Data Across Sectors for Health

DASH Webinar Series

Advancing Community Health Through Equitable Data Ecosystems

Session III:

Navigating Market Forces and Policies

September 26, 2022 | 1:30 p.m. – 3:00 p.m. ET

Tips for Using Zoom

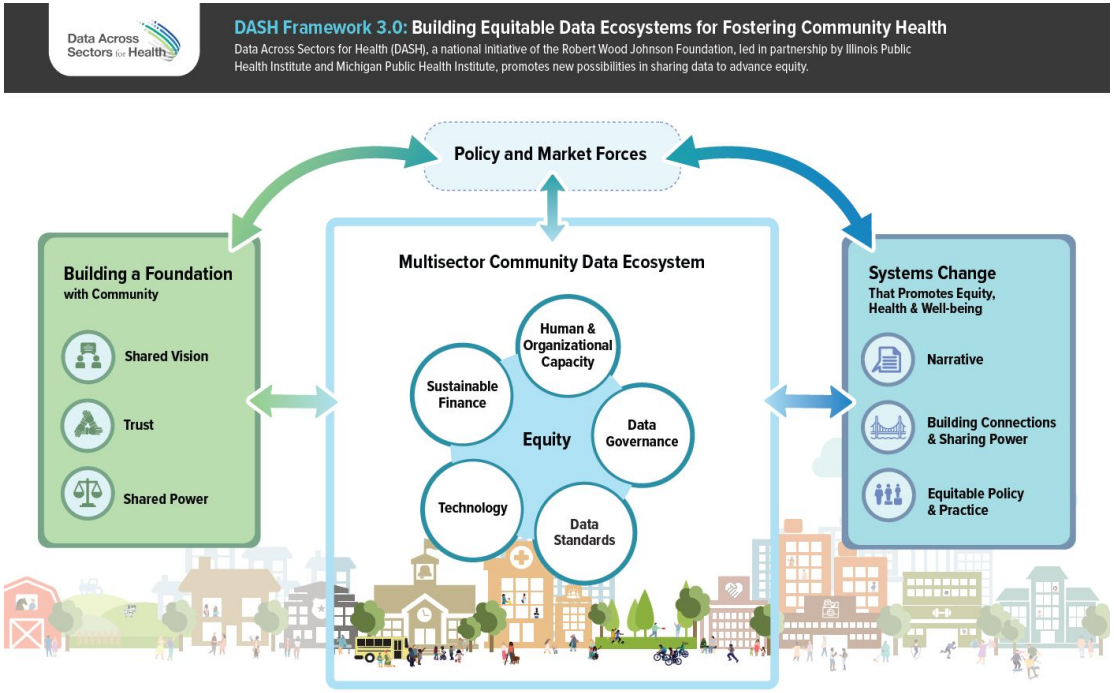
- ASL interpretation: please have your screen view set to “speaker view” to view speakers AND interpreters
- Use the Q & A module to submit questions to presenters
- Closed captioning: you can hide subtitles in your control panel
- Use the hand-raising feature to come off-mic during Q&A

Data Across Sectors for Health (DASH)

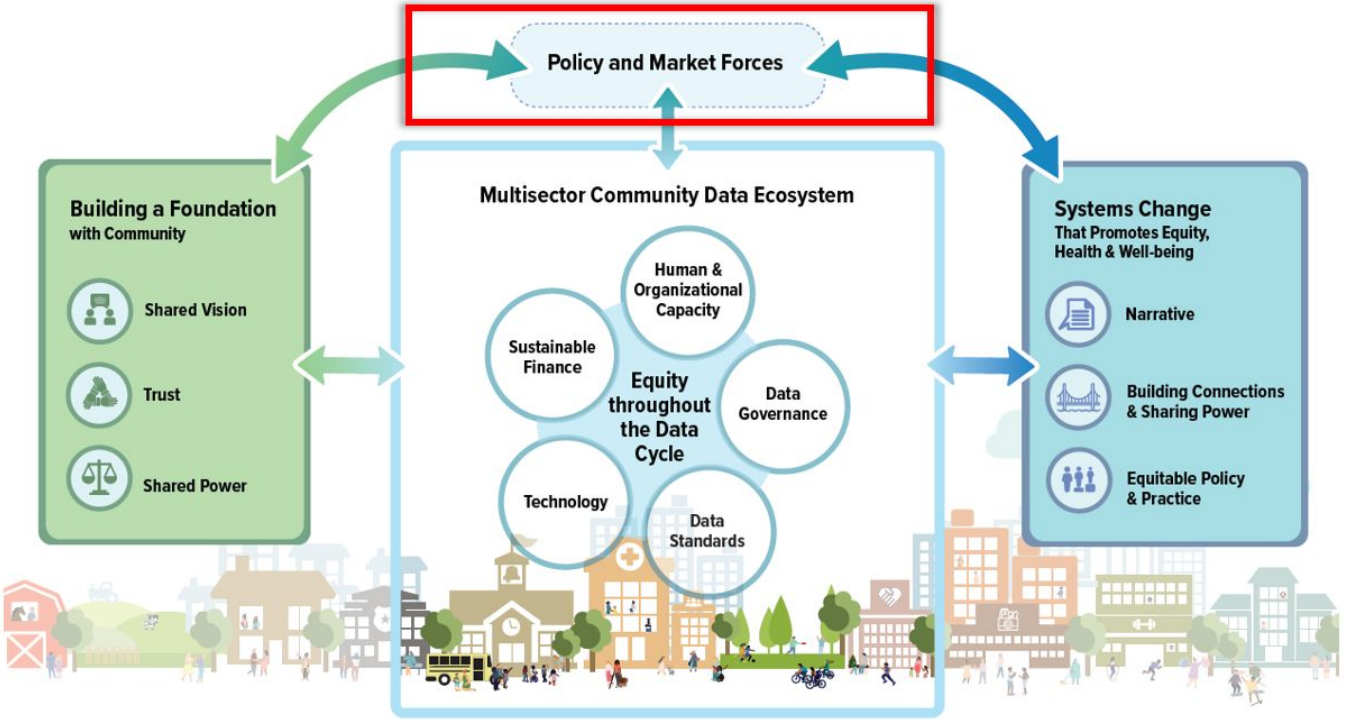
DASH is co-led by the Illinois Public Health Institute and the Michigan Public Health Institute, with support from the Robert Wood Johnson Foundation.

The DASH Framework

Equitable Data Ecosystems for Advancing Community Health



Policy & Market Forces



Session Goals

1. Describe the role of market forces and policies in shaping capacities, opportunities, and barriers to data sharing within data ecosystems.
2. Identify the role local communities play in creating a more effective and just policy sphere.
3. Understand that available data within a capitalist system often reflects inequities that shape our society.

Kicking off the Conversation

Today's Presenters

Greg Bloom
Founder
Open Referral Initiative

David Poms
Partnership Manager
DC PACT (Positive Accountable Community Transformation)

New Solutions for the Resource Directory Problem

@open_referral

bloom@openreferral.org | .202.643.3648 | @greggis

Bread for the City
helping people

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Community Resource Directory Data:

WHICH agencies?

WHAT services?

WHERE are they located?

WHEN & HOW are they accessed?

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Community Resource Directory Data:

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IT'S COMPLEX...

Organizations: multiple services, facilities

Services: elaborate eligibility requirements

Language: differing vocabularies

Jurisdictions: federal, state, local

Public and private: gov vs charitable sector

& IT'S ALWAYS CHANGING

A FRAGMENTED FIELD:

Conventional Referral Providers

Web-based startups

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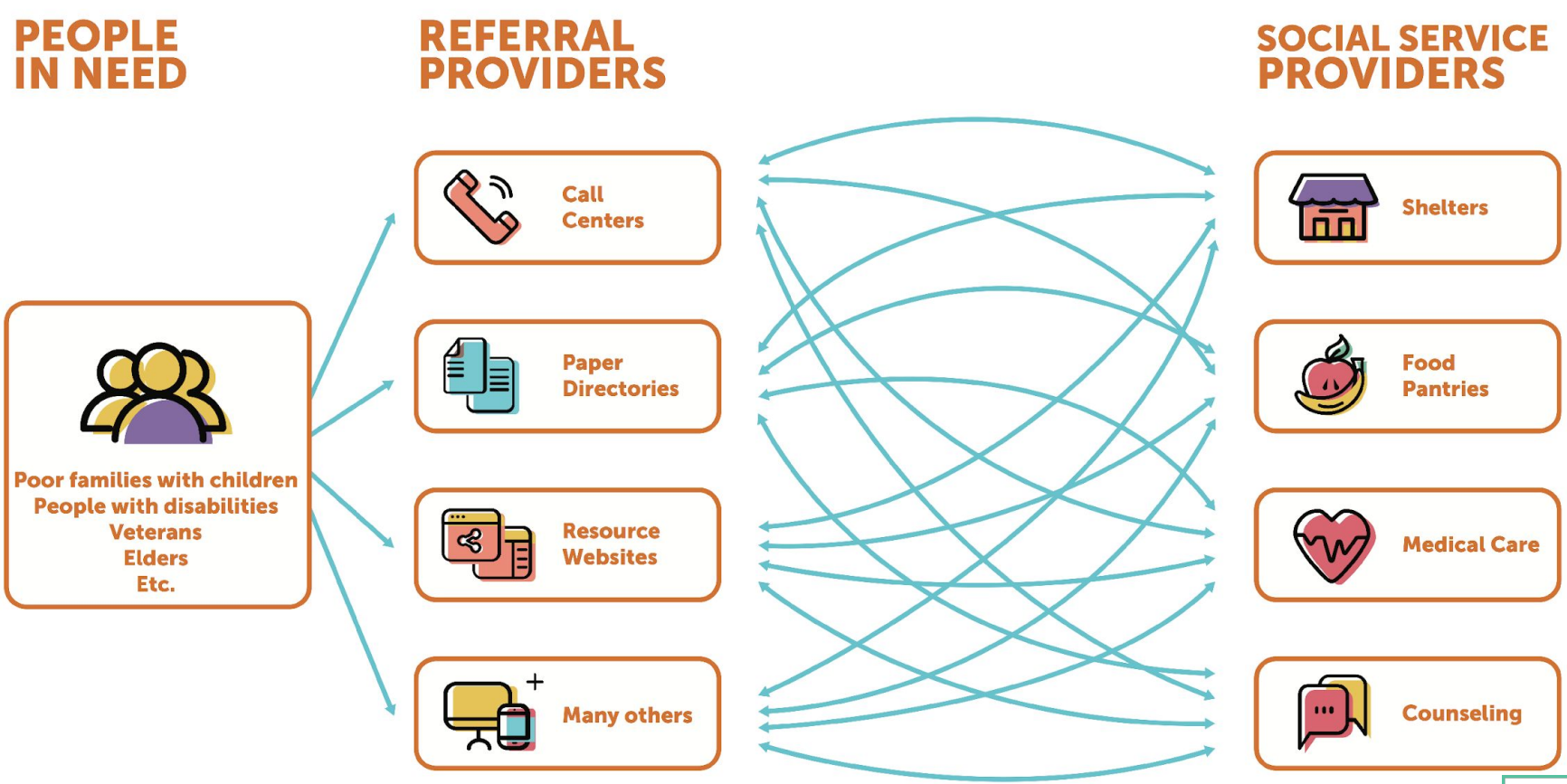
A LANDSCAPE OF SILOS: CHAOTIC, WASTEFUL, INEFFECTIVE



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Vision

A healthy information ecosystem
in which **people can find what they need**,
in **whatever way works best** for them.

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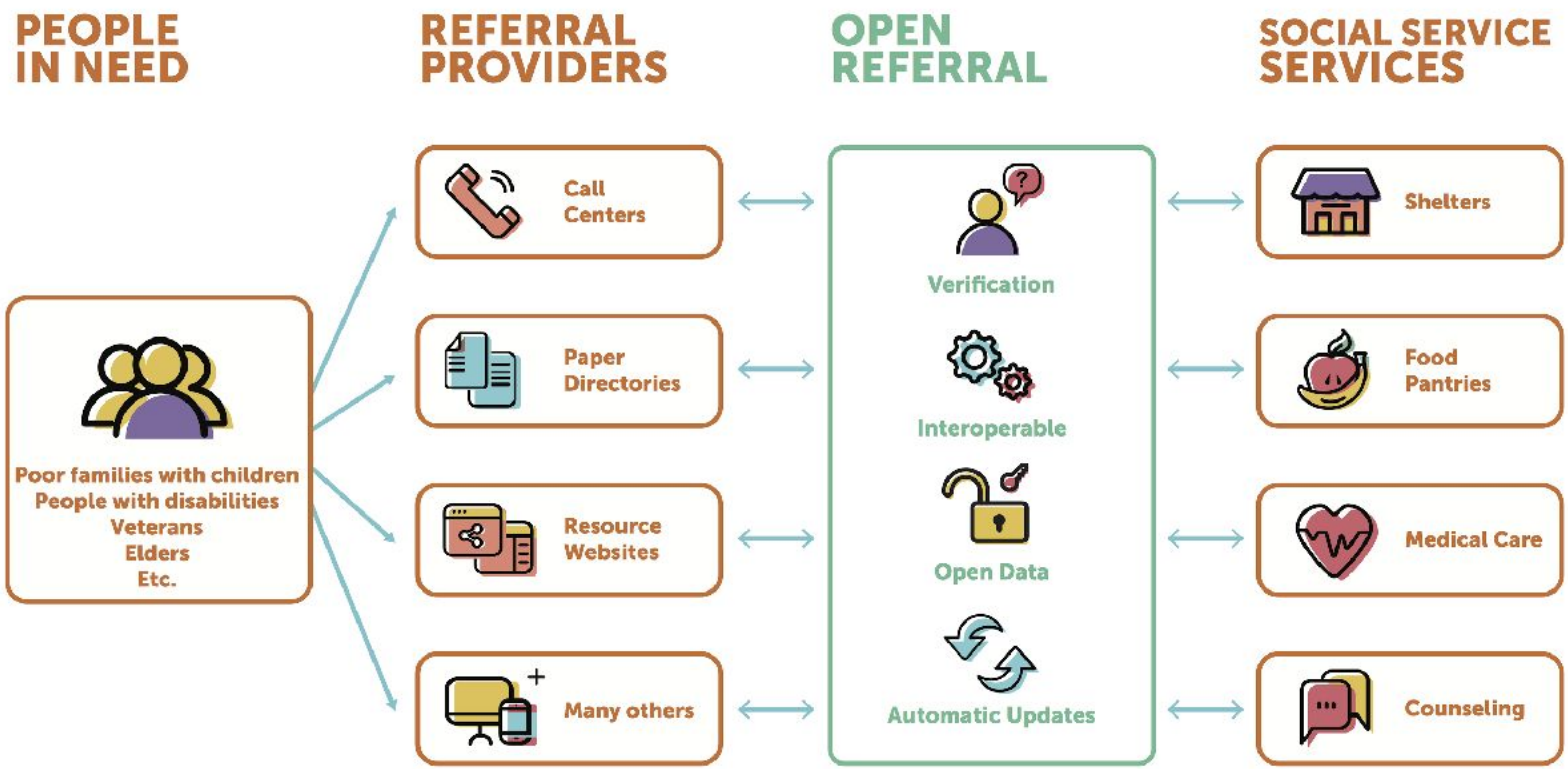
A HEALTHY ECOSYSTEM IS INTEROPERABLE



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THE HUMAN SERVICES DATA SPECIFICATION: BRIDGING OLD AND NEW

The Human Service Data Specifications:

http://docs.openreferral.org

1. Vocabulary and logic model
2. Machine-readable format
3. API Protocols

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Open Referral: Endorsed by AIRS as Industry Standard

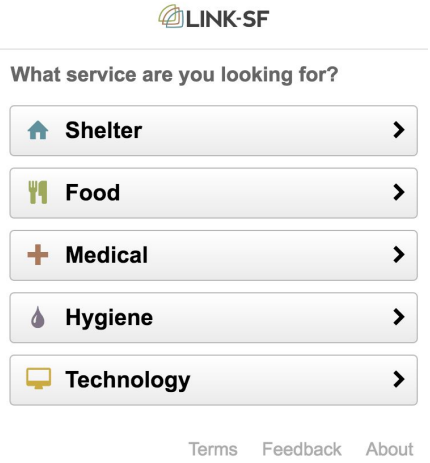
In November 2018, the Alliance of Information and Referral Systems "moved to promote the adoption of Open Referral's Human Service Data Specification and API protocols."

HSDS/A are now the industry standards.

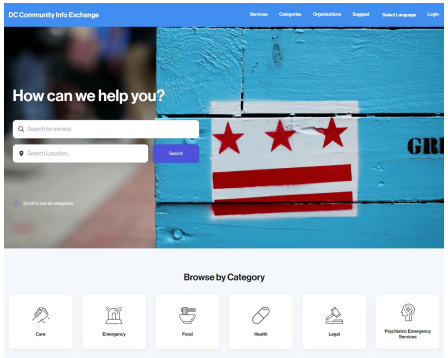
AIRS™
Setting the Standards for Information and Referral Services

Open Source Applications:

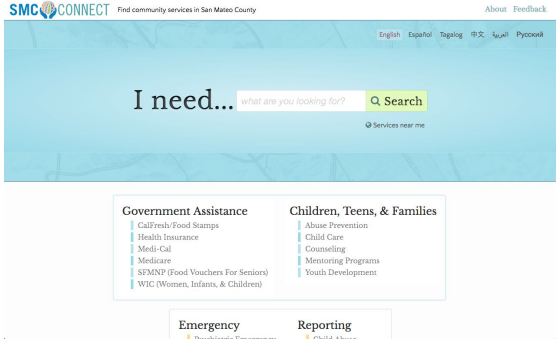
Link by Zendesk



ORServices by Sarapis



Ohana by Code for America



ARRIVAL ADVISOR

PEACE GEEKS

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The Big Question:

If resource data is **public information,**
and should be **openly accessible,**
how can we **sustain its maintenance?**

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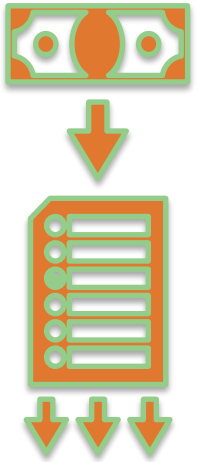
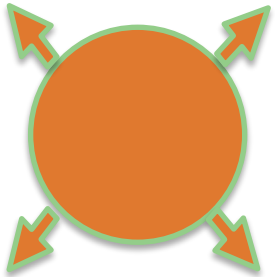
THREE MODES: CENTRALIZED, FEDERATED, MANDATED REGISTRY

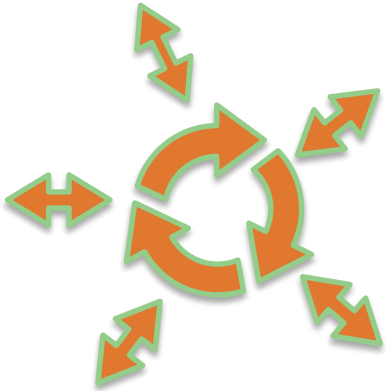
#1: Service Registry (official list)



#2: Data utility (centralized platform)



#3: Data Collaborative (federated network)



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Mode #1: The Service Register

A **funder** can ensure reliable open resource data by **requiring grantees and contractors** to update **their own information in a registry.**

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REGISTRY MODEL

Self-updated list Authority requires it Monitored for trust

1 **Help seekers** might seek help from any number of intermediaries – hotlines, websites, social workers and other care providers, etc. When resource directory information is made available as standardized open data, any intermediary can access the same information, and provide it through their own tools in whichever way is most appropriate for the context in which they help help-seekers.

2 Open resource data can be published through a **Service Register**, which is an official list of services.

3 A funder (or any authority institution) can establish a Service Register by requiring the service providers within its remit to be accurately listed in the Register as a condition of funding (or licensing, etc).

4 For a Service Register to become and remain trustworthy, there should be a designated **Data Custodian** who will monitor the accuracy of the Register's records and ensure compliance.

5 When a network of referral providers can access the same standardized open resource data, they can also aggregate and share data about their usage of data – enabling **analytics** about search terms, referral patterns, resource gaps, etc – to drive decision-making by funding institutions, policy-makers, etc.

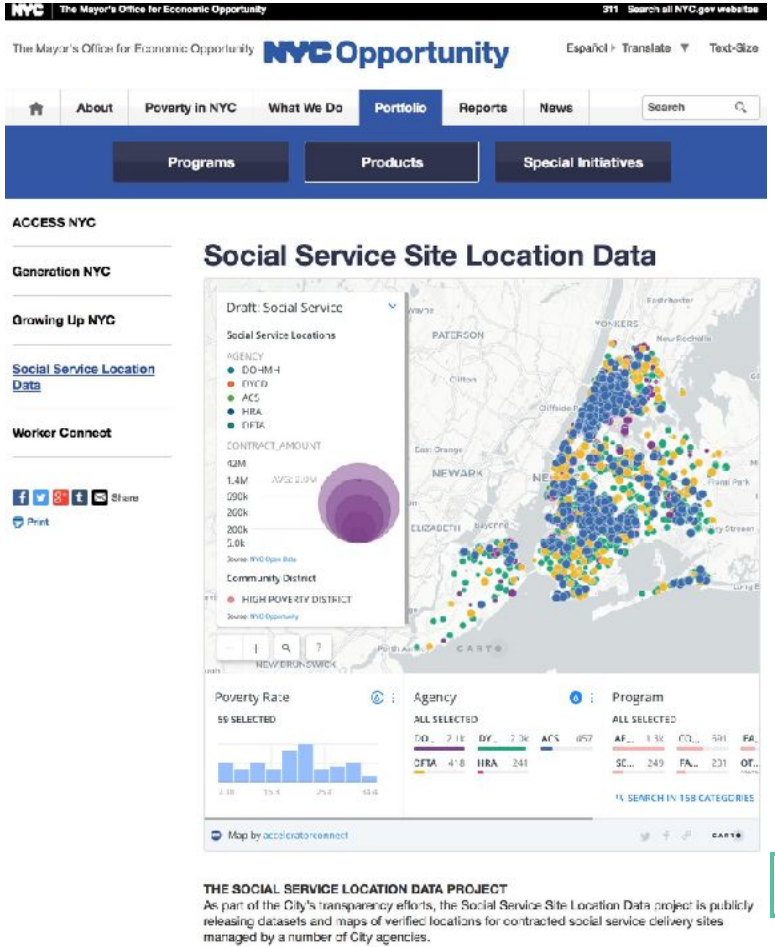
Example: NYC Mayor's Office of Opportunity, HHS Accelerator, and open data on every contractor

NYC Opportunity

Mayor's Office of New York City is publishing data on all municipally contracted service providers in the standardized Open Referral format on its open data portal.

Benefits:

- Canonical public resource directory record
- Gov collects limited data (which is out of date)… and they might pay for enrichment / updating.
- Gov might pay for traffic / analytics data that are interoperable with its own records.



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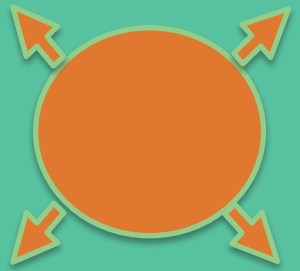
Mode #2: The Data Utility



A referral provider can **sustainably publish open data** as a public good by **generating revenue for premium services.**

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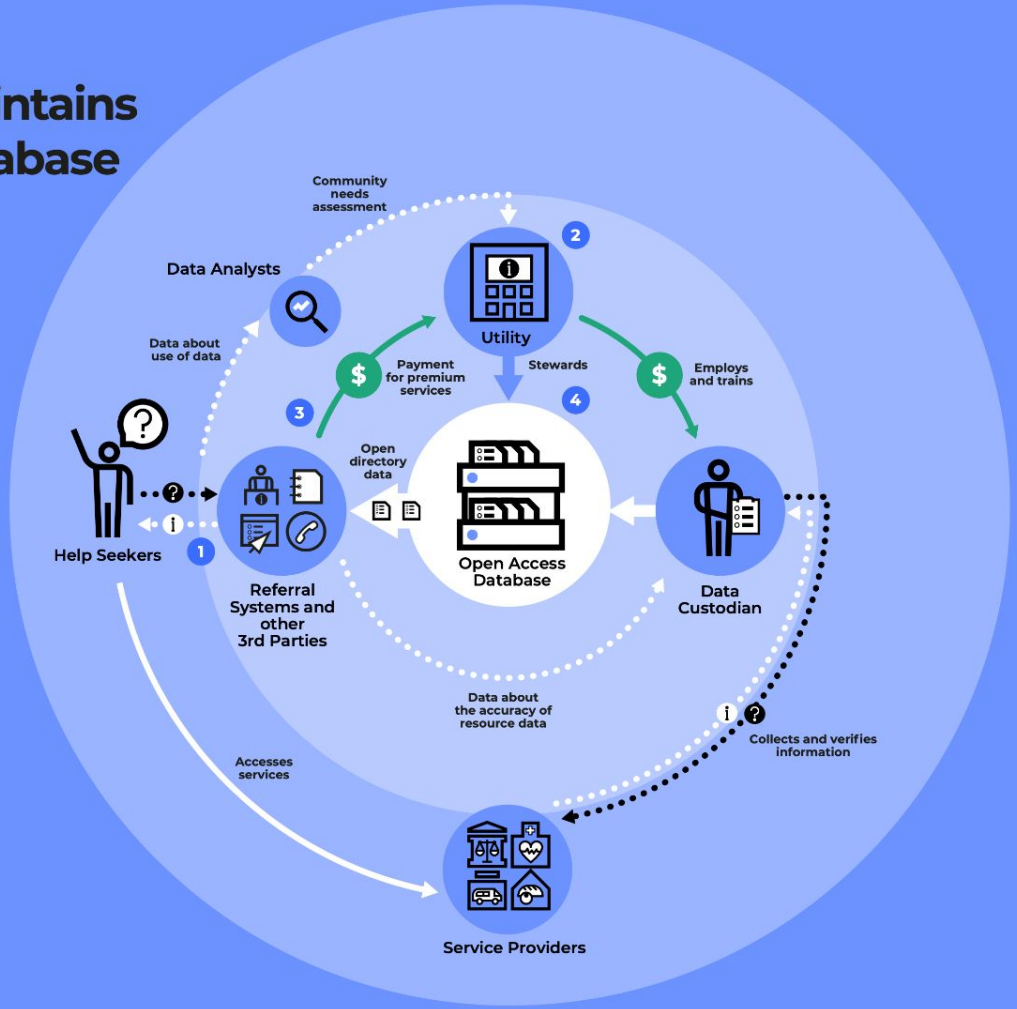
UTILITY MODEL

One steward maintains Open access database Pay for premium

1 **Help seekers** might seek help from any number of intermediaries – hotlines, websites, social workers and other care providers, etc. When resource directory information is made available as standardized open data, any intermediary can access the same information, and provide it through their own tools in whichever way is most appropriate for the context in which they help help-seekers.

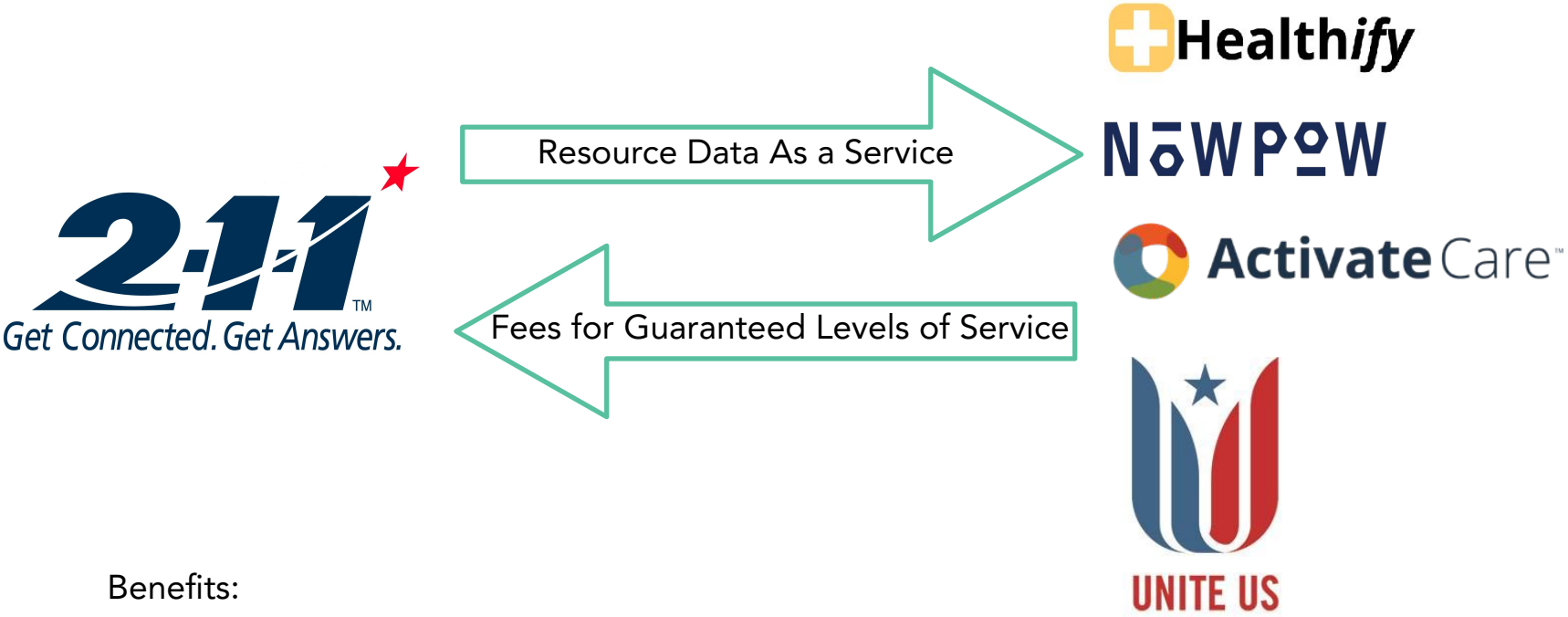
2 A **Data Utility** can maintain a comprehensive resource database including records about many different service providers, with accuracy ensured by the ongoing labor of a data custodian who is responsible for collecting and verifying resource data from service providers.



3 A **Data Utility** can provide its resource data as a public service while sustaining itself with revenue generated from some intermediaries who want guaranteed levels of premium service, value-adding features, and synthesized analytics.

4 A **Data Utility** might also generate revenue by deploying and monitoring Service Registers – as described in the Registry model – as a service for funders and other authority institutions.

Example: the Data Utility



Benefits:

- One single source of truth for a community.
- One organization is responsible.
- Monitor usage to produce valuable data analytics (in future iterations!)

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Mode #3: The Data Collaborative

A network of referral providers can cooperatively maintain and share data, decreasing costs and increasing quality.

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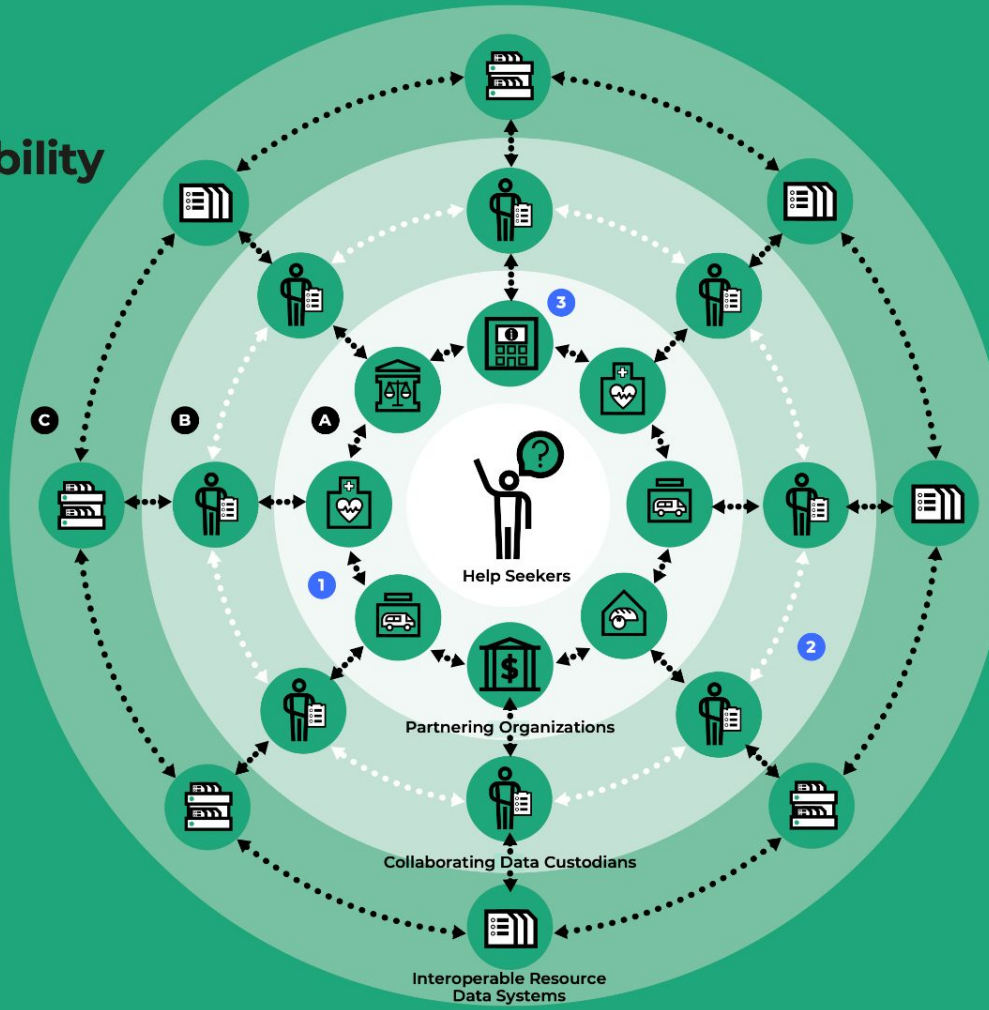
COLLABORATIVE MODEL

A federation
Shared responsibility
Mutual benefit

A **Internal layer:** Organizations develop mutually beneficial partnerships

B **Middle layer:** Data custodians collaborate on resource data management

C **Outer level:** Data systems are interoperable, such that reliable information can be accessed through any of them

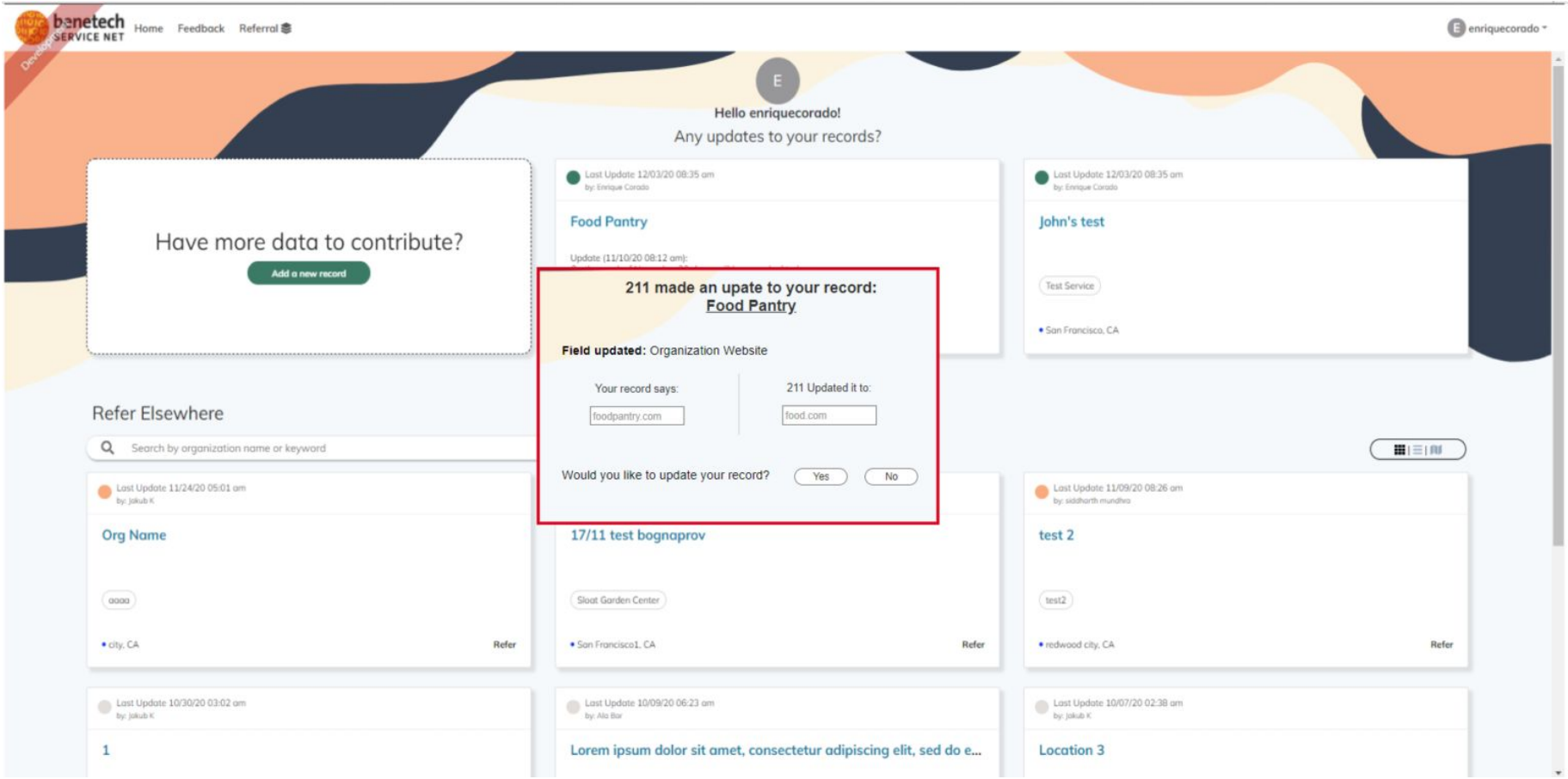


1 A resource data collaborative enables the distribution of maintenance responsibilities to be shared across a network of organizations that help help-seekers find help. This collaborative approach can yield higher quality data at lower collective costs than siloed, competing systems.

2 A resource data collaborative works best when it develops *clear agreements* that appropriately delegate specific responsibilities among designated custodians – with established methods of monitoring, feedback, conflict resolution, and decision-making through which all members can participate. .

3 Collaboratives can include – and, in fact, may benefit from the inclusion of – Service Registries and/or Data Utilities. A Data Utility may even serve as the anchor of a Data Collaborative, assuming bottom-line responsibility for data stewardship (presumably in exchange for the appropriate resources).

Example: Benetech's Service Net



Goals

Local pilots to move the world

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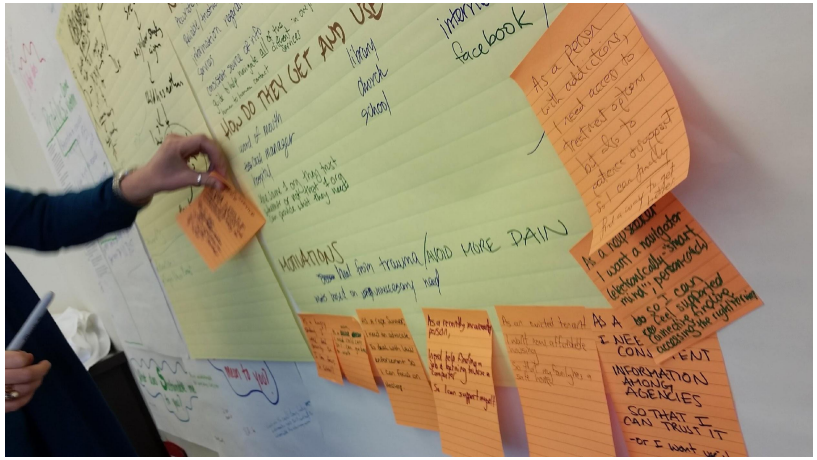
Multi-stakeholder participatory research and deliberation



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How can you help

- Join or start a local pilot
- Adopt open standards in your tech
- Reach out to learn more!

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Thanks for listening. Let's talk!

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Sign up for email announcements: https://openreferral.org

Join our discussion forum: groups.google.com/forum/#!forum/openreferral

Discuss a pilot in your community:

bloom@openreferral.org | 305-962-2859

@greggish | @open_referral

Community Resource Information and Exchange (CoRIE) Initiative

David Poms, DC Primary Care Association

DC HIE

DHCF
Department of Health Care Finance

DCPCA
DISTRICT OF COLUMBIA
PRIMARY CARE ASSOCIATION

CRISP DC

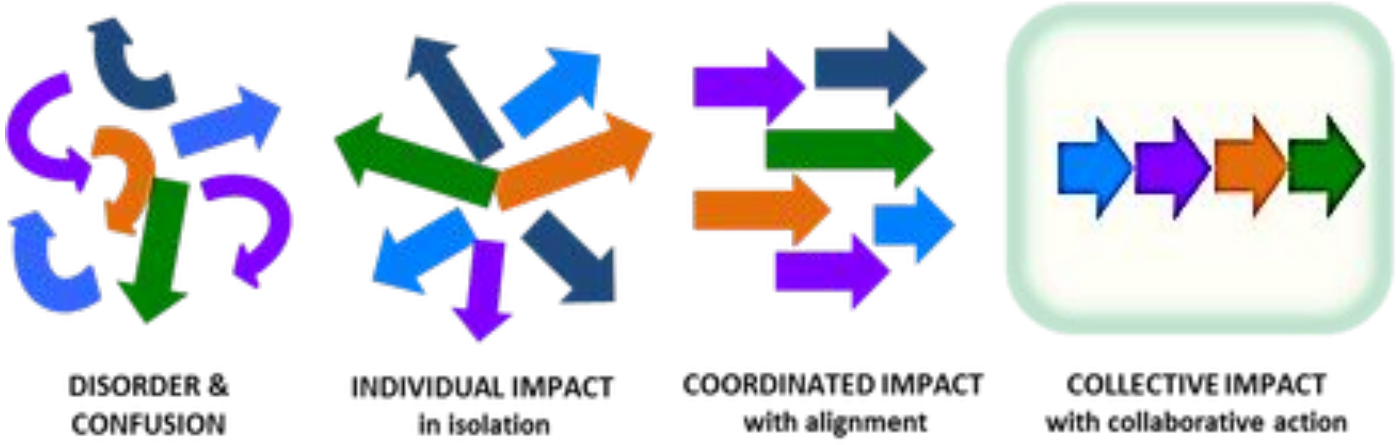
DCHA
District of Columbia Hospital Association

DC PACT (Positive Accountable Community Transformation) is a Collective Impact coalition effort of community providers

- Problem Statement: Racism and the lack of accountability, alignment and investment has led to inequitable social conditions, health and well-being outcomes
- Vision: DC functions as a seamless accountable health community that provides care and the social conditions for racial equity, health equity, and community well-being
- Mission: Build the movement to create a seamless accountable health community that achieves equitable individual and community well-being in the District of Columbia through community leadership, policy change, infrastructure development, and care improvement

Accountable Health Community Model

Collective Impact



- Solutions and resources are not known in advance, and typically emerge throughout the process.
- We cannot predict the solutions at the outset, and that is uncomfortable
- Initial focus on creating effective structure for interaction
- The process itself is the solution/reveals the solution

THINK: EVOLUTION

The DC PACT origin story

Partners:
AmeriGroup DC
AmeriHealth Caritas DC
Bread for the City
Capital Area Food Bank
Capitol Hill Group Ministry
CareMore Health
Children's National Medical System
Children's Law Center
Community Connections
Community of Hope
DC Behavioral Health Association
DC Greens
DC Hospital Association
DC Primary Care Association
Family & Medical Counseling Services
Food & Friends
George Washington Hospital
Health Services for Children with Special Needs
Hillcrest Children & Family Center
Howard University Hospital
Institute for Public Health Innovation
La Clinica del Pueblo
Leadership Council for Healthy Communities
Mary's Center
MedStar Hospitals
Providence Health System
Regional Primary Care Association
So Others Might Eat
Trusted Health Plan
Unity Health
Vitas HealthCare
Whitman Walker Health

Government Partners:
Department of Behavioral Health
Department of Disability Services
Department of Energy & the Environment
Department of Health
Department of Health Care Finance
Department of Human Services
Interagency Council on Homelessness
Fire and Emergency Management Services

- 2016: Came together to apply for CMS's Accountable Health Community pilot project
- 2017: Commitment to work together without CMS support through Collective Impact Model
- 2018: Completed a Common Agenda through retreats to define where we are and begin engaging more broadly
- 2019: Received DC Medicaid Community Resource Inventory and Exchange (CoRIE) planning grant
- 2020: CoRIE technical development phase commenced, led by CRISP and DCPCA
- 2021: Updated our Common Agenda again

STRATEGIC GOALS		
	#1: By December 2024, successfully incorporate social risk management into DC Medicaid value-based payment and quality improvement forums	#2: By December 2024, implement DC PACT communication strategies to promote and sustain health system dialogue and action on SDOH
	#3: By December 2024, ensure all relevant DC PACT partner staff are using DC HIE-connected solutions for social risk assessment and analytics, resource location, and care team coordination	#4: By December 2024, leverage citywide well-being assessment to drive health system accountability to community-defined progress measures on SDOH

What does success look like for DC PACT?

- Build capacity for **organizational and system change**
- Build **shared measurement** consensus for strategic goals through action teams
- Provide a **strong collective framework** that engages the health, social and public sectors in moving toward a seamless accountable health community

Community Input Led to Focus on Social Determinants of Health in DC Medicaid

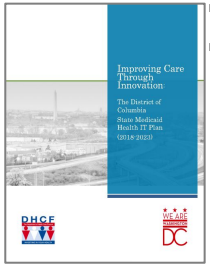
Beginning April 2017, DC Medicaid (DHCF) held a series of discussions on social needs of District residents

- Explored District efforts to collect and use SDOH data
- Generated a set of strategies and tactics to improve health outcomes
- Held 80+ person meeting with national experts "level-set" current work and shared priorities
- Hosted 20-person workshop on strategies to address collection and use of social need data

MAPing (Measuring, Assessing, Planning) the Use of Social Determinants of Health Data in the District

2018 District of Columbia State Medicaid Health IT Plan prioritized the collection and use of SDOH data

- Current Landscape of Health IT and HIE
- Stakeholder Perspectives and Priorities
- 5-year Health IT and HIE Roadmap
  - District health IT and HIE goals
  - Priority Areas/Use Cases
    - Supporting Transitions of Care
    - **Social Determinants of Health**
    - Population Health Management
    - Public Health
    - Telehealth
    - Behavioral Health Transformation



2022 SMHP Update released March 2022: https://dhcf.dc.gov/hitroadmap

DHCF Collaborated with DC PACT to create an HIE Action Team and conduct a community-wide needs assessment

DC PACT HIE Action Team

- DC PACT HIE Action Team was established in 2018 as a multidisciplinary group of District stakeholders (government, health care providers, payers, CBOs) tasked with developing a set of recommended actions to utilize HIE and health IT to move SDOH information.
- Conducted small environmental scan of SDOH health IT initiatives across the country – North Coast Health Information and Innovation Network (NCHIIN); NowPow (Chicago); San Diego 2-1-1; and Camden Coalition.

Community-wide Needs Assessment

- Community resource inventory needs assessment sought to gather technical requirements by engaging 45 District organizations
- Led by DC Primary Care Association in partnership with Clinovations Gov+Health
- Included interviews, questionnaire-based assessments, and focus groups
- Initial funding through DC Council

Community-wide needs assessment and findings of the DC HIE Action Team led to a set of recommendations for a technical solution

1 **General Functions**	• Easy-to-use • Compatible with provider EHRs • Compatible with existing CBO tools and workflows • Solution should be iteratively built to build consensus
2 **Priority SDOH Domains**	• Recommended domains for early focus: food, housing, social wellness • Additional domains for review in later phases: transportation, employment/income, public benefit enrollment and eligibility, child development • Phased consensus building domain by domain
3 **Screening**	• Enable standardized screening through structured data capture and referrals through multiple interfaces • Focus on “answer set” standardization for capture and exchange instead: Assess opportunities for Z-codes and leverage emerging standards (HL7 Gravity Project)
4 **Referral**	• Support closed loop referrals with notifications and confirmations to both provider and CBOs • Enable notifications to a patient's care team that alerts providers or case manager to follow-up

Stakeholders considered 3 technical options based on current SDOH workflows and priority key domains

1 BUY

- Involves the purchasing of a third-party solution
- Procurement of a solution via this approach assumes the purchase or license of a commercially available product, software-as-a-service, or integrated platform and services approach.

2 BUILD

- Involves building out current infrastructure.
- Assumes custom software development that may consist of a work-for-hire solution that is hosted and maintained within DC HIE or managed by the selected developer.

3 BRIDGE

Expanding current infrastructure capabilities ("Build") **and integrating with other platforms** that leverage community investments ("Buy").

District Stakeholder Recommendation: BRIDGE Option

- Build upon current DC HIE capabilities.
- Identify and assess gaps in current capabilities that could be addressed via a 3rd party platforms to maximize adoption and use.
- Focus on optimizing of existing workflows that enhance community partnerships and achieve buy-in from system leaders through iterative development and quick wins.

Since 2018 the DC HIE Demonstrated Substantial Progress to Expand the Network of Participating Users

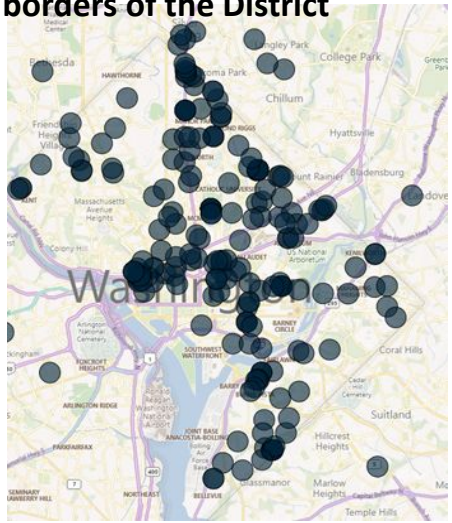
Today Major Providers and Health Systems are Connected

- 8 Hospitals (all)
- 36 Long Term Care Facilities, including 15 Nursing Facilities;
- 20 Home Health Providers
- 8 Federally Qualified Health Centers (all)
- 30 Behavioral Health Providers
- **8 Community Based Organizations**

DC HIE Use at a Glance (as of March 2022)

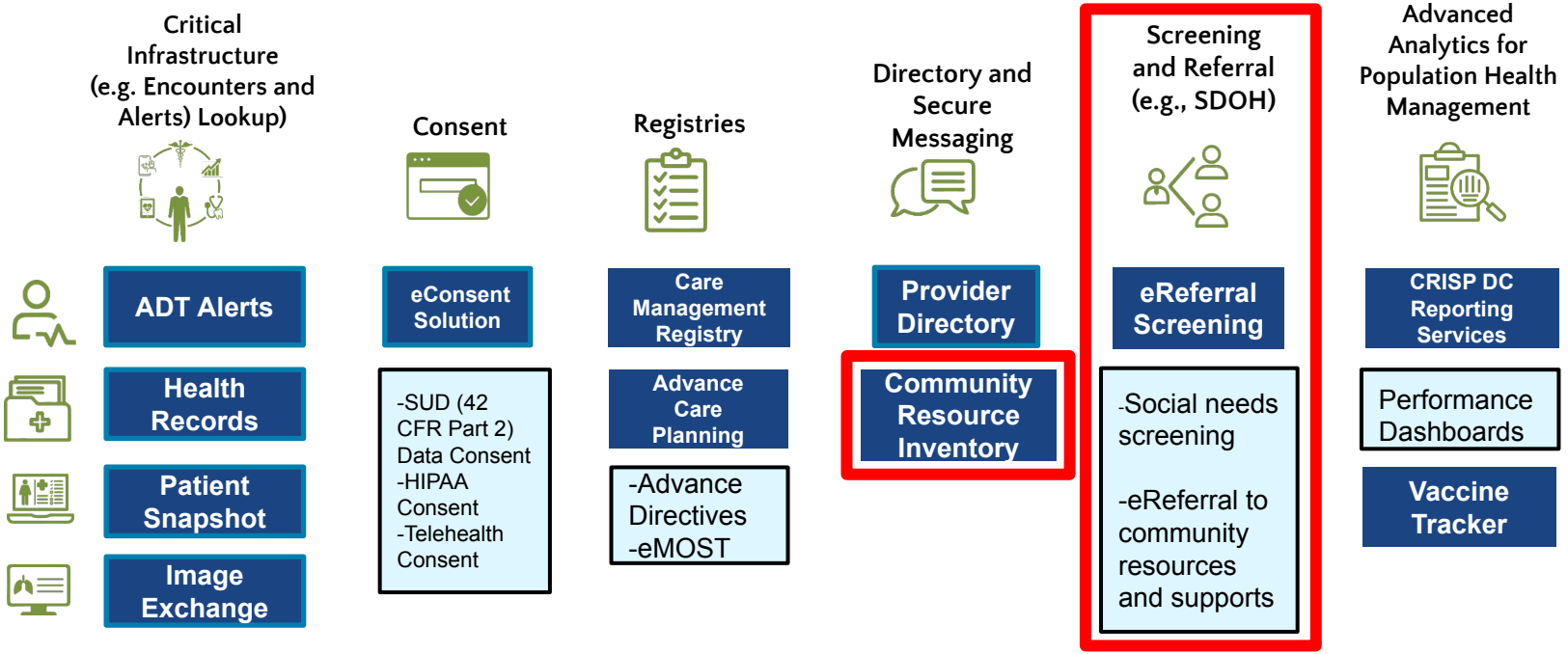
- **13,000+ approved users of the DC HIE**
- **Patient Care Snapshot (Monthly Query)**
  - 1,156 users
- **Encounter Notification Services access**
  - 619 locations
- **Sharing Admit, discharge, transfer**
  - ~300 locations
- **Sharing Clinical care documentation**
  - 200+ locations

DC HIE Connectivity: DC and beyond the borders of the District



CRISP DC **is the District of Columbia's Designated HIE**

The DC HIE is a health data utility with 6 reliable core capabilities that include SDOH screening, resource inventory, referral functions



What is the Community Resource Information Exchange (CoRIE) Initiative?

CoRIE is **a Partnership**	• DHCF, CRISP DC, DC Primary Care Association, and DC Hospital Association are collectively known as 'CoRIE Partners' • Committed to supporting and sustaining technical solutions and enabling coordinated whole person care across health, human, and social service providers in the District.
CoRIE is **a set of 3 technical functionalities to address SDOH**	• Screening for social risks and share dispositions • Lookup resources through a centralized community inventory (CRI) • Refer to appropriate community and support services • Together these 3 functionalities enable data sharing among health system stakeholders to address individuals' social needs.
CoRIE is **a Vendor Agnostic Approach**	• Enables screening and referral information to be shared and displayed regardless of how it was collected • Ensures care partners can view the same information via DC HIE regardless of the vendor platform they use
CoRIE is **an Interoperable System within the DC HIE**	• Digitally connects care partner, including health and social service providers, through the DC HIE health data utility • Provides shared services across the region • Fosters a culture of shared responsibility for ensuring the availability and quality of actionable information

CoRIE is designed to enable social needs screening and referral through DC HIE infrastructure *without* requiring a single District-wide platform

Providers, MCOs, and health system stakeholders use different systems to:

- Collect social needs information from patients
- Make referrals to community services

CoRIE allows 4 pathways to capture and share SDOH screening and referral data with care partners through the DC HIE

Choose 1 of 4 pathways to capture and share SDOH screening and referrals

Each pathway contributes data to the DC HIE

DC HIE Users can view screening and referrals from each pathway in the social needs tab

1. Use 3rd Party SDOH Network Platforms (findhelp, mahmee) → Vendor integration with CRISP enables transmission of screening and referral data
2. Use an EHR (eClinicalWorks, Epic, Cerner, Other EHRs) → CSV files containing referral data; CSV files containing screening data elements; Z-codes extracted from CCDs reflecting screening dispositions
3. Use CRISP DC Direct-entry Screening Tool to capture SDOH screening/assessment → Screening and assessment data elements
4. Use CRISP DC Referral Tool to send referral to CBO ↔ CRISP DC Referral Tool ↔ CBOs can
   - Make and receive referrals Communicate with referring provider/navigator
   - Close the loop

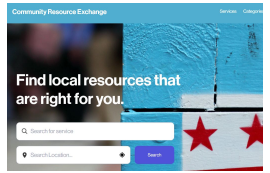
CRISP DC Social Needs Tab

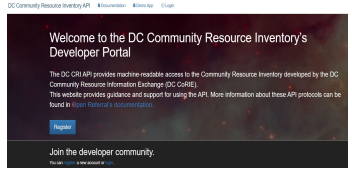
- DC HIE users can view referral history made in non-DC HIE systems
- DC HIE users can view conditions based on extracted z-codes
- DC HIE users can view assessments captured via the CRISP DC Screening Tool or third-party platform

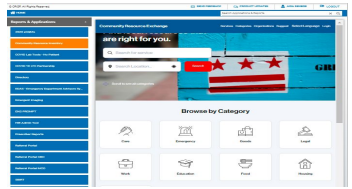
DC HIE establishing technical and governance solutions for a shared Community Resource Inventory (CRI)

•CoRIE initiative funded a District-wide aggregation of resource data from a range of already-existing resource directory databases

•DC CRI live prototype currently contains approximately 500 records and represents directories contributed by District organizations:







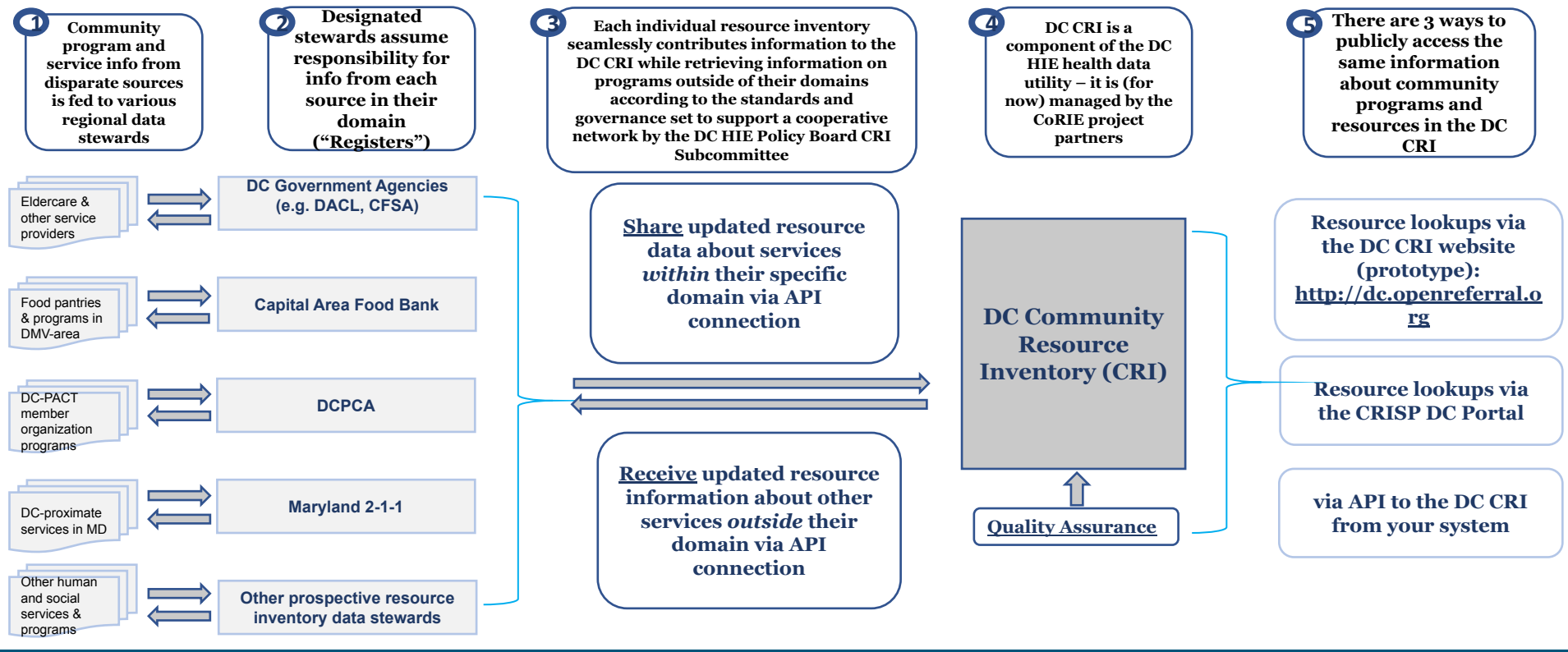
- ***Access via Web Browser–*** Data and resource lookups are available through live, publicly accessible website: http://dc.openreferral.org/.

- ***Retrieve/contribute content via application programming interface (API) –*** District organizations able to retrieve the contents of the directory via as well as contribute batch uploads: http://api.dc.openreferral.org/.

- ***Access via DC HIE –*** CRISP DC users are able to access the DC CRI through a tab in the CRISP Portal (directly accessible within an EMR's App section)

•DC HIE Policy Board established a formal subcommittee in Sept 2021 to develop standards related to the use, exchange, sustainability, and governance of CRI data through the DC HIE infrastructure, **with the goal of ensuring data in the CRI is consistently reliable for CRISP users (i.e. ongoing maintenance)**

The DC CRI requires community participation to ensure records for programs and services offered are up-to-date



Looking Ahead: Key Roles for Government Agencies/Data Stewards

Establish a Service Register

An agency can build an official list of all services it provides and/or funds.

Promote alignment through contracting

An agency can require all contractors to become interoperable and share data.

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Leverage the CRI to meet your needs

An agency can leverage the DC CRI as the source of resource directory information for its own websites and relevant programming.

- My Recovery DC
- LinkU DMV
- CJCC Resource Locator
- Network of Care
- etc

HIE Policy Board: Community Resource Inventory (CRI) Subcommittee

- **Cochairs** Ms. Luizilda de Oliveira and David Poms
- **Mission:** Build the capacity of HIE stakeholders to share, find and use information about resources available to address health related social needs and improve health equity.
- **Purpose:** Develop recommendations for consideration by the HIE Policy Board that are related to the use, exchange, sustainability, and governance of community resource directory data through the District HIE infrastructure.
- **Membership:**

HIE Policy Board Members	District CRI Data Stewards	Community Members
•Dr Eric Marshall (Gerald Family Care) •***[open seat]***	•Stacey Johnson (Bread for the City) •Luis Diaz (Criminal Justice Coordinating Council) •Tamara Moore (Department of Aging and Community Living) •Sabrina Tadele (Capital Area Food Bank) •Ariana Wilson (Maryland 2-1-1)	•Tommy Zarembka (Food & Friends)


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&
A

Thank you!

Data Across Sectors for Health

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