



ONC Social Determinants of Health (SDOH) Information Exchange Learning Forum

Introduction to the Learning Forum and SDOH Information Exchange Foundational Elements

1:30 – 3:00 pm EST
Tuesday, March 29, 2022

The Office of the National Coordinator for
Health Information Technology



Agenda

- Welcome
- Background and Context for SDOH Information Exchange
- Overview of SDOH Information Exchange Foundational Elements
- Spotlight: 211 San Diego Community Information Exchange
- Questions & Discussion
- Learning Forum Series and Small Group Opportunities
- Closing

Welcome

Please chat-in your name, role and organization.



Greg Bloom
EMI Advisors



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211 San Diego



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A large, abstract graphic composed of numerous overlapping triangles and polygons in various shades of blue, green, yellow, and orange. The shapes are arranged in a way that creates a sense of depth and movement, resembling a stylized, multi-colored geometric pattern.

Background and Context for SDOH Information Exchange

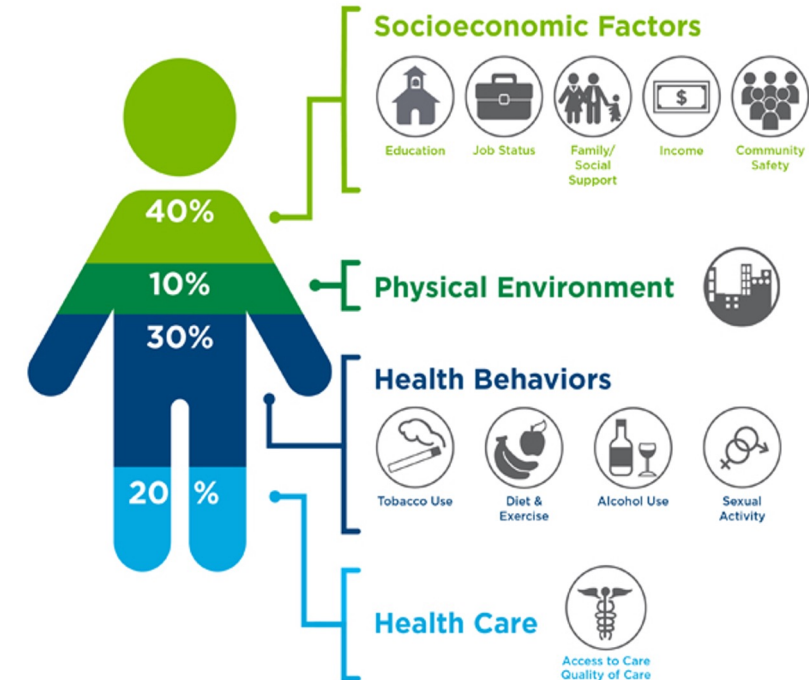
Why Are Social Needs Important?

There is growing awareness that SDOH information improves whole person care and lowers cost. Unmet social needs negatively impact health outcomes.

- **Food insecurity** correlates to higher levels of diabetes, hypertension, and heart failure.
- **Housing instability** factors into lower treatment adherence.
- **Transportation barriers** result in missed appointments, delayed care, and lower medication compliance

Addressing SDOH is a primary approach to achieve health equity.

What Goes Into Your Health?



Source: Institute for Clinical Systems Improvement, Going Beyond Clinical Walls: Solving Complex Problems (October 2014)

The Bridgespan Group



SDOH and HHS Healthy People 2030

Social Determinants of Health



Social Determinants of Health
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 Healthy People 2030

- Healthy People 2030 sets data-driven national objectives to improve health and well-being over the next decade and was released by HHS on August 18, 2020.
- One of Healthy People 2030's 5 overarching goals is specifically related to SDOH: "Create social, physical, and economic environments that promote attaining the full potential for health and well-being for all."

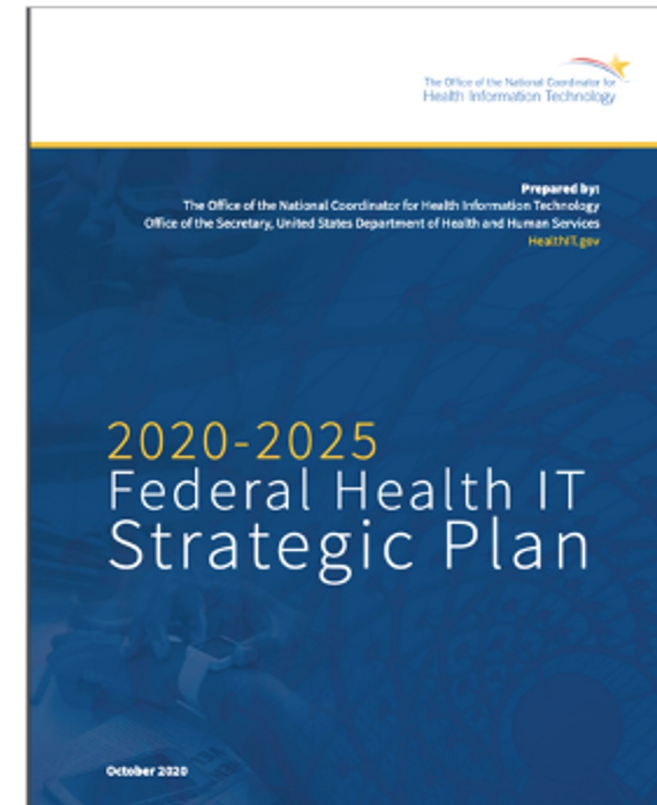


ONC: Federal Health IT Strategic Plan 2020-2025

The Plan was developed in collaboration with over 25 federal organizations and is intended to guide federal health IT activities.

It includes an objective to integrate health and human services information and identifies federal strategies to:

- Strengthen communities' health IT infrastructure
- Foster greater understanding of how to use health IT
- Capture and integrate **SDOH data** into EHRs



STANDARDS AND DATA

(Advance Standards Development Adoption)

POLICY

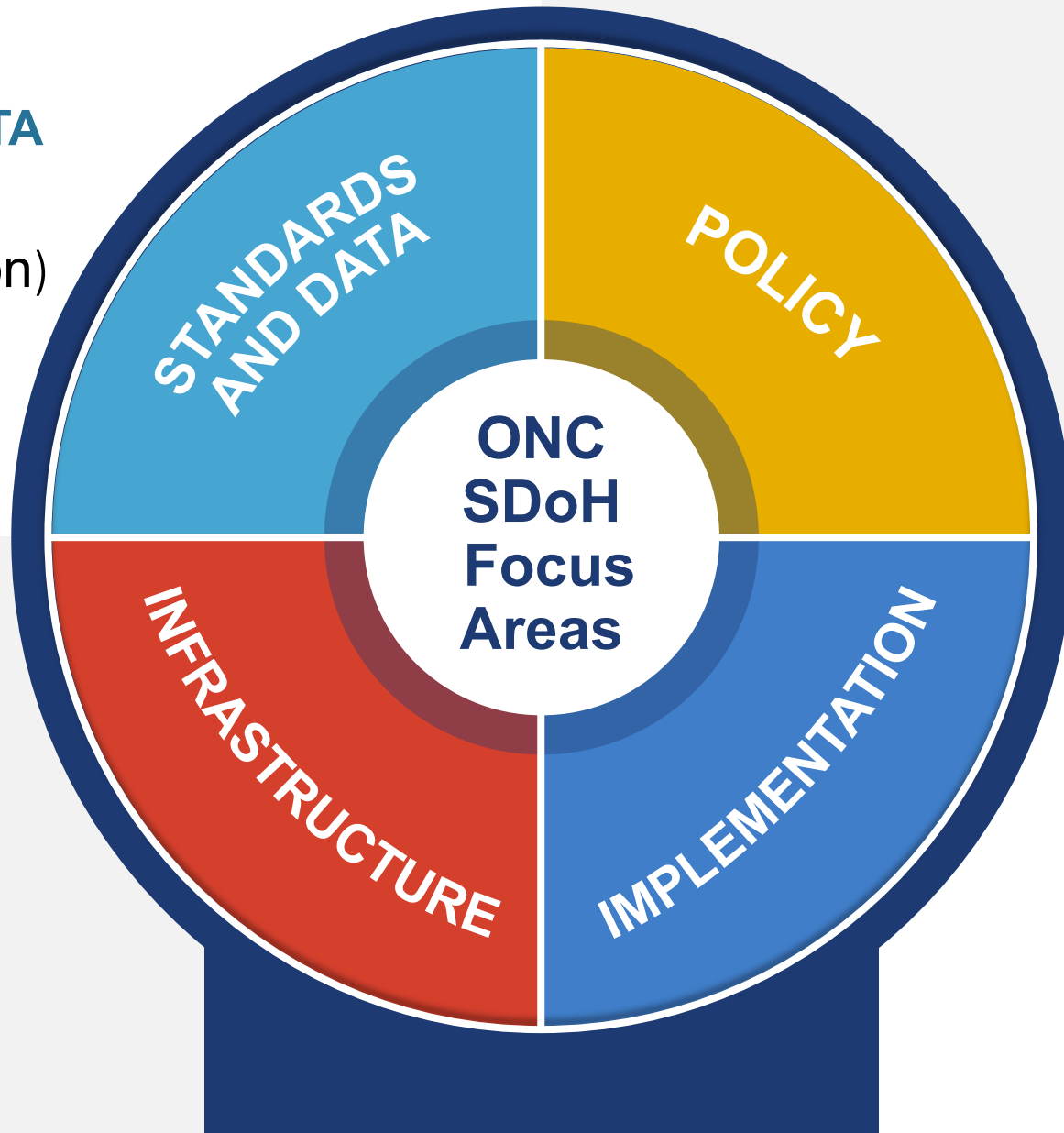
(Emerging Policy Challenges & Opportunities)

INFRASTRUCTURE

(SDOH Information Exchange/Interoperable Referrals, HIE, State, & Local)

IMPLEMENTATION

(Integration, Innovation, and Health IT Tools)



Collect, Access, Exchange, Use

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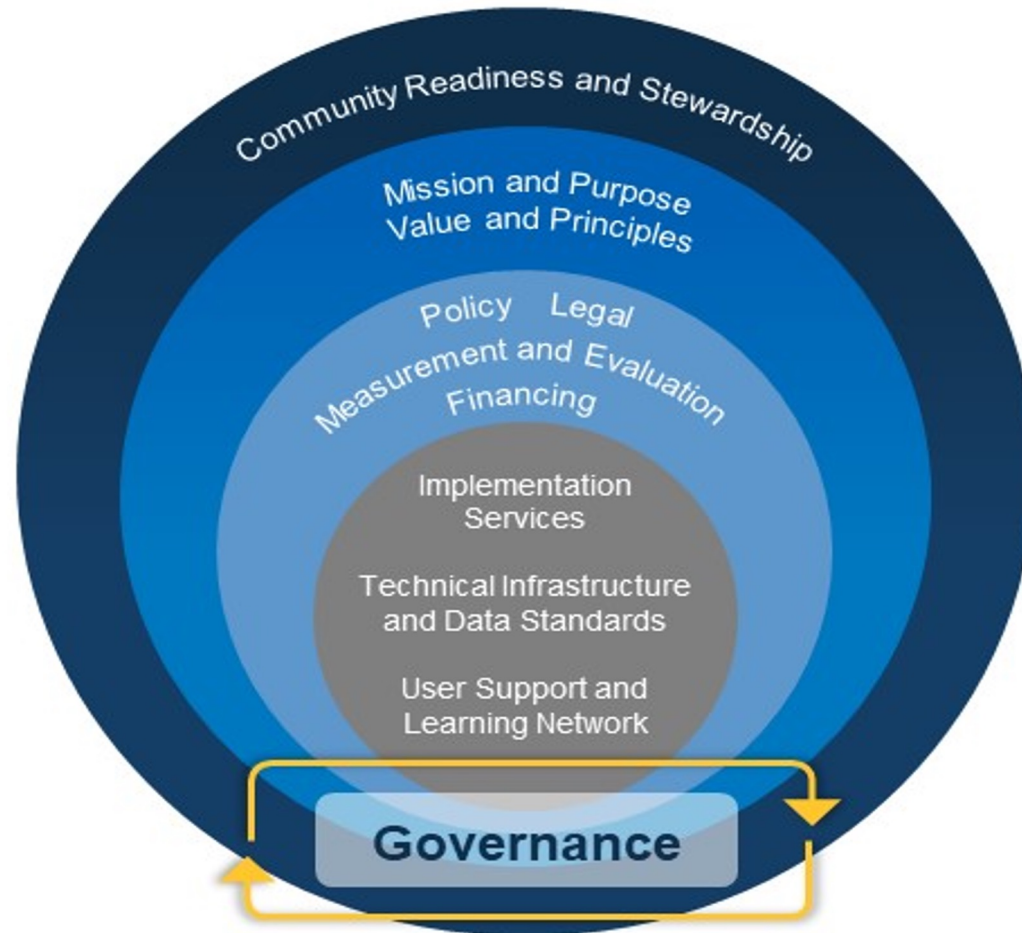
Overview of SDOH Information Exchange Foundational Elements

SDOH Information Exchange Toolkit

- Draft toolkit informed by a Technical Expert Panel (TEP) in 2021. Toolkit forthcoming.
- The TEP included members from community-based organizations, coalitions, payers, health information technology (IT) vendors, health care providers, philanthropic foundations, federal and state government.
- Intended Audience:
 - Community resource referral entities
 - Government agencies, including federal, state, local, tribal, and territorial
 - Health care provider networks
 - Health information exchanges (HIEs)
 - Human services providers
 - IT platform creators and managers
 - Networks of community-based organizations (CBOs)
 - Payers
 - Policymakers
 - Other health and human services entities



Social Determinants of Health Information Exchange Foundational Elements



Draft Foundational Elements Summary Descriptions

- **Community Readiness and Stewardship:** Exploring the existing landscape in the geographic area and/or population of focus, assessing the capacity and willingness of the community to participate, and developing stakeholders' shared rights and responsibilities through the process of co-design, evaluation, and decision-making.
- **Mission and Purpose:** The intention of an initiative, ideally explicitly stated, that addresses the various value propositions of stakeholder groups, as well as the vision, scope of services, and expected benefits.
- **Values and Principles:** Standards for establishing a framework for action, including ethical decision-making in pursuit of health equity.
- **Financing:** Funding opportunities, sources, and plans for investments, ongoing costs, opportunities for blended approaches, and incentives for community adoption and use.
- **Implementation Services:** Inclusive of technical services (e.g., defining requirements, standards specifications, and integration with existing infrastructure and services) and programmatic services (e.g., defining use cases, workflow design/redesign), as well as support for adoption and utilization by individuals and the community.

Draft Foundational Elements Summary Descriptions

- **Technical Infrastructure and Data Standards:** Alignment of hardware, software, data, processes, and standards to enable scalable and interoperable data and IT systems.
- **Legal:** Establishing the framework of processes and operations, along with rights and obligations, to support data use and sharing and to support compliance with Federal, state, local and tribal laws.
- **Policy:** Consideration of federal, state, and local policy levers to advance the ability to collect, share, and use standardized SDOH data, as well as collaboration and alignment with other relevant efforts in the community, region, and/or state for collective impact and improved outcomes.
- **Measurement and Evaluation:** Monitoring and evaluation of performance metrics, individual and population outcomes, program effectiveness, and quality management and improvement.
- **User Support and Learning Network:** User support and learning network activities include assessment of community challenges and needs, education, communication, training, technical assistance, peer-to-peer learning, and identification of promising practices and lessons learned.
- **Governance:** Decision-making processes and groups, including as relates to institutional, administrative, and data governance.



211 San Diego Community Information Exchange

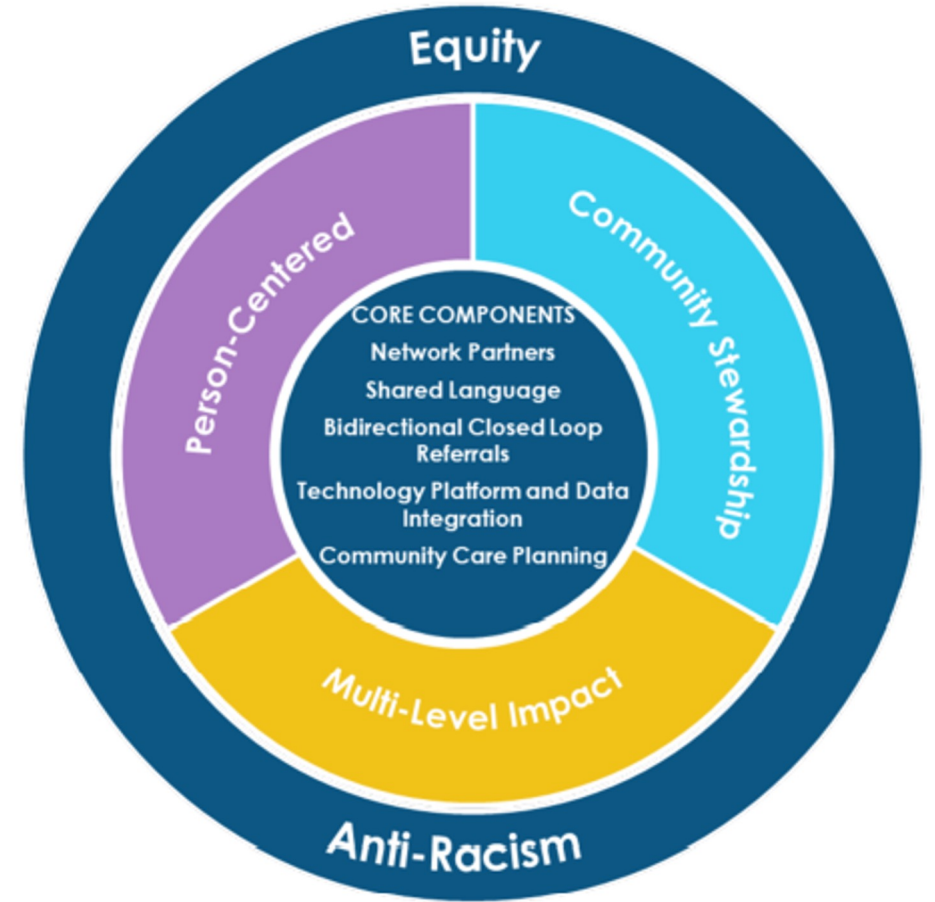


CIE San Diego & National CIE Movement



What is a Community Information Exchange?

“A Community Information Exchange (CIE) ® is a community-led ecosystem comprised of **multidisciplinary network partners** using a **shared language**, a **resource database**, and **integrated technology platforms** to deliver enhanced **community care planning**. A CIE enables communities to have **multi-level impacts** by shifting away from a reactive approach towards **proactive, holistic, person-centered care**. At its core, CIE centers the community to **support anti-racism and health equity**.”



Primary Concepts and Elements of CIE

Cultivates trust and capacity within the community.

Cultivates individual agency and understands root causes of resource gaps.

Drives systems change.

Enables cross-sector collaboration.

Community stewarded and led.

Designed to uplift and assist in providing agency to the communities who experience the starkest disparities and inequities.

Person-centered.

Multi-level impact
(individual → agency → community)

Core Components



Community Stewardship

A CIE must be led by the community through a neutral convener, backbone organization or leadership structure that ensures engagement of community voice, considers the human perspective in all aspects of system design, and promotes shared power and partnership within the network. This governance infrastructure ensures data stewardship, collection and use that meets ethical standards and shares value with community members who institutions have traditionally benefited from.



Multi-Level Impact

The role of a CIE is to support the needs of the individual/family (micro), across organizations and institutions (mezzo) and the larger community (macro). A CIE is responsible for sharing and using data to highlight inequities as well as understand improvement in needs met. CIE data should be used to design community-level interventions as well as inform community-level investment and policy. Locally, a CIE inspires movement with the goal of systems change, rather than solely addressing needs of individual organizations.



Person-Centered to Community Autonomy

Centering individual and family goals, motivations and urgencies is core to a CIE. This person-centered focus prioritizes meeting the needs of the individual and family, rather than the institutions or organizations that serve them. A CIE reimagines the way care is provided and supported through a comprehensive, informed, culturally competent approach that creates space for agency and advocacy. The CIE leverages human-centered design practices and embraces learning and iteration to ensure systems are adaptable to ever evolving community needs, thus supporting community autonomy.

Person-Centered Care





Community
Information
Exchange

2-1-1 San Diego / Imperial

- National 3-digit dialing code
- Free, 24/7 service, 3-digit dialing code
- Access to community, health, social and disaster services
- Local, manage resource database of services and relationships with CBOs
- Part of United Ways or separate 501c3

Community Information Exchange

- Systems change that fosters true collaboration across networks
- Moving towards person-centered interventions and interactions across healthcare and human services
- Goal is to improve health and wellness for individuals and populations

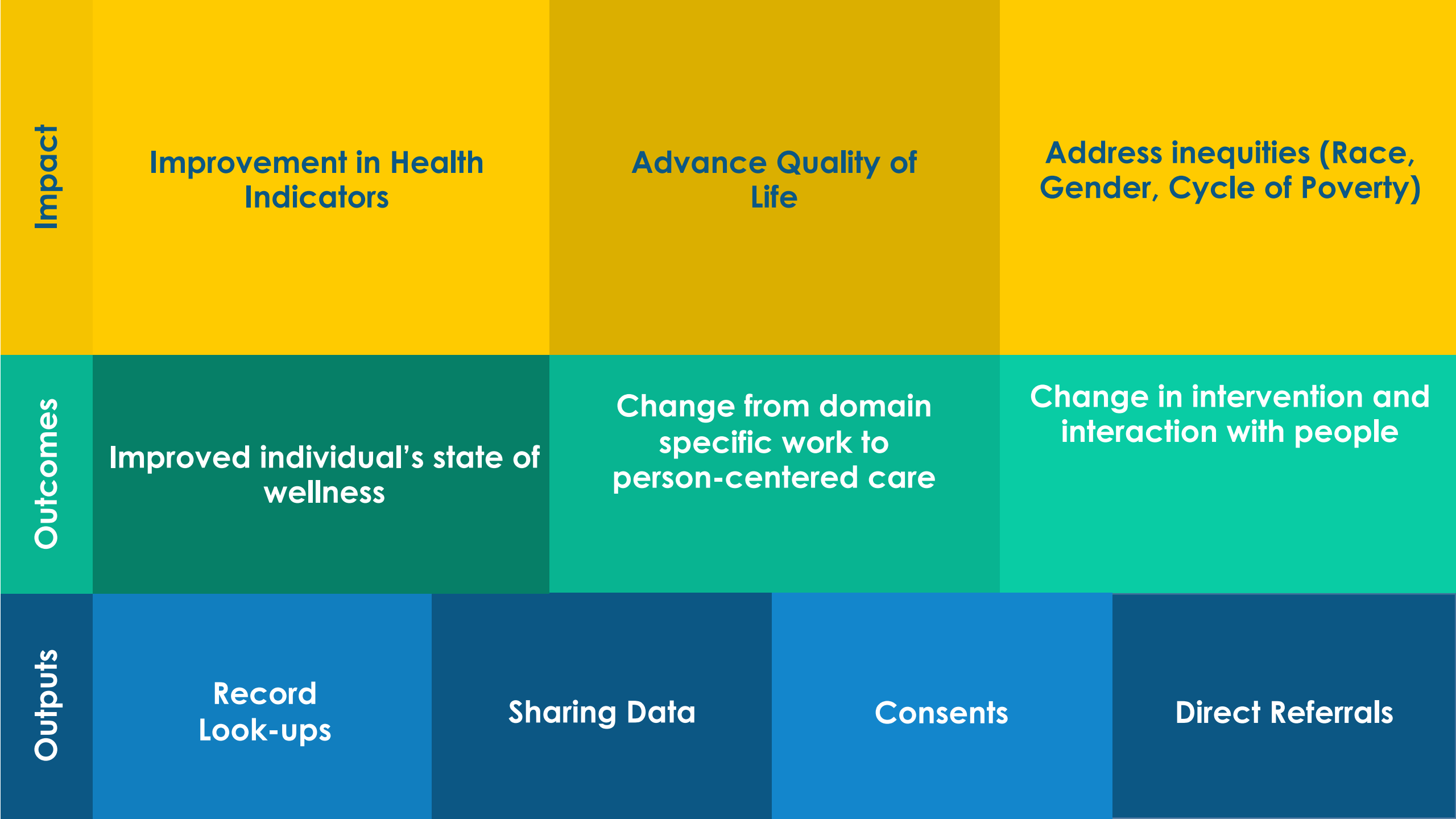


The Problem: a lack of connections between medical and social service providers

The Impact:
Higher risk of death
Higher cost of care
Lower quality of care



- Since January 2011, 9 of 71 San Diegans who most frequently accessed local hospitals & crisis facilities had died
- From 2000-2003 529 San Diegans amassed 3,318 visits and \$17.7 million in charges at two local hospitals
- High cost/high need people routinely receive lower quality care due to lack of integrated health & social services



Impact

Improvement in Health Indicators

Advance Quality of Life

Address inequities (Race, Gender, Cycle of Poverty)

Outcomes

Improved individual's state of wellness

Change from domain specific work to person-centered care

Change in intervention and interaction with people

Outputs

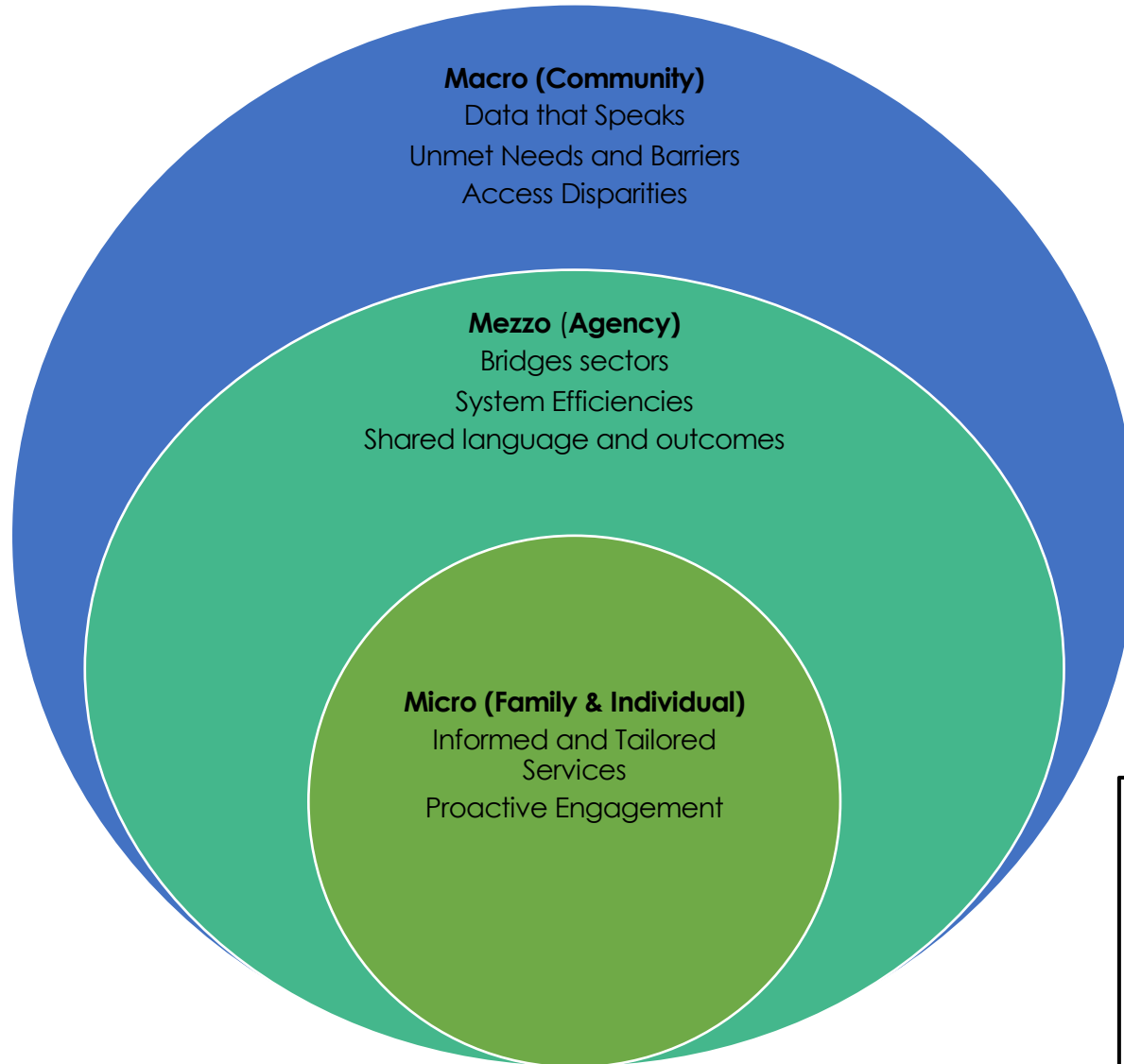
Record Look-ups

Sharing Data

Consents

Direct Referrals

Micro to Macro Value



Macro Impact Examples:

- Collective aggregate community data that is provided by community members
- Wholistic data is collected, understanding connection between health and social

Link to [Housing Policy Brief](#)

Mezzo Impact Examples:

- Breaking down of siloed data systems
- Ability to search patients/members to see historical use of social services and closed loop referrals
- Shared screening or prioritization of resources and care team members receive alerts to be proactive or responsive

Link to [COVID-19 Response](#)

Micro Impact Examples:

- Families don't have to retell their stories or trauma over and over again
- Agencies can reach out directly, instead of adding additional work on the person to follow-up with the agencies for support
- Care gets coordinated within the individual having to remember who they are working with

Example Cohorts: [Homeless Older Adult](#)



CIE Stewardship Framework

Community Voice-Community Members

Executive Stewardship

CIE Advisory Board

Leaders

Network Partner Meeting

Community Voice

Working Groups/Target Populations/Initiatives

Policy & Ethics

User Experience

Affinity

Community Advisory Board

Community Information Exchange Partners: 115



Data Sharing Partners



Community Information Exchange Core Components



Network Partners

Collective approach with standard Participation Agreement, Business Associates Agreement and participant consent with shared partner governance, ongoing engagement, and support.



Shared Language (SDoH)

Setting a Framework of shared measures and outcomes through 14 Social Determinants of Health Assessments and a Risk Rating Scale: Crisis, Critical, Vulnerable, Stable, Safe Thriving



Bidirectional Closed Loop Referrals

Updated resource database of community, health, and social service providers. Ability to accept/return referrals and to provide outcomes and program enrollment.



Technology Platform and Data Integration

Technology software that integrates with other platforms to populate an individual record and shapes the care plan. Partners access the system. System features include care team communication feeds, status change alerts, data source auto-history and predictive analytics.



Community Care Planning

Longitudinal record with a unified community care plan that promotes cross-sector collaboration and a holistic approach.



Client Record Sample

Client Profile

- Demographic and important information about the client

Domains

- Examples like Housing, Food & Nutrition,
- Categorization of Needs (SDOH) & Risk Level
- Shared Assessments and Values across agencies

Care Team

- Case Managers working with client across agencies
- Contact Information

Referrals & Program Enrollment

- Agencies or programs client is referred
- Connection to Services

Alerts

- Notification of emergency services & jail
- Ability to notify Care Team Members of changes

Feed

- Ability to communicate with Care Team members (twitter-like feed)



The shared client record integrates data from multiple partners into a user-friendly display:

Individual and demographic information

Individual Information

Client Name: John Doe | Mobile: (858) 465-1234 | Email: J.Doe1942@email.com | Birthdate: 04/12/1942

Address Information

Home Street: 1200 DEPOT RD APT 2 | Home City: SAN DIEGO | Home State/Province: CA | Home Country: United States

Demographics

Primary Language: English | Race: Bi-Racial/ Multi-Racial | Age: 72 | Ethnicity: Hispanic | Gender Identity: Man | Marital Status: Widower

Income & Benefits

Employment Status: Disabled | Monthly Income Amount: \$ 970.00 | Sources of Income: Supplemental Security Income | Highest Level of School Completed: Associates Degree

Privacy Records (1)

PRIVACY	PRIVACY TYPE	PRIVACY METHOD	CREATED BY
P-553399	Authorization	E-mail	John Doe II

Client Data Sources (3)

SOURCE RECORD	SERVICE	SOURCE ID
CDS-000000	PATH San Diego	ServicePoint
CDS-000001	Alpha Project	ServicePoint
### 000000	Outreach Outreach	Outreach

Alerts (1)

ALERT NAME	TOTAL # OF INCIDENTS	LAST INCIDENT
EMS	2	2/15/2018 2:02 AM

Domains (6+)

DOMAIN	RISK	ACTIONS	REFERRALS
Health Management	Vulnerable	2	3
Transportation	Critical	1	2
Housing	Critical	1	2
Nutrition	Critical	2	6

Care Teams (3)

CARE RECORD	CASE MANAGER	AGENCY	DATE ASSIGNED
CT-00000044	Thomas Lopez	Jewish Family Services	10/05/2018
CT-00000046	Jeri Hernandez	SDRC (Southern Calif...	10/03/2018
CT-00000047	Arcia Munoz	Access to Independence	10/03/2018

Program Enrollments(3)

ENROLLMENT RECORD	SERVICE	STATUS	ENROLLMENT DATE
PE-00008199	PATH Connections	Active	8/07/2018
PE-00008197	Outreach Team	Active	8/30/2018
PE-00008194	Enrollment Center	Closed	7/24/2018

Referrals to programs

Information on the client's care team

Current and prior program participation

Measures of client well-being across different domains

Notifications of significant events, such as when a client is transported by ambulance or booked in jail



Bidirectional
Closed Loop
Referrals

Resource Database and Bi-directional Referrals

Partner Portal Southern Caregiver Resource Center (SCRC) - 👤 Jeri Hernandez (Demo) 🔒 Sign Out

Client Details

food bank 📍 🔍 CIE Partners 👤 Target Populations 👤

Sadie Blue
 Age: 52
 FPL: 206.97%
 Monthly Income: 4329.08
 Household Size: 4
 Home Zip Code: 92109
 Health Insurance Type: CHAMPVA
 Health Condition: Dementia/Traumatic Brain Injury:Dental/Declined/Did not ask

Print this list 3 results

sorted by: [Relevance](#) | [Distance](#) Direct Referral:

Family & Youth Enrichment Program, Neighborhood Food Exchange Distribution (858) 751-5755

Armed Services YMCA, San Diego
 3293 SANTO RD
 SAN DIEGO, CA 92124
 Located 1.68 miles away

[Add Referral](#)

Supplemental Food Box Program (760) 722-0800

Bread of Life Rescue Mission
 Offers supplemental food boxes to low income residents once a month.
 1919 APPLE ST STE L
 Ste L
 OCEANSIDE, CA 92054
 Located 29.58 miles away

[Add Referral](#)

Food Pantry (760) 460-4013

Spread the Love Charity
 Provides a meal to individuals experiencing homelessness 7 days a week. Also provides a food pantry.
 485 BROADWAY AVE
 Suite D
 EL CENTRO, CA 92243

[Add Referral](#)

Map Satellite 🔍 📍 🏠 + - 📏 🗺️



Measurement and Evaluation

CHCS Center for Health Care Strategies, Inc.

2-1-1 San Diego: Connecting Partners through the Community Information Exchange

Connecting patients to needed social services can be challenging for health care providers, who are generally focused on clinical care. Additionally, they are often neither aware of the full range of community services nor have the capacity to refer and follow up with patients. Recognizing that social factors significantly impact health outcomes and spending, 2-1-1 San Diego developed the Community Information Exchange (CIE), a cloud-based platform that enables participating providers to better understand a client's interactions with health and community services. The CIE includes a social risk assessment tool, provides alerts, and facilitates connections across multiple agencies and providers. The rich client information collected through the CIE is also used to monitor community trends and address local challenges. 2-1-1 San Diego is actively engaging community partners to participate in the CIE in the hopes of improving care coordination and health outcomes for at-risk patients throughout San Diego.

Background
2-1-1 San Diego, launched in 1997 by the United Way, is a free, confidential information and referral helpline

Advancing Community-Based Organization and Health Care Partnerships to Address Social Determinants of Health

Health care and community-based organizations (CBOs) across the country are increasingly working together to better address the root causes of poor health among low-income and vulnerable populations. To assist these efforts, there is a need to identify the financial, operational, and strategic considerations necessary to make these partnerships a win-win for all parties: consumers, the communities being served, health care providers, and CBOs. Through support from Kaiser Permanente Community Health, the Center for Health Care Strategies and National Finance Fund collaborated to identify new strategies for advancing effective health care-CBO partnerships, building on work done under the *Partnerships for Healthy Outcomes* project funded by the Robert Wood Johnson Foundation. This case study is part of a series highlighting diverse partnerships between CBOs and health care organizations.

Made possible through support from Kaiser Permanente Community Health.



Case Study | August 2018

Program At-A-Glance: Community Information Exchange (CIE) is an interactive data platform developed by San Diego 2-1-1 designed to allow multiple health and social service providers see a patient's interaction across systems, agencies, and community services.
Partners: San Diego 2-1-1 and 34 social service and health care providers, including federally qualified health care centers, and government agencies.
Goals: Improve care coordination for vulnerable patients through an online platform.
Partnership Model: Coordinated service.
Scope of Services: Referral support, secure, cloud-based platform; shared measures for social determinants of health; capacity for organizations to accept and return referrals.
Funding: Grants.
Impact: Among clients enrolled in the CIE, reduced number of emergency medical services trips and increased stable housing rates.

Community Information Exchange Using Data to Coordinate Care for People Experiencing Homelessness: Addressing COVID-19 and Beyond April 2020

WHAT IS CIE?

Community Information Exchanges (CIEs) are care coordination tools that bring together providers and data from the health and social services sector. While Health Information Exchanges (HIEs) focus on bringing health care providers from across a community together, this model builds on the idea for HIEs to incorporate cross-system partners.



Partners in a CIE can include hospitals, health centers, other primary care providers, social service providers, housing providers, and schools, among other community resources.



HOW IS CIE USED?

CIE a response to growing awareness of the Social Determinants of Health (SDOH). After a health center provider screens for SDOH related needs, the community wide data system can be used to identify and connect individuals to other community resources.
An integrated CIE allows for coordination with other health care providers, like an HIE would, but also connects to social service providers. This allows health center staff to identify where an individual is accessing other services and who could be considered part of the care team.
Data integration tools can be incorporated and linked to fields in the electronic health record (EHR), following HIPAA considerations, to help seamlessly sync health center workflow as part of the SDOH strategy.
In response to SDOH needs, health care providers, case managers and other enabling services staff then have access to information on available community resources, what resources someone has accessed, and can track follow-up on referrals to improve care planning incorporating SDOH.

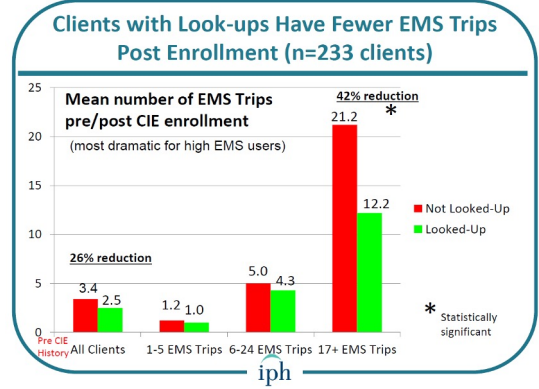


Figure 6. Total Number of EMS Transports in the 12 Months Before and After CIE Enrollment (n=464)

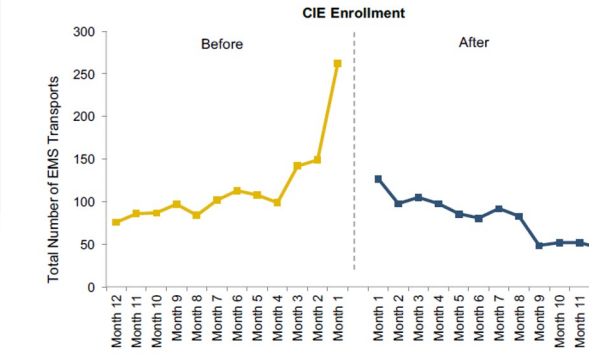
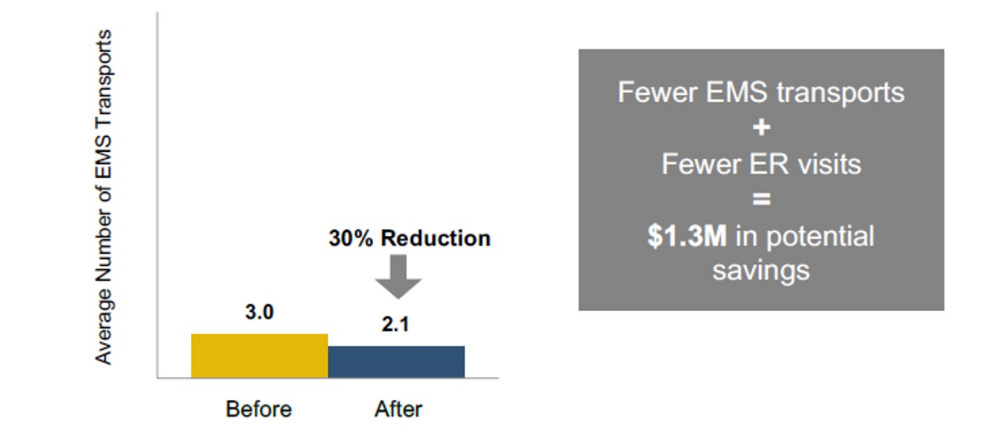


Figure 7. Average Number of EMS Transports Before and After CIE Enrollment (n=464)*



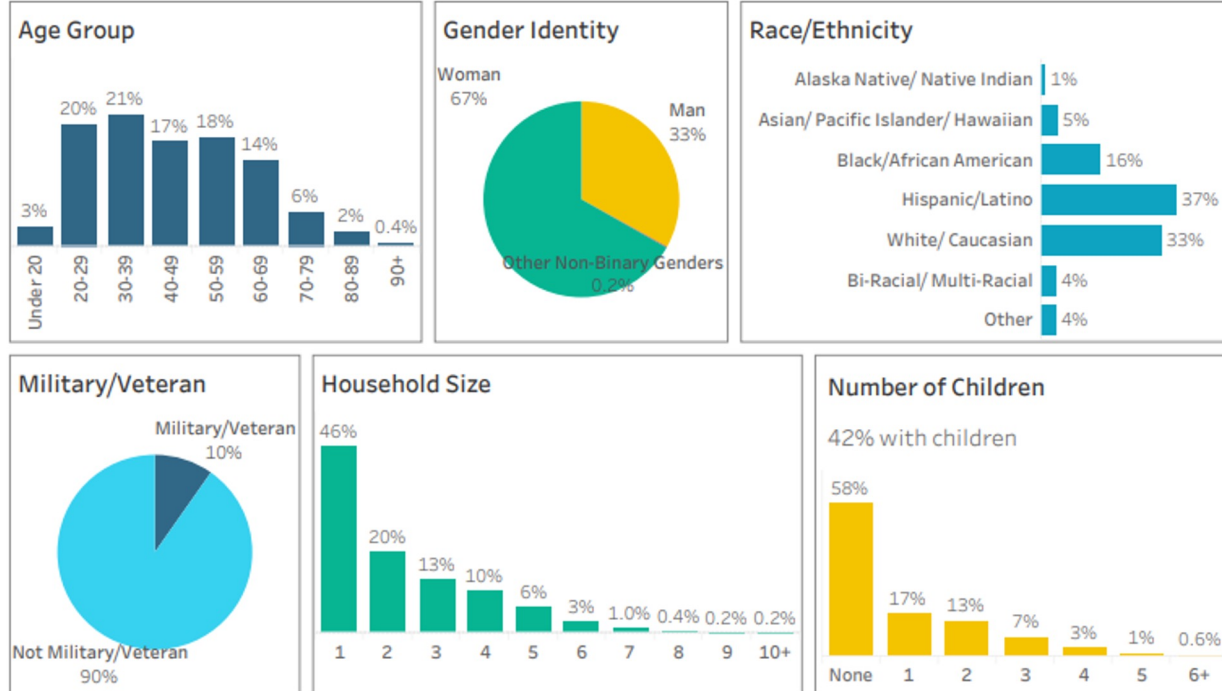
*Statistically significant difference (p<.05)

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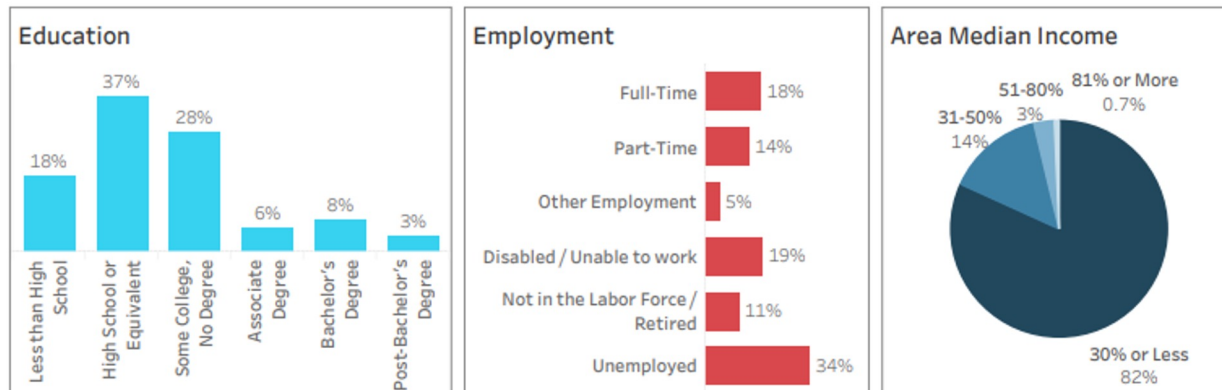
ELP.

Who is in the CIE?

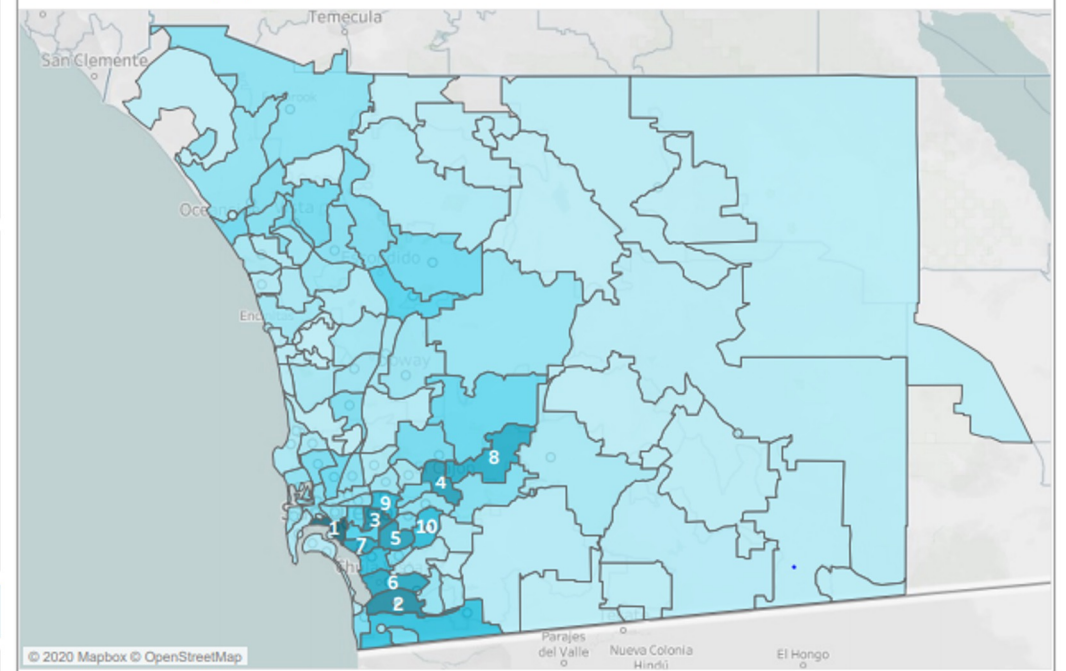
General Demographics



Socioeconomic Indicators



Number of Clients by Zip Code



Financing

- Not one source of funding
- Can be used or leveraged for any organization and financially support CIE infrastructure
- Blended/Braided Funding Model
 - CIE Membership for Healthcare Systems, Healthcare Providers, Government & For-Profit
 - Foundations
 - Grants

Lessons Learned

- Influence of Governance: Varied starting place (based on initiative or policy) and representation (Healthcare, CBO Consortium, etc.)
- Leveraging local infrastructure, existing relationships and services
 - Importance of building trust and capacity
- Requires evolution/agile approach to the work
- Measurement and Evaluation are challenging because of the many players involved and need to show return on investment to continue the work

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Questions & Discussion



Learning Forum Series and Small Group Opportunities

Learning Forum: Webinar Series Schedule

Date & Time	Topic	Learning Objectives	Registration Link
March 29 th 1:30 – 3 pm EST	Introduction to SDOH Information Exchange	Learn about the SDOH landscape and foundational elements to enable SDOH information exchange.	Register here
April 22 nd 1 – 2:30 pm EST	SDOH Information Exchange: Vision, Purpose & Community Engagement	Learn about promising practices to engage with community stakeholders and define a vision and purpose.	Register here
May 13 th 1:30 – 3 pm ET	SDOH Information Exchange: Governance	Learn about different levels of governance for stakeholders engaged in SDOH information exchange initiatives.	Register here
June 14 th 1 – 2:30 pm ET	SDOH Information Exchange: Technical Infrastructure & Interoperability	Learn about data systems and standards to enable SDOH information exchange.	Register here
July 19 th 1:30 – 3 pm ET	SDOH Information Exchange: Policy & Funding	Learn about privacy and security considerations, as well as financing models to support organizations pursuing SDOH information exchange.	Register here

<https://www.healthit.gov/news/events/oncs-social-determinants-health-information-exchange-learning-forum>



Learning Forum: Small Group Opportunities

ONC will also have additional opportunities for interested stakeholders to participate in small group learning.

- Groups of approximately 10-15 individuals across a diverse set of stakeholder groups.
- Paired with a facilitator and subject matter experts who will guide and support learning and engagement.
- Discussion questions and focus areas will be collaboratively developed.
- Topics will align with the Learning Forum monthly webinar series.

Upcoming Small Group Sessions

Upcoming small group sessions:

- Wednesday, April 6th, 2:00 - 3:00pm EST
- Thursday, April 7th, 1:00 - 2:00pm EST
- Friday, April 8th, 1:00 - 2:00pm EST

To express interest in small group participation, email oncspdohlearningforum@hhs.gov for more information on how to join.



Thank You!



The Office of the National Coordinator for
Health Information Technology

Contact ONC

Learning Forum contact information:
oncsdohlearningforum@hhs.gov



Phone: 202-690-7151



Health IT Feedback Form:

<https://www.healthit.gov/form/healthit-feedback-form>



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