Minnesota Resource Directory Infrastructure Workshop – October 2024 – FINAL DRAFT - PENDING COMMUNICATIONS REVIEW

About this document: This document summarizes the key outputs and findings of the Minnesota Resource Directory Infrastructure Strategy Workshop in October 2024. This document is in the final draft form, and we encourage participants to review, annotate, and suggest edits. You can flag issues via comments (highlight text and then right-click or ctrl-click to add a comment) or via email to Senka Hadzic [SHadzic@stratishealth.org] and/or Greg Bloom [bloom@openreferral.org]. This document is pending communications review. The final version will be available after the communications review by December 19th.

TABLE OF CONTENTS

Minnesota Resource Directory Infrastructure Workshop – October 2024 – FINAL DRAFT - PENDING COMMUNICATIONS REVIEW

Executive Summary

This document summarizes the proceedings and conclusions of the Minnesota Resource Directory Infrastructure Strategy Workshop which was conducted in Minneapolis, MN in October 2024, and co-facilitated by Stratis Health and Open Referral.

This Workshop was first proposed through a multi-sector Co-Creation process that brought together people and organizations from across the sectors of health care systems, health plans and community organizations to collaboratively develop sustainable strategies that can more effectively meet people's social needs for people in Minnesota. (See Background for more.) In 2023, the Co-Creation Process's Directory workgroup recommended the development of shared "resource data infrastructure" that can ensure reliable service directory information is easy to access by people in need and those helping them, wherever and however it might be useful.

In this workshop, we affirmed our understanding of the nature of the resource directory information challenge: across Minnesota, there are a range of already-established directory managers that collect, maintain, and distribute resource information – but though these directories share common goals, they work in isolation from each other. These directory managers have critical expertise – from aging and disability services, child and family services, legal aid, food programs, housing and community health – yet currently manage data in silos.

Our guiding question was: how can we enable and sustain cooperation among these resource directory providers, to ensure that all can access reliable resource information?

Significantly, participants affirmed four key assumptions, in accordance with our stated values:

> **First,** it takes work to produce reliable community organization directory information. Community organizations are often overwhelmed and under-resourced, and cannot be expected to manage their information in various directories – especially not at the level of precision that users need for information to be trustworthy and useful. **Reliable information must be verified and curated by third parties.**
>
> **Second,** one size will not fit all. Different users have different needs, and while the prospect of a "single solution" sounds appealing, it actually pits users' interests against each other. An equitable strategy would ensure **organizations have autonomy to use their own information systems – and that users can choose how to use this data.**
>
> **Third,** when standardized, the same resource data can be accessed through many different systems – such that comprehensive information can be used not in one monolithic database but across a distributed network of systems. This "ecosystemic" approach requires standards and careful governance – but in turn, it can **enable all directories to have better information at lower collective cost.**
>
> **Fourth,** this work must be sustainable – and sustainability can be achieved through cooperation. Any one directory would struggle to sustain the labor required to manage

this information at a statewide scale. However, participants considered the possibility of a 'data utility' that could serve as public infrastructure, stewarding resource data for use across a wide variety of different systems. This utility could be supported by multiple funding streams, with **a mix of public subsidy and market-generated revenue for value-adding premium services.**

Toward this end, participants in the workshop proposed a strategy that would 1) **clarify and enhance the responsibilities of a network of designated directory maintainers (i.e. "data stewards")** to specialize in designated service domains and/or geographies; and also, 2) **establish a central bottom-line role (i.e. a "data utility") to aggregate data from across this network** and publish comprehensive, quality-assured resource data as a public service.

Next Steps and Call to Action

To advance the proposed strategy, the participants recommended **identifying at least one actionable and fundable pilot project** to test the four key assumptions above to scale toward data utility. This could entail specific use cases prioritized by resource directory providers who are ready to start aligning their systems and exchanging resource data. A successful pilot could be followed by larger-scale implementations. Lessons learned from these potential pilots could also inform a strategy for integrating health and social care through coordinating processes such as closed loop referrals among health systems, health plans, community organizations, and resource navigators.

In the meantime, we propose the following actions to build awareness of the workshop outputs and buy in on the above next steps:

- This report will be shared with the Co-Creation Guiding Council to inform within the broader context of the five strategies approved in September 2023.
- Individual workshop participants can share this report within their organizations and discuss the role that they might want to play in a potential pilot or use case and how the organization would want to be involved.
- Ongoing Next Conversations among participants to learn more about how resource directories manage their information and how resource directories that manage similar information can start to align or share data to advance next steps from this workshop including pilots.

Funding disclaimer: *The workshop was made possible through generous funding support by Blue Cross Blue Shield of Minnesota, HealthPartners and the Midwest Big Data Hub (a partnership of the University of Illinois at Urbana-Champaign and Indiana University's Ostrom Workshop on the Commons).*

Minnesota Resource Directory Infrastructure Workshop – October 2024 – FINAL DRAFT - PENDING COMMUNICATIONS REVIEW

For questions or to learn more, contact Senka Hadzic, Program Manager, shadzic@stratishealth.org.

Minnesota Resource Directory Infrastructure Workshop – October 2024 – FINAL DRAFT - PENDING COMMUNICATIONS REVIEW

Background: How we came to this point

Assisting people in getting the resources they need to address their health-related social needs is integral to improving health outcomes and equity. While valuable resources and tools exist to address social needs, it is currently a fragmented approach, which can be burdensome, expensive, and a barrier to successfully addressing social needs.

Since 2021, Stratis Health has served as convener, facilitator, and subject matter expert to the Co-Creation process. This collaboration has brought together community organizations, health care, health plans, resource directory providers, and other partners from throughout Minnesota to collaboratively develop a shared approach to connect people with needed and culturally responsive resources. The collaboration resulted in five implementation strategies for a comprehensive approach to address social needs.

The Co-Creation Process Five implementation strategies to address social needs:

1) Design and implement a shared resource directory infrastructure,

2) Develop standards and tools for viable operational and financial agreements and options for payment for community organizations,

3) Develop specifications and workflows for an interoperable information exchange to support multi-directional, closed loop social needs referrals,

4) Advance community care hub backbone organizations,

5) Intensify visibility, momentum, and commitment through a campaign-like approach with pledges, measurement, and reporting.

The scope of this workshop was Strategy 1: Design and implement a shared resource directory infrastructure. The goal of this strategy is to design and implement shared infrastructure to resource directory information management to connect people with resources to address their social needs. To begin work on this strategy, a workshop was proposed with the objective to build on the 2023 Directory Work Group recommendations, and collaboratively develop proposals to establish sustainable, universally-accessible infrastructure that will provide reliable information about the resources available to Minnesotans to address their social needs.

The workshop brought together organizations that maintain and use resource directories across Minnesota to analyze the current landscape of resource information management and use, and develop proposals that can bring Minnesota closer to shared resource directory infrastructure.

Minnesota Resource Directory Infrastructure Workshop – October 2024 – FINAL DRAFT - PENDING COMMUNICATIONS REVIEW

What is our vision of the future? Epic success looks like . . .

The workshop participants described a hopeful vision for a future in which their efforts to build shared resource directory infrastructure have been "epically successful."

The proposed strategy would move us in the direction of this future:

1) **End users of resource directory information** (especially people seeking help, and resource navigators) would be able to find resources they need (even when they didn't previously know such resources exist) without having to know what questions to ask. (In this future, people would be able to readily access support upon their first interaction with any part of the care system.)
2) **Resource Directory providers and intermediaries** will spend less time cleaning up duplicative resource information, and in turn have more time to use the information to help people and generate intelligence.
3) **Community organizations** will spend less time updating multiple resource directories, and instead know the designated place where updates can be officially made; they will also be able to generate better intelligence about the need for and benefit of their services, because all organizations will be able to reference the same service data in their analytics.
4) **Health plans and health care** will have real time data that show resource capacity gaps, funding streams, program outcomes and patient needs - leading to better health outcomes, decreased health care costs; also reduced burden to maintain resource lists to provide to patients and/or members.
5) **Analysts and decision-makers** will have granular intelligence about community assets, unmet needs, program effectiveness, and policy outcomes to inform data-driven investment and rule-making that improves community health outcomes.
6) **Innovators** will more effectively be able to leverage reliable data to build new tools to help all of the above.

A shared resource directory infrastructure also provides for better connectedness among all the parties involved which helps the group form joint coalition to advocate for joint actions, collaboration and cooperation (less siloing) and no one is left out. With shared resource information infrastructure, all parties can more effectively coordinate their work toward shared goals.

Minnesota Resource Directory Infrastructure Workshop – October 2024 – FINAL DRAFT - PENDING COMMUNICATIONS REVIEW

PROPOSED STRATEGY:

In the final stretch of the workshop, with almost two days of collaborative analysis behind us (see Appendix), participants formed small groups to develop hypothetical proposals for action.

Each proposal addressed a common scenario: a network of "data stewards" have specific responsibilities for managing directory information in a given domain and/or geography, and collaborate with a "data utility" that bottom-lines the aggregation, quality assurance, and publication of comprehensive resource data as a public service. The proposals specified roles, responsibilities, near-term objectives, budget guesstimates, and key milestones for the first year of development.

> Most groups presented a "generic" proposal, not naming specific organizations. (One group proposed that 211 could serve as the 'data utility.' When polled, about half of the room indicated strong support of the prospect of 211 as the data utility; nobody expressed strong opposition, but about half of the participants indicated tentative support contingent upon more information.)

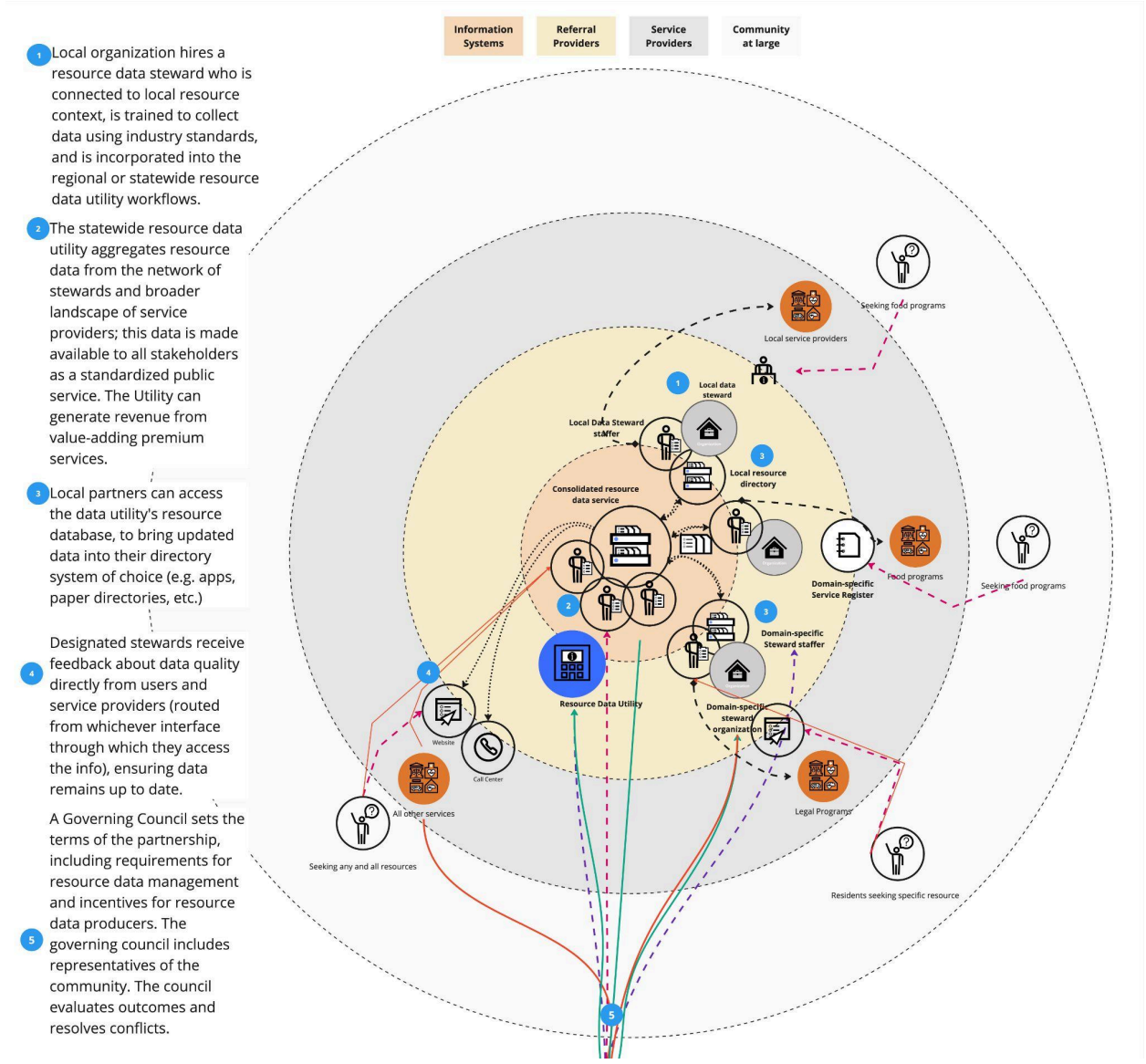
When reflecting on the results, participants agreed that the proposals as a group were more or less similar – and converging on a shared vision. In the post-workshop synthesis process, we have consolidated all versions into this one summary, indicating minor potential differences or uncertainties when they emerged.

Example drawings of Minnesota Shared Resource Directory Infrastructure:

- Proposed Strategy for MN Data Utility
- Proposed pilot drawing

Minnesota Resource Directory Infrastructure Workshop – October 2024 – FINAL DRAFT - PENDING COMMUNICATIONS REVIEW

Proposed Strategy Drawing for MN Data Utility:



Minnesota Resource Directory Infrastructure Workshop – October 2024 – FINAL DRAFT - PENDING COMMUNICATIONS REVIEW

Roles and responsibilities –

Data Utility

A “utility” is a provider of universally-accessible services, designated under a franchise that ensures accountability to public interests. A “data utility” would be responsible for publishing data as an “open access” service – meaning, any compliant system would be able to access and use the public data service produced by the utility – operating under oversight that addresses data quality, accessibility, and equitability criteria.

In this proposal, a “resource data utility” would hold bottom-line responsibilities for:

- Aggregating and assuring quality of resource data about all human services in MN
    - Synthesizing domain-specific outputs from data stewards into this comprehensive data service.
    - Responding to user feedback around data quality and prioritized information needs.
    - Curating this data through a master taxonomy that can be aligned with domain-specific categories.
- Publishing this data as an “open access” information resource – i.e. open data
- Managing the technology infrastructure that facilitates this aggregation and publication

The resource data utility would take direction for data quality improvements from some kind of data governance body that represents the perspectives of data stewards and other institutional stakeholders.

The utility could potentially generate revenue for value-adding services and premium features that it offers to business entities that leverage the resource data. These monetization strategies – along with the overall budget – would be subject to oversight and direction from an organizational governance body.

The resource data utility might be responsible for convening the data stewards as a community of practice, and for providing tech assistance and training to data stewards. The resource data utility would also be responsible for fielding input from community members, help-seekers, and service providers – and addressing that input through accountable processes.

Data Stewards

A “steward” is responsible for the care of resources that they do not own. A “data steward” would be responsible for gathering and maintaining information about a designated domain. In this case, a “resource data steward” would hold specific responsibilities for collecting and maintaining information about human services within a given service domain and/or geography.

Minnesota Resource Directory Infrastructure Workshop – October 2024 – FINAL DRAFT - PENDING COMMUNICATIONS REVIEW

Resource data stewardship roles would presumably be held by organizations that are best positioned to manage relationships among services providers in their specialized field. (For example, Legal Services of Minnesota is already a kind of steward with designated responsibilities for managing information about legal aid programs in the state.) Such a role could also be designated to local organizations that are hubs for information about services in their geographic area.

(In relation to individual data stewards, the resource data utility described above would be a kind of “super steward” – responsible for maintaining information about kinds of services not otherwise claimed by other stewards, under the same terms that apply to other stewards, with overarching responsibility for the domain as a whole.)

Resource data stewards would presumably be responsible for collecting and sharing directory data on a given schedule, in accordance with standardized criteria. Stewards would have to agree to uphold a common style guide, and might need to use a shared taxonomy (or at least collaborate in the alignment of their taxonomy with the standard statewide taxonomy).

Stewards need to be fairly incentivized for the labor of resource data management to be sustainable; participants recognized that the obvious way to structure compensation could be on a price-per-record basis – which could be established from industry benchmarks for average time costs per record update, in accordance with fair labor market wages. Participants recognized the risk that such a pay-per-record incentive could be unfairly gamed; the compensation process would have to be subject to quality evaluation and monitored by an oversight body in order to be trustworthy and reliable.

Data stewards would have designated people and processes for collaboration with the data utility. Stewards should also be able to participate in the governance of the data utility and the collaborative network overall – with input into evolution of the taxonomy, style guide and standards, inclusion/exclusion criteria, etc.

Stewards may need to be members of or even certified by Inform USA, the industry association for information-and-referral providers, although this may not be strictly necessary and should be further considered. (Perhaps Inform USA accreditation could merit higher rates of compensation.)

Governance body:

Participants agreed that the above roles would need to be subject to accountable oversight from a representative governance body designed to ensure equitable processes and outcomes.

This governance body – or set of connected bodies – should be comprised of representatives of data stewards, prioritized groups of impacted parties, and public leadership. The governance body might need to consist of different groups comprised of different kinds of subject matter experts with different responsibilities.

Minnesota Resource Directory Infrastructure Workshop – October 2024 – FINAL DRAFT - PENDING COMMUNICATIONS REVIEW

Data governance processes would set criteria for:

- Data quality, delivery, and other service attributes
- Inclusion/exclusion policies, and domain prioritization
- Monitoring and user feedback resolution
- Standards

Organizational governance processes would set criteria for:

- Upholding principles and values
- Approving / removing data stewardship responsibilities (including Utility role)
- Fiscal agency, funding strategies, and financial incentives

These governance processes would also be responsible for reviewing feedback from users and impacted parties, and for resolving conflicts among stewards, utilities, etc.

Advisory processes could also liaise with the stewards and utility with regard to:

- Government relations
- Vendor relations
- Community advocacy
- Funding

Budget guesstimation:

Groups ranged in their budget estimates, which also vary in accordance with a variety of factors that are subject to further determination as described above.

Guesstimates of the cost of starting this infrastructure up ranged from $2 million to as much as $10 million, when considering the path from launch to mature, stable institutional structure.

Participants estimated that the cost for the data utility role to manage technology infrastructure and coordinate the network (i.e. NOT including the data stewardship costs) might range from $250k-$1m a year.

One group estimated that there might need to be 6-8 FTE of resource data management capacity required to deliver resource data at a level of high reliability, *in addition to current capacity* distributed across the network.

Another group estimated the following figures:

- About 50,000 resources to maintain across the state
- 30 minutes (rough average) to update each resource once a year
- 25,000 hours
- 13 FTEs covering 2,000 hours per year
- $70,000 x 13 = **$910,000.00 to pay for the Stewards, round up for 1M**

Minnesota Resource Directory Infrastructure Workshop – October 2024 – FINAL DRAFT - PENDING COMMUNICATIONS REVIEW

These estimates don't include the cost of launching and facilitating the governing body. Costs of the Governing Body might entail at least 1 FTE plus possible stipends for participation.

Potential Funding Strategy:
Philanthropic grants might help address startup costs, while philanthropic program-related investments and public funding (legislative appropriation) to support sustainability. Health plans and health care should pool resources to invest in developing the infrastructure, and their vendors should support the infrastructure by paying fees for service-level agreements that guarantee levels of quality and outcomes from the utility.

What should happen first:

- Affirm shared value and articulate shared responsibility/roles
    - Identify prioritized already-existing directories that we want to include
- Start with seed investment which would include small planning grants/initiatives/pilots with limited scope. This would help achieve the following:
    - Focus on better coordination between directories thus reducing duplication
    - Produce efficiencies and gap closure instead of creating "new" directories to solve the issue
    - Potential initiatives/pilots to test these hypotheses::
        - Alignment and exchange of resource information between food organizations and 211 (proposed potential pilot to start with)
        - 211 and MNHelp.Info alignment and coordination
        - Coordination with FindHelp/UniteUs and 211 (greater complexity)
    - Lessons learned from the pilots can be used to advise and analyze for a broader scalable strategy toward a greater goal of "data utility" for shared resource infrastructure
- Set up Data Utility Oversight board and governance structure
    - This board needs to include community organizations that also manage resource directories, community members, data steward(s), technology vendor and/or intermediary, community organization that is NOT a data steward, funders (health plans, health systems, etc.), government representation
- Shareholders identified / funding structures
    - Understand who has an interest in resource data being generated and the funding structures
- Issue a Call for proposal for Data Utility role

In year one, how do we know it's working?

- Usability reporting i.e. clicks, usage across users of information
- Positive feedback from community organizations and members of the public (can do feedback survey)
- Community organizations report spending less time updating their information in resource directories

Minnesota Resource Directory Infrastructure Workshop – October 2024 – FINAL DRAFT - PENDING COMMUNICATIONS REVIEW

- No duplicative resource listing
- Roadmap created for future additions to Data Utility (domains, non-licensed community organizations, functionalities, other data of interest about resource)

Minnesota Resource Directory Infrastructure Workshop – October 2024 – FINAL DRAFT - PENDING COMMUNICATIONS REVIEW

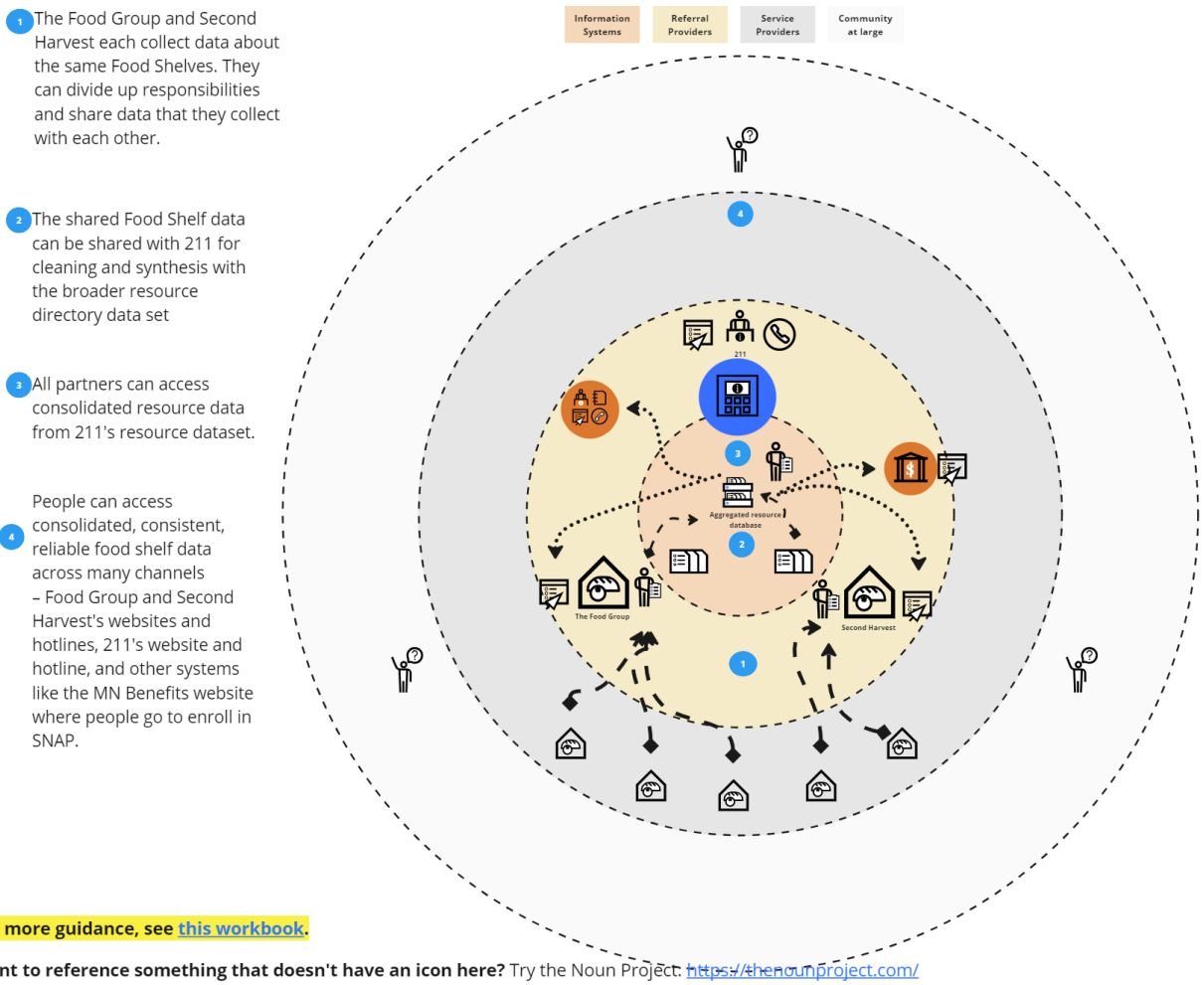
Path Forward: Potential Pilot Projects

Participants recommended a path of action that would test these assumptions and demonstrate the core value propositions of this strategy in an achievable, small-scale pilot. Participants also discussed specific partnership opportunities in which multiple organizations could exchange resource data for mutual benefit. These partnership opportunities could be the focus of pilot projects that move this network in the direction of the recommended strategy above.

One example of such an opportunity is drawn below:

[*Original Drawing:* Food Group and Second Harvest with 211 resource alignment and exchange]

Revised drawing: [Miro board]



For more guidance, see this workbook.

Want to reference something that doesn't have an icon here? Try the Noun Project: https://thenounproject.com/
(Or just create a new shape here and label it! Whatever works ;)

Minnesota Resource Directory Infrastructure Workshop – October 2024 – FINAL DRAFT - PENDING COMMUNICATIONS REVIEW

Description of Food Groups with 211 Use Case Pilot:

Background: The Food Group and Second Harvest each collect data about the same Food Shelves. They can divide up responsibilities and share data that they collect with each other.

Proposed pilot - data alignment between food shelves and data exchange with 211:

- The shared Food Shelf data can be shared with 211 for cleaning and synthesis with the broader resource directory data set.
- All partners can access consolidated resource data from 211's resource dataset.

Intended Outcome:

- People can access consolidated, consistent, reliable food shelf data across many channels – Food Group and Second Harvest's websites and hotlines, 211's website and hotline, and other systems like the MN Benefits website where people go to enroll in SNAP.

Minnesota Resource Directory Infrastructure Workshop – October 2024 – FINAL DRAFT - PENDING COMMUNICATIONS REVIEW

Conclusion

To establish reliable and accessible resource directory information as an equitable, sustainable public good, our network must develop a strategy that aligns the interests of multiple stakeholder groups through mutually beneficial agreements that incentivize active data stewardship and ensure accountable governance.

The strategy proposed here is a starting point that can be tested through actionable pilot projects. A pilot could focus on a specific use case for data exchange among directory providers that are already collecting this information and recognize a shared interest in collaboration.

Examples of use cases for such a pilot, as discussed by participants, include:

1) Collaboration between 211 + MNHelp.Info to divide responsibility and share data

2) Collaboration between Second Harvest and the Food Group to align processes of gathering data about food shelves, and exchange data with each other and a statewide partner.

3) Partnership between 211 and social care coordination technology vendors – such as FindHelp/UniteUs – in which the former provides resource data as a service to the latter.

Stratis Health suggests that options #1 and #2 may present expedient paths to demonstrate the core value proposition; however, especially if technology vendors agree to adopt industry standards for resource data management and exchange, all use cases could be actionable.

In any case, the results of a pilot project could be evaluated by a broader group of interested parties, who can subsequently recommend a scalable strategy for funding by healthcare institutions, philanthropies, and/or the state government. The Co-Creation Guiding Council will review results within the context of five strategies, to align lessons learned with our broader objective of enabling health and social care integration.

In the more immediate period, the following actions can be taken to increase awareness of build buy in for development and implementation of small pilots:

- Individual workshop participants can share this report within their organizations and discuss their role in a potential pilot.
- Next Conversations are already underway among workshop participants who are self-organizing efforts to learn about topics discussed.
- Keeping the broader Co-Creation group (Guiding Council and other partners) updated and involved in helping build awareness and buy-in of the workshop outputs to keep the momentum and action on the proposed path forward.

We now have an agenda for future deliberation together: workshop participants prioritized questions to address next about the details of the proposed data utility and stewardship roles

– and about how to align this work with efforts to build infrastructure to support closed loop referrals among care providers.

Appendices

Methodology

This is a complex problem that demands coordination among many stakeholders. Effective solutions will build upon and reflect the strengths and priorities of communities that are already in place, so we must engage with those who are already doing the work – and help them engage with each other.

Toward that end, this workshop was designed to maximize participation among representatives of organizations and communities who are already maintaining resource directory information and coordinating referrals to social services in Minnesota. This design process engaged with these representatives at every phase of the process – from conception to agenda design to the event itself and the followup reporting – so that our work would reflect the interests and priorities of this network to the greatest degree possible, and in turn generate the most buy-in to the results.

Minnesota Resource Directory Infrastructure Workshop – October 2024 – FINAL DRAFT - PENDING COMMUNICATIONS REVIEW

In this case, the primary cost of the workshop – process design and facilitation – was funded by a grant from the Midwest Big Data Hub, to the Ostrom Workshop at Indiana University, at which Greg Bloom is a visiting scholar. Bloom is developing a visual toolkit for participatory design of resource directory infrastructure strategy, and this workshop served as a test case for the prototype of these design materials.

Before supplementary funding was procured to support the other costs of the workshop (food, travel, etc), Bloom and Stratis began the design process by reviewing and affirming the outputs from the 2023 Co-Creation process in dialogue with key participants. Once funding was secured, we developed an invitation list – also in dialogue with organizations that played a leading role in the 2023 process – and subsequently engaged in pre-event discussions with each prospective attendee. In these dialogues, we reviewed the proposed agenda and elicited feedback from each participant on our prospective objectives; through their feedback, we identified specific topics that should be prioritized for discussion during our time together.

The result was a dynamic approach to agenda design that iterated right up until the event and continued to iterate during the event. The agenda began, after opening matters, with a round-robin showcase of each participating organization's current operations and goals; participants were invited to draw their resource data management strategies, and described their strengths and priorities to other participants. Subsequently, each participant was invited to pair off with representatives of one other organization, to explore the potential for mutual benefit that might come from some kind of collaboration in data management and exchange. This process iterated on our drawing practice, from a self-centered drawing to a collaborative drawing that depicted one-to-one value exchange.

With these value propositions identified, we then considered the recommendation posited by the 2023 workgroup report for many-to-many collaboration among the entire network of organizations – a two-part strategy, including: 1) Clarify and enhance the distinct responsibilities of already-existing "data stewards" of directory information within specific domains / geographies, and 2) Establish a core coordinating role – i.e a "data utility" – to a) synthesize data from this network and b) bottom-line the publication of comprehensive resource data as a public service.

Participants were invited to consider "plausible scenarios" in which this strategy might successfully uphold each of the specific value statements that the 2023 process articulated – Accessibility, Reliability, Equitability, and Sustainability. Each such value was assigned to a small, peer-facilitated group for analysis. Each conversation generated notes on significant points of analysis, and participants were invited to rotate from one topic to the next, generating a cross-pollinating accumulation of analysis along the way.

At the end of Day One, having affirmed our vision and values, and articulated plausible scenarios in which these values could be upheld, we polled the group to identify the topics that each participant wanted to discuss in Day Two. With this input, Open Referral and Stratis designed the agenda for Day Two.

Minnesota Resource Directory Infrastructure Workshop – October 2024 – FINAL DRAFT - PENDING COMMUNICATIONS REVIEW

The second day's agenda shifted into development of specificity in the design of our emerging strategic proposal. Participants were invited to break into topic-specific groups again, this time to describe the "propitious conditions" (i.e. the factors that could help such a strategy succeed) in accordance with three prompts:

- What should be the responsibilities and incentives to promote equitable data stewardship?
- What should be the policies and criteria for reliable and accessible data management?
- What should be the funding models for sustainable data stewardship?

Participants in these groups generated lists of conditions that could increase the likelihood that this strategy will successfully uphold our shared values.

Finally, with these "propitious conditions" on the table, participants were invited to develop specific proposals in which funded roles with designated responsibilities could be coordinated to achieve our shared goal. By default, participants were prompted to develop "generic" proposals that would merely describe the key roles without naming specific organizations that would assume those roles; they were, however, also invited to develop a "specific" proposal that would put forth named organizations for designated roles. One group opted to develop a specific proposal (nominating 211 for the role of "data steward"). At the end of this session, participants analyzed the resulting proposals and expressed a degree of consensus that the emerging options were converging toward a shared agreement (even though there remains some uncertainty or even diverging perspectives on the details of this strategy).

As a result, the strategy described in this report can be considered a reflection of the tentative consensus of the room, with the caveat that key questions are outstanding and various implementation details must be further specified before any binding commitment can be expected from participants.

After the workshop, these conversations are ongoing as self-organized among participants.

Analysis

Links to Selected Drawings from the workshop that show the current state of resource directories and how information is managed and used:

- 211
- MNHelp (dot) Info
- Health Systems and Health Plans connections to resource directories
- Resource provider/community organization - Second Harvest
- Resource provider/community organization - The Food Group
- UniteUs

Minnesota Resource Directory Infrastructure Workshop – October 2024 – FINAL DRAFT - PENDING COMMUNICATIONS REVIEW

Day 1 Working Session #1: Pair-off collaboration discussions

In this session, participants were paired up to discuss opportunities for mutually beneficial collaboration between one organization and another. We invited participants to represent their organization in conversation with at least one representative of another organization with whom they thought there might be potential to effectively collaborate.

The representatives were invited to describe – and then draw – scenarios in which each organization benefited from some kind of data exchange. The conditions were 1) each organization can keep their own information system and 2) somebody needs to remain responsible for resource data quality assurance.

The following summaries synthesize multiple conversations into consolidated narratives.

Health Plans and Health Systems:

Participants recognized that different organizations are able and perhaps best positioned to provide data stewardship in different domains – and they may have good reason to want to continue managing this information in their own data system. But participants asserted that there still needs to be a common source-of-truth set of data that can meet the needs of various kinds of caregivers. Can these objectives both be met? Participants hypothesized that smaller organizations could be responsible for localized / specialized data management, while bigger organizations can be responsible for data aggregation – there can be exchange across these scales.

Participants also hypothesized that many health systems could benefit from funding “open access” data infrastructure that could be used by many different information systems – enabling them to break from the competitive silo cycle.

This strategy could in turn benefit the various efforts to develop “closed-loop referral networks,” by ensuring that directory information is reliable and consistent across different networks.

There was recognition that data itself is not sufficient to achieve positive outcomes; there needs to be human expertise to effectively realize the promise of this data. This points to potential scalable and sustainable propositions – an open access database powered by human expertise that can tailor the data as a service to paying business customers.

The representatives of health plans discussed opportunities to collaborate in funding resource directory data management, and also in advocacy for public funding.

Open questions:

- How do health plans help build trust from users of information – and from providers of information (like CBO’s themselves)?

- Payers need data in return to understand effectiveness, and they also understand that community organizations may need to be compensated for additional capacity in exchange for participating in admin-intensive referrals. The latter may need to come first.
- How do we solve the need-to-helper ratio? Complex needs require human capacity; how can we make sure that we're investing not just in tech but scalable human resources?
- Resources that don't provide emergency or in-the-moment services – how do we make it easy for users to get help?

Complementary resource directories:

211 and MNHelp.Info

Representatives of these organizations outlined various overlapping functions/differences – as well as various unique responsibilities that one party holds which the other could benefit from.

They observed that their resource updating process is similar, while certain structures and relationships can allow for faster updates. Participants posited a collaborative scenario that divides up responsibilities across domains, and/or establishes aligned verification processes (such that if one has already verified a record, the other can accept that verified status in their own system).

Participants posited the potential for proof of concept projects that could test this kind of integration.

Food resource directory managers: Second Harvest and the Food Group

Representatives of these organizations estimate that 80% of their resources are duplicated between their systems.

They discussed the potential to align their information updating cycles, so that updates made by one could be accepted by the other to avoid redundant data gathering.

They also identified long-term potential to share front-end tools for presenting this data to users.

They still see important value in humans helping help-seekers, such as via call-center service.

Day 1 Working Session #2: Plausible Scenarios in line with our values

In the four peer-facilitated breakout groups, participants were asked to evaluate the recommended scenario put forth by 2023's working group – in which a data utility will bottom-line the production of comprehensive state-wide resource data, consolidating output from a network of data stewards with geographic- and/or domain-specific responsibilities.

Minnesota Resource Directory Infrastructure Workshop – October 2024 – FINAL DRAFT - PENDING COMMUNICATIONS REVIEW

The breakout groups were each asked to describe circumstances in which this scenario could uphold one of our core values – Accessibility, Reliability, Equitability and Sustainability. Group participants were invited to cycle from one topic to another in iterative cycles, so that discussions of one value could be applied to inform discussions of other values.

RELIABILITY - How would we ensure reliable data quality?

Attributes of reliable data quality:

Reliable data must be vetted by humans to ensure that it accurately reflects reality. Such vetting ought to be performed by a trusted intermediary with appropriate expertise.

Reliable data must be able to be presented in ways that are concise and discrete (i.e. y/n) and also detailed (beyond basic information); some users need just enough information to take another step to find more (e.g. website) and other users want detailed information about eligibility requirements, etc, to make precise decisions in complex situations.

Consolidated points – *denotes priority (greater number of stars denotes higher priority)

What are the drivers of good data quality? (prioritized):

- Shared standards (i.e., Inform USA) and taxonomy *
- Clear definitions of terms such as service v program, consistently applied. *
- Frequent formal review cycle **
- Established process for addressing user feedback in a timely way *
- Partnerships with subject matter experts *
- Clear motivation and scope of work, designed for longevity ***
- Inclusion/exclusion criteria **
- Data structure and scope should reflect the needs of a defined audience. * Data can be structured to effectively serve multiple audiences, but this requires more effort and granularity on the supply side, and more design decisions at the “last mile.”
- Keep it scoped, e.g. work with minimum viable first (with equity lens) ****

What are attributes of bad data quality:

- Duplicative **
- Broken links/unavailable phone numbers
- Prioritizes the needs of those who have more power / resources
- Does not consider motivation of potentially untrustworthy sources

What could result in bad data quality?

- Website scraping as sole source of updating info does not yield good quality *
- Too comprehensive to be user friendly
- Not enough staff to maintain data *****

- Decentralized updates that don't feed back to primary source would result in fragmentation and lost information.
- No benefit to CBO to update information, or capacity to accept referrals *****

ACCESSIBILITY - How might the same information be reliably updated once, and shared across many places, so that users can access wherever/however they need it.

Attributes for accessible data:

Accessible data must have a network of data stewards each with distributed expertise that can identify core needs that can be addressed in a standardized way and provide for the ability to exchange data with each other. There will need to be clarity on what is shared and with whom and core data about services are usable and open to users (additional information about services can be at a fee).

One of the outcomes is that this will decrease the burden on organizations providing services from doing multiple updates to just one update.

Consolidated points – *denotes priority

What are the opportunities for data to be shared across our network

- We have distributed expertise in our network, built on trusted relationships ****
- We can identify core needs that can be addressed in standardized way.
- Standardized data can be exchanged across systems.
- We can decrease burden on frontline organizations by going from many update requests to one.
- We can ensure that data is usable beyond cloud, i.e. printed directories are derived from (rather than competing w/) shared open data service that supports different use cases*
- Recognize limitations but still ensure access to info about orgs

How might we leverage the opportunities?

- Identify stewards by service area (Domain) and Geography
- Exchange standards already in use – can socialize to benefit from them further.
- Establish clarity on what is to be shared with who and when
- Better understand aggregate demand and resource gaps
- Data = Open, but "Information Services" = Fees **
- Consider the role of AI

What are the obstacles to sharing data across our network

- Data need vs data available ****

- We need clarity about capacity – because demand might increase due to increased availability of information, without increase in supply of resources to address needs *******
- Competing motivations, non-profit vs for-profit
- Decreased reputation and trust if we hand out “bad info”

What might result in failure?

- We try to go all in all at once: it needs to be a baby step *
- Unaccountable monopoly *
- What’s in it for CBOs? ****
- JSTOR/HIE example: if organizations/people are charged for access to information, then no access for those that can’t pay
- Staff turnover
- Loss of legacy
- AI

EQUITABILITY - What would fairness look like in this system?

Attributes for equitability:

The system should be open to all service organizations to participate in at their discretion and in ways that work best for them. Before any updates or data are published, those participating in the system should have the ability to review and approve changes that apply to them.

The system should be transparent about any fees related to the use of information and what’s core data vs. additional data. The proposed options are listed below, however, the participants were conflicted on whether the a few models such as legislative

Consolidated points – *denotes priority

What would equitability look like?

- All CBOs invited/able to be included *
- Capacity and compensation for providers to accept and update ******
- Prioritize best fit resources vs. biggest/easiest referral ***
- Review by stakeholders before publishing
- Coordinate filling out forms among orgs and sharing information

What would make this system more equitable?

- Ability to turn on/off provider discretion
- Provide training/assistance for updates/reimbursement *****
- Ensure compatibility with existing systems, no new systems for CBOs to manage
- Build value proposition into design for all parties
- Many points of entry: in-person/phone/test/web/self-service/app

- Accessible and transparent data *
- Proactive data tracking and reporting to ensure all are seen equally *
- Include help seekers in process/governance
- Public facing option – easy to use by individuals and organizations ****
- Review processes to ensure broad representation and identify gaps
- Language options
- Iterate and continue to adapt (not a one-time conversation)
- Transparency of fees, etc. what is required to share
- Allow users to customize fields they want
- Adaptable data (i.e. print) *

What would in-equitability look like?

- Excluding services based on political rationale (i.e. abortion, contraception, gender affirmation care) ****
- Expecting CBOs to do unpaid work *
- Pay to play (SEO)

What would result in inequitable outcomes?

- Not being intentional about equity
- Not including a variety of perspectives, demographics, etc.
- Unreasonable expectations
- Not having honest conversations, not acknowledging power dynamics **
- Human bias

SUSTAINABILITY - How might we ensure this infrastructural system is sustainable?

Attributes for sustainability:

There are multiple models that can be expired. The options are listed below. The agreement among participants was that for this system to be sustainable, it has to be an ongoing inversement, incentives among data stewards to keep information current with options on how to do that, and the role of the beneficiaries of the system in sustainability should be further explored.

The participants were conflicted about the legislative appropriation and philanthropic grants as a sustainable model for long-term sustainability.

Consolidated points – *denotes priority

Who benefits from this infrastructure?

- Organizations seeking resources/help seeker/person receiving service
- Community based orgs – less admin time, more accurate referrals
- Directory vendors, allows relocation of resources

- Health Insurers, employers, government
- Smaller referral systems, schools

What are sustainable funding models?

- Incentivization alignment among current players ****
  - Proportionate investment from beneficiaries, distribution to stewards ****
  - Braiding funding streams from current vendors *****
    - Using a portion of the shared value/savings to address upkeep of information management ****
- 1115 Group exploration
- Has to be Ongoing 7+ years
- Philanthropic program related investment (not grants, but money for services provided to the funder)
- Legislative appropriation ****

What are the costs of this infrastructure?

- (Potential) Increased employee turnover
- Governance
- Legal/compliance *
- Data management time
- Technical expertise (upkeep) *
- Overhead, managing the cost of running an organization
- Marketing
- Security
- Quality assurance of organization users of platforms ****
- Are there complications of having one source of truth? What does it look like from standpoint of healthcare, for profit, CBO?
- Medicaid infrastructure

What are unsustainable funding models?

- One time payment funding for initial data download
- One-time legislative appropriation
- Philanthropic grants
- Incentives that can be unfairly gamified *

Propitious Conditions: "This could work if . . ."

Given the emerging themes from Day 1, we broke into topical groups to get specific about what might need to be true in order for the proposed scenario to succeed. Our objective was to deepen our analysis, to ensure that our plausible proposition could evolve into a feasible strategy.

Participants were first invited to articulate the "propitious conditions" – i.e. favorable circumstances that could enable success. Then, participants were invited to identify risks that could derail efforts into failure – and then were prompted to identify steps that could mitigate the

most significant risks. The resulting risk-mitigation measures have been included in the following lists of propitious conditions.

Clear, equitable responsibilities and incentives for data stewardship

Consolidated points – *denotes priority

- There is a clear mission and set of values * ✅
- The individual data stewards are appropriately and proportionally incentivized, to ensure that the benefits are worth the time and effort **
    - Incentives could be financial on per-record basis (weighted by complexity) – such that organizations are compensated for maintaining designated records to an acceptable level of quality.
        - This would have to be designed and monitored to prevent gaming.
    - Incentives could also include non-monetary benefits
        - technology
        - analytics
        - grant writer time *
        - training, support, help achieving accreditation
- We use existing standards (adapting as needed for each domain of resources), to ensure data is consistent and reliable.
    - These standards are regularly reviewed and adapted as needed to ensure equitability.
- The bottom-liner / utility is accredited through Inform USA.
- There is an oversight board, monitoring the utility and resolving conflicts with stewards.
    - Charter ensures diverse representation on the board.
- Data stewards apply through an RFP process and have contracts with end dates.
- CBO burden is reduced by establishing a single designated data steward contact

Appropriate protocols for reliable, interoperable data management.

Consolidated points – *denotes priority

- Domain stewards ensure rules are consistently applied and approves updates
    - Public transparency of roles and accountability, to prevent confusion about who updates what
- Incentives (funding) contingent upon standards compliance and quality assurance.
- Quality assurance processes are standardized and transparently reported
    - Tiered levels of requirements to ensure appropriate flexibility – less verified (speed vs quality) for crisis responses, given acceptable levels of risk tolerance
        - option for time limited resources (e.g. summer, disaster) *
- A standard review cycle

    - generates feedback on what data is needed and why
    - prunes data that is at the end of its lifecycle, to avoid bloating / stagnation
- Mechanism(s) for flagging resources, submitting feedback
- Requests for updates are filtered and directed to respective data steward
- (In addition to standards) there is a collaborative, fair process to further specify criteria and requirements for fields and style.
    - Taxonomy and style guide * standards to be set collaboratively at the oversight board level
- Required table structure is sufficiently granular for data to be used for different purposes.
    - Shared approach to managing taxonomy that enables different levels of specificity for different purposes. *
    - Required + optional data
        - Eligibility
        - Contact
        - Accessibility
        - Hours
        - Address
- Standardized unique identifiers
    - [Question: UIDs for organizations… *and* services?]
- Clear, agreed-upon exclusion criteria with review and evaluation process
    - Escalation process for bringing inclusion/exclusion issues to gov board
        - Utility board owns inclusion/exclusion and conflict resolution *
    - Public display of inclusion/exclusion, accessible from where data is shared
    - Launch in phases
        - Start with validated partners (e.g. non-profit, government, licensed)
        - Add for-profit, community groups etc over time
- There are appropriate feedback loops for different kinds of users
    - Agencies can request inclusion/exclusion and updates *
    - Individuals can submit feedback (goes to domain owners and agency)

Equitable funding models can sustain reliable data stewardship

- Seed money to get things started
- The funding model is clear and there are guardrails to avoid exploitation *
- The ROI is meaningful to each user, both qualitatively and quantitatively *
    - ROI can be shifting resources to higher-impact work
- Governance is not captured by funders
    - Met council type model of funding governance
- Data services are defined and appropriately compensated
- State gov (through inter-agency agreement) pays for baseline level of service
    - Opportunity for a small tax to fund this infrastructure (i.e. 911 phone bill)
- Healthcare collectively supports

Minnesota Resource Directory Infrastructure Workshop – October 2024 – FINAL DRAFT - PENDING COMMUNICATIONS REVIEW

- Referral platform software vendors share some of the value they capture in exchange for data services (data quality assurance, curation, support, etc)
- Funders agree to minimum, basic KPIs, with additional tangible value being a bonus
- Independent advocacy groups continue to message importance (i.e. Council of Nonprofits, Council of Health Plans)
- There is budget for CBO support

Minnesota Resource Directory Infrastructure Workshop – October 2024 – FINAL DRAFT - PENDING COMMUNICATIONS REVIEW

Questions:

What do we mean by 'infrastructure'?

- One answer: Shared means to many ends.

Research

- What can we learn from past iterations? ****
- What can we learn from the EHR consortium and HTAC?

Closed loop referrals and compensation for social services

- Does the referral process need to be part of directory conversation?
- How do Z-codes relate to the shared taxonomy? How will they be aligned?
- How are COs going to be compensated with increased demand?
- How do we design with closed loop in mind?
- What's the funding mechanism of end referral?

Data management - this can start getting addressed with prioritized use cases

- How do we capture complexities of resources in a database?
- How would necessary staff capacities break down by sector/steward?
- What are organizations in both systems and what does the updating process look like?
- How can we standardize taxonomy usage across contexts – recognizing that different users have different needs that are in tension?
- Who gets to decide if/how groups are categorized?
- What information must always be shared with all users, and what kinds of information might only be shared with some users?
- What are the limits of technology?

Governance

- How do we trust each other?
- What kind of boundaries ought to be in place around usage?
- Should there be separate bodies for Advisory + Fundraising, and Governance + Oversight?
- Should Oversight Body members get paid?
- How do we ensure this works best for providers/members?
- How do we create a governance that supports ongoing funding?

Funding models:

- What is a financial model that's appropriate/fair for stewards?
    - Is there a funding model for 5+ years that doesn't require closed loop referral i.e., is a better database / utility? What would payers / providers need to know to

commit to granting / paying for something for a long-term pilot? What area / division of their orgs would they handle?

- How do we layer in human expertise in resource navigation?
- What is important that can't be bought?
- How should we engage with government (legislators, agency leadership, etc) in support of this strategy?
- Who is in/out?
    - Start with government or 501(c)3
    - Later have adjacent (e.g. adult sliding scales? Day care?

Next Conversations

Discussing Stratis' role in supporting this process forward

Bottom liner: Senka
Who's interested: Lisa Bond – Findhelp, Dan Behrens – Allina, Ben Waltz – BCBS, Roseline A., Catherine Enz
Date: To be determined

Food Source data alignment/sharing

Bottom liner: Second Harvest – Robin
Who's interested: 211, The Food Group, Roseline A.-Unite Us, Lisa Bond-Findhelp
Date: In process

211 data "tour" what are these standards we keep referencing?

Bottom liner: 211 – Julie
Who's interested: Roseline A-Unite Us, Katherine DuGarm, Bethany Hawley, Robin Manthie (SHH), Jaclyn Mann (Fairview)
Date: 12/3/24

Collaboration and Federation: What we've learned elsewhere

Bottom liner: Greg Bloom
Who's interested: Christy, Julie, Shawn, Senka, Katherine, Bethany
Date: In process

Minnesota Resource Directory Infrastructure Workshop – October 2024 – FINAL DRAFT - PENDING COMMUNICATIONS REVIEW

Minnesota Resource Directory Infrastructure Workshop – October 2024 – FINAL DRAFT - PENDING COMMUNICATIONS REVIEW

Index of Links to Raw Notes and Images on OneDrive: