested stakeholders to help shape the network’s mission. While it fosters inclusivity, this model may struggle to recruit specific organizations necessary for technical expansion or to bridge service gaps.
- **Careful selection:** This “top-down” method ensures that partners possess specific capabilities, such as the ability to provide evidence-based clinical protocols or manage large-scale funding. Recruitment criteria typically focus on organizational roles — such as specialized service providers, government funders, or researchers — to ensure the network has the necessary expertise to meet standardized goals.
- **Hybrid model:** This approach attempts to balance the need for careful selection with the local autonomy of individual participants. It provides

the “collaborative advantage” of a broad coalition while utilizing a central entity to vet and coordinate high-impact partners. However, this model requires managing the inherent tensions between top-down control and bottom-up participation.

Well-resourced providers, who are often better able to meet reporting requirements, are often given precedence over less-resourced, culturally specific organizations that might be more trusted by marginalized communities. When networks select partners and onboard members, they should assess the capacity of partners with limited resources to participate, including the expected administrative burdens and compliance requirements that could hinder full participation or exclude members entirely. Leaders should consider how to minimize these burdens to ensure that these smaller, trusted organizations can join.

Governance

Governance is about who sets network rules, defines success, and manages conflicts. There are three common forms of network governance for referral networks: NAO, lead organization, and shared participant governance.

- **NAO** involves a separate, often independent, administrative entity created primarily to manage and make decisions on behalf of the network. For example, in a mental health system in Pima County, AZ, Community Partnership of Southern Arizona functioned as the Regional Behavioral Health Authority.⁴ Similarly, in many child social service networks in Kansas, Maryland, and Michigan, a designated entity oversees the vertical management.⁵ This designated entity is responsible for network management and governance.

3 Keith G. Provan et al., “Network Formation, Governance, and Evolution in Public Health: The North American Quitline Consortium Case,” *Health Care Management Review* 36, no. 4 (2011): 315–26, <https://doi.org/10.1097/HMR.0b013e31820e1124>.

4 Keith G. Provan et al., “Cooperation and Compromise: A Network Response to Conflicting Institutional Pressures in Community Mental Health,” *Nonprofit and Voluntary Sector Quarterly* 33, no. 3 (2004): 489–514, <https://doi.org/10.1177/0899764004265718>.

5 Jaclyn Piatak et al., “Managing Goal Conflict in Public Service Delivery Networks: Does Accountability Move Up and Down, or Side to Side?,” *Public Performance & Management Review* 41, no. 1 (2018): 152–76, 126574748, <https://doi.org/10.1080/15309576.2017.1400993>.

- **Lead organization** describes a model where one of the member agencies coordinates the network while also providing services. For example, in a community mental health network in Providence, RI, a very large provider acted as the lead organization while also providing mental health services.⁶
- In a **shared membership** model, agencies share the governance responsibility and often make decisions via consensus. For example, the Boston Career Link relies on strong connections and takes a participative approach that relies on strong facilitation.⁷ Rather than having centralized decision-making, they embrace the collective decision-making processes of shared membership governance.

Most of the nearly twenty years of research on inter-organizational networks suggests that centralized governance, either NAO or lead organization governance, is more effective than shared membership governance.⁸ Centralized governance models can enhance coordination. However, these organizations are not always accountable to the affected communities. When choosing a centralized governance model, care should be taken to ensure the community has a voice in decisions.

Intervention design elements

While inter-organizational network elements describe the constitution of the referral network, intervention design elements focus on how referrals are made in the system. These design elements have the most immediate impact on the outputs and outcomes for clients. Many of the differences in referral network outputs and outcomes are likely related to these design features and their implementation (see the companion report, *Implementing and Evaluating HHS Referral Networks*).

Outreach

Outreach describes how clients with health and social needs are identified. Approximately 40% of Americans will experience material hardship every year, yet less than half will receive help from any source.⁹ Several factors contribute to this gap, such as learning costs (the effort required to find and understand available services), compliance costs (the time and effort needed to apply for benefits), and psychological costs (stigma, shame, or frustration, which deters individuals from seeking help and navigating complex bureaucracies).¹⁰

⁶ H. Brinton Milward and Keith G. Provan, "Measuring Network Structure," *Public Administration* 76, no. 2 (1998): 387–407, <https://doi.org/10.1111/1467-9299.00106>.

⁷ Joaquín Herranz, "The Multisectoral Trilemma of Network Management," *Journal of Public Administration Research and Theory: J-PART* 18, no. 1 (2008): 1–31.

⁸ Daniela Cristofoli and Laura Macciò, "To Wind a Skein into a Ball: Exploring the Concept and Measures of Public Network Performance," *Public Management Review* 20, no. 6 (2018): 896–922, <https://doi.org/10.1080/14719037.2017.1363904>; Michelle Shumate et al., "Network Effectiveness in Context," *Journal of Public Administration Research and Theory*, March 2, 2023, muad003, <https://doi.org/10.1093/jopart/muad003>; Julia Grace Smith, "Theoretical Advances in Our Understanding of Network Effectiveness," *Perspectives on Public Management and Governance* 3, no. 2 (2020): 167–82, <https://doi.org/10.1093/ppmgov/gvz032>.

⁹ Colin Campbell, "Help after Hardship: Trends and Disparities in Sources of Support Following Experiences with Material Hardship," *Social Service Review* 95, no. 3 (2021): 513–44, <https://doi.org/10.1086/715977>.

¹⁰ Raf van Gestel, Tim Goedemé, Julie Janssens, Eva Lefevere, and Rik Lemkens, "Improving Take-Up by Reaching Out to Potential Beneficiaries: Insights from a Large-Scale Field Experiment in Belgium," *Journal of Social Policy* 52, no. 4 (2023): 740–60, <https://doi.org/10.1017/S004727942100088X>

There are three common ways to identify clients with social needs.

- 1 Clients can actively seek help** by contacting a helpline or a health or human service organization. When clients contact public helplines, like 2-1-1, they are actively seeking help. In addition, in no-wrong-door referral networks (see centralized coordination model and peer-to-peer closed-loop models below), clients can enter the network by seeking help at any of the member agencies.
- 2 Systematic screening for social or health needs**, often but not always in clinical settings, is one of the ways that clients enter the system. Screening allows organizations to identify clients' unexpressed social needs (i.e., the needs they have for which they are not seeking help).¹¹ Common clinical screening tools include the AHC Screening Tool and the Protocol for Responding to & Assessing Patients' Assets, Risks, and Experiences.¹² In addition, social needs helplines, like 2-1-1, can effectively screen for health needs. Research demonstrates that callers find helplines screening for health-related needs like smoking cessation programs and cancer control acceptable.¹³
- 3 Proactive data-driven identification** is a third, and less utilized, method for client outreach. This includes using claims or utilizing data to identify high-risk individuals and predictive analytics or risk-factor assessments to anticipate client needs.¹⁴ For example, the North Carolina

Integrated Care for Kids program uses data from the state's Medicaid agency, Department of Public Instruction, and Department of Public Safety to identify children in or at high-risk of out-of-home placement. Children who are identified are encouraged to engage in care management services.¹⁵

Workflow

Once a client's need is identified, there are four common workflow models.¹⁶ The first three are active models, and the fourth model is more passive. Active referrals involve a higher level of engagement from staff, who may directly facilitate a connection by making a phone call on the patient's behalf, helping to schedule an appointment, or providing a "warm handoff" to the CBO. This direct facilitation is intended to lower barriers for the patient and increase the likelihood of a successful connection. These models are not necessarily mutually exclusive. For example, some networks offer high-touch care management to individuals with acute or complex social needs, and a self-service model to the general public.

- 1 Centralized coordination (hub-and-spoke) model:** In this model, a central entity acts like a clearinghouse. All clients are routed through the hub before going to an agency. A referral typically progresses through four interdependent phases: intake, triage, assignment to an agency,

11 Niko Verdecias et al., "Expressed and Unexpressed Social Needs in Low-Income Adults in the U.S," *Health & Social Care in the Community* 29, no. 5 (2021): e184–91, <https://doi.org/10.1111/hsc.13265>.

12 Rachel A. Petts et al., "Health-Related Social Needs Screening and Referral in Pediatric Primary Care: A Systematic Review," *Journal of Pediatric Health Care* 38, no. 6 (2024): 850–65, <https://doi.org/10.1016/j.pedhc.2024.05.012>.

13 Erika R. Cappelletti et al., "Basic Needs, Stress and the Effects of Tailored Health Communication in Vulnerable Populations," *Health Education Research* 30, no. 4 (2015): 591–98, <https://doi.org/10.1093/her/cyv033>; Matthew W. Kreuter, "Reach, Effectiveness, and Connections," *American Journal of Preventive Medicine* 43, no. 6 (2012): S420–21, <https://doi.org/10.1016/j.amepre.2012.09.024>; Jason Q. Purnell et al., "Cancer Control Needs of 2-1-1 Callers in Missouri, North Carolina, Texas, and Washington," *Journal of Health Care for the Poor and Underserved* 23, no. 2 (2012): 752–67.

14 Laura B. Beidler et al., "'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* 37, no. 16 (2022): 4160–67, <https://doi.org/10.1007/s11606-022-07531-3>; Elaine Michelle Albertson et al., "Systematic Review of Care Coordination Interventions Linking Health and Social Services for High-Utilizing Patient Populations," *Population Health Management* 25, no. 1 (2022): 73–85, <https://doi.org/10.1089/pop.2021.0057>.

15 Charlene A. Wong et al., "An Introduction to North Carolina Integrated Care for Kids (NC InCK): A Model to Support Whole-Child Health," *Healthcare* 14, no. 1 (2026): 100773, <https://doi.org/10.1016/j.hjdsi.2025.100773>.

16 Michelle Shumate, *Mapping the Navigation Systems of Pennsylvania: Opportunities for the Future* (Social Impact Network Consulting, 2021), <https://sirenetwork.ucsf.edu/tools-resources/resources/mapping-navigation-systems-pennsylvania-opportunities-future>.

and resolution. After intake, there is limited interaction between the hub and client. Instead, most of the staff interaction involves working with the agencies to provide services and updates. Resolution and assignment may be facilitated by a technology system to track these statuses. The AmericaServes network for veterans and Community Care Hubs both operate using this workflow model.¹⁷

- 2 Human navigator (high-touch) model:** This model relies on specific staff members (e.g., social workers, community health workers [CHWs], navigators) to guide clients through the help-seeking process, often overcoming barriers related to trust, literacy, or technology. A case typically progresses through four stages: assessment and goal setting, barrier removal, connection to resources, and client follow-up. The interaction is centered on the relationship between the staff and client, with little direct interaction between staff and the referral agencies. The Pathways Community HUB model is an example of this model.¹⁸
- 3 Peer-to-peer, closed-loop technology model:** In this model, technology systems facilitate a direct handoff between a referring entity and the service provider, with a focus on data tracking. In this case, the workflow can start with any provider in the

network. The provider sends a referral directly to the peer organization, and the peer organization then updates the referral status. Referrals can be rejected or accepted. If a referral is accepted, agencies may then enter a case resolution status after services are provided to the client. The sending agency can see status updates for the referral, often through a community resource referral technology. Both NCCARE360 and Connect Oregon utilize this model.¹⁹

- 4 Self-service directory or helpline model** focuses on providing information to the client so that they can act on it themselves. While not a referral network as defined in this report, the self-service directory is a good comparison model to assess the value of health and human service referral networks. Passive methods place the full burden of initiating contact on the patient, which can be a significant barrier for those already facing stress and lacking resources.²⁰ The self-service directories use smart filters or algorithms to provide clients with a list of recommendations. The public-searchable sites of FindHelp and CommunityRx are both examples of the self-service directory.²¹ 2-1-1 helplines are also an example of these types of directories, with resource specialists providing the referral information for callers.

¹⁷ Leslie R. M. Hausmann et al., "Participation of Veterans Affairs Medical Centers in Veteran-Centric Community-Based Service Navigation Networks: A Mixed Methods Study," *Health Services Research* 59, no. 3 (2024): e14286, <https://doi.org/10.1111/1475-6773.14286>; Office of the Assistant Secretary for Planning and Evaluation (ASPE), *Community Care Hubs: A Promising Model for Health and Social Care Coordination* (U.S. Department of Health and Human Services, 2023), <https://aspe.hhs.gov/reports/community-care-hubs>; Derek R. Manis et al., "Community-Informed, Integrated, and Coordinated Care through a Community-Level Model: A Narrative Synthesis on Community Hubs," *Healthcare Management Forum* 35, no. 2 (2022): 105–11, <https://doi.org/10.1177/08404704211046604>.

¹⁸ Sandra Regan et al., *Ohio Pathways Community HUBs: Understanding the Benefits for Patients with Diabetes* (Cardi-OH.org, 2024), <https://www.cardi-oh.org/files/resources/cardi-oh-ohio-pathways-community-hubs-understanding-the-benefits-for-patients-with-diabetes.pdf>; Bernard Zeigler et al., *Pathways Community HUB: A Model for Coordination of Community Health Care* | *Population Health Management*, 17, no. 4 (2014), <https://www.liebertpub-com.turing.library.northwestern.edu/doi/10.1089/pop.2014.0041>.

¹⁹ Connor Drake et al., "Implementation of NCCARE360, a Digital Statewide Closed-Loop Referral Platform to Improve Health and Social Care Coordination: Evidence from the North Carolina COVID-19 Support Services Program," *North Carolina Medical Journal* 85, no. 2 (2024), <https://doi.org/10.18043/001c.94877>; Bradley Iott and Caroline Fichtenberg, *A First Look at Connect Oregon Implementation - Analysis of Connect Oregon Platform Data from 2023* (2024), https://ohlc.org/wp-content/uploads/2024/10/COSIE_FinalReport_9.30-1.pdf; Bradley Iott and Caroline Fichtenberg, *User Perspectives on Connect Oregon - Results from a User Survey and User Focus Groups* (2024), https://ohlc.org/wp-content/uploads/2024/10/COSIE-Evaluation-User-Perspectives-Final-Report_9.30.pdf.

²⁰ Petts et al., "Health-Related Social Needs Screening and Referral in Pediatric Primary Care."

²¹ Dana Abbey et al., "Organizing the World of Social Services: A Review of FindHelp.Org," *Journal of Consumer Health on the Internet* 29, no. 1 (2025): 76–85, <https://doi.org/10.1080/15398285.2025.2455340>; Stacy Tessler Lindau et al., "CommunityRx: A Real-World Controlled Clinical Trial of a Scalable, Low-Intensity Community Resource Referral Intervention," *American Journal of Public Health* 109, no. 4 (2019): 600–606, <https://doi.org/10.2105/AJPH.2018.304905>; Stacy Tessler Lindau et al., "Sharing Information about Health-Related Resources: Observations from a Community Resource Referral Intervention Trial in a Predominantly African American/Black Community," *Journal of the Association for Information Science and Technology* 73, no. 3 (2022): 438–48, <https://doi.org/10.1002/asi.24560>.

Operational models determine where responsibility for connecting clients to services lies: on the client, the frontline staff, the providers, or the technology. Workflows and outreach that rely on client-initiated communication assume that literacy and digital access that are unevenly distributed across communities. On the other hand, high-touch and centralized models reduce client administrative burdens but require ongoing funding for staffing and coordination to prevent burnout among frontline workers. Equity-centered design encourages networks to be flexible, recognizing that responsibility is fluid and subject to change. Therefore, networks should manage and shift responsibilities away from those least able to absorb them.

Staffing roles

Staffing protocols vary across referral workflow models (see [TABLE 3](#)). Each model assigns responsibility for coordination, follow-up, and accountability differently across organizations, technologies, and clients. Some models prioritize externally facing roles that support clients from intake to follow-up. Other models shift responsibility to more internal roles that emphasize data collection and maintenance, technology management, and network orchestration.

TABLE 3 Comparative Analysis of Burden in Referral Workflow Models

Workflow Model	Client Burden	Staffing
Centralized coordination (hub-and-spoke)	Lowest burden: The client engages with one entity (the hub) via a “no wrong door” approach. The client does not need to retell their story to multiple providers; the hub manages the data and handoff through an active referral model.	Staff act as dedicated intake leads who actively coordinate referrals and conduct client follow-ups to ensure closed-loop communication. Internal roles focus on professionalized management, data stewardship, and monitoring distribution to ensure smooth handoffs across the network.
Human navigation (high-touch)	Relational trust: The client must build rapport with the navigator. However, the navigator removes logistical burdens (e.g., filling out forms, finding transport) in this active referral model.	Community-embedded navigators manage relationship-heavy caseloads and proactively accompany clients through provider interactions. Internal support staff prioritize alignment between external providers and navigators while tracking activities to prevent frontline burnout.
Peer-to-peer (closed-loop technology)	Moderate burden: The client must navigate the “last mile” to the provider, though the provider is alerted electronically. If the client’s referral is not accepted by the peer-to-peer provider, there is no agency that owns the referral, shifting the burden to the client as a passive referral.	Staffing is minimal on the public-facing side since providers initiate navigation, only re-engaging if a referral is rejected. Internal personnel focus on platform governance, provider training, and monitoring technology use to ensure compliance with network best practices.
Self-service directory or helpline	Highest burden: The client must possess the “bandwidth” to find and process information, call providers, and navigate eligibility alone.	Staff is optimized for high-volume information delivery and directory maintenance rather than active coordination or client follow-up. Internal efforts are restricted to monitoring search trends and ensuring the service database remains accurate and up-to-date.

Regardless of model, professionals are hired to work in complementary, sometimes overlapping, roles. These roles include:

External-facing roles (client-facing labor)²²

- **Social workers/case managers/care coordinators:** conduct intake, assess needs, and manage active referrals on behalf of clients²³
- **CHWs:** frontline public health workers who serve as a liaison or intermediary between health/social services and the community²⁴
- **Peer support specialists:** support navigation through lived experience, particularly in high-need or high-touch models
- **Helpline or intake specialists (e.g., 2-1-1 staff):** provide information and initial referrals, typically without longitudinal follow-up

Internal-facing roles (coordination, oversight, and infrastructure)²⁵

- **Network coordinators/hub staff:** manage referral flow, coordinate across agencies, and resolve stalled or rejected referrals
- **Data or platform administrators:** maintain referral platforms, ensure data quality, update service availability, and manage eligibility rules
- **Provider engagement specialists:** support partner organizations in using closed-loop systems and updating referral statuses

- **Program managers/supervisors:** oversee caseload distribution, staffing capacity, and workflow alignment across the network
- **Evaluation or quality improvement staff:** monitor referral outcomes, resolution rates, and system performance where closed-loop data are available

Compensation models to support staff are a critical part of the referral design. Research shows that boundary-spanning roles are significantly underpaid relative to the demanding, complex, emotional, and relational nature of these jobs, contributing to high turnover and burnout.²⁶ Organizations with workers who receive fair and stable compensation have stronger client engagement and reduced attrition.²⁷ Networks should recognize this relational and coordination labor by providing salaried positions, standardized pay bands, and funding mechanisms that cover the operational costs of coordination, rather than relying solely on billable client encounters.²⁸

Staffing, compensation, and workflow design reveal whose labor is most valued in the network. External roles, such as navigators, CHWs, and social workers, must perform intense emotional, relational, and coordination tasks that are essential for serving their clients. However, they are often underpaid and under-resourced. Internally facing staff play different roles, including ensuring referrals do not stall, data remains accurate, and providers are engaged. Operational equity involves recognizing relational and coordination labor as core infrastructure, not supplemental, and providing proper resources for those roles.

22 Shannon Winters et al., "Cross-Sector Service Provision in Health and Social Care: An Umbrella Review," *International Journal of Integrated Care* 16, no. 1 (2016): 10, <https://doi.org/10.5334/ijic.2460>.

23 Nidhi Monga Nakra et al., "A Qualitative Exploration of Multi-Level Factors That Support Effective Community Health Worker-Social Worker Collaboration," *BMC Health Services Research* 25, no. 1 (2025): 1–12, 188355767, <https://doi.org/10.1186/s12913-025-13347-8>.

24 American Public Health Association, "Community Health Workers," accessed April 9, 2026, <https://www.apha.org/apha-communities/member-sections/community-health-workers>.

25 Katherine R. Cooper et al., "Leading Resilient, Purpose-Oriented Networks Through Change," *Management Communication Quarterly* 38, no. 4 (2024): 978–1005, <https://doi.org/10.1177/08933189241241226>.

26 Kenneth D. Smith, "The Wages of Peer Recovery Workers: Underpaid, Undervalued, and Unjust," *Critical Public Health* 34, no. 1 (2024): 1–12, <https://doi.org/10.1080/09581596.2024.2332796>.

27 Thomas Bodenheimer and Christine Sinsky, "From Triple to Quadruple Aim: Care of the Patient Requires Care of the Provider," *The Annals of Family Medicine* 12, no. 6 (2014): 573–76, <https://doi.org/10.1370/afm.1713>.

28 Deborah Bachrach Bachrach et al., *Addressing Patients' Social Needs: An Emerging Business Case for Provider Investment* (Commonwealth Fund, 2014), <https://doi.org/10.15868/socialsector.18186>.

Technology

Almost all referral network designs incorporate some technology, from call center technologies to more advanced cloud-based data systems that track referrals. Technology systems often support operations, communication, and care coordination among autonomous organizations. There are three key features of these technologies: a resource directory, a system to send and track referral statuses, and a way to integrate the technology into existing organizational systems.

Resource directory maintenance: At the core of every platform is a searchable directory of CBOs and social services. The quality of this directory is paramount, as referrals to outdated or incorrect services are bound to fail. Regardless of the approach, developing and maintaining these resource lists is a time-consuming and persistent challenge for both platform vendors and users from healthcare and social service organizations.²⁹

Referral management and tracking: The ability to generate and share referrals for community services, track the status of those referrals, and document outcomes—key functionalities that enable a closed-loop process.³⁰ This feature provides visibility into the referral lifecycle, helping organizations understand what happens after a patient leaves the clinic or a client is referred to another agency.

Systems integration: Integrating referral platforms with Electronic Health Records (EHRs) and existing case management systems is a critical facilitator of referral platform adoption. If platforms are not integrated, staff must log into and document information in multiple systems, leading to “click

fatigue” and duplicative data entry that hinder their adoption. In contrast, seamless integration, often through single sign-on, embeds the referral process into existing clinical workflows and significantly improves uptake.³¹ However, without information sharing between HHS providers, they will lack a comprehensive understanding of clients’ experiences. Although it can be challenging due to strict health information regulations, health and human services providers should aim to achieve interoperability among these systems by sharing necessary information when feasible. This can be achieved by obtaining clients’ permission to share information with non-healthcare providers.

The most common technologies that support referral networks are (1) referral and case-management platforms for community use and (2) health-record platforms for healthcare.

Community referral platforms: Referral platforms, or electronic community resource referral systems, help manage client flow by tracking service requests as they move through the network. These platforms are typically closed-loop, meaning they provide immediate, time-stamped data on service interactions until there is a confirmed outcome.³² Common examples include Unite Us, FindHelp, Channels 360, Integrated Referral and Intake System (IRIS), and IBM Connect360. They offer several key functions to users: needs assessment, resource directory, referral tracking and reporting, and analytics.³³ For intake and needs assessment, these platforms enable a shared access point, ensuring that providers in the network start with the same information. They also support

29 Beidler et al., “More than Just Giving Them a Piece of Paper.”

30 Dana Weiner et al., “Mobile Resource Referral Technology for Preventive Child Welfare Services: Implementation and Feasibility,” *Children and Youth Services Review* 107 (December 2019): 104499, <https://doi.org/10.1016/j.childyouth.2019.104499>; Yuri Cartier et al., *Community Resource Referral Platforms: A Guide for Health Care Organizations* (Social interventions research and evaluation network, 2019), 98, https://childrenshealthwatch.org/wp-content/uploads/SIREN-webinar-for-HVS-NCoP-2019_05.pdf.

31 Cartier et al., *Community Resource Referral Platforms: A Guide for Health Care Organizations*.

32 Drake et al., “Implementation of NCCARE360, a Digital Statewide Closed-Loop Referral Platform to Improve Health and Social Care Coordination.”

33 Cartier et al., *Community Resource Referral Platforms: A Guide for Health Care Organizations*.

structured and customized client questionnaires and can flag eligibility based on client status and requested services.³⁴

Additionally, these types of platforms enable providers to “store” community resources and serve as a shared, curated inventory of available services, thereby facilitating service discovery for providers.³⁵ Referral tracking is the core function of this technology; it enables the network to capture the entire lifecycle of service requests, including information such as time sent, accepted, rejected, pending, and closed. Tracking the lifecycle enables reporting of key metrics related to client experience and network performance, including accuracy, efficiency, and effectiveness, as discussed in the following sections.

EHR platforms: EHR systems are digital platforms mainly used by health agencies to document, manage, and share clinical information.³⁶ They are not typically used to manage social needs referrals. However, they remain useful for managing client information as they interact with health agencies within the network. Increasingly, EHRs are also implementing social risk screening modules. EHR platforms often play a crucial role in health integration efforts, especially when clients experience complex health events, because they enable providers to share clinical information and collaborate more effectively.³⁷ Common examples include Epic, Cerner, Meditech, and NextGen.³⁸ These platforms are helpful because they include clinical documentation of diagnoses, medications, laboratory results, treatment plans, and care coordination,

allowing clinicians to share information and support follow-up care. These technologies also support compliance with the Health Insurance Portability and Accountability Act (HIPAA) and other quality reporting, enabling billing, reimbursement, and utilization tracking.

Custom-built and integrated systems

Instead of using existing systems available from commercial vendors, many organizations develop proprietary systems or leverage existing internal technologies to manage social needs referrals. This approach allows for greater customization to fit specific workflows and patient populations.

Proprietary software: One medical group developed an in-house platform called “Arc” designed to integrate medical and social care data. The platform facilitates cross-functional collaboration and automates workflows by integrating Health Information Exchange data. This provides visibility into external events (e.g., hospital admissions and discharges), which automatically initiates “pair team workflows” to facilitate timely follow-up.³⁹

Leveraging existing health information infrastructure: A common strategy involves adapting existing health information systems rather than building or buying new ones. Health systems are increasingly embedding social needs screening and referral processes directly into their existing EHRs. This includes using patient portals like MyChart to screen patients before their appointments, with positive screens triggering a referral workflow within the clinical setting.⁴⁰

³⁴ Cartier et al., *Community Resource Referral Platforms: A Guide for Health Care Organizations*.

³⁵ Carboni et al., *Collaborative Networks: The Next Frontier in Data Driven Management*, IBM Center for The Business of Government

³⁶ Ashish K. Jha et al., “Use of Electronic Health Records in U.S. Hospitals,” *New England Journal of Medicine* 360, no. 16 (2009): 1628–38, <https://doi.org/10.1056/NEJMs0900592>.

³⁷ Janita F. J. Vos et al., “The Influence of Electronic Health Record Use on Collaboration among Medical Specialties,” *BMC Health Services Research* 20, no. 1 (2020): 676, <https://doi.org/10.1186/s12913-020-05542-6>.

³⁸ Cartier et al., *Community Resource Referral Platforms: A Guide for Health Care Organizations*.

³⁹ Luke Mueller et al., “A Novel Intervention for Medicaid Beneficiaries with Complex Needs,” *Journal of General Internal Medicine*, ahead of print, September 25, 2025, <https://doi.org/10.1007/s11606-025-09839-2>.

⁴⁰ Adrienne W. Henize et al., “A Road Map to Address the Social Determinants of Health Through Community Collaboration,” Special Article, *Pediatrics* 136, no. 4 (2015): e993–1001, <https://doi.org/10.1542/peds.2015-0549>; Christa Mayfield et al., “Development of a Statewide Network Hub for Screening, Referral, and Enrollment into Food as Medicine Programs across Kentucky,” *Frontiers in Public Health* 12 (January 2025), <https://doi.org/10.3389/fpubh.2024.1502858>; Weiner et al., “Mobile Resource Referral Technology for Preventive Child Welfare Services.”

Research and data capture tools: For pilot programs and research initiatives, existing HIPAA-compliant software can be adapted for referral management. One food-as-medicine program used REDCap, a secure web application for building and managing online surveys and databases, as a centralized hub to connect clinical partners and manage patient referrals.⁴¹

Compensation

Organizations engaged in integrated health and human services must navigate a limited set of financial compensation structures that shape how collaboration occurs and where accountability lies (TABLE 4). They generally fall into four broad categories: value-based care arrangements, reimbursement-based care coordination, specialized grant funding, and service contracts or performance-based payments. Each structure allocates risk, resources, and decision-making authority differently across healthcare and human services organizations, with important implications for relational work, autonomy, and sustainability within networks.

TABLE 4 Compensation Models for Health and Human Services Referral Networks

Financial Structure	Definition	Pros	Cons
Value-based care (includes capitation, global budgets, shared savings)	These payment models tie reimbursement to outcomes, cost containment, or population health metrics rather than volume of services. Capitation and global budgets provide fixed payments for a defined population.	It encourages upstream investment in social care, supports flexibility and long-term coordination, and aligns incentives around prevention, quality, and reduced utilization	System is often controlled by healthcare organizations; social care work is difficult to measure; relational and maintenance labor is under-recognized; there is a large administrative burden
Reimbursement-based care coordination	Fee-for-service payments for specific coordination activities (e.g., referrals, navigation) are often routed through healthcare organizations to human services partners	Creates incentives for healthcare–human services collaboration; provides predictable short-term funding; supports referrals and documentation	Favors healthcare metrics and reporting logics; shifts accountability to human services providers; may constrain relational work to billable activities and incentivize quantity over quality; can be burdensome for CBOs if they need to cover upfront costs and wait to be reimbursed
Specialized grant funding	Time-limited funding from federal, state, or private foundations to support coordination infrastructure (e.g., backbone staff, technology platforms)	Provides flexible funding for startup and innovation; supports cross-organizational infrastructure; enables experimentation	Short-term and unstable; rarely funds long-term relational maintenance; sustainability challenges once grants end
Service contracts/ performance-based payments	These are formal agreements where healthcare organizations pay human services providers for defined services or outcomes, sometimes tied to performance benchmarks. These models may incorporate fee-for-service or value-based payments.	Clarifies roles and expectations; can provide steady funding streams; supports targeted services	Can narrow service scope; reinforces power asymmetries; prioritizes measurable outputs over community-defined needs and relational care

⁴¹ Mayfield et al., “Development of a Statewide Network Hub for Screening, Referral, and Enrollment into Food as Medicine Programs across Kentucky.”

Part II: What are the outcomes of referral networks?

This section summarizes evidence on the main outcomes of referral networks, focusing mostly on short-term process outcomes (e.g., the percentage of referrals that lead to service receipt), as these are outcomes within the network's control and for which the most evidence exists. This section also briefly touches on other outcomes, such as needs resolution, client confidence in accessing resources, and health impacts. An important caveat is that these outcomes likely reflect the availability, responsiveness, appropriateness, and quality of services clients are referred to more than the effectiveness of the referral network itself.

This section focuses on referral networks with agreed-upon processes for referring clients to each other and that include both healthcare and human services organizations. It does not include referral processes that are limited to providing clients with a list of resources or case management or care coordination services that do not also include a referral network component. In other words, we limited our evaluation of the evidence to HHS referral networks.

We identified 11 articles evaluating referral effectiveness. This was measured by two metrics: (1) the service receipt rate, or the percent of referrals that led to clients receiving services, and (2) referral efficiency, the time from referral to

receipt of services ([TABLE 5](#)). Several articles also assessed network impacts on network organization relationships, client needs resolution, and client health and health outcomes, which are summarized in the relevant sections below.

Referral effectiveness: **How well do referral networks connect clients to services?**

Evidence suggests that network referral success varies widely and is affected by several factors. As shown in [TABLE 5](#), service receipt rate in the identified studies varied from 21% (Connect Oregon/Unite Us network)⁴² to 88% (NCCARE360 in Durham County, NC).⁴³ For comparison, among clients who received resource information from a 2-1-1 call center without network infrastructure, 25% received assistance. Factors that affected service receipt include:

- **Funding of case management and service provision:**
Service receipt for the NCCARE360/Unite Us referral technology-based network in North Carolina dropped when funding for services and CHWs to manage referrals ended: 65% to 38% in an aggregate of 26 counties⁴⁴ and 88% to 30% in Durham County, NC.⁴⁵
- **One organization coordinating the network and/or staff responsible for referral follow-up:**
AmericaServes networks had much higher service receipt rates (76%) than networks without a

⁴² Bradley Iott and Denise Anthony, "Provision of Social Care Services by US Hospitals," *The Milbank Quarterly* 101, no. 2 (2023): 601–35; Iott and Fichtenberg, *A First Look at Connect Oregon Implementation - Analysis of Connect Oregon Platform Data from 2023*.

⁴³ Drake et al., "Implementation of NCCARE360, a Digital Statewide Closed-Loop Referral Platform to Improve Health and Social Care Coordination."

⁴⁴ Fred S. Johnson et al., "Measures of Referral vs Receipt of Social Services Among Patients With Health-Related Social Needs," *JAMA Network Open* 7, no. 4 (2024): e247021, <https://doi.org/10.1001/jamanetworkopen.2024.7021>.

⁴⁵ Drake et al., "Implementation of NCCARE360, a Digital Statewide Closed-Loop Referral Platform to Improve Health and Social Care Coordination."

coordinating organization (as low as 21%).⁴⁶

In addition, when Duke Health implemented the NCCARE360 referral technology platform in 2021-2022, it found that “a human connector [was needed] to facilitate follow-up for service navigation and verification of referral completion.”⁴⁷

- **For veteran-serving networks, involvement of a VA Medical Center:** AmericaServes networks that involved greater coordination and collaboration with a VA Medical Center also had higher service receipt rates.⁴⁸

- **Complexity of client needs:** Service receipt was highest for needs that are more easily addressed (e.g., transportation, food, physical health care) and lowest for needs that are harder to address (e.g., housing, utilities, employment).⁴⁹

⁴⁶ Hausmann et al., “Participation of Veterans Affairs Medical Centers in Veteran-Centric Community-Based Service Navigation Networks”; Eugenia R. McPeck Hinz et al., “Addressing Health-Related Social Needs Through Systematic Screening and Integration of a Social Care Technology Platform,” *NEJM Catalyst* 4, no. 5 (2023): CAT.22.0324, <https://doi.org/10.1056/CAT.22.0324>; Johnson et al., “Measures of Referral vs Receipt of Social Services Among Patients With Health-Related Social Needs”; Teri Garstka et al., “Developing Cross-Sector Referral Networks to Address Social Determinants of Health: Results from a Multi-Year Evaluation before and during COVID-19,” paper presented at 2021 Kansas Public Health Association (KPHA) Virtual Conference, September 2021, https://connectwithiris.org/sites/default/files/inline-files/Developing%20Cross-Sector%20Referral%20Networks%20to%20Address%20Social%20Determinants%20of%20Health_Garstka%20et%20al.%202021_SUBMITTED_4.pdf; Iott and Fichtenberg, *A First Look at Connect Oregon Implementation - Analysis of Connect Oregon Platform Data from 2023*.

⁴⁷ McPeck Hinz et al., “Addressing Health-Related Social Needs Through Systematic Screening and Integration of a Social Care Technology Platform.”

⁴⁸ Hausmann et al., “Participation of Veterans Affairs Medical Centers in Veteran-Centric Community-Based Service Navigation Networks.”

⁴⁹ Iott and Fichtenberg, *A First Look at Connect Oregon Implementation - Analysis of Connect Oregon Platform Data from 2023*; Marina Saitgalina and Donta Council, “Contextualizing Performance of Coordinated Care Network of Veteran Services in Virginia,” *Journal of Social Service Research* 46, no. 3 (2019): 299–312, <https://doi.org/10.1080/01488376.2018.1560386>.



TABLE 5 Service Receipt Rates Among Identified Studies

Referral Network Instance	Service Receipt (% of Referrals Leading to Service/Assistance Being Received)
Technology without a central coordinating organization	
Connect Oregon/Unite Us ⁵⁰	21% among 38,197 cases from 2021 to 2023 This varied by service need (e.g., higher for food and physical health needs and lower for housing, utility, and mental/behavioral health needs).
NCCARE360/Unite Us at Duke ⁵¹	27%* among 5,007 referrals from 2021 to 2022 The rate was higher when staff followed up on referrals.
NCCARE360/Unite Us at Duke ⁵²	88%* with funding for services and CHWs to manage referrals 30%* without funding
IRIS: referral technology, rural Kansas counties, 2017–2020 ⁵³	39% over three years, increasing over time: 33% in 2017 and 41% in 2020 Range in 3 Kansas comparison networks: 23%–61%
NCCARE360/Unite Us in 26 counties in NC ⁵⁴	65% with funding for services and care coordination 38% without funding
AHC Pilot ⁵⁵	40%* of those who received navigation had one social need resolved. An additional 11% had no social need resolved, but were connected to a community service provider.
Highmark Social Care Network ⁵⁶	27% of closed-loop referrals received services.
Technology with a central coordinating organization	
Mission United in VA (AmericaServes network: coordinating org + referral technology), serving veterans ⁵⁷	74% among 1,512 referrals from 2016 to 2018 This varied by case duration and by service need, e.g., 95% for transportation vs. 36% for money management.
AmericaServes veteran services networks (coordinating org + referral technology) ⁵⁸	76% among 13,685 referrals in 2019 This increased with collaboration with VA Medical Centers
CHOP Food Insecurity Referral Program ⁵⁹	43% of reachable clients who were eligible for benefits completed applications for benefits.
Information provision only	
2-1-1 Missouri (resource information provided to client) ⁶⁰	25% received assistance. Assistance rates varied significantly by need, ranging from 67% for food assistance to 17% for housing.

* Definition of receiving services in McPeck and Drake studies includes situations where clients no longer needed help or where they received some kind of assistance (e.g., enrollment assistance, but have not yet received services).

† The AHC study used surveys to determine if needs were resolved, not whether services were received.

⁵⁰ Iott and Anthony, "Provision of Social Care Services by US Hospitals"; Iott and Fichtenberg, *A First Look at Connect Oregon Implementation - Analysis of Connect Oregon Platform Data from 2023*.

⁵¹ McPeck Hinz et al., "Addressing Health-Related Social Needs Through Systematic Screening and Integration of a Social Care Technology Platform."

⁵² Drake et al., "Implementation of NCCARE360, a Digital Statewide Closed-Loop Referral Platform to Improve Health and Social Care Coordination."

⁵³ Garstka et al., "Developing Cross-Sector Referral Networks to Address Social Determinants of Health."

⁵⁴ Johnson et al., "Measures of Referral vs Receipt of Social Services Among Patients With Health-Related Social Needs."

⁵⁵ RTI International, *Accountable Health Communities (AHC) Model Evaluation Third Evaluation Report* (Centers for Medicare and Medicaid, 2024), <https://www.cms.gov/priorities/innovation/data-and-reports/2024/ahc-3rd-eval-report>.

⁵⁶ Kathleen Galper et al., "Design and Early Evaluation of a Social Care Network's Impact on Health Care Costs," *Health Affairs Scholar* 4, no. 3 (2026): qxag051, <https://doi.org/10.1093/haschl/qxag051>.

⁵⁷ Saitgalina and Council, "Contextualizing Performance of Coordinated Care Network of Veteran Services in Virginia."

⁵⁸ Hausmann et al., "Participation of Veterans Affairs Medical Centers in Veteran-Centric Community-Based Service Navigation Networks."

⁵⁹ Molly Knowles et al., "Successes, Challenges, and Considerations for Integrating Referral into Food Insecurity Screening in Pediatric Settings," *Journal of Health Care for the Poor and Underserved* 29, no. 1 (2018): 181–91.

⁶⁰ Sonia Boyum et al., "Getting Help from 2-1-1: A Statewide Study of Referral Outcomes," *Journal of Social Service Research* 42, no. 3 (2016): 402–11, <https://doi.org/10.1080/01488376.2015.1109576>; Tess Thompson et al., "Promoting Health by Addressing Basic Needs: Effect of Problem Resolution on Contacting Health Referrals," *Health Education & Behavior* 43, no. 2 (2016): 201–7, <https://doi.org/10.1177/1090198115599396>.

Referral efficiency: Do referral networks increase efficiency of cross-sector referrals?

Although increased efficiency (e.g., reduced time and effort from referral initiation to service receipt) is a goal of referral networks, we only found one study that examined this outcome. Sonoma County (CA) increased the efficiency of coordination across county departments and health care and social service providers by: (1) introducing a data integration hub, care management, and coordination system that integrated siloed data and services into a unified view of citizen status; (2) identifying clinical and social determinants of health from structured and unstructured sources; and (3) using algorithms to match clients across systems. This enabled the cross-sector care coordination team to discuss 30–45 cases during their meetings, compared to 10 prior to the data integration and care management system, a tripling in efficiency.⁶¹

Organizational working relationships: Do referral networks improve relationships between member organizations?

Research suggests that referral networks can improve working relationships among member organizations. An evaluation of an intervention that included referral networks found that cross-sector collaboration between network organizations improved over time.⁶² Another study of the same intervention found that cross-sector collaboration strengthened over time in networks when two factors were present: (1) health and human service organization partners were meaningfully engaged in program design and

implementation, and (2) network members met regularly, not just to resolve individual, client needs but to discuss broader systems change, such as addressing gaps in existing systems of care.⁶³ Similarly, a study of the Medi-Cal Whole Person Care pilot programs found that meaningfully engaging partners in program design (along with braided funding) reduced the number of challenges in developing meaningful data sharing infrastructure and contractual relationships.⁶⁴ These studies suggest that including network members in the design and implementation of HHS referral systems can improve members' working relationships.

Service receipt rate refers to when a client is connected to and receives a service to meet their need. **Needs resolution**, in contrast, indicates that the social need is completely addressed. For example, a client may receive regular food boxes, but if the amount of food is insufficient for their family's needs, they may still experience food insecurity. In this example, the service is received, but the need is not resolved.

Needs resolution: Do referral networks improve needs resolution?

Networks have the potential to increase both perceived and actual needs resolution. With regard to perceived needs resolution, one study found that an intervention that included not only an online directory and referral network but networking sessions as well that fostered interactions between community organizations and a large healthcare system was associated with greater healthcare system staff confidence in community resources and in increases in healthcare staff referrals to CBOs.⁶⁵

⁶¹ Jane L. Snowdon et al., "Empowering Caseworkers to Better Serve the Most Vulnerable with a Cloud-Based Care Management Solution," *Applied Clinical Informatics* 11, no. 4 (2020): 617–21, <https://doi.org/10.1055/s-0040-1715894>.

⁶² Nadereh Pourat et al., *Final Evaluation of California's Whole Person Care Program* (2022), https://healthpolicy.ucla.edu/sites/default/files/2024-03/whole-person-care-final-evaluation-report-approved-with-signature_03_11_24.pdf.

⁶³ Emmeline Chuang et al., "Collaboration Strategies for Bridging Health, Behavioral Health, and Social Services in California's Medi-Cal Whole Person Care Pilot Program," *Health Services Research* 60, no. 53 (2025): e14417, <https://doi.org/10.1111/1475-6773.14417>.

⁶⁴ Chuang et al., "Collaboration Strategies for Bridging Health, Behavioral Health, and Social Services in California's Medi-Cal Whole Person Care Pilot Program."

⁶⁵ Albert W. Wu et al., "The Baltimore Community-Based Organizations Neighborhood Network: Enhancing Capacity Together (CONNECT) Cluster RCT," *American Journal of Preventive Medicine* 57, no. 2 (2019): e31–41, <https://doi.org/10.1016/j.amepre.2019.03.013>.

The AHC study includes bridge organizations that adopted a variety of different outreach designs. Across these designs, the study found that beneficiaries who received navigation assistance had similar levels of needs resolution. However, certain subpopulations, including individuals with chronic conditions, were more likely to have their needs resolved than others.⁶⁶

Although we did not identify any studies of referral networks that examined client needs resolution, one study of referrals through a 2-1-1 helpline (which we do not consider to be a referral network due to the lack of organization-to-organization referrals) found that clients who followed up on a referral and received assistance were more likely to report that their needs were resolved after one month than those who followed up on a referral and did not receive assistance.⁶⁷ Services received through a network referral would likely also contribute to increased need resolution.

Referral impacts: Do referral networks improve client health outcomes?

The impact of referral networks on client health outcomes depends largely on the design features of those networks. In particular, we identified several design features that appear to be associated with improved client health outcomes. However, research has not universally supported a relationship between referral networks and these health outcomes, suggesting that some designs do not improve health outcomes. The research reported here does not compare the design features listed with a control case without the design feature.

Designs not associated with improved health outcomes

In some studies, no association with improved health outcomes was detected. In one such study following the implementation of nation-wide commissioning of service networks to reform mental health care in Belgium, there were 19 networks that each developed its own design.⁶⁸ In a second study, CBO staff with access to an online referral tool (Healthify) organized meet-and-greet sessions between CBO and hospital staff to improve inter-organizational awareness and assigned research assistants as technical liaisons between organizations.⁶⁹ Neither study found an association between network design and improved client health or between network design and healthcare utilization.

High-touch human navigation models associated with improved health outcomes

Two evaluations of high-touch human navigation networks suggested that they produce both positive health outcomes and healthcare savings. The Pathways Community HUB model has been found to improve birth outcomes among pregnant women at high risk of poor birth outcomes. This model combines care coordination by CHWs with a centralized hub infrastructure that tracks outcomes, minimizes inefficiencies and duplication of services, and supports a pay-for-performance payment structure. A 2025 study of the Pathways model in Richland County, OH, compared pregnant women enrolled in the program to pregnant women from the same county with a similar distribution of risk factors (identified through propensity score matching) who did not participate in the program. Program participants were found to have 43% lower adjusted odds of a low birth weight and 36% lower odds of preterm birth.⁷⁰

⁶⁶ RTI International, *Accountable Health Communities (AHC) Model Evaluation Final Report*.

⁶⁷ Boyum et al., "Getting Help from 2-1-1."

⁶⁸ Vincent Lorant et al., "Effectiveness of Health and Social Service Networks for Severely Mentally Ill Patients' Outcomes: A Case-Control Study," *Administration and Policy in Mental Health and Mental Health Services Research* 46, no. 3 (2019): 288–97, <https://doi.org/10.1007/s10488-018-0910-x>.

⁶⁹ Wu et al., "The Baltimore Community-Based Organizations Neighborhood Network."

⁷⁰ Edward T. Chiyaka et al., "An Evaluation of the Pathways Community HUB Approach To Improving Birth Outcomes: A Retrospective Study Using Propensity Score Matching in Richland, Ohio," *Maternal and Child Health Journal* 29, no. 10 (2025): 1425–34, <https://doi.org/10.1007/s10995-025-04172-w>.

California's Medi-Cal Whole Person Care pilot program provided care coordination and other services to address eligible members' medical, behavioral health, and social needs (e.g., housing assistance, benefits assistance, transportation). Services were delivered via cross-sector partnerships involving county agencies, health plans, and community-based providers, with a single lead entity responsible for program implementation and reporting. A mixed-methods evaluation using a quasi-experimental difference-in-difference design found that the program improved access to specialty care and substance use treatment services and significantly reduced ED visits, hospitalizations, and overall estimated costs (approximately \$383 per beneficiary per year) for enrollees compared to a matched comparison group.⁷¹

Pilot-specific analyses found that while the majority of pilots serving >1,000 enrollees reduced ED visits for enrollees relative to matched controls, only four of the 16 pilots significantly reduced both ED visits *and* hospitalizations. Successful outcomes were associated with configurations including: 1) active engagement of a public housing partner AND client enrollment in care coordination services at the point of care, OR 2) medium to high electronic data sharing AND medium to high program intensity, based on average per enrollee expenditures. Failure was linked to either having no public housing partners OR low program intensity.⁷²

Dedicated enrollment staff associated with improved health outcomes

Enrollment staffing intervention designs also hold promise for improving health outcomes. A statewide network hub in Kentucky facilitated hospital-based

screening and connected hypertensive patients affected by food insecurity to "Food as Medicine" programs. In the study, the research staff acted as dedicated navigators, enrolling referred clients into programs to receive either medically tailored meals or grocery prescriptions. The intervention was shown to improve diet, reduce financial strain, and improve self-reported health among recipients; participants who received Supplemental Nutrition Assistance Program (SNAP) in addition to the grocery prescription benefits had significant reductions in systolic and diastolic blood pressure relative to those who did not receive SNAP.⁷³

Compensating CBOs for providing services associated with improved health outcomes

Compensating CBOs for providing services is another promising way to improve health outcomes. North Carolina's Healthy Opportunity Pilots (HOP) included services to address members' social needs, such as housing navigation or healthy food boxes, which were delivered through regional networks managed by a lead "hub" organization responsible for connecting managed care plans, human service organizations, and clinical teams. An interrupted time series evaluation found that although the program was associated with increased spending in the first month after enrollment, by eight months after enrollment, ED visits and overall spending (approximately \$85 per beneficiary per month) were lower for HOP participants compared to an estimated counterfactual.⁷⁴

Similarly, California's Medi-Cal Health Homes Program provided comprehensive care management, care coordination, and other services to address eligible members' medical and non-medical needs (e.g., health promotion, transitional care, individual and family supports, and community and social

⁷¹ Pourat et al., *Final Evaluation of California's Whole Person Care Program*.

⁷² Emmeline Chuang et al., "Program Implementation Strategies Associated With Reduced Acute Care Utilization for Medicaid Beneficiaries in California's Whole Person Care Pilot Program," *Medical Care Research and Review* 81, no. 6 (2024): 432–43, <https://doi.org/10.1177/10775587241273404>.

⁷³ Alison Gustafson et al., "Tailored Food Is Medicine Programs as an Effective Approach to Address Dietary Intake and Blood Pressure among Rural and Urban Adults," preprint, medRxiv, July 11, 2025, 2025.07.09.25331229, <https://doi.org/10.1101/2025.07.09.25331229>.

⁷⁴ Seth A. Berkowitz et al., "Medicaid Spending and Health-Related Social Needs in the North Carolina Healthy Opportunities Pilots Program," *JAMA*, ahead of print, February 27, 2025, <https://doi.org/10.1001/jama.2025.1042>.

service referrals). Services were provided via contracts between managed care plans and networks of community-based care management entities (e.g., community health centers, behavioral health providers, and CBOs). A statewide evaluation found a significant reduction in ED visits, hospitalizations, and estimated costs of care for enrollees relative to matched controls.⁷⁵

Finally, Highmark's Social Care Network uses an incentive structure to compensate CBOs for closing the loop on referrals, regardless of whether the individual received help or not. Individuals who received help saw significant monthly medical cost reductions of \$617. These cost savings were notable because the participant population had a mix of insurance types.⁷⁶

Implementation fidelity influences health outcomes

One study provides cautionary guidance about the importance of implementation fidelity. In Boston, MA, the WE CARE program screened mothers of

healthy infants for social needs, including child care, education, household heating, employment, food security, and housing. In an early cluster randomized controlled trial of the program, where research staff ensured that participants were screened and received referrals with greater fidelity, WE CARE mothers were more likely to receive referrals and be enrolled in a community resource after 12 months. They had a greater probability of being employed and having access to childcare, and lower odds of residing in a homeless shelter. However, in later interventions where clinic staff implemented a similar program with less fidelity, fewer clients were screened and received referrals. In these clinics, WE CARE infants were more likely to visit the emergency room and had higher hospitalization rates. The authors attribute this effect to a double-loss; a double-loss occurred when clients disclosed social needs but did not receive adequate referrals, leading to greater distrust in local pediatric health services.⁷⁷

Conclusion

In sum, there is a moderate amount of evidence that referral networks are more likely to result in receipt of services with one or more of the following: 1) designated staff to follow up on referrals and ensure clients receive services; 2) a central coordinating organization that helps maintain the infrastructure, builds inter-organizational trust, and supports collective problem-solving; and 3) funds to pay for services.

⁷⁵ Nadereh Pourat et al., *Final Evaluation of California's Health Homes Program* (UCLA Center for Health Policy Research, 2023), <https://healthpolicy.ucla.edu/our-work/publications/final-evaluation-californias-health-homes-program-hhp>.

⁷⁶ Galper et al., "Design and Early Evaluation of a Social Care Network's Impact on Health Care Costs."

⁷⁷ Arvin Garg et al., "A Social Care System Implemented in Pediatric Primary Care: A Cluster RCT," *Pediatrics* 152, no. 2 (2023): e2023061513, <https://doi.org/10.1542/peds.2023-061513>; Arvin Garg et al., "Addressing Social Determinants of Health at Well Child Care Visits: A Cluster RCT," *Pediatrics* 135, no. 2 (2015): e296–304, <https://doi.org/10.1542/peds.2014-2888>; Arvin Garg et al., "Potential Pediatric Health Care Consequences of Not Getting Help for Disclosed Social Needs," *Academic Pediatrics* 25, no. 6 (2025): 102834, <https://doi.org/10.1016/j.acap.2025.102834>.

Abbreviations

AHC	Accountable Health Communities
CBO	Community-Based Organization
CHW	Community Health Worker
ED	Emergency Department
EHR	Electronic Health Record
HIPAA	Health Insurance Portability and Accountability Act
HHS	Health and Human Services
HOP	Healthy Opportunity Pilots
HUD	U.S. Department of Housing and Urban Development
IRIS	Integrated Referral and Intake System
NAO	Network Administrative Organization
NNSI	Network for Nonprofit and Social Impact
SIREN	Social Interventions Research and Evaluation Network
SNAP	Supplemental Nutrition Assistance Program
VA	Veteran Affairs

