Community
Information
Exchange
Toolkit

Collaboration and Cross-Sector Data Sharing to Create Healthier Communities

November 2018

2-1-1 SAN DIEGO

Community
Information
Exchange

Acknowledgment

Community Information Exchange Partners

211 SAN DIEGO

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SAN DIEGO HEALTH CONNECT — Better Information · Better Care

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SAN DIEGO WORKFORCE PARTNERSHIP

SAN MARCOS FIRE DEPARTMENT

SAN YSIDRO HEALTH

Scripps

SHARP

SKINNY GENE

SERVING SENIORS — Formerly Senior Community Centers

sbcs — south bay community services

Southern Caregiver Resource Center — Caring for those who care for others

Trans Family Support Services

UC San Diego HEALTH SYSTEM

the Y — YMCA

CIE partners as of October 2018

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Introduction

In recent years, communities across the country have joined a nationwide movement to use data to promote individual well-being as a foundation for a more holistic approach to community health. As this movement has taken root, more communities have started to consider how integrating data from multiple systems can enhance their understanding of social determinants of health—health care, education, economic stability, housing and neighborhood environment, and social and community context—and their influence on quality of life and approaches to improved care. The result is a proliferation of innovative cross-sector partnerships that share data to improve real-time care coordination, reduce the use of costly public services, inform public policy, and support individuals' progress in achieving health, social connectedness, housing stability, and other quality of life indicators. Communities that have been deeply engaged in developing collaborative approaches to care, such as 2-1-1 San Diego's Community Information Exchange (CIE), have an opportunity to share lessons learned and best practices to encourage, inspire, and educate others to join the CIE movement to break down barriers across sectors to improve population health.

San Diego's CIE began in 2011 as a grassroots, collaborative approach to sharing basic client-level data between service providers in San Diego. Over time, the CIE has become a catalyst for the community-based movement to understand, value, and share social determinants of health data and use technology to bridge sector divides. The CIE facilitates a community moving from a reactive system of care to a more proactive system through closed loop referrals and the creation of a single, unduplicated record and community-wide care plan. Today, San Diego's CIE is an ever-growing network of committed health care, human and social service providers delivering person-centered care, and integrating and sharing data using an interactive cloud-based platform that contains identifiable and longitudinal records of each individual's progress toward health and wellness goals.

Built upon the foundations of the collective impact approach to solving complex social problems, 2-1-1 San Diego has shaped a broader vision for the CIE as a system that uses collaborative planning tools, as well as a shared language and outcome measures, to influence how providers care for individuals.

Across the country there are several examples of communities, health systems, networks and technology vendors tackling the same issues as San Diego's CIE using diverse approaches. 2-1-1 San Diego's CIE uses a community-based approach that leverages the strengths of network partners, continuously learning from each other and expanding the network and technological functions. Emerging and proven practices are shaping the field and driving innovation in communities across the country. The work of CIE, complemented by an annual CIE Summit, has generated significant interest from community leaders and organizations looking to understand the value of cross-sector collaboration and data sharing and to replicate the CIE in their communities. 2-1-1 San Diego is honored to share its story and lessons learned to drive and further shape the integration of health care with social services and supports critical to improving population health, driving system efficiencies and effectiveness, reducing costs, and advancing health equity.

How to Use This Toolkit

This toolkit is designed to assist communities interested in learning how to harness the value of cross-sector collaboration and data sharing to develop a Community Information Exchange (CIE) that enables a network of health, human, and social service providers to deliver coordinated, person-centered care to address social determinants of health to improve population health. 2-1-1 San Diego understands that communities using this toolkit may have very different levels of familiarity with the functions of a CIE and how it can help redefine the health and social care delivery systems to address not only a person's physical health needs, but also the social impact of determinants of health on individual well-being. This toolkit explains what a CIE is and the key issues a community should consider when developing a CIE.

Why 2-1-1 San Diego Created This Toolkit

In the past few years, communities across the country have expressed interest in learning from San Diego's long history developing, growing, and maintaining its CIE. To address this need, 2-1-1 San Diego partnered with the Schultz Family Foundation to develop this toolkit to give communities insights and strategies on how to approach development of a local CIE in their community.

What this Toolkit Includes

The Toolkit has been organized in three sections.

Section 1

What Is a Community Information Exchange?
Learn about the features and benefits of developing a CIE, including how the CIE creates community impact.

Section 2

State of the Field
Discover the influences that shaped the conceptualization and evolution of the CIE.

Section 3

Insights and Strategies
Explore the six strategies essential to developing an effective and sustainable CIE.

The toolkit explains why communities should focus on these strategies and provides an action checklist to guide local planning. The toolkit also includes resources and templates for local use and illustrates practical applications of each concept based on 2-1-1 San Diego's experience. Look for these icons throughout the toolkit to find the information you need.

Purpose	Action Checklist	Practical Application	Glossary	Resource/ Template

Most important, the toolkit describes important factors to consider for the greatest impact and demonstrates how a CIE can transform the delivery of health and social services by making it easier for all the providers involved in an individual's care to make referrals, track an individual's progress toward health and well-being, and share data on program enrollment and outcomes to advance public health policy and inform community planning.

Who Should Use the Toolkit

This toolkit is intended as a guide for any individual, organization, or community interested in creating, evolving, or sustaining collaborative partnerships, service referral networks, data sharing strategies, or joint use technology platforms. 2-1-1 San Diego frequently fields inquiries about the CIE from public agencies, 2-1-1 agencies, health information exchanges (HIEs), health care providers, philanthropies, and nonprofit social service providers across the nation.

Help Using the Toolkit

While communities are welcome to use this toolkit on their own, 2-1-1 San Diego recognizes that many may need additional information and support. 2-1-1 is committed to serving as a resource in helping to guide the discussion, and team members are available to answer questions and provide consultation and technical assistance upon request. For more information, please visit www.ciesandiego.org.

Section 1:
What is a Community Information Exchange?

A CIE is an ecosystem comprised of multidisciplinary network partners that use a shared language, a resource database, and an integrated technology platform to deliver enhanced community care planning. Care planning tools enable partners to integrate data from multiple sources and make bi-directional referrals to create a shared longitudinal record. By focusing on these core components, a CIE enables communities to shift away from a reactive approach to providing care toward proactive, holistic, person-centered care (see Figure 1).

Figure 1: Core Components of a CIE

Network Partners + **Shared Language** + **Resource Database and Bi-directional Referrals** + **Technology Platform and Data Integration**

Community Care Planning
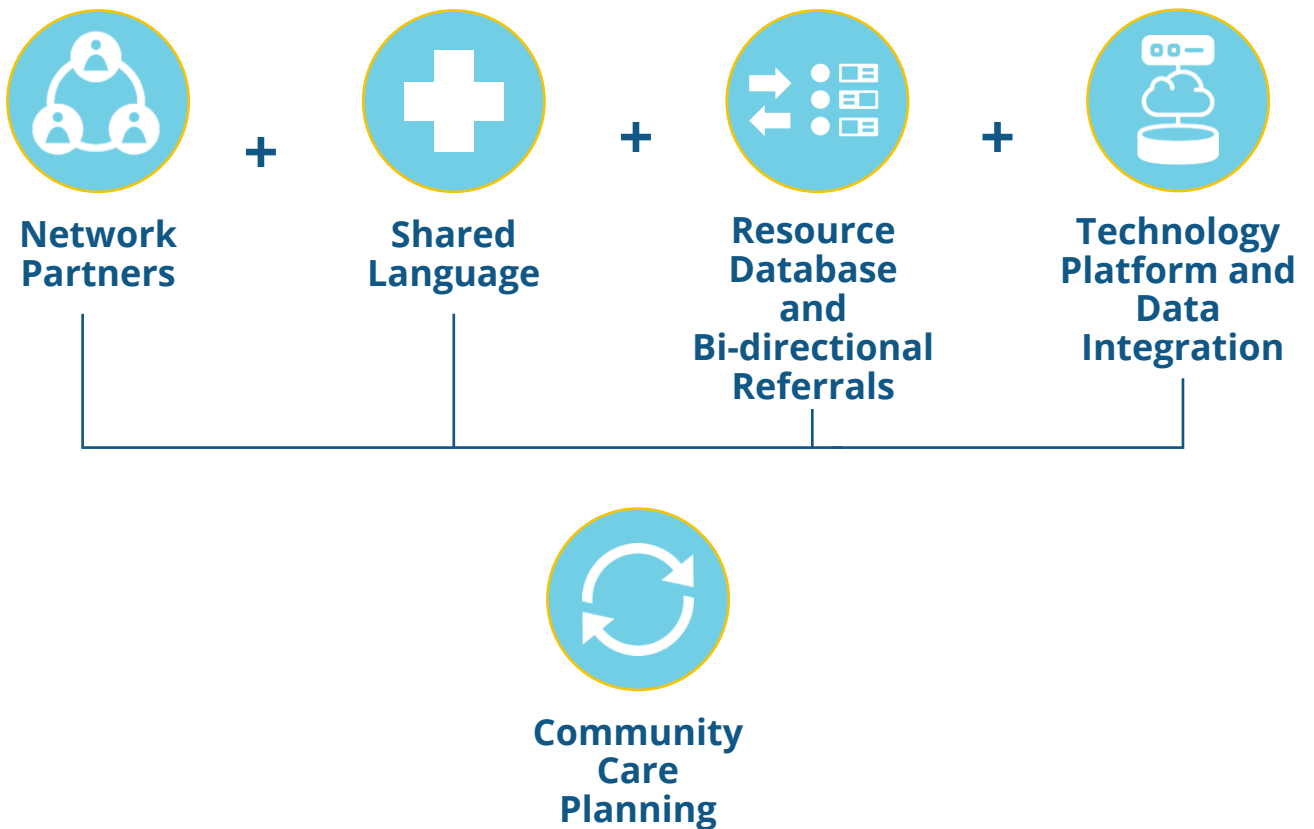
Risk Rating Scale. A tool developed by 2-1-1 San Diego to determine the immediacy of a client's needs along 14 health and wellness domains, the client's knowledge and utilization of services, and what social supports and barriers are influencing whether those services are accessed.

Resource database. An electronic repository that includes information about the programs and services offered by community, health, and social service providers categorized using a shared taxonomy to streamline the referral process.[1]

2-1-1. 2-1-1 is a 3-digit dialing code that connects people to a free, confidential service that provides information and referrals to local health, human, and social service organizations. 2-1-1 leverages the Alliance of Information and Referral Services taxonomy to create standards around its information and referral services. Local 2-1-1 providers throughout the United States and in parts of Canada serve approximately 14 million people each year.[2]

Core Components of a CIE

A robust CIE achieves collective impact by enabling CIE *network partners* to address people's needs across multiple health, human, and social service domains to gather and share data to address systemic needs and realize a shared vision for a healthier community.

While all network partners commit to a collective approach to care, partners contribute to a CIE in different ways based on their organizational 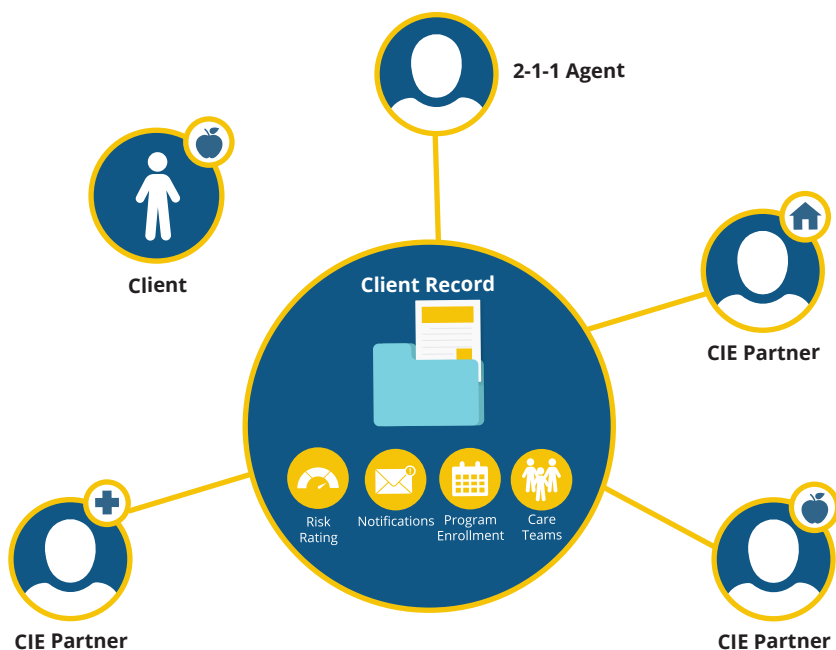capacity and role within the community. Network partners have committed to redefine a patient or client and extend thinking beyond their individual programs or agency interaction. Network partners are willing to re-engineer their business processes to consider how the care they provide fits into the broader care delivery system, to better connect individuals to services, and to share new levels of information. Network partners also share challenges and best practices, inform CIE policy decisions, champion expansion of the partner network, and contribute to ongoing technology platform development.

A CIE is also rooted in a *shared language*, which is informed by a deep understanding of the social and economic systems that influence whether the conditions where people live, work, learn, and gather contribute to positive or poor health outcomes and quality of life. Known as the *social determinants of health* (SDoH), these conditions are shaped by access to power and resources and include a person's neighborhood and built environment, social and community context, economic environment, educational environment, and health services. When developing a CIE, a community reviews existing partnerships, projects, or technologies that facilitate a shared language, then develops or adopts a model to measure impact and shared measures of progress for each domain at both the individual and community level. For example, 2-1-1 San Diego has developed a **Risk Rating Scale** to assess and track an individual's health and wellness along 14 domains on a scale ranging from crisis to thriving.

Partners also have access to a **resource database** that enables them to efficiently match individuals with appropriate care providers based on their needs. Most communities can leverage their **2-1-1** infrastructure that hosts a comprehensive resource database with standardized listings of health, human, and social service providers' service offerings, eligibility, and intake information. A resource database is a critical component to establishing a closed-loop, bi-directional electronic referral process.

A *technology platform* facilitates the integration of individual data from multiple partners' data systems to populate a single, **longitudinal record** of a person's demographics and history of interactions with participating health, human, and social services partners (see Figure 2). The technology platform also allows partners to make and accept or decline *bi-directional closed loop referrals*.

Figure 2: How a CIE Supports Longitudinal Client Records

2-1-1 Agent

Client

Client Record

Risk Rating

Notifications

Program Enrollment

Care Teams

CIE Partner

CIE Partner

CIE Partner

Together, the components of the CIE enable partners to communicate with each other and contribute **case notes** and other information to create a single unified shared care plan. Specifically, tools built within the technology platform support proactive community care planning by enabling them to share individual demographic and program enrollment information, and send alerts and notifications of significant events. For example, when a person is transported by ambulance or booked into jail, network partners who are members of a person's care team are notified so that they can proactively anticipate individuals' needs and adjust care plans. Most important, partners can use a CIE to document service utilizations and outcomes and measure changes to a person's health and well-being over time.

Longitudinal Record. A cumulative history of an individual's situation and interactions with care providers, as well as other care-related activities. The record may include demographics, past service history, and case notes, among other information.[3]

Case Notes. Documentation by a health care provider, social worker, or other professional that provides objective descriptions of interactions with clients, as well as the services that were provided.[4]

Benefits of a CIE

When fully implemented, a CIE offers distinct benefits to individuals, partners, and the community at-large (see Figure 3).

Figure 3: Micro to Macro Value of a CIE
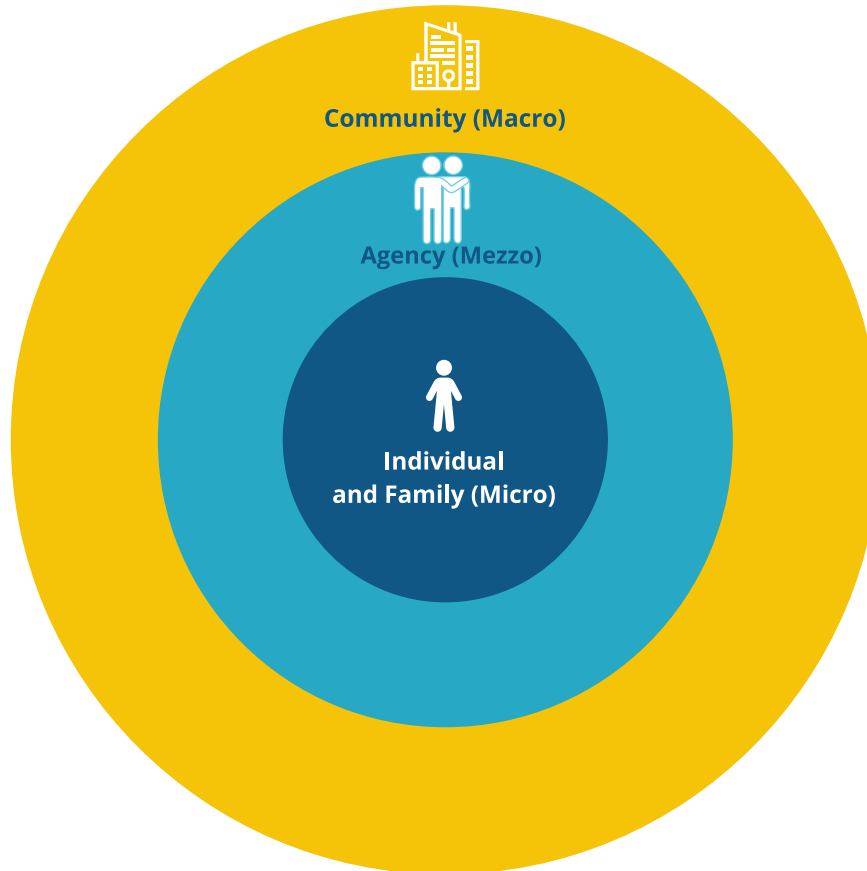
Individual and Family (Micro)

Individuals benefit from a universal, person-centered record of life events and system interactions enable providers to proactively tailor services to individual needs. Using a universal longitudinal record also supports trauma-informed care by reducing the need for individuals to repeatedly share their individual experience and situations to different service providers. The CIE is a responsive and proactive system allowing helpers to initiate a connection to individuals rather than putting the burden on individuals and families who may be in crisis.

Agency (Mezzo)

At the agency level, a CIE empowers providers to efficiently collaborate with providers across sectors using a shared language and shared outcomes to deliver comprehensive care while generating referrals through the system.

Community (Macro)

A CIE provides the community with insights into broader trends, building a system that can proactively address unmet needs and barriers, as well as disparities in access to services. This data also can be used to inform local planning and funding priorities and to advocate for policy change.

The Impact of a CIE

The impact of a CIE is based on the degree to which partners contribute to the CIE to produce both outputs and outcomes (see Figure 4). Specifically, a CIE enables partners to perform four basic types of interactions: record look-ups, record creation, data sharing, and direct referrals.

A *record look-up* is a search for an individual's record within a CIE using personal information, such as first and last name, Social Security Number (last 4 digits), a unique PIN, and/or date of birth. Partners look up a client record to understand a person's current situation, identify all team members working with that individual, and see a history of current and past referrals and the services provided. Providers using record look-ups include hospitals planning a discharge, health plans searching for a member with whom they have lost contact, housing providers trying to understand the full range of individual needs, or an agency interested in making a referral outside the organization. Performing a CIE record look-up shapes the holistic understanding of the person within their environment, informs a provider's care recommendations, and allows providers to change their approach based on a deeper understanding of an individual's needs and to collaborate with other agencies.

Record creation occurs when a person signs a standard authorization or client consent to allow their personal information to be shared within the CIE to improve access to services and care. The CIE uses an **opt-in** model for consent, which requires that patients give explicit permission allowing the CIE to share their client record. Once an individual's record is entered in the CIE, providers receive notifications and alerts about significant life events, such as EMS transports to area emergency departments and arrests.

Effective *data sharing* is critical to a CIE. Partners involved in the CIE agree to contribute data from their source systems into the CIE, and to follow specific rules and guidelines designed to protect each individual's identity and privacy. For example, a CIE integrates with a local food bank client record management system, and individuals can opt-in to share their data with the CIE. This information can be used by other agencies when addressing food insecurity or unmanaged health conditions that could be triggered by hunger.

Opt-in. A term used to signify that a person has given explicit permission to share his or her personal information or be contacted.[5]
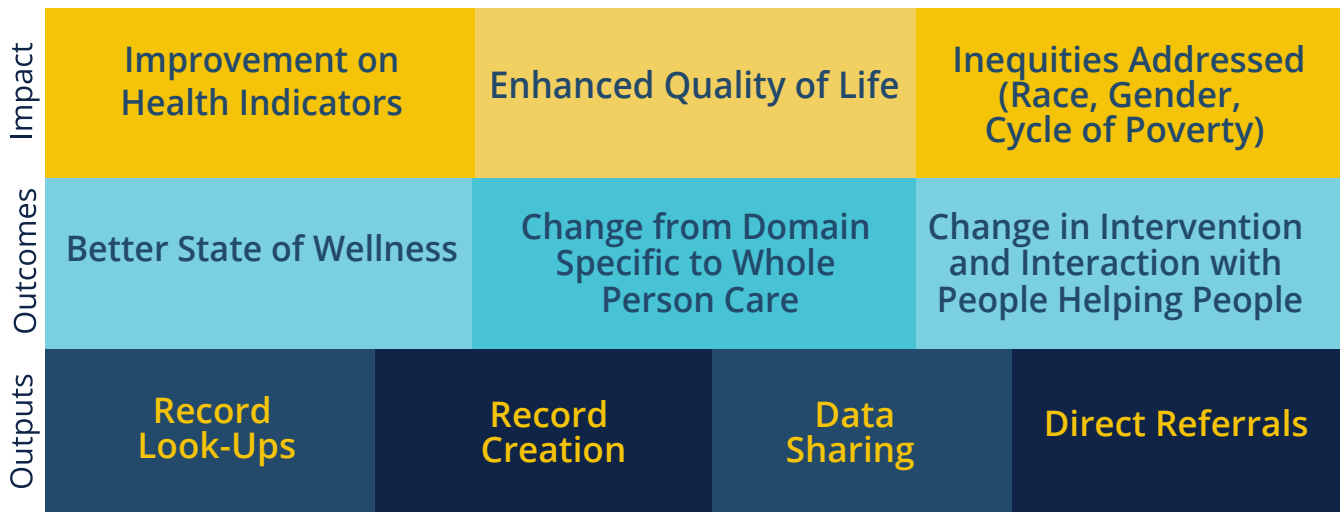
The CIE can also provide notifications to the care team of any change to data fields or change in client status allowing for the care team to receive real-time up to date information across various domains for those they are serving. This can assist with real-time care coordination as well as increased data quality and accuracy in partners' host systems. For example, when a healthcare provider updates information related to an individual's health insurance, a homeless services agency can use that information to update the Homeless Management Information System (HMIS) to meet U.S. Department of Housing and Urban Development requirements of 'accessing mainstream resources.' By enabling consent authorizations across agencies and programs, a CIE enables individuals and providers to better target and coordinate care and share outcomes.

Bi-directional, closed loop referrals enable partner organizations to streamline the delivery of person-centered care, monitor individuals' progress, and capture outcomes in real-time. Using the CIE technology platform, network partners can use detailed information about a client's needs to match them with health care, social services, and other services in the resource database. Partners can send, accept, and decline referrals to and from each other based on their program expertise and geographic areas served. Partners can also provide information about referral status, program enrollment, and outcomes, closing the loop on accessing services.

Using a CIE fundamentally changes how individuals and organizations work by fostering collaboration across networks, improving the wellness of individuals within the community, refocusing interventions on the interactions between people, and expanding the definition of care from a domain-specific focus to person-centered care that extends beyond the traditional four walls of service delivery into the larger community. In essence, a CIE shifts the emphasis away from addressing individuals' primary needs only toward person-centered care that holistically addresses a person's needs.

By engaging diverse partners in providing person-centered care, a CIE helps the community identify and understand race, gender, and economic inequities, inform plans to positively impact individual health indicators, and advance the quality of life within the community. For example, as a CIE expands to serve more individuals, it can provide information about the underlying factors that influence health disparities at the population and ZIP code level to promote upstream interventions such as changes to public policies and expanded access to health and social services.

Figure 4: Impact of a Community Information Exchange

Impact	Improvement on Health Indicators	Enhanced Quality of Life		Inequities Addressed (Race, Gender, Cycle of Poverty)
Outcomes	Better State of Wellness	Change from Domain Specific to Whole Person Care		Change in Intervention and Interaction with People Helping People
Outputs	Record Look-Ups	Record Creation	Data Sharing	Direct Referrals

Section 2: State of the Field

This section of the toolkit explores the social, political, environmental, and technological influences that shaped the conceptualization of the CIE, and a timeline that illustrates the shared history of 2-1-1 San Diego and the CIE.

Influences Shaping the CIE

Twenty years ago, we could not have imagined the myriad ways data is used to understand and improve population health. This more robust understanding of health extends beyond the health care system to include the impact of socioeconomic and environmental influences on an individual's health and quality of life. These insights have led to a range of innovative approaches to address health and social needs on a broad scale. Legislation, research, and culture have also influenced the way communities approach achieving community health outcomes.

Public Awareness of the Social Determinants of Health

Historically, the factors that impact people's health where they live, work, learn, and play— commonly known as **social determinants of health**—were not considered primary drivers of health status at either the individual or community level. As a result, efforts to improve health primarily targeted access to health care and individual behavior changes related to diet and exercise, alcohol and tobacco use, and sexual activity.

The nation's focus on population health began to take shape in 1979 when the U.S. Department of Health and Human Services released the *Healthy People* initiative, which sets disease prevention and health promotion objectives each decade since.[6] Today, we understand that differential conditions, which are often closely linked to race, social class, and gender, create **health inequities** with impacts on health outcomes, as severe as higher child mortality rates and lower life expectancy rates.[7] In fact, a person's physical environment and socioeconomic factors such as education, job status, income, family and social supports, and community safety account for approximately 50 percent of a person's health outcomes (see Figure 5).[8]

Social Determinants of Health (SDOH). The social and economic systems that influence whether the conditions where people live, work, learn, and gather contribute to positive or poor health outcomes and quality of life. These conditions are shaped by access to power and resources and include neighborhood and built environment, social and community context, economic environment, educational environment, and health services.[9]

Health Inequity. Differences in measures of health and well-being between population groups due to differences in health resources and other socioeconomic and environmental conditions. Ensuring equity requires understanding that disparities in life outcomes reflect differences in life experience, which produce advantages and disadvantages that are disproportionately distributed throughout society.[10]

Whole Person Care Pilot.
California-based pilot programs funded through a waiver from the Centers for Medicare and Medicaid Services to coordinate health, behavioral health, and social services to provide integrated, patient-centered care for Medi-Cal beneficiaries who are high users of multiple public systems. The Whole Person Care Pilot is part of a larger demonstration program and will focus on sharing data between systems, real-time care coordination, and the evaluation of both individual and population-level progress.[11]

Meaningful Use. Minimum standards that the Centers for Medicare and Medicaid Services require healthcare providers to meet regarding the use and exchange of patients' electronic health records to demonstrate efforts to positively impact patient health and receive an incentive payment.[12]

Figure 5:
Social Influences Greatly Impact Health
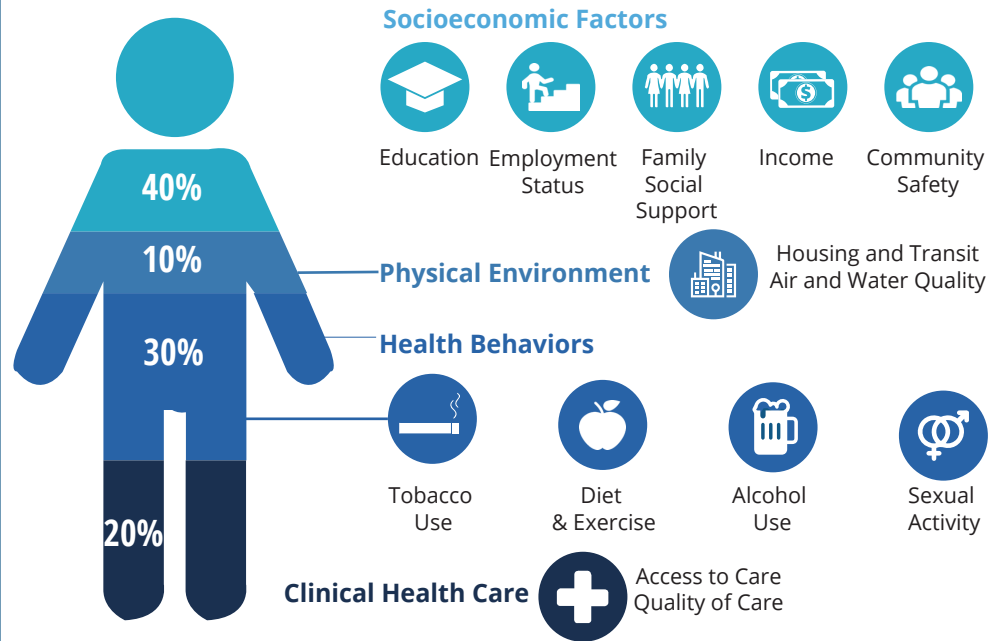
Hood, CM, Gennuso, KP, Swain, GR, & Catlin, BB. (2015). County health rankings: Relationships between determinant factors and health outcomes. *American Journal of Preventive Medicine.*

Person-Centered Care

The concept of person-centered care is foundational to the profession of social work dating back to the early 1900's. In the early 1900s, the field of psychology was the first to use the term 'person-centered' to emphasize the role of empathy—the professional's willingness to suspend judgment and appreciate the patient's perspective—as a key element of providing effective patient care.[13] In the late 1970s, the field of psychiatry promoted the move from a medical to a biopsychosocial model of health that is now commonly used to explain the shift in thinking required to deliver person-centered care.[14]

While traditional medicine used a deficits-oriented approach to treatment, emerging models used a more holistic strengths-based approach that extends beyond an individual's health condition or disability and emphasizes an individual's right to actively participate in making decisions about their care. In the 1990s, the concept of person-centered care underpinned the Americans with Disabilities Act and was integral in developing a model to improve how health systems cared for people with chronic conditions. Person-centered models became even more mainstream with the Affordable Care Act of 2010, which views people as experts in their own lives with a right to services and supports that improve health care safety, coordination, and quality of life.[15]

Person-centered care leverages social work's core Person-In-Environment perspective. The person-in-environment perspective in social work is a practice-guiding principle that highlights the importance of understanding an individual and individual behavior in light of the environmental contexts in which that person lives and acts. The perspective has historical roots in the profession, starting with early debates over the proper attention to be given to individual or environmental change. Recently, nationwide models, such as the **California Whole Person Care** pilots, have integrated person-centered service delivery into initiatives to coordinate care for complex health needs and frequent users of public health, behavioral health, and social service systems that have historically had poor health outcomes.

Proliferation of Technology

Innovations in technology have also fundamentally transformed how people consume, use, and share information. People use search engines and websites to weed out information and interact with diverse networks using social media and other tools. As people become more comfortable with technology, organizations have created more tools for conducting personal and professional business electronically.

Health care systems have become the most recent institutions to conduct business online. In 2009, the federal government established the "**meaningful use**" incentive program to promote the use of **electronic health records**. Since then, the adoption of electronic health records has improved the speed and accuracy of record keeping while also allowing care providers to easily share information among authorized users within and across systems through **health information exchanges**.

Cross-Sector Collaboration

The combined emphasis on person-centered care and the effective use of technology has also propelled cross-sector collaboration to break down silos and foster **clinic-community linkages** to better understand and serve the needs of people who overlap systems of care. Currently, localized data-sharing efforts across the country are coalescing into systems-level networks ("networks of networks") that provide multiple layers of resources and support for emerging data-sharing initiatives, lending momentum to this accelerating field.

Electronic Health Record. A type of electronic, longitudinal patient record typically used by health care providers to store patient demographics and medical history.[16]

Health Information Exchange (HIE). An electronic data transfer platform that allows health care providers and individual patients to securely access and share their medical and treatment history with an emphasis on enhanced decision making to improve diagnosis, reduce duplicative testing, and avoid medication errors and unnecessary hospital readmissions.[17]

Clinic-Community Linkage. Approaches that improve patients' access to preventive and medical care by fostering interaction between public health agencies, health care providers, and community-based organizations and leveraging their individual and collective strengths. Examples include referring patients from health care providers to community partners and vice versa, cross-training between health care providers and community organizations, collocating health care and community services, and clinicians providing care at trusted community-based organizations.[18]

12

Data Integration. The process used to match, link, combine, and consolidate data records from multiple sources into a single system to minimize record duplication and improve data quality.[19]

Value-Based Health Care. An alternative to fee-for-service based care that emphasizes the quality of care rather than the quantity of services delivered by tying incentive payments for healthcare providers to achieving positive health outcomes for individuals, improving strategies for managing population health, and reducing costs.[20]

Accountable Communities for Health (ACH). A cross-sector alliance of health care, public health, and other organizations that focuses on improving population health and health equity by addressing the race, socio-economic, and environmental factors in addition to traditional medical care.[21]

Local and regional stakeholders have continued to to prioritize collective impact models which requires participation from multiple organizations across sectors. An example of this is community-level data sharing initiatives, conducted by Data Across Sectors for Health (DASH) in 2015, which demonstrated both a common purpose and critical need for this type of **data integration**. The analysis identified 85 separate initiatives that bridged data across sectors to impact social determinants of health.[22]

Evolving Funding Environment

These advances have also contributed to changes in the funding environment, largely driven by efforts to measure whether investments in health care and social interventions produce an impact on a person's health and well-being relative to the investment. For example, the Affordable Health Care Act was instrumental in encouraging health care providers to shift away from fee-for-service models toward **value-based care**, which ties payments to providers' ability to maximize positive health outcomes while reducing costs. Within the nonprofit social and human services sectors, these approaches are often referred to as outcome-based payments, performance-based contracting, or Pay for Success models.

Other changes to the funding environment include tying funding to collaborative initiatives to measure organizations' cumulative impact on addressing complex social problems. One example of this nationally, **Accountable Communities for Health**, was designed to examine how addressing the social determinants of health can improve health outcomes while reducing health care utilization costs.[23]

Research and Policy Advocacy
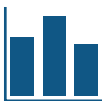
As collaborative networks of care evolved, they contributed to a growing understanding of the role of social determinants on health outcomes and an interest in which interventions are most effective within and across different settings. In 2016, the University of California, San Francisco established the Social Interventions Research and Evaluation Network (SIREN) to support the collection and dissemination of research on how health systems can address unmet social needs, and to develop and provide seed funding for a

research agenda to fill gaps in the evidence.[24] These types of networks not only inform the development of cross-sector approaches to health promotion, they also provide an avenue for local collaboratives to examine their impact on population health across socioeconomic classes, demographics, and geographic areas and the patterns and trends that shape and are shaped by human behavior, and contribute to the literature.

Data has also been instrumental in shaping public policy to reinforce cross-sector collaboration and the role of social determinants of health on quality of life. In the public policy sphere, the concept of "health in all policies" began to take root in the early 2000s, revolutionizing efforts to improve health equity.[25] For example, the Affordable Care Act allowed states to extend Medicaid coverage to improve access to health care among disadvantaged groups and provided funding for community health centers. In 2010, the U.S. Department of Health and Human Services released an action plan to reduce health disparities. The Accountable Health Communities Model, launched by the Centers for Medicare and Medicaid Services, supports similar goals. And within California, the Whole Person Care Pilot program, which promotes patient- centered care coordination, has helped spur regional and local interest in using technology to improve population health.
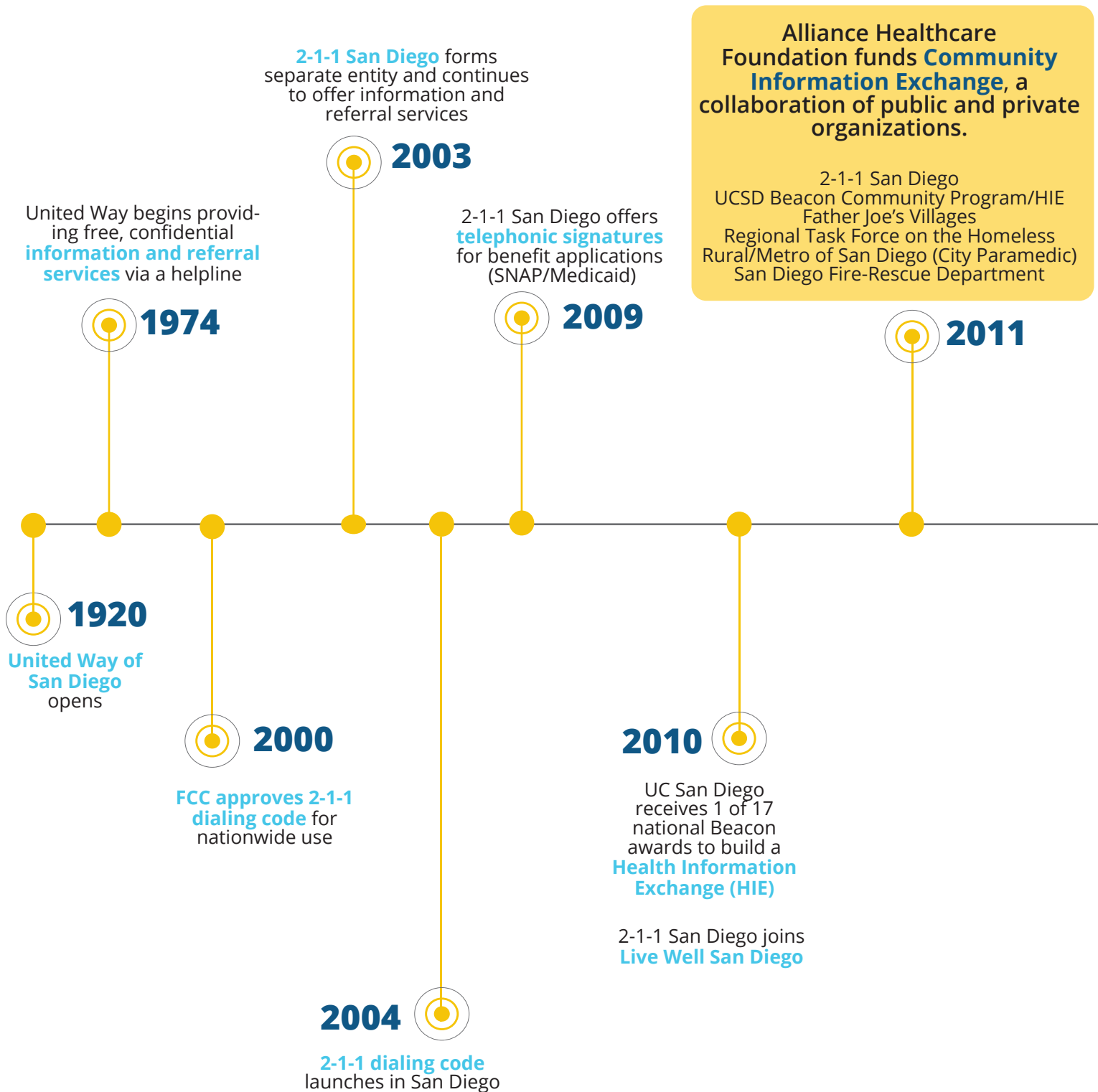
As the CIE continues to grow, the San Diego CIE partner network is committed to contributing to the regional, state, and national movement to bridge social and health sectors by creating actionable solutions and driving the need for standards to adequately address social determinants of health. San Diego's CIE network is dedicated to furthering the conversation about how a CIE enhances the development, delivery, and evaluation of best practices in health, social, and human services.

Dr. Donald Rucker, Chief of the Office of the National Coordinator (ONC) for Healthcare Information Technology, U.S. Department of Health and Human Services, as a keynote speaker at the 2018 CIE Summit discussing insights on technology usability and interoperability to improve the health care industry.

History of 2-1-1 San Diego and the CIE

The following timeline depicts the founding and evolution of both the CIE and 2-1-1 San Diego, and 2-1-1 San Diego's role as the convener of a CIE partner network and the developer and manager of a community-based technology platform.

2-1-1 San Diego forms separate entity and continues to offer information and referral services

2003

United Way begins providing free, confidential **information and referral services** via a helpline

2-1-1 San Diego offers **telephonic signatures** for benefit applications (SNAP/Medicaid)

1974

2009

Alliance Healthcare Foundation funds **Community Information Exchange**, a collaboration of public and private organizations.

2-1-1 San Diego
UCSD Beacon Community Program/HIE
Father Joe's Villages
Regional Task Force on the Homeless
Rural/Metro of San Diego (City Paramedic)
San Diego Fire-Rescue Department

2011

1920

United Way of San Diego opens

2000

FCC approves 2-1-1 dialing code for nationwide use

2010

UC San Diego receives 1 of 17 national Beacon awards to build a **Health Information Exchange (HIE)**

2-1-1 San Diego joins **Live Well San Diego**

2004

2-1-1 dialing code launches in San Diego

2-1-1 San Diego launches SD United network offering closed loop electronic referrals to target population of military and veterans.

Leveraging the work of the San Diego Veterans Coalition, and the region's Peer to Peer hub at Courage to Call, SD United is a care coordination network working to improve access for military and veteran families with enhanced collaboration

2017

CIE launches second cohort of senior service providers

2015

2014

CIE launches pilot cohort of homeless services providers sharing basic client demographic data.

2-1-1 San Diego expands Health Navigation through hospital and clinic partnerships.

As 2-1-1 San Diego grew, agency leaders recognized traditional Information and Referral models did not provide a holistic view of a person's interconnected health and well-being needs and put the burden on those in need to access services. 2-1-1 San Diego began shifting services toward a person-centered approach with the launch of Health Navigation

2018

Relaunch of **enhanced CIE** offering network partners a shared language of assessments and Risk Rating Scale, resource database, and robust technology platform that supports data integration and community care planning with closed loop referrals

2017

2-1-1 launches person centered care with enhanced CRM with Social Determinants of Health assessments, Risk Rating Scale, and a unique, longitudinal record for each caller

Section 3: Insights and Strategies

This section of the toolkit provides communities with Insights and Strategies to guide discussion about the practical issues they should consider when developing networks and data sharing opportunities. The six strategies covered in this section include:

I

Identify the CIE Vision and Governance
Provides information on establishing the need for a CIE, clarifying the community vision, and creating a governance structure and plan for oversight.

M

Mobilize the Community Network
Covers developing and implementing a strategy to engage partners and foster collaboration through shared values, a common language, and partner engagement.

P

Prepare a Legally Compliant Framework
Highlights the steps necessary to standardize data sharing, and ensure adequate security and privacy measures.

A

Adopt Interoperable and Scalable Technology
Outlines the importance of analyzing existing data systems, establishing a design and technology team, developing a scope of work, and selecting a technology platform.

C

Cultivate Sustainability
Underscores the need to develop and pursue a diversified initial and long-term sustainability strategy based on a clear understanding of costs, potential business models, and clear value propositions for key sectors.

T

Transform the Movement
Emphasizes the role of a CIE in building the regional data sharing ecosystem, contributing to the field of public health, and shaping the conversation through the regional ecosystem, building the field, and shaping the movement through education and advocacy.

The toolkit outlines the importance of each strategy and provides an action checklist with questions to guide planning discussions, resources, and templates for local use, and practical applications that illustrate how 2-1-1 San Diego approached the planning and decision-making process.

Identify the CIE Vision and Governance

🎯 Why Is It Important?

Since the national Healthy People initiative was launched in 1979, communities across the country have engaged in a variety of local, state, and federal initiatives to measurably improve the population's health and well-being by reducing preventable diseases, disabilities, injuries, and premature death.[26] As communities have grappled with these challenges, many recognized the importance of collaboration across the private and public health sectors to improve health literacy and reduce health disparities between different populations and geographic areas.

In recent years, many communities have started examining how they can address the impact of social and economic environments on physical health and well-being. Recognizing that better coordinated care could provide a more holistic solution to these challenges, a growing number of communities have adopted a **collective impact** model, which brings together diverse partners to accelerate the development of solutions to complex social problems. This model uses a "**backbone organization**," which plays a unique role within a collaborative effort:

- Guiding the development of a shared vision and strategy
- Maintaining a shared identity
- Expanding the network of partners and funders
- Aligning partners and their activities
- Engaging target populations
- Establishing shared outcomes and measurement practices to facilitate ongoing learning and process[27]

The roles and responsibilities of a backbone organization are also essential to the development of a CIE. The organization leading the development of a CIE must have the expertise and the capacity to engage and guide a diverse network of partners through a cross-sector systems change initiative. This includes leading partners through the process of clarifying the need for a CIE, developing a shared vision, and building the political will to make both short- and long-term investments in what is essentially a local movement to promote cross-sector collaboration and data sharing to promote healthier communities.

Collective Impact. An initiative that convenes a group of committed cross-sector partners using a structured process to develop a "common agenda, continuous communications, shared measurement, and mutually reinforcing activities" under the umbrella of a centralized infrastructure with dedicated staff.[28]

Backbone Organization. An organization that coordinates a network of partners to achieve collective impact by guiding a shared vision and strategy, supporting aligned activities, establishing shared measurement practices, fostering public will and advancing policy, and mobilizing funding.[29]

(!) Action Checklist

1. Establish the Need for the CIE

Conduct an environmental scan. To develop a robust CIE, a community first needs to understand how local organizations currently coordinate care and the challenges they are experiencing, as well as the social, economic, political, and technological events and trends shaping local coordination efforts. To begin, identify and hold conversations with major stakeholders in the health care and social service sectors, including philanthropy and government, to understand the following:

- How does information about people flow through different systems?
- What processes and protocols are in place to connect people at the intersections between systems?
- What data systems are being used within each sector?
- What trends are shaping service coordination in each sector?
- What are the problems service providers and key decision-makers are seeing?
- What data is missing for informed decision making at all levels (micro, mezzo, macro)?

Organize the feedback into key themes and priorities, and use the information to inform CIE planning and development.

Convene potential partners and participants. Share the findings of the environmental scan with established coalitions and other stakeholders to help them understand the impact and value of a CIE, including ways a CIE could help resolve identified challenges. Leverage the structures and collaborations of established coalitions focused on diverse health and social issues, as well as specific populations and neighborhoods. Hold educational workshops on the scan's findings with other potential partners in the health care, social, and human services sectors. Involve or meet individually with elected officials, government, philanthropic, and nonprofit agency leaders.

Gain buy-in. Gauge the interest of health care providers, nonprofit organizations, government and philanthropic funders, and relevant local and regional coalitions in further exploring the development of a CIE. Actively recruit potential partners through direct outreach and by attending meetings, events, and workshops targeting each sector. Convene workshops or meetings to discuss the priority challenges a CIE could address, who would interact with a CIE, and for what purpose (e.g., data set integration, alerts, etc.). Use these meetings to determine whether local organizations and/or coalitions are interested in forming a partnership to develop a CIE and what resources, if any, they can contribute to the effort.

Steve Alt, Military and Veteran Manager of 2-1-1 San Diego, shares details on the nature of the support provided to veterans, active duty, and their families.

Analysis of Data Sharing Systems and Challenges

As part of its effort to develop a CIE, 2-1-1 San Diego conducted analyses to learn about what data systems health care, human, and social service providers were using and the challenges they were experiencing in gathering, sharing, and using data to make decisions and report outcomes. For example, some of 2-1-1 San Diego's analyses identified that there were challenges in reporting or gathering information about client access to defined mainstream resources for federal U.S. Department of Housing and Urban Development (HUD) reporting. Providing this information through the CIE would improve processes to lead to improved overall services for clients.

2-1-1 San Diego used the following questions when holding conversations with key stakeholders to build consensus:

· Which populations do the major stakeholders serve?

· What types of services do they provide?

· Who are their partners, and what challenges do they experience working together and sharing information with each other?

· How do they use data to determine what works and what doesn't work?

· Is this data shared? If so, with whom and how?

· How would sharing this data across providers add value?

Use Case. A description of a real-world scenario that illustrates how information flows between stakeholders within a system, and the relevant issues and system needs that should be addressed in that information flow.[30]

2. Clarify the Vision

Develop use cases. Building on the findings from the environmental scan, engage potential partners in developing use cases that describe the priority challenges they are experiencing and what data is available to address the challenge. **Use cases** should identify the organization or user, the goal or problem being solved, the systems and partners necessary to solve the problem, the data that needs to be exchanged, and a scenario or story to illustrate what steps need to take place before, during and after the interaction. Assess which use cases would best illustrate the community's vision for the CIE based on where the community needs better data to inform decision making. These use cases will help to build support for a CIE and serve as potential inputs for the development of the technology platform.

Articulate the vision. Based on the needs and buy-in of prospective and committed partners, establish a long-term vision for the CIE to guide internal decision-making. The vision should clearly define why the community needs the CIE and what success will look like. This information is critically important to establish value statements and mobilize interest to potential partners and funders/payers alike.

3. Create a Governance Structure

Engage stakeholder partners. Invite and encourage influential stakeholders with an interest and the capacity to participate in developing a CIE to establish and form an advisory group. Communities may have an established advisory group or may need to develop a governance structure based on local needs. Potential stakeholders include:
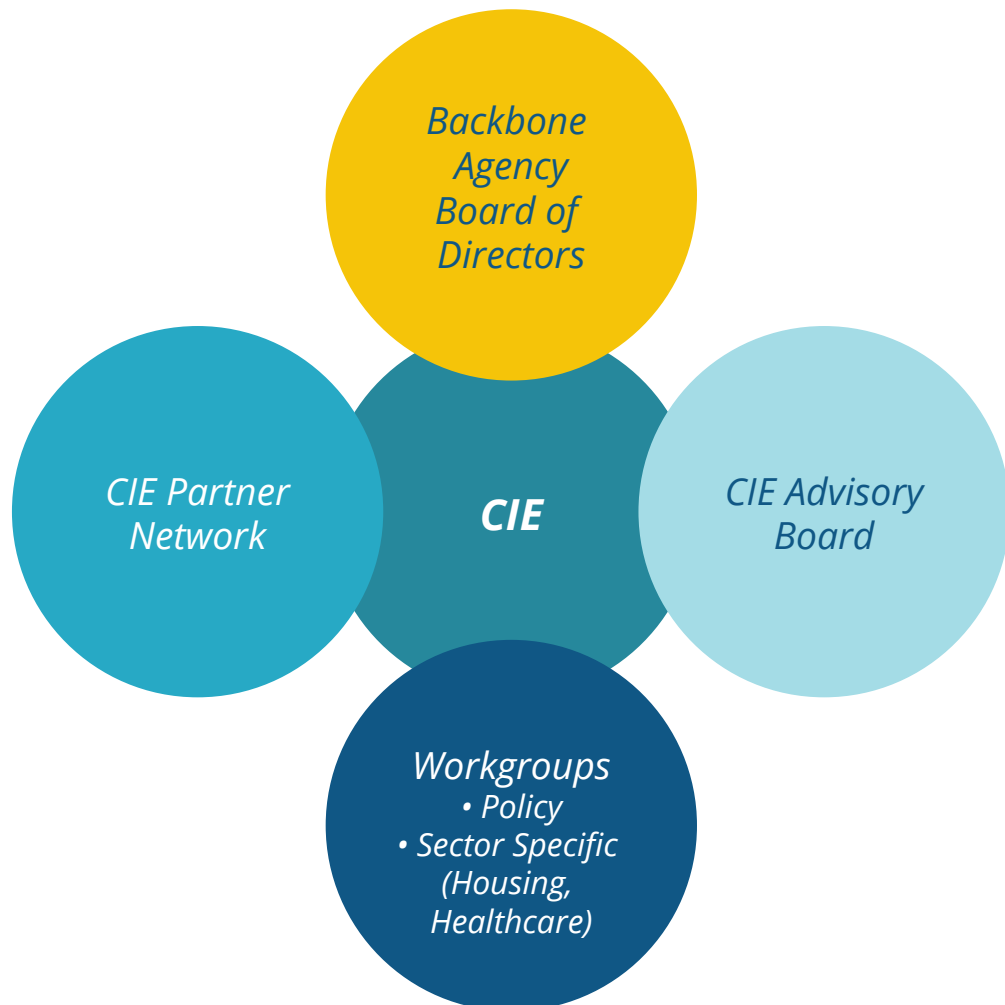
- Confirmed and prospective CIE partner organizations

- Subject matter experts who are well-versed in local challenges related to the social determinants of health

- Public stakeholders, elected officials, funders, and other "influencers" that support innovative and progressive data sharing and coordinated care

Establish the vision, roles, and responsibilities of an advisory group or governance structure to guide the CIE's development. The advisory group should at minimum set goals and outline roles and responsibilities related to providing guidance on the CIE's development, promoting its use within the community, and advocating for funding. Formalize the advisory group's role with a charter supported by individual agreements that outline individual members' commitment to the shared vision, mission and participation within the council (See page 25 for an overview of the San Diego CIE's governance structure).

Convene and champion the cause. Establish regular advisory group meetings, as well as regular meetings of the CIE partner network. Invite the council to CIE partner meetings so that they can stay apprised of the successes, challenges, and opportunities with the partner network and the technology platform. Develop a communications plan that includes providing regular updates and sharing opportunities for the governance to champion the CIE.

Figure 6: Governance and Engagement Structure

Backbone Agency Board of Directors

CIE Partner Network

CIE

CIE Advisory Board

Workgroups
• Policy
• Sector Specific (Housing, Healthcare)

Multi-Level Governance Structure

San Diego's CIE is supported by a multi-level governance structure in which different partners each play a unique role in guiding the vision and ongoing development of the CIE.

While 2-1-1 San Diego staffs the CIE, the CIE also relies heavily on the contributions of its Advisory Board, a Partner Network, and several workgroups, as well as the 2-1-1 San Diego Board of Directors (see Figure 6).

• **2-1-1 San Diego**. A private, 501(c)(3) nonprofit corporation governed by a Board of Directors, 2-1-1 San Diego has extensive expertise managing information and referral services between health care and social service providers throughout San Diego County. Integrally involved with the CIE since its creation, the agency serves as the backbone or hub of CIE operations with oversight of both the partner network, various workgroups, and the CIE technology.

• **Advisory Board**. Comprised of executive leaders of healthcare and provider organizations, CBOs, health plan partners, and the local HIE, this group meets monthly to facilitate the development, adoption, innovation, and sustainability of the (CIE), advance the work of the CIE Partner Network and improve the health and social influences that impact the wellness outcomes of individuals and the community. The CIE Advisory Board is facilitated by individuals within 2-1-1 San Diego's Executive Leadership Team, Partner Engagement staff, and a 2-1-1 San Diego Board Member.

• **Partner Network**. Staff from current and prospective partner organizations meet monthly to share information about their experience participating in the CIE. Discussions focus on what's working well and challenges to address within the partner network and in relation to the CIE technology, as well as to share and emerging best practices. This group also participate in ongoing training and provides input on CIE governance policies and technology platform functionality.

• **Workgroups**. Individuals from 2-1-1 San Diego, network partner organizations, and the Advisory Board also serve on workgroups that support various aspects of the CIE's development and management:

> • **Policy Workgroup**. Oversees CIE policy development related to inclusion criteria, data best practices and research, ethical standards and policies, quality of care standards, and certifications of network partners.

> • **Shared Language Review Workgroup**. Develops overview of social domains and history of domain assessment, shared questions, and data fields.

> • **Healthcare and Housing Workgroups**. Align sector specific systems with person-centered care and share workflow review related to consents, referrals, data sharing, and lookups.

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4. Plan for CIE Oversight

Establish core activities. Define the minimum requirements for managing a CIE, which should include:

- Engaging and supporting an advisory group and active partner network

- Developing and maintaining a legally compliant framework, especially as it relates to security, privacy, and other risks

- Managing the system infrastructure and technology platform

- Securing resources to ensure the sustainability of the CIE

- Contributing to building the field and championing policies that improve population health

Identifying a Backbone Organization

San Diego's CIE was built using the collective impact model, which anchors the initiative with a single infrastructure or "backbone" organization that convenes stakeholders and coordinates the activities of the network of partners. While communities do not necessarily need an organization like 2-1-1 San Diego to develop an integrated CIE, 2-1-1 San Diego was selected to serve as the backbone organization because of its ongoing efforts to address health and social problems through technology, the ability to leverage existing community's regard for the organization as a convener, and the organization's involvement in the CIE since its inception.

In addition, 2-1-1 San Diego had the staff capacity and expertise, direct provider of services, high volume of callers, existing technology resources, existing relationships and partnerships with social and health service providers and public entities alike, and experience serving in a similar role for SD United. Powered by 2-1-1 San Diego in partnership with the San Diego Veterans Coalition, SD United strengthened an existing partner network by deploying the UniteUS technology platform, an off-the-shelf technology platform that engages government agencies, social services and community-based providers, and health care organizations to provide care coordination to veteran and military families.

In its role as a backbone organization, 2-1-1 San Diego manages brainstorming initial and ongoing use cases for the technology, develops and manages the technology platform, ensures compliance with the appropriate legal protocols, engages new and current partners, and ensures the CIE's financial stability and sustainability.

Leverage existing resources. Fill critical gaps in expertise by leveraging the knowledge and relationships of local subject matter experts, such as:

- Referral organizations with resource directories, such as 2-1-1

- Government agencies, foundations, and nonprofits

- Organizations with health care and social services expertise

Identify lead(s) or a backbone organization. The advisory group, with input from the partner network, should determine whether a CIE should be managed by a single "backbone" organization or a coalition of organizations. Communities can start this process by identifying trusted local organizations that meet objective criteria related to their capacity to provide network management, legal, technological, security, and fiscal counsel for a CIE. Communities may want to consider issuing one or more requests for proposals for these services if more than a single local organization could fill the role. The legal structure of the CIE lead is an important factor that will shape sustainability opportunities and funding potential.

*Navigating Complex Health and Social Needs Workshop - CIE Summit 2018*

Mobilize the Community Network

⌖ Why Is This Important?

The most challenging and important element of a CIE is community engagement. The CIE can only function when partners move toward person-centered care, utilizing the network to share data. An effective integrated CIE requires a network of committed partners who actively use it, participate in training, trust each other, and contribute to enhancing the data available through the CIE over time.

Engaging partners from different sectors allows for a more holistic view of the person's well-being and increases the quantity and richness of the data available through the CIE.

It is important to first be genuinely curious and understand the social and health provider landscape in a community. The asset map of providers and their roles are an important step necessary to identify and mobilize a network necessary for systems change. There is a heavy lift and risk for providers, especially social service providers, in altering the way they do business. Acknowledging the inherent risks and burdens in re-engineering business processes and sharing data is critical to being authentically engaged with the community. A personalized approach to each provider is important. Building trust, setting expectations, formulating a plan, and continuously checking in on the plan's progress are key ingredients to building a network that results in systems change.
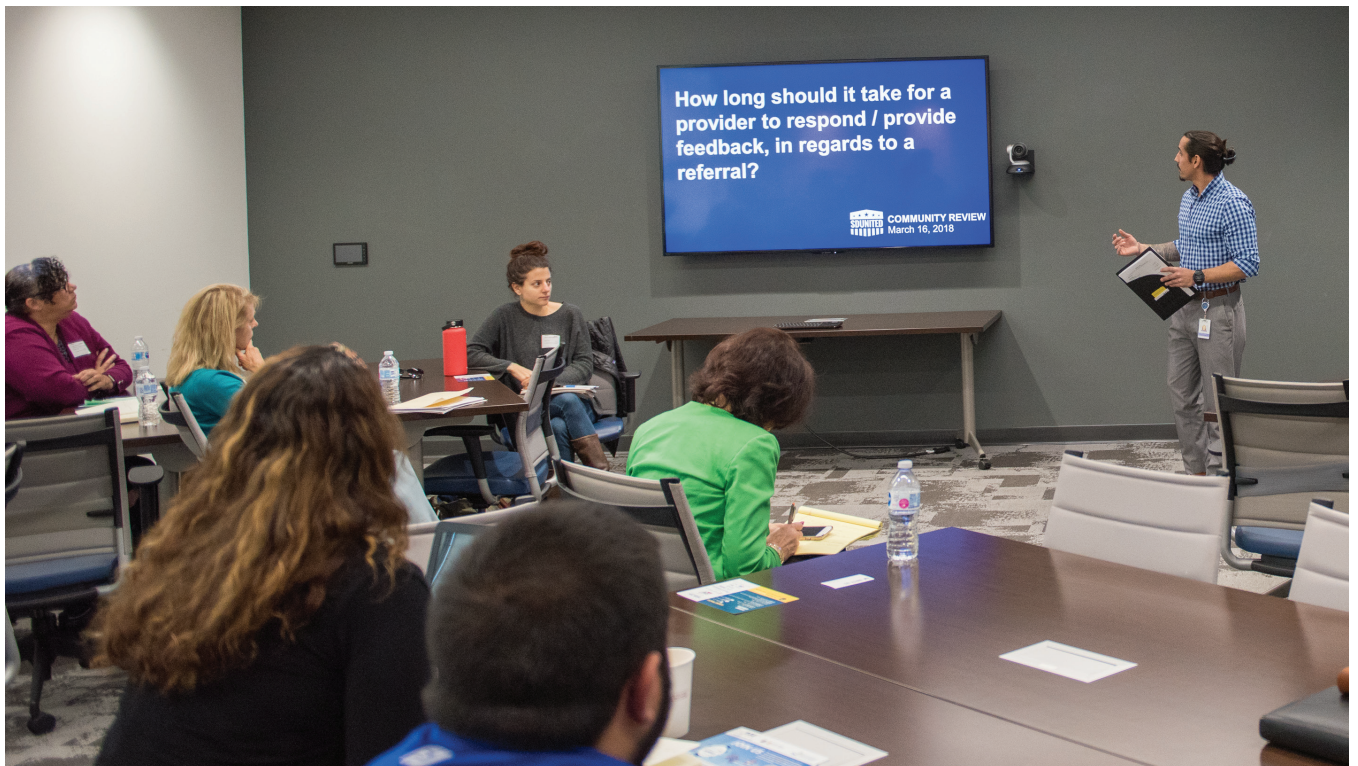
2-1-1 San Diego holding a partner meeting for Veteran service providers

! Action Checklist

1.Develop a Partnership Engagement Strategy

Designate an engagement team. Tap into the diverse strengths of community members or hire staff to build public will for systems-level change and promote technology adoption. Team roles and responsibilities include conducting outreach and assisting new partners in becoming CIE member organizations, working with existing partners on workflow and change management, and coordinating partner network meetings and events.

Meet organizations where they are. Recognize that organizations differ in their capacity and commitment to participating in the CIE. The foundation of the social work profession is respect for client autonomy and self-determination and to 'start where the client is' to create a collaborative working alliance. This holds true in working with network partners as well.

To engage a wider variety of organizations, consider creating a tiered structure that allows organizations to participate at a level that aligns with their technical capabilities and capacity to meet privacy and security requirements. Leave the door open for organizations to build their capacity and participate at a higher level over time. Allow partners to 'dip their toe in the water' and use one functionality to identify value while remaining focused on full utilization as the goal.
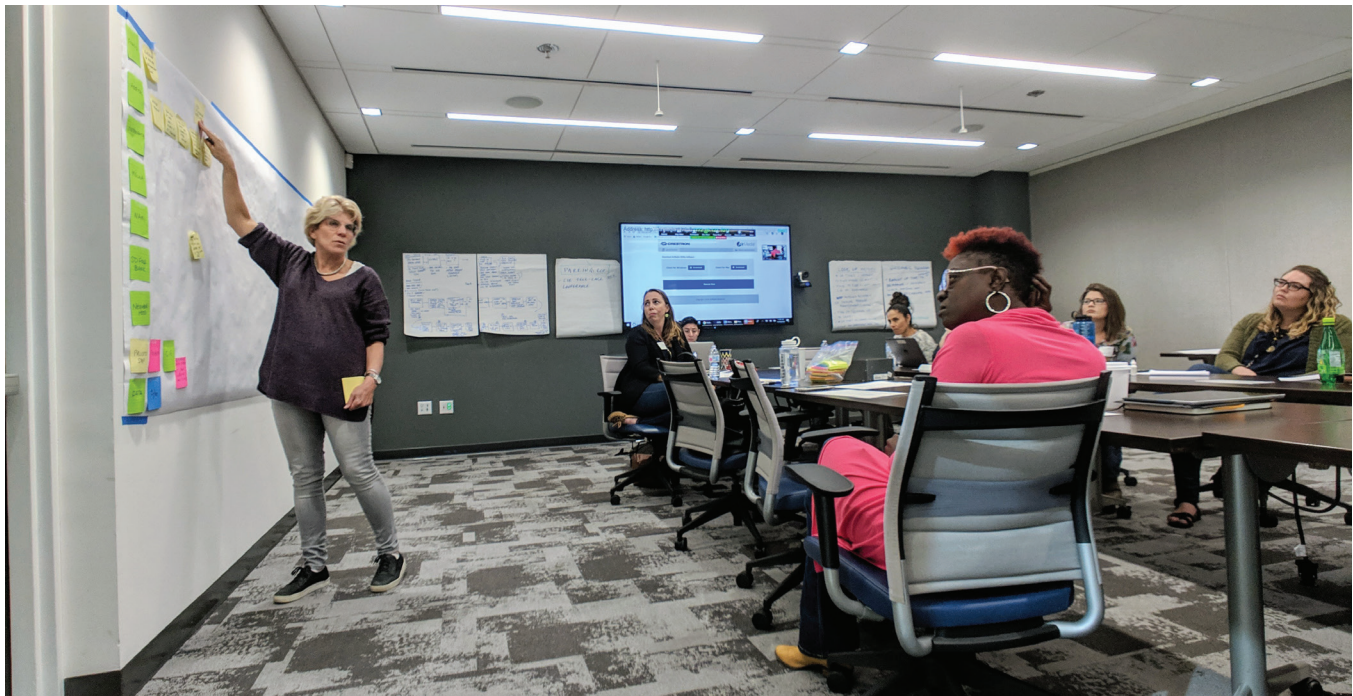
CIE partners discussing care coordination strategies

Foster ongoing collaboration and continuous feedback loops. Solicit partner input and feedback on the CIE on an ongoing basis, through a variety of activities:

- Network partner meetings, where partners can discuss issues and problems and build relationships through face-to-face networking, brainstorming, and problem-solving

- Workshops and trainings to share lessons learned about successful strategies for re-engineering business practices and other best practices for using the CIE

- Monitoring partner usage of the CIE to identify opportunities for training and enhancements

- Establishing secondary workgroups based on challenges or opportunities for utilization or on particular sectors or target populations

- Designing and updating CIE features and functionality based on community feedback

- Identifying prospective partners that offer services and have access to data to influence systemic change

Tiered Partnership Structure

2-1-1 San Diego recognized that not all organizations have the same capacity to participate as full partners in the CIE. In response, they created three levels of partnership:

Tier 1

Referral Partners exemplify the traditional information and referral relationship in which partners list program and service information within the 2-1-1 San Diego resource database. They have login access to update their profile and add service, and their agency's information is shared with 2-1-1 clients and partners. They do not have access to the CIE individual records and do not participate in electronic referrals.

Tier 2

Connected Partners have the ability to make electronic referrals, including the functionality to send, accept, and decline referrals, and provide electronic status" and outcome updates through the CIE. They receive only limited client information and do not have access to the full CIE client record.

Tier 3

I**ntegrated Partners** have full access to the CIE shared client record with options for record look-ups, record creation, data sharing, and bi-directional referrals. They also have the capacity to share data about the people they serve in the system and are required to comply with legal requirements.

2. Create Shared Values and Language

Identify common individual, provider, and community outcomes. Engage the partner network in creating an organizing framework and a plan with milestones to track progress on CIE development.

Define and share social influences and measures. Convene partners to affirm common social needs or indicators, or leverage existing tools used to measure progress on social determinants of health within the community. Engage subject matter experts within the community to provide insight on common shared data fields that are relevant across the network and actively marry the social and health sectors. Collectively create standardized measures and data fields to be captured within each domain to demonstrate progress in improving population health over time.

Identifying Community Outcomes

When engaging new and existing partners, San Diego CIE partners explore what data or information would help community partners perform their jobs more efficiently and effectively. From the outset, they held numerous discussions with partners about gaps in their knowledge of the persons they served and what information partners would need to accept or reject a referral. 2-1-1 San Diego also conducted a comparison analysis of the assessments conducted by different providers within each domain, then used the information to work with partners to develop and validate a Risk Rating Scale that is used to determine a client's level on the continuum from crisis to thriving. Discussions of these gaps also helped the network to identify additional community partners.

Standardized Risk Rating Scale

To help partners more fully understand the connection between an individual's health and the social determinants that influence their well-being and self-sufficiency, 2-1-1 San Diego created a Risk Rating Scale that allows for the standardized assessment of individuals across fourteen domains. The Risk Rating Scale was integrated into CIE and serves as a foundation of shared language and measure around social determinants of health. The assessment walks individuals through a series of questions about housing stability; nutrition and food security; activities of daily living; employment; transportation; financial wellness; and, social and community connections (see Figure 7). These questions help to determine the immediacy of the client's needs, their knowledge and utilization of services, and what social supports and barriers are influencing whether a client is accessing these resources (see Figure 8).

Further, 2-1-1 San Diego aligned its resource listings with each risk stratification utilizing the 2-1-1 taxonomy to help identify appropriate resources for the assessed needs that correspond to the identified risk level.

Figure 7: 14 Health and Well-Being Domains

Housing
Employment
Primary Care
Personal Care
Health Management
Education
Nutrition
Transportation
Financial Wellness
Utilities & Technology
Activities of Daily Living
Disaster and Safety
Social Connection
Legal

Figure 8: Risk Rating Scale

Crisis   Critical   Vulnerable   Stable   Safe   Thriving

Immediacy

Knowledge & Utilization

Barriers & Support

Responses to these questions are then used to produce a risk indicator of a client's health and well-being within each domain on a continuum of crisis to thriving with the goal of helping clients move toward thriving. These risk indicators are visible by domain on the shared client record (see Figure 9).

Figure 9: Sample Shared Client Record

Individual Information

Privacy Status Icon

Ⓐ

Client Name ⓘ	Mobile ⓘ
John Doe	(858) 465-1234
Email ⓘ	Birthdate ⓘ
J.Doe1942@email.com	04/12/1942
Last 4 of SSN or PIN ⓘ	Birth Month/Year ⓘ
6789	04/1942

Address Information

Home Street ⓘ 1200 DEPOT RD APT 2	Address Line 2 ⓘ
Home City ⓘ SAN DIEGO	Home Zip/Postal Code ⓘ
	91910
Home State/Province ⓘ CA	Home Country ⓘ United States

Demographics

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

Income & Benefits

Employment Status ⓘ	Monthly Income Amount ⓘ
Disabled	$ 900.00
Sources of Income ⓘ Supplemental Security Income (SSI)	Percent of AMI 30% or less
Non-Cash Benefits ⓘ N/A	Percent of FPL 43.03 %
Highest Level of School Completed ⓘ	
Associates Degree	CalFresh Renewal Date

Privacy Records (1)

PRIVACY	PRIVACY TYPE	PRIVACY METHOD	CREATED BY
P-053569	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
CDS-000002	Catholic Charities	ServicePoint

View All

Alerts (1)

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

View All

Domains (6+)

DOMAIN	RISK	ACTIONS	REFERRALS
Health Management	🟡 Vulnerable	2	3
Transportation	🟠 Critical	1	2
Housing	🟠 Critical	1	2
Nutrition	🔴 Crisis	2	5

View All

Care Teams (3)   New

CARE RECORD	CASE MANAGER	AGENCY	DATE ASSIGNED
CT-00000044	Thomas Lacoste	Jewish Family Services	10/05/2018
CT-00000046	Jeri Hernandez	SCRC (Southern Caregiv…	10/03/2018
CT-00000047	Archie Munoz	Access to Independence	10/03/2018

Program Enrollments (3)   New

| ENROLLMENT RECORD	SERVICE	STATUS	ENROLLMENT DATE
PE-00008199	PATH Connections	Active	9/07/2018
PE-00008197	Outreach Team	Active	8/30/2018
PE-00008194	Enrollment Center	Closed	7/24/2018

In addition, network partners can easily update an individual's status of risk level resulting from a specific assessment criteria because these data are integrated into the assessment tool. For example, data from the **Homeless Management Information System (HMIS)** has been integrated into the CIE to inform individuals' progress within the housing stability domain (see Figure 10). As a person moves from living on the street to shelter or permanent housing, the homeless service provider working with that individual updates HMIS. This triggers an automatic status change within the CIE's housing domain, as well as notifications and alerts to every partner that makes up the individual's care team. In this way, the Risk Rating Scale enables partners to proactively refer clients to additional services and engage clients in activities that address the upstream socioeconomic and environmental conditions that contribute to health disparities.

Homeless Management Information System (HMIS). Required by the U.S. Department of Housing and Urban Development (HUD) for each Continuum of Care (CoC), HMIS is a local information technology system used to collect data on individuals and families who receive homeless services.[31]

Figure 10: Triggering Status Changes Within the CIE
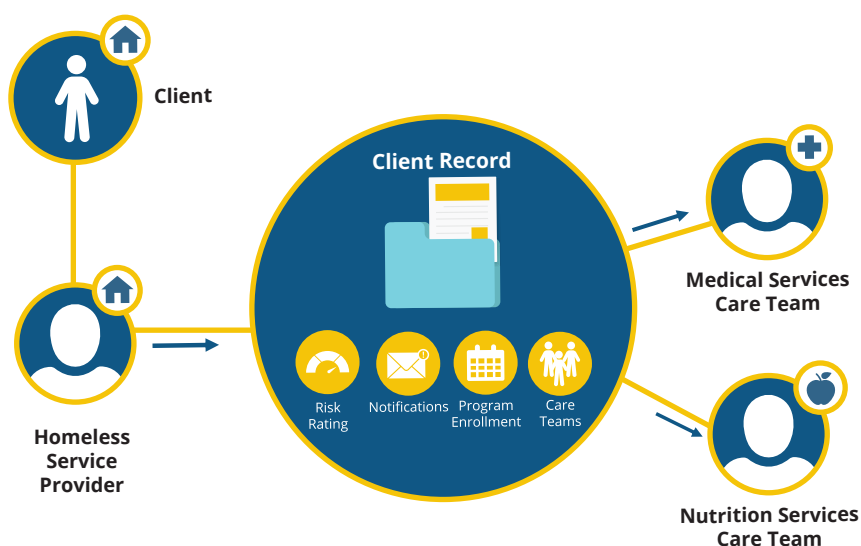
Not only does the Risk Rating Scale offer network partners a shared language for understanding the impact of social determinants on an individual's health and well-being, partners can also use the data to inform the creation of a centralized community care plan. In addition, these data can be used to better understand the overall health of the entire population within the CIE, as well as the risk and protective factors that contribute to population health and inform larger public policy decisions.

3. Engage the Alliance of the Willing

Assess prospective partner buy-in and readiness. Determine the buy-in and readiness of existing and prospective partners to pilot the CIE, as well as those who are best positioned to demonstrate the CIE's impact and diversify the partner base. When possible, identify existing collaborations interested in leveraging the shared infrastructure of a CIE to accomplish shared goals. Explore what types of information could be gleaned from a CIE by diversifying the partner base in each sector.

Some communities may start with a cohort model organized by service provider type, whereas others may include a diverse group of partners. Some communities may already have social and health partners connected for a particular project or initiative and just need to inject technology to formalize and fortify the connection. Whichever path the community decides, the purpose of the pilot, along with metrics for evaluating its success and areas of improvement or expansion, should be clearly established before transitioning from the conceptual phase to development and implementation.

Use a phased approach. Once a starting point has been selected, the community should begin mapping out the goals, strategies, and timeline for the first phase of development and clearly delineate the roles of participating systems and partners. Partners should also begin discussing the components of a legal framework, technology needs, and the sustainability plan. Partners should engage government, nonprofit and philanthropic funders early to secure buy-in and resources.

Secure early adopters. When first establishing CIE partnerships, educate partner staff at all levels about the features, benefits, and requirements for participating in the CIE. Gauge leadership interest in the vision for a CIE. Once a partner expresses interest in joining the network, build buy-in at all levels of the organization from the CEO to the frontlines.

4. Create an Individualized Partner Plan

Determine initial participation level. If using a tiered partnership structure, assist the organization in determining its initial level of participation. Start by assisting partners in assessing where they are and provide solutions that meet them where they want to be. Work with each partner to map out their programs and services, the data they use to inform programmatic decision making and advocacy efforts, and their business goals. Identify steps to move forward to full utilization.

Facilitate business process re-engineering. Help each partner determine processes they will need to revise or establish to make effective use of the CIE. Develop a plan with timelines and a budget to secure the resources and expertise necessary to re-engineer their business processes, especially how they will need to redefine their approach to case management. Work with partners to identify opportunities, including collaborative funding to support systems change efforts across multiple partner organizations.

Support CIE implementation and ongoing participation. Develop an implementation plan strategy and timeline for onboarding relevant team members to use the CIE. Consider piloting the CIE with one department in an organization or focusing on only one of the functions of the CIE at a time. Outline steps to help the organization build its internal capacity to increase its utilization of the CIE and expand access to different teams within the organization over time.

⚙ Engaging Willing Partners

The CIE started with two committed partners—Father Joe's Villages and the City of San Diego Emegency Medical System (EMS)—who were already coordinating care and sharing information as part of Project 25, a three-year pilot initiative to provide housing and services to people who were chronically homeless frequent users of public services and began collecting data on individual program and service usage, costs, and outcomes. Over time, other homeless services providers joined the CIE forming a cohort based on the similarities in the types of services they provided. The CIE later expanded to include cohorts of partners serving seniors and veterans. As the CIE grew, however, staff recognized that organizations that were not part of the existing cohorts were serving the same clients as the CIE partners, and that they were inadvertently excluding willing community partners.

In 2016, 2-1-1 San Diego's CIE began to shift away from the cohort model based on the readiness to expand to all populations and apply a holistic approach to addressing community needs. The following table provides an overview of the program and service data made available through partners representing different health care and social service sectors.

Examples of Program and Service Data Shared Through the CIE

CIE Data Sharing Sectors	Program and Service Data
2-1-1 San Diego	Information on referrals from the 2-1-1 San Diego Call Center, including profile information, assessments, referrals, and referral outcomes.
Homeless System of Care	Program data from the Homeless Management Information System (HMIS) includes basic Universal Data Elements (UDEs) that are part of the U.S. Department of Housing and Urban Development's data standards. Available data includes participation in various homeless programs, length of time in those programs, and contact information for each program.
Food Banks and Meal Serving Programs	Data about accessing food programs, including dates the individual was enrolled and services were provided.
Other Social Services	Depending on the organization, data include a client's profile information and participation in programs and services.
Health Care System	Healthcare partners—health centers, hospitals, health plans, and emergency medical services—are sharing healthcare utilization data, such as EMS transports, health insurance type, health insurance plan, primary medical home, etc.
Criminal Justice System	Criminal justice partners share booking data on persons booked into any County jail, including the date of booking, initial charge, jail location, and release dates. While this information is publicly available, having it in the CIE allows an alert to be sent to the individual's care team when the person is booked into jail.

Prepare a Legally Compliant Framework

🎯 Why Is This Important?

Health Insurance Portability and Accountability Act (HIPAA). Passed by Congress in 1996, HIPAA aims to promote the development of standards for electronic health care transactions while protecting the privacy of individual health information.[32]

Protected Health Information (PHI). Personal information that must be protected under the HIPAA Privacy Rule because it contains patient demographics, physical or mental health, type of care provided, and payment data that could be used to identify the individual.[33]

Personally Identifiable Information (PII). Information that can be used alone or when linked to other information to identify an individual. Examples of PII include a person's name, Social Security number, birth date and location, mother's maiden name, and educational, employment, financial, and medical information.[34]

Sharing data among multiple partners requires a solid legal framework and protocols that comply with federal, state and local regulations. For many organizations, this represents a steep learning curve and requires organizations to understand complex legal and privacy issues related to what data needs to be shared and for what purposes. For example, CIEs that include health providers are required to meet **Health Insurance Portability and Accountability Act (HIPAA)** requirements for sharing **Protected Health Information (PHI)**. Other federal compliance regulations govern the use of **personally identifiable information (PII)**.

A legal framework also clarifies who owns the data. These decisions are based on how the partner organizations participating in the CIE will use the information based on their roles and responsibilities for care coordination (see Figure 11).

Figure 11: Sharing Client Data Within the CIE

Clients who receive services from a CIE partner need to give consent to have their information shared within the CIE. If the client gives consent, the data that gets shared is either added to an existing record or used to create a new CIE client record.
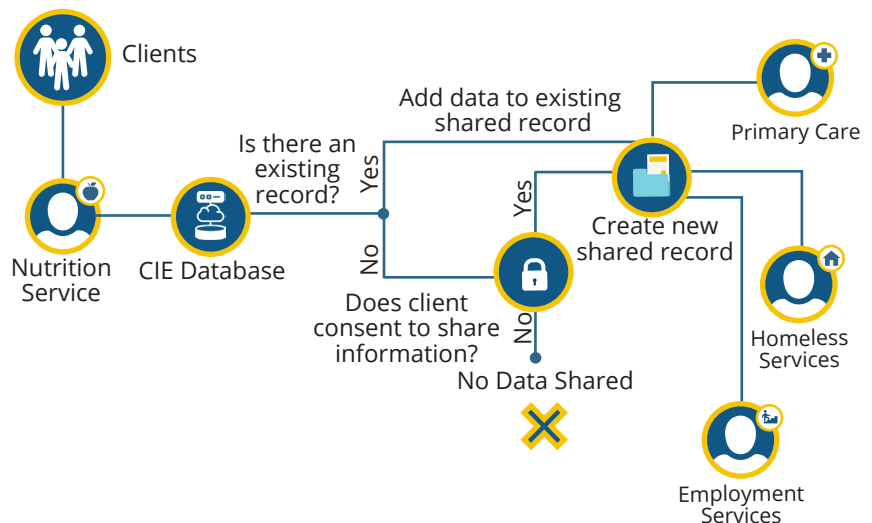
ⓘ Action Checklist

1. Set Standards for Network Partners

Create a team of legal advisors. Become familiar with health information privacy and security laws by attending trainings, researching topics, and seeking consultation with legal experts. Create a legal team that understands the vision for the CIE and how it interacts with other data systems and integrated exchanges in the community. Include legal and privacy advisors from partner organizations, as well as others from the health care, nonprofit, government, and technology sectors. Create a legal framework that complies with privacy and confidentiality guidelines for sharing cross-sector data, especially among health care partners.

Develop formal data-sharing agreements. Establish standard agreements that can be used by all partners, utilizing pre-existing legal agreements certified to meet information exchange requirements whenever possible (see Appendix C, Legal Agreement Examples). Provide onboarding and ongoing support for small social service providers and other partners that may have not have the infrastructure or resources to immediately meet compliance standards on their own. While most of the legal work involves setting up initial protocols, new challenges arise when onboarding new partners or when federal and state privacy laws change. Establish feedback loops for data concerns and environmental changes such as new legal requirements.

Shelley Brown, San Diego Health Connect, and Ford Winslow, ICE Security, addressing privacy and security requirements at the 2018 CIE Summit.

Partnership Agreement

When the vision for the CIE expanded beyond social services, 2-1-1 San Diego needed to update the legal protocols to ensure that the CIE met HIPAA requirements for sharing PHI. 2-1-1 San Diego engaged the same legal counsel who was assisting San Diego Health Connect with its legal framework. Currently, the CIE's legal framework resembles that of the community's HIE and is at the highest standard for sharing personal health information.

Business Associates Agreement
Each participating organization signs a Health Insurance Portability and Accountability Act (HIPAA) compliant Business Associates Agreement (BAA) that outlines 2-1-1 San Diego as a Business Associate of each partner and recognizes each partner as a Covered Entity. The BAA requires each partner to abide by the strictest standards and requirements of federal, state, and local laws for handling protected health information. See Appendix C for the current version of the CIE BAA.

Participation Agreement
In addition to the BAA, each partner organization signs a participation agreement that outlines the responsibilities of 2-1-1 San Diego and the responsibilities of the partner. This includes confidentiality, privacy compliance, insurance expectations, and other applicable laws. See Appendix C for the current version of the Participation Agreement

Service Level Agreement
The partner signs an agreement to establish expectations for client interaction and service outcome connections. This includes internal referral notes, response time, and the follow-up protocol. See Appendix C for the current version of the Service Level Agreement.

2. Establish Standard Consent

Set standards based on information sharing. Engage legal counsel in reviewing the consent forms of the initial prospective partners to determine whether one should serve as the model for the CIE or whether the CIE should adopt core elements of multiple other forms of consent. Leverage existing forms by adding language to other consents whenever possible. Establish an authorization that meets all HIPAA Privacy Rule requirements to simplify the information sharing process for both the individual and the network partners.

Establish consent model. Determine whether to establish an opt-in or opt-out policy, and whether to seek voluntary consent to disclose protected health information (PHI).

Opt-in policies require individuals to give specific permission to share their data whereas opt-out policies would enable individual data to automatically be added to the CIE unless an individual explicitly requests that their data not be stored in the system.

Under the HIPAA Privacy Rule, organizations may seek a patient's voluntary consent to use and disclose PHI for treatment, payment, and health care operations. However, to use PHI for other purposes or to disclose PHI to a third party, organizations may require an individual's authorization.

Informed consent. A legal term used to describe a health care provider's obligation to discuss the potential risks and benefits of a health intervention or agreement to share PHI, and to get the client's written agreement before proceeding.

Opt-In Data Sharing

The San Diego CIE has used an opt-in model to enroll people who call for information and referral services into the CIE. Currently, agencies can seek a person's consent at the point of intake or through the 2-1-1 Call Center, working with other systems to consolidate or merge forms.

CIE Individual Authorization
To become a participant in the CIE, a person signs an authorization form to allow relevant partners to share their information across the CIE. This includes information about how an individual can revoke consent and where they can find more details about how their information is used and shared. See Appendix C for the current version of the Authorization.

3. Define Roles for Health and Non-Health Partners

Establish role-based permissions. Role-based permissions ensure that each end user and partner organization have the right credentials to access and use the data. Permissions are granted on a need-to-know basis based on a user's role and duties within their organization and the CIE.

Support the standards of care. Ensure that the backbone organization has a Notice of Privacy Practices, which provides an explanation of how the individual's information is being shared and maintained with privacy of their PHI. Ensure that partners are talking with their clients about what information they are sharing with the CIE and how that information is being used to ensure **informed consent.**

4. Establish Standard Security and Privacy Measures

Standardize technical requirements. Establish technical and administrative requirements for securing the privacy of a client's record. Requirements should be based on the different levels of access partners have related to their roles. Technical requirements should also outline the separation of duties between information technology and data security staff that are required by HIPAA to reduce potential conflicts of interest.

Provide ongoing privacy monitoring. Develop well-documented plans for securing the technology platform and data, and conduct ongoing monitoring for cyber threats and exposure. Ensure that dedicated staff are available to oversee ongoing data security, regularly run internal and partner risk assessments to improve data security, and respond immediately to any suspicious activity. Conduct ongoing security and compliance training for team members, consultants and partners.

CIE Security Protocols

San Diego contracts with a private data security firm that oversees all aspects of cyber security for both 2-1-1 San Diego and the CIE. The firm provided security and notification guidance around software and hardware, breach notification, and consent recommendations. 2-1-1 San Diego opted to contract with an independent entity for data security monitoring, which was more economical than managing in-house data security.

Adopt Interoperable and Scalable Technology

🎯 Why Is It Important?

One of the primary goals of a CIE is to enable network partners to achieve greater efficiency and impact by collaborating to share and use data to improve the health of individuals involved with multiple health care and social service systems. Therefore, a CIE should facilitate the ease with which partners communicate, exchange, and use the data they each collect. For example, partners should be able to contribute data from their individual systems into a CIE, send and receive closed-loop referrals, and communicate across the partner network. This concept, known as interoperability, underscores the magnitude of the decisions involved in developing the data architecture and selecting a technology platform for a CIE.

To begin, CIE partners should develop a working knowledge of the data systems being used within the community and the broader data sharing environment. They should also take steps to establish a shared vision, a governance structure, and a legal framework that clarifies who owns the data and how that data can be used, as well as whether the technology platform should be developed and managed by a lead or backbone organization or a trusted technology partner. There are many technology options for various CIE functions available in the market. Before purchasing off-the-shelf options, it is important to have a clear understanding of existing resources, short- and long-term goals, desired functions that will allow for scalability, and cost considerations.

Once these important decisions have been made, CIE partners should establish a multidisciplinary design and technology team to discuss various issues related to technology platform development, maintenance, ongoing operations, and costs. These discussions should emphasize the need for interoperable and scalable CIE technology that allows the CIE to integrate new data sets or systems, add new features and functionality, and expand the partner network to produce greater value for both individual and population health over time.

Action Checklist

1. Analyze Data Systems and Information Sharing Environment

Create a community data asset map. The data asset map should build on the environmental scan and provide a more in-depth assessment of where data is collected, stored, and shared across systems to understand the flow of persons through multiple systems. For example, the data asset map might identify whether the community has existing platforms such as an active HIE, which health care organizations are using electronic health records, and which organizations manage social service data systems such as the Homeless Management Information System. The asset map should also identify existing information sharing agreements and any examples within a community of cross-sector data sharing in action.

2. Establish a Dedicated Multidisciplinary Design/Technology Team

Identify primary sectors of influence. Select or hire a dedicated multidisciplinary team that can assist with the design, creation, customization and ongoing updates of the technology platform to ensure the system's capacity to address local needs. Specific areas of expertise or backgrounds include:

- Person-Centered Care/Social Work or Case Management

- Technology Advisor

- Data Analytics

- Public Health or Healthcare Informatics

- Project Management Professional

Ensure oversight of the technology requirements. Identify a project lead or manager to oversee the development of the technology requirements, and the design and development of the platform. If the community opts for a customized platform, ensure that the technology team is proficient in the selected technology or has adequate support from partners or contractors to fulfill these functions and be responsible for customization, creation of new tools or modules, and technical assistance.

Create community ownership. Engage end users from community partner organizations in the design and testing phases of development to provide feedback and recommendations on how the technology platform should look and function. This builds shared buy-in and ownership of the system and ensures that the platform will meet the needs of end users.

Continuously explore opportunities for new functionality. Assign the design/technology team to scan the environment for opportunities to continue building out the system. Specific examples include:

- Identify situations where real-time upstream alerts could improve care coordination, such as notifying providers of individuals' health risks based on biometric data or reminding individuals of appointments and connecting those eligible with rides

- Exploring opportunities to integrate data from prevention efforts, such as rental and utility assistance data captured in systems like Homeless Management Information System or others to alert partners and providers of housing instability

- Monitoring trends in using **blockchain technology** for service coordination applications

Blockchain technology. A database that secures records in interconnected blocks stored in a distributed database that allows users to access, edit, and/or share only the blocks to which they have a private key.

Blockchain is based on a system and process by which each entity involved in a data exchange has a copy of the ledger of transactions across all entities (aka "distributed ledger"). Each ledger is then peer-balanced regularly using a consensus algorithm agreed to by all entities.

Blockchain may be a very useful technology component in the future of CIE to ensure the privacy and security model deployed in the CIE platform meets the privacy requirements of the future.[35]

Perla Hernandez utilizes the CIE to help to connect clients to services within the community.

Technology Platform Design

In 2016, 2-1-1 San Diego began working with Salesforce and Informatica to design a new technology platform. During the three-month design phase, 2-1-1 San Diego invited potential users to attend multiple sessions to test and provide feedback on the system.

• The Executive Sponsor established the vision and advocated for the CIE.

• The Product Owner had overall responsibility for guiding the CIE's development from creation to successful completion.

• The Project Manager executed the project plan, ran project status meetings, managed resources and deliverables, and prioritized project changes.

• The Call Center Service Subject Matter Expert provided guidance on current and future customer service and support needs.

• Community Subject Matter Experts provided guidance on processes, requirements validation, and reporting, as well as the technology platform user experience and user interface.

• IT/System Subject Matter Experts provided insight and guidance on the key systems to integrate/replace, security requirements, and data migration requirements.

• A Salesforce Administrator and an Architect/Developer worked closely with Salesforce vendors and were responsible for overseeing the technology platform before and after going live.

3. Set Needs for Technology

Identify current and future technology needs. In collaboration with partners, discuss which features, functionality, and requirements a CIE technology platform must offer to achieve short- and long-term goals, such as:

• Storing an individual profile and longitudinal record that can be accessed by members of the care coordination team.

• Disseminating alerts and notifications of significant events or status changes, such as intake by another provider, ambulance rides or jail bookings, to the care team.

• Bi-directional referral processes, which allow CIE users to send referrals to participating organizations for services and enable partners to communicate the decision and resulting outcomes back to the referring agency and relevant CIE network partners.

• Integrating data from outside source systems within a single client record.

• Assessing and quantifying social determinants of health needs and risks and measuring an individual's status change over time.

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Prioritize needs and compare technology vendors. Prioritize desired features and functionality based on the value they will bring to partners and the immediacy of the need. Develop a scope of work that outlines immediate and near-term needs, leveraging existing technologies where applicable, while also forecasting the need for a scalable platform that can store large amounts of data and meet the diverse integration needs of partners within the multi-organizational system. Select and invite potential technology vendors to bid on the scope of work.

4. Select Technology that Supports Interoperability and a Shared Record

Assess functionality. Determine what features the software needs to have to accomplish the tasks outlined in the scope of work. Ensure that the software is both easy to use and HIPAA-compliant to promote utilization, and enable the care team to communicate with each other securely through the platform. Include end users in testing potential technology platforms.

Facilitate data integration. Select software that has the flexibility to support interoperability with various levels of community partner host systems to create a shared individual record and allow for diverse integrations (see page 49). Ensure that the technology platform has the capacity to extract data from partner data systems to be transformed and uploaded into the CIE.

Use standardized criteria for data to ensure that the translation layer can effectively identify differences in individual demographic information across partner data systems and match records based on a tested algorithm to create a single integrated shared individual record. A translation layer also ensures a higher level of data security.

Selecting a Technology Platform

San Diego's CIE initially used an off-the-shelf software platform originally designed for case management, which allowed it to develop a proof of concept to initial funders, demonstrating that data from two systems could be matched and a platform could be used for initial connection and coordination across sectors. As the number of partners and individuals grew, the initial software platform became insufficient and 2-1-1 transitioned to a Salesforce Customer Relationship Management platform, which offered greater flexibility and enhanced interoperability.

Salesforce is a technology platform that can be highly customized to meet the needs and vision of a CIE while remaining adaptable to new technologies and programming. These upgrades enable real-time data exchanges and updates, and the ability to merge duplicate records and transfer data into other formats such as MS Excel via a middleware like Informatica, so that organizations with less sophisticated technology can participate.

Shared Client Record

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

Individual and demographic information

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

Individual Information

Privacy Status Icon
A

Client Name
John Doe

Mobile
(858) 465-1234

Email
J.Doe1942@email.com

Birthdate
04/12/1942

Last 4 of SSN or PIN
6789

Birth Month/Year
04/1942

Address Information

Home Street
1200 DEPOT RD APT 2

Address Line 2

Home City
SAN DIEGO

Home Zip/Postal Code
91910

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
$ 900.00

Sources of Income
Supplemental Security Income (SSI)

Percent of AMI   30% or less

Non-Cash Benefits   N/A

Percent of FPL   43.03 %

Highest Level of School Completed
Associates Degree

CalFresh Renewal Date

Privacy Records (1)

PRIVACY	PRIVACY TYPE	PRIVACY METHOD	CREATED BY
P-053569	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
CDS-000002	Catholic Charities	ServicePoint
		View All

Alerts (1)

ALERT NAME	TOTAL # OF RECORDS	LAST INCIDENT
EMS	2	2/15/2018 2:02 AM
		View All

Domains (6+)

DOMAIN	RISK	ACTIONS	REFERRALS
Health Management	Vulnerable	2	3
Transportation	Critical	1	2
Housing	Critical	1	2
Nutrition	Crisis	2	5
			View All

Measures of client well-being across different domains

Care Teams (3)   New

CARE RECORD	CASE MANAGER	AGENCY	DATE ASSIGNED
CT-00000044	Thomas Lacoste	Jewish Family Services	10/05/2018
CT-00000046	Jeri Hernandez	SCRC (Southern Caregiv...	10/03/2018
CT-00000047	Archie Munoz	Access to Independence	10/03/2018

Program Enrollments (3)   New

ENROLLMENT RECORD	SERVICE	STATUS	ENROLLMENT DATE
PE-00008199	PATH Connections	Active	9/07/2018
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

CIE Technical Specifications

The following specifications describe the planning and system requirements that a technology platform should meet to support a CIE that can be used by multiple stakeholders to coordinate care for shared clients.

Design and Technology Planning Team

All stakeholders should be involved in the planning, design, development, testing, and deployment of the technology platform. The core team should include members or appointed representatives of the lead or backbone organization with responsibility for oversight and management of the procurement, development, and deployment of the technology software. If led by a subgroup, the information technology team should be included in the development and ongoing updates of the shared vision of all stakeholders.

Planning Requirements

Identify start-up and annual budgets for technology procurement, design, customization, and ongoing operations.

Consider the system, staffing, and other cost implications of the following questions:

- What systems must be integrated?

- What information must be tracked and stored?

- Which information will be shared? If Personally Identifiable Information or Protected Health Information will be shared, what additional requirements must be considered?

- How will technology facilitate information sharing?

- What level of security monitoring is necessary?

- How will the system be accessed and by whom? Is there a need for varying levels of secure access or role-based permissions?

- Who will be responsible for developing the technology, establishing and improving on processes, and creating and facilitating user training?

- Will system development, upgrades, and maintenance be managed in-house or using a third-party technology firm? Will staffing need to be expanded or enhanced over time?

- How significantly will the technology platform be customized, and what resources are required to support ongoing customization?

- Will users require technical assistance? If so, who will provide assistance and with what frequency?

- What regulations apply to the services and data?

System Requirements

User Types and Log-Ins
At minimum, a CIE should support three user types: administrator, agency representative, and individual. Each user type's login should be associated with secure access to different levels of provider and client information.

Uniform Data Standards
At least three unique identifiers are needed to authenticate and integrate data from various systems. These unique identifiers may include First Name, Last Name, Date of Birth, Last 4 SSN, unique 4-digit pin, email, etc.

Longitudinal Record
Authorized providers should be able to access a comprehensive record of an individual's interactions with participating health care and social service providers. The record should include demographics and other basic information, the individual's assessment and referral history, and information on the individual's care team, including contact information and current and prior program participation.

Bi-directional Closed-loop Electronic Referrals
To maintain an outcomes-focused agenda, the technology should allow network partners to send, accept, or reject referrals with decisions communicated back to the referring agency.

Care Team Management
A CIE should allow users to identify and communicate with service providers also working with the individual.

Push Communication Tools
The system should enable SMS, email, notifications, auto-dial, etc.—also known as push communications—to all user types. For example, providers should be able to send referrals to clients for appointments and notify other providers of significant events, such as an ambulance transport or jail booking.

Interoperability
A CIE should enable users to "access, exchange, and use" electronic health information for authorized use.[36] (See Figure 12 on pages 53-54.)

Open Source
A CIE may also want to consider who owns the software and has the right to modify it. With open source software, the copyright holder grants users the rights to modify and distribute the source code to anyone and for any reason or to develop the source code using a public and collaborative approach.

Security and Privacy

A CIE needs to meet rigorous security standards to protect client PHI from being shared with unauthorized users. For example, HIPAA requires a regular internal Security Risk Assessment. A CIE should also conduct a regularly vulnerability scan and update risk observations to help prioritize cybersecurity and IT efforts. A CIE should select a technology platform that uses an unbiased third party to certify its security status.

A CIE should also ensure that system users do not intend to collect and share data that could be unintentionally or intentionally used against any population, especially individuals, through creating or emphasizing bias or other harmful polarizing narratives.

Reporting

Users should be able to report on all data inputs.

Additional Functionality

The technology platform should also enable the storage, connection to, or integration of the following tools:

- A resource database that includes information on health care and service providers and whether they are participating in the CIE

- Comprehensive screening and assessment tools with measures of individual well-being across different domains, including housing, food, transportation, and health

Figure 12: CIE Technology Platform
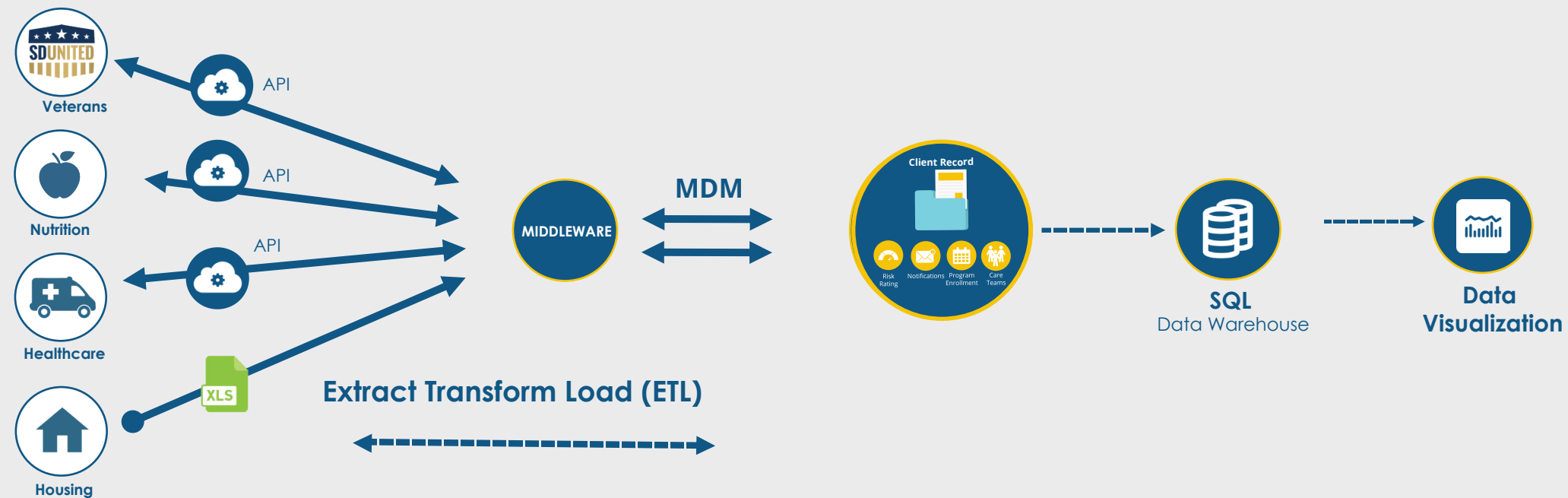
CIE technology enables the following processes:

Application Programming Interface (API)
The technology should have the capacity to allow software to access information from a second application to allow for the seamless transfer of data between systems and third-party applications. This enables links between the CIE and various community data systems, allowing for real-time data exchanges and updates.[37]

Extract Transform Load (ETL)
Because network partners' data systems vary in their level of sophistication, the CIE technology platform should also allow the transfer of other data formats, such as regular uploads from Excel files, between the technology platform and community partner databases. Known as an Extract Transform Load (ETL), this process takes data from one source(s) and transforms and loads it into a secondary source using specialized software.[38]

Master Data Management (MDM)
The CIE should also be able to detect and merge duplicate records and confirms the accuracy of data from multiple systems into a single shared individual record. This process, which is part of the ETL process, is used to centralize critical data into a single shared source to minimize redundancy and improve business processes.[39]

Middleware
Multipurpose software that connects applications and networks to increase the functionality of data, support standardization of user interfaces, and reduce development costs.[40]

Translation Layer
A CIE should have the capacity to match records to other systems based on an algorithm to create a master record across multiple data systems. The matching process enables the system to extract data from partner data systems, transform it, and load it into the new system. This matching process also adds an extra layer of security to the system.

Cultivate Sustainability

◎ Why Is It Important?

Communities need to begin developing a plan for the CIE's financial sustainability from the very early stages of the process to support the partner network and the technology platform. Government agencies and philanthropic funders have played a major role in providing communities with the initial grants and investments to create, test, and implement innovative technologies that link data from the health care, human, and social service sector to present a broader picture of health. However, these initial funding sources are often intended as start-up funding and not meant to sustain the effort.

To ensure the CIE's relevance and viability, communities need to develop and secure financial and in-kind resources from diverse sources to guide the CIE from its start-up phase to sustainable operations.

Robert B. McCray, Alliance Healthcare Foundation, at the 2018 2-1-1 Connections Luncheon

! Action Checklist

1. Start Sustainability Discussions Early

Strategize and diversify funding. Plan for sustainability from onset, starting with discussions about the business model, partnerships, and funding required to maintain a CIE over time. Identify potential ongoing sources of funding and opportunities to write CIE development, use and upgrades into grants and contract opportunities. Create a long-term sustainability plan that provides a rationale for funding and guide sustainability activities and steps over time. Clearly identify and communicate a model that expects ongoing philanthropic or government support or a model that expects the CIE to be self-sustaining through member fees.

Engage funders and communicate progress and wins. Invite existing and prospective funders to engage in developing the CIE, in addition to discussing long-term funding. Share the CIE's successes through various networks and collaboratives.

2. Determine Sustainability Costs

Establish a runway for multi-year capacity building.
Determine start-up and operating costs, which include staff, technology, and legal compliance.

- Key staff roles include a database administrator and data analysts, partner engagement managers, and development staff to secure funding and other resources. A CIE also benefits from having staff with a public health background in the key leadership role, as well as staff to conduct training for new and existing partners on an ongoing basis.

- A CIE should also plan for flexible funding to allow for ongoing customization of the technology platform and partner integrations. When determining these costs, a CIE should consider that partners may need support with multiple integrations over time as they upgrade their internal systems.

- CIEs will also need either in-house or contracted legal counsel to ensure that the partner network and technology platform comply with all laws and regulations related to health care privacy, as well as information security specialists to protect individuals' data for misuse.

- Don't underestimate the need for and cost of partner outreach, training, on-boarding, and continuous support.

Demonstrate impact and return on Investment. Prepare a cost-benefit analysis for diverse prospective funders and investors to increase the likelihood of securing ongoing funding. The ROI cases need to be diverse to attract different funders.

3. Create Value Propositions for Key Sectors

Determine the value of data to inform opportunities.
Determine how data available through the CIE can inform decision making, generate revenue, or support initiatives for each user and within each sector. Conduct research on sectors like healthcare, public health, criminal justice, education, etc. that could see value in efficiencies or opportunities to address unmet needs.

Engage the public sector early. Local government entities benefit from lower care coordination costs and improved community-level health outcomes, and should be a natural partner and ongoing source of funding for a CIE. A CIE should also cultivate relationships with state and federal government and encourage them to play a role in financially sustaining community data integration efforts. Identify where there are potential cost savings and engage those potential savers in early development.

Engage the philanthropic sector. Federal, state, and local funders that support community health and well-being can provide both financial resources and insight on the issues to consider when developing a CIE. Specifically, funders can provide start-up capital, capacity building support for both the backbone organization and service providers, and even sustainable sources of funding. Funders may also be interested in partnering with a CIE on research to inform other community health-focused data sharing initiatives.

Creating Value Propositions

In 2018, 2-1-1 San Diego drafted its CIE sustainability plan to share with key funders and partners, and has held ongoing discussions with its Advisory Board on the proposed strategy. The sustainability plan included value propositions for the different types of CIE partners—health plans, hospitals, health centers, and social service providers—as well as a business risk analysis, financial model, funding opportunities, and business metrics.

4. Explore Different Business Models for Sustainability

Establish a business model and monetization strategy. Consider a membership model with licensing fees paid by organizations using the system. Establish fees for organizations outside the partner network to access and/or use the aggregated data to support business, policy, and research decisions.

Continually evolve and stay abreast of changing funding climates and opportunities. Leverage existing collaboratives or initiatives that need an infrastructure to work on target populations on utilizing the CIE to support.

Kimberly Bailey, Nonprofit Finance Fund; Kathlyn Mead, The San Diego Foundation; Annet Arakelian, Kaiser Permanente; and Elizabeth Dreicer, Alliance Healthcare Foundation at the 2018 CIE Summit describing what sparked them to become early investors in information sharing community models centered on the social determinants of health and how data sharing initiatives are informing future investments.

Transform and Shape the Movement

🎯 Why Is It Important?

A CIE is part of a nationwide movement to promote local and regional health health care and social service collaborations that use technology to share data with a focus on delivering person-centered care and enhancing population health.

While the primary focus of a CIE is to nurture the local ecosystem of network partners, a CIE also can play a role in building the field of health care and social service collaborations by conducting research and sharing best practices, convening conversations and engaging influencers to shape the conversation about the role of data in understanding and addressing the impact of social determinants on population health, and championing efforts to standardize care with an eye toward achieving equity and social justice.

To ensure that a CIE consistently incorporates best practices in health care and social service, staff need to routinely monitor the landscape and remain agile to adapt to political, economic, social, and technological trends. A CIE also needs adequate staff to proactively listen and respond to the needs of its various partners, including efforts to engage in rapid development processes that simultaneously promote fast failure and continuous improvement to ensure that CIE policies, programs, and practices result in improved individual and population health.

Alana Kalinowski, Director of Partner Integration, explaining 2-1-1 San Diego's resource department to other 2-1-1s from around the country.

! Action Checklist

1. Nurture the Regional Ecosystem

Be agile to adjust to the environment. Analyze data to better understand local needs and how current interventions are improving health. Continuously monitor the local, state, and national legislative and funding environment to better anticipate how they will shape changes to the CIE.

Deepen relationships with the network of partners and participants. Focus on opportunities to build the local and regional capacity to deliver person-centered care that produces better health outcomes while minimizing duplication of services, reducing errors, and cutting costs. Engage new partners serving diverse populations and geographic areas.

Promote process improvement. Conduct regular evaluations of the effectiveness of the partner network and technology platform to inform continuous process improvement.

CIE Development Process Evaluation

2-1-1 San Diego's leadership understands that expanding the footprint and the impact of the CIE within the San Diego region requires a growth mindset and a commitment to continuous process improvement. In 2018, the agency received funding from the Schultz Family Foundation to hire a third-party evaluator to conduct a process evaluation of the CIE's development. The process evaluation used interviews, research studies, organizational documents, and interviews with the 2-1-1 San Diego team and CIE partners to examine the quality of service delivery related to the development and implementation of a legal frame-work, community partnerships, technology, and sustainability planning. The evaluation also traced the CIE's evolution toward a broader, community health framework and a longitudinal, client record, and explored the impact of process and protocol decisions on system design, scalability, and replication. The findings and lessons learned from the process evaluation have been incorporated into the action steps that are highlighted throughout this toolkit.

2. Build the Field

Conduct evaluations and research. Work with partners, funders, and research institutions to conduct evaluations and research on the impact of the CIE on individuals, partners and the community.

Share best practices. Document and disseminate practices that have been proven effective through the evaluation and research process. Participate in ongoing discussions with other organizations working at the intersection of health care and social services.

Respond to community needs and take risks. Be proactive to opportunities within your community to address new challenges or needs through the CIE. Learn from past failures and see how the CIE can help to move systems change work.

Qualitative Research on Health Care, Social Service Partnerships

2-1-1 San Diego actively participates in research that supports the development of practical resources and tools designed to foster collaboration between health care and community-based organizations (CBOs) to address social determinants of health. In 2018, the Center for Health Care Strategies and Nonprofit Finance Fund conducted qualitative research to identify common characteristics among health care-CBO collaborations. Discussion of the CIE's development was featured in a framework highlighting common characteristics of health care-CBO collaborations, a webinar, and a case study.

3. Shape the Conversation

Convene meetings and events. Leverage CIE partners as thought leaders by hosting meetings, workshops, webinars, and training on the history and development within your own community.

Engage influencers at local, regional, state, and national levels. Conduct research and outreach to engage key influencers, such as elected officials, public agency administrators, philanthropic funders, and the media, through one-on-one or small group presentations.

Community Information Exchange Summit

In April 2018, 2-1-1 San Diego organized a and hosted the inaugural CIE Summit, bringing together more than 350 leaders from across the nation to share ideas about how to bridge the health and social service sectors to build strong and thriving communities. The CIE Summit included keynote speakers from the U.S. Department of Health and Human Services' Office of the National Coordinator for Healthcare Information Technology, HealthBegins, Rx Democracy, and the Palo Alto Medical Foundation. Presented by 2-1-1 San Diego in collaboration with the County-led Live Well San Diego and the San Diego Health Connect HIE, the CIE Summit offered three learning tracks:

- Bridging Data Across Sectors
- Community Models and Practical Applications
- Collective Impact: Sustainability and Measurement

To continue to Inform and Shape the Movement, 2-1-1 San Diego is hosting the Second Annual CIE Summit in April 2019.

4. Champion the Movement

Shape policies. Engage partners in crafting local, state, and federal policies in relevant domains based on best practices and supported by CIE data.

Engage in advocacy. Engage partners locally and in other communities to build public support for policies and funding to make CIEs the standard of care nationwide.

Support social justice. Provide data to highlight specific social determinants of health to inform communities initiatives and disparities across neighborhoods to ensure equitable access for all. Help individuals and organizations accurately interpret the data, especially as it relates to understanding how differential access to programs and services impact outcomes.

Dr. Rhea Boyd, Palo Alto Medical Foundation, University of California San Francisco and Benioff Children's Hospital Oakland, presenting on the issues related to health equity, health disparities, and social and criminal injustice at the 2018 CIE Summit.

Appendix A: Information Exchange Resources

100 Million Healthier Lives

100 Million Healthier Lives, convened by the Institute for Healthcare Improvement, cultivates cross-sector collaboration and engages people with lived experience to create a movement that develops solutions to advance health, well-being, and equity. Priorities include fostering a culture of partnership, developing workforce strategies and peer-to-peer support systems, transforming health care, and integrating data across silos.

Alliance of Information and Referral Systems (AIRS)

AIRS is a professional membership association for individuals, nonprofits, and government agencies that specialize in community information and referral services. Members use a shared language—or taxonomy—developed by 2-1-1 Los Angeles County to standardize how human services resources are indexed to ensure interoperability across different resource databases.

Camden Coalition Health Information Exchange

The Camden Coalition Health Information Exchange, for example, got its start when a primary care physician in Camden, New Jersey, ran into issues treating a long-time patient incarcerated in the county jail. His patient "may as well have been dropped onto a remote island," the doctor said (Brenner). The Camden Coalition HIE has since become a model in this field, expanding to include four hospitals, 10 primary care offices, and over 20 providers of ancillary services ranging from medical transport to homeless outreach and housing.

Dallas Information Exchange Portal

The Dallas Information Exchange Portal, operated by Parkland Center for Clinical Information (PCCI), is another example of innovative data sharing. The Parkland Health and Hospital System formed PCCI and launched the Dallas IEP in 2015. Dallas IEP comprises upwards of 80 health and social service organizations and over 148,000 unique clients. PCCI uses machine learning predictive modeling to serve patients, for example by identifying individuals at risk for asthma and then alerting both the clients and their physicians to initiate preventive treatment.

Data Across Sectors for Health (DASH)

Launched by the Robert Wood Johnson Foundation in partnership with the Illinois Public Health Institute and Michigan Public Health Institute, DASH fosters collaboration and alignment among health care, public health, and social service systems to develop strategies that align communities around using multi-sector data systems to address social determinants and improve community health.

Health Leads

Health Leads is a champion of change partnering with communities and health systems to address systemic causes of inequity and disease. Health Leads is focused not only on social needs interventions in hospitals and clinics, but on entire communities. They thrive to enable healthcare, community and government organizations to share resources, data and health goals in new ways — ensuring communities are in the lead on what they know they need to be healthy.

Social Interventions Research and Evaluation Network (SIREN)

Housed at the Center for Health and Community at the University of California, San Francisco, SIREN promotes research to address social factors that influence health within the health care environment. Priorities include developing a comprehensive research agenda, providing seed grants for research, fostering collaboration within the field, and creating an online hub for sharing research, tools, and metrics.

Stewards of Change Institute's National Interoperability Collaborative

NIC promotes interoperability and information-sharing across the domains of human services, public health, health IT, education, public safety, and emergency response at the local, state, and national level to address the impact of the social determinants of health. A secure and interactive NIC online collaboration hub enables members to connect with each other, gather and share information and resources, and discuss their ideas and projects.

Strategic Health Information Exchange Collaborative (SHIEC)

SHIEC is a national collaborative that represents more than 70 health information exchanges (HIEs) covering more than half the population nationwide. Each member organization operates an HIE in a specific geographic area and works with other HIEs to educate their communities, share best practices, identify joint solutions, and influence legislation to better serve the needs of their communities.

Appendix B: Social Determinants of Health Resources

Centers for Disease Control and Prevention (CDC)

The CDC, which is the part of the U.S. Department of Health and Human Services, oversees health protection. Its website enables communities, public health practitioners, health care providers, and others to access data and research, policy resources, information on programs, and tools and resources on social determinants of health that were developed or funded by the CDC.

HealthyPeople

Healthy People provides science-based, 10-year national objectives for improving the health of all Americans by establishing benchmarks and monitoring progress to encourage collaborations across communities and sectors, empower individuals toward making informed health decisions, and measure the impact of prevention activities. Healthy People 2020 reflects input from a diverse group of subject matter experts, organizations, and members of the public. The Secretary's Advisory Committee on National Health Promotion and Disease Prevention Objectives is currently developing recommendations for national health promotion and disease prevention objectives for 2030.

Kaiser Family Foundation (KFF)

KFF is a nonprofit foundation that conducts policy analysis, journalism, and communication programs on national health issues, including disparity policy and the social determinants of health. They have also partnered with the Peterson Center on Healthcare to develop the Peterson-Kaiser Health System Tracker to track the quality and cost of care delivery and identify issues that affect health care system performance.

Live Well San Diego

Live Well San Diego is a collective impact initiative that brings together individuals, organizations, and government entities to improve the quality of life throughout San Diego County. Regular meetings that take place in each region focus on prioritizing needs, identifying improvements, and organizing activities to build better health, live safely, and thrive. The initiative measures progress in five areas with a specific focus on the following 10 indicators: life expectancy, quality of life, education, unemployment rate, income, security, physical environment, built environment, vulnerable populations, and community involvement.

Robert Wood Johnson Foundation (RWJF)

As the nation's largest health philanthropy dedicated to health, RWJF has made significant investments in understanding and developing interventions that respond to the social, economic, and environmental factors that contribute to health and well-being. These investment programs promote a Culture of Health Prize, which recognizes communities that have made a commitment to helping all residents thrive by making health a shared value, fostering cross-sector collaboration, creating more equitable communities, and strengthening the integration of health services and systems.

World Health Organization (WHO)

WHO operates a Social Determinants of Health Unit that works toward bringing a health focus to policy decisions, re-orienting the health sector toward social determinants of health, addressing health inequities, and monitoring progress in achieving health and health equity.

Appendix C: Legal Agreement Examples

NOTICE OF PRIVACY PRACTICES

THIS NOTICE DESCRIBES HOW PERSONALLY IDENTIFIABLE INFORMATION ABOUT YOU MAY BE USED AND DISCLOSED AND HOW YOU CAN ACCESS THIS INFORMATION. PLEASE REVIEW THIS NOTICE CAREFULLY.

What We Do:

> 2-1-1 San Diego ("2-1-1") is a resource and information hub that connects individuals with health and social services, insurance, financial aid, debt and tax preparation counseling, housing, food, transportation, employment and job training, disaster relief and other service providers through a free, 24/7 stigma-free confidential phone service, searchable online database, care coordination, technology infrastructure. 2-1-1 provides referral, care coordination, outreach, education, and other services in connection with its trusted network of referral providers to deliver services to members of the community.

Information We Collect About You:

> To address your needs and connect you to appropriate providers in our network, 2-1-1 San Diego may collect and keep a record of information about you. This information may include your name, social security number, telephone number, address and email, your age, gender, nationality, ethnicity, physical and mental health condition, health care, health insurance and care team, finances, debt, and employment, housing and housing needs, names and contact information for your family members, friends and care givers, military background, information about the community programs you have been or are currently enrolled in, and other information that may be required to determine if you are eligible for government benefits, tax credits, income/debt assistance, insurance coverage, housing assistance and other programs and services offered by our referral providers. Some of the information we collect may be considered "protected information" under federal and/or state privacy laws. 2-1-1 San Diego maintains information about its Clients, in a secure electronic database and takes precautions to prevent third parties from accessing Client information inappropriately. The 2-1-1 system allows us to document the source of the information, who accessed your information and control what information is shared with 2-1-1's network of referral providers. 2-1-1 San Diego's network of referral providers are legally and/or contractually obligated to protect your information.

Where the Information Comes From:

> Information about you may come from a variety of sources. The information you provide to us directly through our website or when you speak to one of our representatives is considered "self-reported" information. When you provide us with self-reported information, you give us permission to share the information with staff members within our organization, and with the referral providers in our network we feel are qualified to address your needs.

Information about you may also be disclosed to us by your providers if they are a member of our trusted network. The information will be shared with us when they use our services or access our database to provide services to you or to refer you to other providers and programs in the region. For example, we may receive and share information about you with individuals, businesses, government agencies and community programs that provide meals, emergency or low cost shelter, transportation, healthcare, behavioral health counseling and education services, , debt counseling or debt reduction services, tax preparation, employment and job training. This information will also be shared within our organization and with other providers in our referral network in order to provide you with services. In some situations, we may receive protected health information from your healthcare provider. In those situations, we may use and disclose your information only as permitted by the business associate agreement we have entered into with your provider or as expressly permitted by you or as permitted or required by law. Regardless of the source of information, 2-1-1 San Diego and its referral providers are committed to safeguarding your protected information from unlawful use and disclosure.

For information about the referral providers with whom we may share your information
Please Visit: www.211sandiego.org

2-1-1 SAN DIEGO's RESPONSIBILITIES

Privacy of Information:
Under California and Federal privacy laws we have a responsibility to maintain the privacy of "protected information." We are required to provide you with this notice of our privacy practices, and follow the terms of the notice currently in effect. We must notify you when we become aware of unauthorized access, use or disclosure of your unsecured protected health and personally identifiable information.

Changes to this notice:
We reserve the right to change this notice at any time. We reserve the right to make the revised or changed notice effective for the protected information we already have about you as well as any protected information we receive about you in the future.

How to Obtain a Copy of this Notice:
We will post a copy of the current notice on our web site at **www.211sandiego.org**. A copy of the notice currently in effect will be available at the registration area of our facility located at 3860 Calle Fortunada, San Diego, CA 92123. You have a right to receive a paper copy of this Notice and a copy will be mailed to you upon request.

HOW 2-1-1 SAN DIEGO MAY USE AND DISCLOSE
YOUR PROTECTED INFORMATION

We may disclose protected information about you in accordance with the Privacy Laws, or as permitted by you or as permitted or required under state and federal laws. In some situations, we may disclose your information without your oral or written permission. The following list

describes examples of different situations where we may use and disclose your information to individuals outside our organization.

For more information on how we may use your health information visit:
www.hhs.gov/ocr/privacy/hipaa/understanding/consumers/index.html.

Legally Permissible Uses and Disclosures of Information About You:

To Contact You, a Family Member, Friend or Personal Representative:

> When you call us, you will be asked to provide us with contact information for yourself and other persons involved in your care. If you do so, you give us permission to use that information to contact you and the individuals you have identified and to provide services to you by telephone, email or text. We may use the information to communicate necessary information about your appointments, to update you on your care or care management options, programs and benefits you or your family may be eligible for, or to connect you with any of our referral network providers and to follow up with our referral providers about services you have received or programs you have enrolled in. We may contact you or the individuals involved in your care by fax, cell phone, telephone, email or in writing.

To Verify Your Identity:

> We may use your protected information and require you to provide us with a copy of a photo or other identification to verify your identity and link it to your record or communicate with you about your information.

Referral for Treatment, Care Coordination, Case Management and the Determination of Eligibility for Disability Benefits and Programs:

> We may gather, use and disclose your protected information to network referral providers to facilitate the delivery of healthcare, care coordination, for health and human services agencies, case management, the determination of eligibility for governmental or other private program benefits, in an emergency or for other purposes permitted by you or permitted by or required by law. Our referral network providers may include doctors, nurses and other healthcare professionals, public health agencies and officials, insurers, social workers, housing officials, and other professionals that provide or coordinate healthcare, mental health or behavioral health treatment, housing and emergency shelter, transportation, education, food and financial assistance among other things. Different departments within our organization may also share protected information about you in order to coordinate the referral of services you need to and amongst members of our referral network.

For Payment, Qualification for Government Benefits:

> We may disclose your protected information to insurance or managed care companies, Health and Human Services Agency, Medicare, Medicaid, Social Security Administration, Public Agencies, utility companies and other providers to assist in the payment of your

bills, reduce debt or tax liability or to qualify you for government benefits or other programs.

For Business Operations:

We may use and disclose your protected information for our business operations. For example, we may use protected information to review the quality of our referral services, and to evaluate the performance of our staff. We may use your information for our business planning and program development, and to investigate complaints.

Business Associates:

We may use or disclose your protected information to our subcontractors, and "business associates" when they perform services that may require the use of your protected information, such as technology, accounting, auditing, legal, and consulting services. Our business associates will be required to keep your protected information confidential.

Marketing and Fund Raising:

We may contact you to give you information about products, services or programs related to your treatment, case management, care coordination or other healthcare, social, and financial needs. We may also use demographic information and dates of service for our own fundraising purposes. If you do not want to receive fundraising material, you may choose to opt out of receiving those communications. We will not use or disclose your protected information for marketing purposes without your written authorization.

Disclosures Required by Law:

We may use or disclose your protected information when required or permitted to do so by federal, state, or local law. The following are examples of some of the situations where we may be required to use or disclosure information about you without your consent:

Public Health Activities:

We may use or disclose your protected information for public health activities that are permitted or required by law. For example, we may disclose your protected health information in certain circumstances to control or prevent a communicable disease, injury or disability; for public health oversight activities or interventions.

Health Oversight Activities:

We may disclose your protected information to a health oversight agency for activities authorized by law. Oversight activities may include audits; investigations; inspections; licensure or disciplinary actions; or civil, administrative, or criminal proceedings or actions. Oversight agencies include government agencies that oversee the health care system, government benefit programs, other government regulatory programs, and government agencies that ensure compliance with civil rights laws.

Lawsuits and Other Legal Proceedings:

We may disclose your protected information in the course of a judicial or administrative proceeding or in response to an order of a court or administrative tribunal, a subpoena, a discovery request, or other lawful process.

Law Enforcement:

We may be required to disclose your protected information to law enforcement officials for law enforcement purposes, such as to: (1) respond to a court order; (2) locate or identify a suspect, fugitive, material witness, or missing person; (3) report suspicious wounds, burns or other physical injuries; or (4) report a crime or identify a victim.

Abuse or Neglect:

We may disclose your protected information to a government authority that is authorized by law to receive reports of abuse, neglect, or domestic violence. If we believe you have been a victim of abuse, neglect, or domestic violence, we may disclose your protected health information to a governmental entity authorized to receive such information.

To Avert a Serious Threat to Health or Safety:

We may disclose your protected information if disclosure is necessary to prevent or lessen a serious and imminent threat to your health or safety or the health or safety of another person or the public.

Research:

We may use and share your protected information for certain kinds of health or social services research. For example, a project may involve comparing the housing outcomes of all clients who received services from a referral agency to those received from another. Some research projects may require a special approval process and your written authorization. In some instances, the law allows us to do some research using your protected information without your approval.

Shared Medical Record/Health Information or Social Information Exchanges:

Some of our referral providers maintain protected information about their clients in a common electronic record that allows business associates to share protected information. We may participate in various electronic health or social information exchanges that facilitate the sharing of protected information among healthcare, health and human service agencies or other referral network providers.

Military:

If you are a member of the armed forces, we may use and disclose protected information as required by military command authorities, Department of Veteran Affairs, or other authorized federal officials.

National Security, Intelligence and Emergencies:

2-1-1 San Diego Notice of Privacy Practices

We may disclose health information about you to authorized federal officials for intelligence, counterintelligence and other national security activities authorized by law, and in emergencies.

Other Uses and Disclosures of Your Protected Information

Disclosures Requiring Your Written Authorization:

Most uses and disclosures of psychotherapy notes, substance use disorders, and uses and disclosures of protected health information, disclosures for marketing purposes and disclosures that constitute the sale of protected information require your ***written authorization***. A written authorization may be created in paper or electronic format. Once received, we will store a copy of your authorization electronically.

YOUR RIGHTS REGARDING YOUR PROTECTED INFORMATION

The Right to Access Your Own Information:

You have the right to inspect and copy your information for as long as we maintain it. All requests for access must be made in writing. We may charge you a nominal fee for each page copied and postage if applicable. You also have the right to ask for a summary of this information. If you request a summary, we may charge you a nominal fee for preparation of the summary and postage if applicable.

Right to Request Restrictions:

You have the right to request certain restrictions on our use or disclosure of your protected information. We are not required to agree to your request in most cases. But if we agree to the restriction, we will comply with your written request unless the information is needed to provide you emergency treatment or we are required to disclose the information by law. We reserve the right to terminate any previously agreed-to restrictions (other than a restriction we are required to agree to by law). We will inform you of the termination of the agreed-to restriction and such termination will only be effective with respect to protected information created after we inform you of the termination.

Right to Request Confidential Communications:

You may request that we communicate with you in a certain manner or at an alternative location. For example, you may ask that we contact you only at home. Your request must be in writing and specify the alternative means or location for communicating with you. We will accommodate a request for confidential communications that is reasonable based on our system capabilities**.**

Right to be Notified of a Breach:

You have the right to be notified in the event that we (or one of our business associates) or referral providers discovers a breach of your unsecured protected information. We may notify you in writing or by email or other electronic means.

Right to Inspect and Copy Your Record:

You have the right to inspect and receive a copy of protected information about you that may be used to make decisions about your health. A request to inspect or receive a copy of your records may be made by completing a Request for Release of Information form. For protected information in a designated record set maintained in electronic format, you can request an electronic copy of such information. If the information you request is protected health information, 2-1-1 may be required to forward your request to your healthcare provider for a response. There may be a charge for these copies.

Right to Amend:

You may ask us to amend, or correct your self-reported information. If the information was reported to us by your healthcare provider, a government agency, or other third party provider, you must contact that provider to correct or amend the information.

Right to an Accounting:

With some exceptions, you have the right to receive an accounting of disclosures of your protected information made for purposes other than treatment, payment, healthcare operations, disclosures excluded by law or those you have authorized. A nominal fee can be charged for the record search and preparation of the accounting of disclosures.

Right to Revoke Your Authorization:

You may revoke your written authorization or consent to share your information at any time in writing by mailing your request to the address listed below. If you revoke your written authorization or consent, it will be effective for future uses and disclosures of your protected information. Once your authorization has been revoked, we will render your record inaccessible and our referral partners will no longer be able to see your information in our system. However, the revocation will not be effective for information that we have used or disclosed to a referral partner in reliance on your authorization or consent and prior to receipt of your written revocation. After revocation, we will continue to store and use your information internally for our own business purposes, including auditing, accounting, training and quality improvement.

Complaints:

You may also file a complaint with us, or the Secretary of the U.S. Department of Health and Human Services if you feel that your rights have been violated. There will be no penalty or retaliation for you making a complaint.

Right to Receive a Copy of this Notice:

You may request a paper copy of this Notice at any time, even if you earlier agreed to receive this notice electronically. You may also access this Notice on our website at www.211sandiego.org

Requests:

Please submit all requests, complaints or concerns in writing to our Privacy Officer at:

2-1-1 San Diego/Imperial

Attn: Privacy Questions, PO Box 420039 San Diego, CA 92142

privacy@211sandiego.org

AUTHORIZATION FOR THE USE AND DISCLOSURE OF INFORMATION

Community Information Exchange

You are authorizing Infoline of San Diego County, dba Community Information Exchange (CIE) and its Partner Agencies to use, store and share your personal, financial and health information with each other in order to assess your needs, coordinate your care and provide services to you. Partner Agencies participating in the CIE are listed at www.211sandiego.org.

This Authorization covers, without restriction, all information disclosed and re-disclosed to CIE by you, your family, Partner Agencies including your care team, or any other person involved in your care while this Authorization is in effect. CIE and its Partner Agencies may share your personal, financial and health information. You agree to notify CIE if your information changes or is incorrect. Information disclosed pursuant to this Authorization may be re-disclosed and no longer be protected under applicable privacy laws. Your refusal to sign this Authorization will not adversely affect your ability to receive health care or services from Referral Agencies directly.

Notice of Privacy Practices posted at **www.211sandiego.org** explains how CIE uses and protects information, how to get a copy of this Authorization and your record. You can revoke this authorization at any time by sending notice to CIE at revoke@211sandiego.org, allowing a minimum of **five business** days to process. Revocation will not affect any information previously disclosed in reliance on this Authorization. Unless revoked earlier, this Authorization will expire in **Ten (10) Years, or on the following Date: _____**.

☐ I authorize for CIE to use and disclose information relating to, Drug/Alcohol/Substance Abuse, Mental Health, and HIV/AIDS.

If you agree, sign your name below:

CLIENT INFORMATION

Today's Date: _____/_____/_____

Client's Full Name:_____

DOB: _____/_____/_____   Last 4 or full SSN/4 digit PIN:_____

Client's Signature:_____

Agency Name: _____Care Coordinator Name:_____

COMMUNITY INFORMATION EXCHANGE
PARTICIPATION AGREEMENT

For good and valuable consideration, the sufficiency of which is hereby acknowledged, Info Line of San Diego, dba 2-1-1 San Diego and the "Participant" named at the signature page, each a "Party" and collectively, the "Parties" hereby enter into this Participation Agreement upon the terms and conditions provided herein.

> **Effective Date:**
> **Termination Date:**
> **First Renewal Date:**
> **Annual Fee:**

TERMS AND CONDITIONS OF PARTICIPATION

1.0   INTRODUCTION.

1.1 Role of 2-1-1 San Diego as the Facilitator for Community Information Exchange.

2-1-1 San Diego operates a 2-1-1 information hotline (Call Center) in the San Diego and Imperial County. Call Center services are designed to help members of the general public ("Clients") to connect with community resources to assist Clients obtain medical care, mental health services, housing, food, clothing, government benefits, among other things. 2-1-1 San Diego has expanded its referral services to include direct referral of Clients to community resources and access to the Community Information Exchange Database. The Community Information Exchange database (the "Database") will serve as a directory of participating professionals, agencies and businesses providing services that relate to the social determinants of health. The database will also serve as a source of information about the Client's social determinants of health and current needs and will be used to help the Client access community resources suitable to address those needs.   Information maintained in the Database consists of information provided by the Client ("self-reported") and information that has been created and entered into the Database by Referral Partners. Participants are cautioned to verify the information accessed from the Database; 2-1-1 San Diego does not assume any responsibility or liability for its inaccuracy.

1.2 Level of Access and Administration of Participation Agreements, Generally.
In order to protect the privacy and security of Client Data, 2-1-1 San Diego will only permit

Participants that have entered into a Participation Agreement on terms and conditions substantially similar to those stated herein to access the Database. A Participant's level of access to the Database will be limited to the extent necessary to protect the privacy and security of Client Data.

Tier 3 (Integrated Partner): Tier 3 Integrated Partners will have the ability to log on to the CIE Database and access Client Data, receive or decline referrals from other Tier 3 Partner made through the CIE Database, consent Clients into the CIE Database, share information related to Client details, needs, status and outcomes, and receive Client related Alerts. These abilities are customizable and optional for each Tier 3 Partner. Depending on the technology deployed in the Tier 3 Partner's facility, Tier 3 Partners may establish an interoperable connection to the CIE Database in order to access and share their Client's information. Participation Agreement: 0517 rev.0618 Page 2 of 13.

1.3 Participant Policies and Procedures. From time to time, 2-1-1 San Diego may adopt, amend, repeal and replace policies and procedures that pertain to use of the Database and processing of referrals (hereafter, "Policies and Procedures"). The Policies and Procedures will provide guidance to Participants on such topics as security measures required to protect Client Data, notifying 2-1-1 San Diego in the event the Participant experiences a Security Breach, referral acceptance/rejection response times and outcome reporting requirements, among other things. The Policies and Procedures may be posted on the 2-1-1 San Diego website at www.211sandiego.org, and are hereby incorporated in this Agreement by this reference as if fully set forth. 2-1-1 San Diego may modify, amend or replace the Participant Policies and Procedures, in its reasonable discretion, from time to time, and the change or modification shall be deemed effective and binding upon Participant on the date indicated, but not less than sixty (60) days from the date Participant receives the modified Policies. Material modifications to the Policies and Procedures shall require the prior approval of the 2-1-1 San Diego Board of Directors. In the event 2-1-1 San Diego adopts a new, or modifies an existing, policy or procedure in a way that materially changes Participant's obligations, liability or ability to participate in the Database, then Participant may terminate this Agreement as provided below for Early Termination. Modifications to the Policies and Procedures that are required by Applicable Law shall not be deemed a material change and will be adopted and implemented by Participant as soon as practicable.

2.0 TERM AND TERMINATION.

2.1 <u>Term</u>. The "Term" of this Agreement shall commence on the Effective Date and terminate on the Termination date indicated on the cover page unless terminated early or renewed as provided herein.

2.2 <u>Renewal Term</u>. The Term shall automatically renew July 1st of the year immediately following the Effective Date, without notice, and thereafter, each time for a period of three years, unless either Party hereto notifies the other in writing, of its intent not to renew, not less than thirty (30) days prior to the Termination Date.

2.3 <u>Right of Early Termination</u>. Either Party may terminate this Agreement early; (i) no cause, or (ii) immediately, in the event of a material breach of the privacy or security of Client Data, or (iii) a breach of the Confidentiality provisions stated herein, or (iv) in the event a Party fails to cure a material breach of this Agreement, to be effective within thirty (30) days of receipt of Notice specifically describing the cited reason deemed by the either party within writing.

2.4 <u>Effect of Termination</u>. Access to the Database and Services shall cease immediately upon Termination of this Agreement, and Participant will not be permitted to access, submit or retrieve any Data from the Database or obtain other Services under this Agreement. Notwithstanding Termination, Participant's duties and obligations to; (i) protect the privacy and security of Client Data, and (ii) return, destroy, or secure, store and securely maintain Client Data retrieved from the Database prior to Termination shall survive Termination. Client Data entered into the Database by Participant up through the date of Termination will continue to be used and maintained by 2-1-1 San Diego following Termination in compliance with its Notice of Privacy Practices and Applicable Laws.

3.0 FEES AND PAYMENT.

3.1 <u>Participation Fees</u>. As consideration for the Referral Services, and depending on the Tier Level assigned to Participant, access to the Database and Client Data, Participant shall pay a "Participation Fee" in the amount indicated on the Cover Page to this Agreement. The Annual Fee may be prorated monthly through July 1st of the year in which this Agreement is executed. Participant shall pay Fees within thirty (30) days of receipt of invoice. 2-1-1 San Diego may modify or use a different fee structure or formula for calculating fees and the amount of the annual or other Fees from time to time, but Fee Changes shall not occur more often than once in any calendar year. Changes to Fees shall become effective and binding on Participant after not less than sixty (60) days Notice to Participant. All Fees payable shall be non-refundable in the event of an early Termination.

3.2 Internet Access to the Database. Participants will be permitted access to the Database and access to segments of Client Data according to the Participant type and data access permissions assigned to the Participant's Authorized Users by logging onto the web portal using unique logon credentials.

4.0 PARTICIPATION IN COMMUNITY INFORMATION EXCHANGE.
(Section 4 applies to Participants who will be entering Client information into the *Customize the CIE Database*).

4.1 Access to the Database and Use of Client Data. Participant hereby grants 2-1-1 San Diego a fully-paid, non-exclusive, royalty-free, right and license to host, use, copy, store, maintain, and disclose Participant's profile and directory information, and Client Data and to share some or all of Participant's information and Client Data with other Participants, subject to the other Participant's Tier level and "need to know".

4.2 Client Data. Participant shall use reasonable care to ensure the accuracy, currency and completeness of Participant's profile and directory information and its Client Data, including Client demographic information (collectively "Data") and shall promptly correct or update such Data if Participant discovers the Data is incorrect, incomplete or has changed.

4.3 Client Consent/Authorization. Participant is solely responsible for (i) accurately documenting its Client's Consent or revocation of Consent or Written Authorization, when required by Applicable Law, to disclose protected health information to 2-1-1 San Diego and other Participants, (ii) protecting Client Data in its control from unlawful use or disclosure, and (iii) notifying 2-1-1 San Diego immediately of any changes or restrictions on a Client's Consent or Authorization, or (iv) of a Security Breach. Participant shall not disclose or permit another Participant or 2-1-1 San Diego to access Client Data unless Participant is permitted or required to disclose Client Data as a matter of law, or the Client who is the subject of the Data has given Participant Consent or Authorization (if required by Law) to share the Client's data with other Participants participating in the Community Information Exchange. When a Client's written Authorization is required for disclosure of Client Data, Participant will promptly provide 2-1-1 San Diego with an electronic copy of the Client's written Authorization prior to uploading or disclosing the Client's Data to 2-1-1 San Diego. Participant shall immediately notify 2-1-1 San Diego if its Client revokes Consent or Authorization to share Client Data or if Participant has agreed to a restriction on the disclosure of Client Data. Participant warrants and represents that the Client's Consent or written Authorization will conform to the requirements of Federal and State law.

4.4 Scope of Participation. Participant shall not use or disclose, or permit others to use or disclose Client Data, or access the Database for any purpose other than to provide the

types of services described in the Participant's profile as published in the Database, to refer a Client to another Participant, or for a lawfully permitted use in compliance with Applicable Laws. Participant shall not (i) sell, view, access, use, download or disclose Client Data retrieved from the Database, except to the extent necessary in connection with the provision of services and payment for services provided by Participant to a Client. Participant shall not provide access to the Database or to Client Data via or obtained from the Database to third parties who are not Participants of the Database, or use or disclose Client Data in connection with any marketing, fundraising or other activity not permitted by Applicable Laws.

4.5 Revocable License to Display Participant's Trademark/Logo. The Parties hereto grant the other a fully-paid, non-exclusive, royalty-free right and license to display the other's Trademark and Logo on its website and on other media in connection with the party's efforts to educate the general public, Clients, and other existing and potential Participants about the Participant's enrollment with the Community Information Exchange, and the benefits of participating in the program. Upon termination, all right and license to display the Trademark or Logo of the other Party shall immediately terminate.

5.0 PARTICIPANT'S USE OF THE HOSTED SYSTEM.

5.1 Minimum Necessary Use of Client Data. Whether Client Data is obtained through the Database, or directly from 2-1-1 San Diego or another Participant, Participant shall implement safeguards to limit the information accessed, retrieved, or requested to the minimum necessary to deliver and obtain payment for the services provided to the Client, for referral or for other lawful purposes consistent with Applicable Law.

5.2 Web-Services Participants: Internet Connection to the Database. Participant, at Participant's sole cost and expense, will use commercially reasonable efforts to obtain and maintain a secure internet connection to the Database with an internet browser and computer equipment and software that meets or exceeds the minimum configuration and security requirements and specifications recommended by 2-1-1 San Diego. 2-1-1 San Diego may upgrade or adopt new or different specifications for connecting to the Database from time to time and will notify Participant of any material changes to its specifications not less than thirty (30) days in advance if feasible. 2-1-1 San Diego shall not be liable for any lack of connectivity or loss in functionality in the event Participant utilizes hardware or software or an internet browser that does not meet 2-1-1 San Diego's recommended specifications.

5.3 Authorized Users. Participant shall limit access to the Database to the number of System Software licenses granted to Participant from time to time. Participant shall

conduct ongoing monitoring of the licenses to ensure that the number of Authorized Users registered under Participant to use the Database does not exceed the number of licenses issued. Participant shall train its Authorized Users on the proper use of Client Data and the means and methods for protecting Client Data from unlawful disclosure before allowing such Authorized User to access the Database. In addition, Participant shall implement and train its Authorized Users on network privacy and cultural competence on a regular basis, not less than annually. Participant shall immediately notify 2-1-1 San Diego and the vendor issuing the end user license (e.g. Unite US) of any changes to an Authorized User's status or access rights.

5.4 <u>Participant Security Requirements</u>. Participant shall, at its sole cost and expense, implement, maintain and update as needed, internal security systems, specifications and monitoring procedures to ensure that its computer servers, software and internet connections meet or exceed the security standards and specifications established by 2-1-1 San Diego, and Applicable Law and regularly monitor its electronic record database, systems and Personnel to protect the privacy and security of Client Data in compliance with this Agreement and Applicable Laws.

5.5 <u>Participant's Limited Use of the Database, Documentation</u>. Participant shall not (and it shall not permit others) to; (i) interfere with or disrupt the Database, (ii) sell, assign, license, sub-license or otherwise provide access to the Database or documentation related to the Database to anyone other than those employees, agents or contractors who have a need to know, "Authorized User(s)"; (iii) use the Database or its documentation, or Client Data for the purposes of providing commercial use in a service bureau, timesharing, remote batch, or similar commercial operations with third parties, (iv) by reverse engineering or by other process, create or attempt to create, or recreate the Database, (v) copy, modify, or distribute any portion of the Database or any documentation related to the Database or Client Data other than in connection with the delivery of services or referral of Clients to other Participants, (vi) transfer or assign any of its rights hereunder; (vii) create any derivative works based on the Database or its documentation, or (viii) export, re-export, divert or transfer the Database or its documentation outside the United States.

5.6 <u>Participant Profile.</u> Participant shall continuously maintain up-to-date registration and profile information that accurately describes the programs and services offered by the Participant to Clients, eligibility requirements for such programs and contact information for processing referral requests submitted to Participant by 2-1-1 San Diego, other Participants or Clients through the Database.

5.7 <u>Referral Requests.</u> As the Community Information Exchange facilitator, 2-1-1 San Diego may, but shall not be required to refer Clients to Participant ("Referral Request"). In the event a Client is referred to Participant by 2-1-1 San Diego or another Participant, Participant shall promptly respond to a Referral Request in the manner and within the timeframe specified by 2-1-1 San Diego in the Referral Request or as specified in the Policies and Procedures, as applicable. If no timeframe is specified, Participant shall respond to the Referral Request within two business day of receipt of the Referral Request. Participant's failure to respond to a Referral Request three times in any consecutive four week period shall initiate an opportunity for 2-1-1 and partner meeting to discuss timeframes.

6.0 SERVICES AND ADMINISTRATION.

6.1 <u>Database Operations</u>. 2-1-1 San Diego will; (i) maintain and operate the Database including Participant directory and profile and Client Data and facilitate the electronic storage and exchange of Client Data with other Participants according to the other Participant's Tier access, (ii) provide user support to Participant and its Authorized User(s) via a helpdesk, (iii) comply with Applicable Law. 2-1-1 San Diego may contract with subcontractors to maintain and upgrade the Database from time to time, operate the Database, and provide support services, among other things. In each such case, 2-1-1 San Diego will require its subcontractors to (i) maintain the confidentiality of all Client Data and other proprietary information relating to Participant, (ii) execute a Confidentiality Agreement containing at a minimum the same restrictions and conditions that apply to 2-1-1 San Diego, if applicable, whenever such person or entity may have access to, view, receive, transmit or disclose PHI execute a Business Associate Agreement, (iii) implement security measures to protect the Client Data from unlawful use or disclosure, and (iv) require its contractors, employees and agents to comply with Applicable Laws

6.2 <u>Database Availability</u>. 2-1-1 San Diego shall operate and maintain the Database in a workman-like manner consistent with commercially reasonable industry standards. 2-1-1 San Diego shall provide Participant with access to the exchange 24 hours per day, 7 days per week during the Term, subject to downtime. 2-1-1 San Diego will, to the extent reasonably possible, (except in the event of Force Majeure), provide advance written notice of downtime(s) either by sending Participant a downtime alert by email, or by posting the information on 2-1-1 San Diego's website. Notwithstanding the foregoing, Participant acknowledges and agrees that the Database's availability is provided on an "As Is, As Available" basis. Downtime shall not constitute a material breach of this Agreement unless downtime exceeds a total of seven consecutive days or fifteen days within any consecutive sixty (60) day period, excluding Force Majeure and scheduled maintenance.

6.3 <u>Support Services.</u> 2-1-1 San Diego, either directly or through a subcontractor, will

provide support services to assist Participant with registering Authorized Users to use the Database, (the "Database Helpdesk") and other administrative matters. The Database Helpdesk will be available on the dates and at the times posted on the 2-1-1 San Diego website. 2-1-1 San Diego may change the level of support, and its availability or cost, from time to time, provided, however, Participant shall be notified of any material changes not less than thirty (30) days in advance.

6.4 Database Records. 2-1-1 San Diego will maintain records of the dates, times and the specific client records accessed by Authorized Users if, as and for the period of time required by Applicable Law. Within thirty days of a written reasonable request, 2-1-1 San Diego may provide Participant a copy of a Data access audit log.

6.5 Security of Client Data. 2-1-1 San Diego shall establish, implement and maintain commercially reasonable security measures to ensure the privacy and security of Client Data while at rest in the Database and during its transmittal to and from Participants through the Database.

6.6 Disaster Recovery. 2-1-1 San Diego will establish, implement and update a disaster recovery plan which addresses the retrieval of lost, or corrupted Client Data in the event of Force Majeure, or a Breach or Security Incident. Notwithstanding the foregoing, 2-1-1 San Diego shall not be liable, under any theory, for lost, corrupted, irretrievable, inaccurate or incomplete Data.

7.0 WARRANTY DISCLAIMER; RELEASE OF LIABILITY.

7.1 WARRANTY DISCLAIMER. 2-1-1 SAN DIEGO IS NOT RESPONSIBLE FOR AND SHALL NOT BE LIABLE FOR THE CONTENT, USE OR DISCLOSURE OF CLIENT DATA COLLECTED, STORED, ACCESSED, RETRIEVED OR TRANSMITTED THROUGH THE DATABASE TO OR FROM A PARTICIPANT. PARTICIPANT ACKNOWLEDGES THAT THE CLIENT DATA VIEWED OR ACCESSED THROUGH THE DATABASE IS EITHER SELF REPORTED BY THE CLIENT, OR COMES FROM ANOTHER PARTICIPANT AND THAT SUCH CLIENT DATA MAY NOT BE COMPLETE, ACCURATE OR UP-TO-DATE. PARTICIPANT AND ITS AUTHORIZED USERS ARE SOLELY RESPONSIBLE FOR CONFIRMING THE COMPLETENESS, ACCURACY AND TIMEFRAME OF ALL CLIENT DATA RETRIEVED FROM THE DATABASE, AND FOR THE USE OR OMISSION OF SUCH CLIENT DATA IN CONNECTION WITH A CLIENT'S CARE OR COORDINATION OF CARE AND RELATED SERVICES. 2-1-1 SAN DIEGO WILL USE COMMERCIALLY REASONABLE EFFORTS TO MAKE CLIENT DATA AVAILABLE TO THE PARTICIPANT IF, WHEN, AND TO THE EXTENT THE DATABASE SOFTWARE IS ABLE TO MATCH UP THE RECORDS FOR SUCH CLIENT IN THE DATABASE OF OTHER PARTICIPANT(S) PARTICIPATING IN THE DATABASE AND TO NOTIFY PARTICIPANT(S) WHENEVER IT DISCOVERS DUPLICATE OR INAPPROPRIATELY LINKED

CLIENT RECORDS. ACCESS TO THE DATABASE, THE DATABASE ITSELF, AND THE DATA VIEWED OR RETRIEVED THEREFROM IS LICENSED "AS IS" AND "AS AVAILABLE." 2-1-1 SAN DIEGO DISCLAIMS ALL REPRESENTATIONS AND WARRANTIES OF ANY KIND AS THEY MAY PERTAIN TO THE FUNCTIONALITY OF THE DATABASE OR THE ACCURACY, COMPLETENESS OR TIMELINESS OF THE DATA INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

7.2Carrier Lines and Internet Security. Participant acknowledges that access to the Database will be provided over various telecommunications facilities and lines, and that Client Data may be transmitted over local exchange and internet backbone carrier lines and through routers, switches, and other devices owned, maintained, and serviced by third-party carriers, utilities, and internet service providers (collectively, "carrier lines"), all of which are beyond 2-1-1 San Diego's control. Neither 2-1-1 San Diego nor Participant shall be liable for the integrity, privacy, security, confidentiality, and use of Data as it transits carrier lines, or for any delay, failure, interruption, interception, loss, transmission or corruption of any Data attributable to transmission on the carrier lines.

7.3RELEASE OF LIABILITY PARTICIPANT IS SOLELY RESPONSIBLE FOR AND HEREBY RELEASES 2-1-1 SAN DIEGO, ITS OFFICERS, DIRECTORS, EMPLOYEES AND AGENTS OF AND FROM ALL LIABILITY ARISING OUT OF ANY AND ALL ACTS OR OMISSIONS, TAKEN OR MADE BY PARTICIPANT, IN RELIANCE ON THE DATABASE OR 2-1-1 REFERRAL SERVICES, CLIENT DATA, DISCLOSURE OF CLIENT DATA, OR THE FAILURE OF PARTICIPANT TO OBTAIN A CLIENT'S CONSENT OR AUTHORIZATION TO DISCLOSE A CLIENT'S DATA TO 2-1-1 SAN DIEGO AND OTHER PARTICIPANTS WHEN REQUIRED TO DO SO UNDER THIS AGREEMENT OR APPLICABLE LAW.

7.4 LIMITATION OF LIABILITY. EXCLUDING CLAIMS FOR INDEMNITY, AND NOT WITHSTANDING ANYTHING TO THE CONTRARY STATED ELSEWHERE IN THIS AGREEMENT TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, THE AGGREGATE LIABILITY OF 2-1-1 SAN DIEGO TO PARTICIPANT, REGARDLESS OF THEORY OF LIABILITY OR CHARACTERIZATION OF DAMAGES, SHALL BE LIMITED TO AN AMOUNT THAT IS EQUAL TO ONE-HALF THE ANNUAL AGGREGATE PARTICIPATION FEE OR FIFTY THOUSAND DOLLARS, WHICHEVER IS LESS.

8.0 INDEMNIFICATION.

8.1INDEMNIFICATION. 2-1-1 San Diego and Participant shall each indemnify, defend and hold the other harmless (the "Indemnitor") from and against any damages, cost or expense incurred by the other (the "Indemnitee") for third party claims resulting from a Security Breach caused solely by the Indemnitor's acts or omissions, whether or not

negligent or intentional. For purposes hereof, the term "Security Breach" shall have the meaning set forth in Section 9.1.2.

8.2 ADDITIONAL REQUIREMENTS. The Indemnitee shall give Indemnitor prompt written notice of any Claim asserted against the Indemnitee, however, the failure to provide such Notice shall not relieve the Indemnitor of its obligations hereunder, except to the extent a Court of competent jurisdiction determines such failure materially and adversely prejudiced the Indemnitor. Upon receipt of such notice, the Indemnitee shall tender defense to the Indemnitor, who shall, at its sole cost and expense, retain legal counsel and defend the Indemnitee with counsel reasonably satisfactory to Indemnitee. The Indemnitor may not settle such litigation or proceeding without the express consent of the Indemnitee, which consent shall not be unreasonably withheld, conditioned or delayed. The provisions set forth herein for indemnity, as to third parties, shall not serve as a waiver of any defense or immunity otherwise available and shall not preclude the Indemnitor from asserting every defense or immunity that the Indemnitor could assert on its own behalf. All remedies provided by law, or in equity shall be cumulative and not in the alternative.

9.0 INSURANCE.

9.1 Participant's Insurance. Unless otherwise agreed, Participant, at its sole cost and expense, shall obtain and keep in force, an insurance policy or policies, or self-insure in an amount sufficient to cover any liability it incurs for breach of this Agreement, Applicable Law or other act or omission giving rise to a claim for indemnity. Such policies shall provide, at a minimum, coverage of the following types and amounts set forth below and in each case waiving the right of the insurer to subrogation. Participant shall increase the limits of cyber liability coverage within ninety (90) days of 2-1-1 San Diego's written reasonable request.

9.2 Comprehensive or Commercial Form General Liability. (Blanket Contractual Liability, Broad Form Property Damage, Personal Injury included) with minimum limits as follows:

Coverage Modules	Limit
Each Occurrence	$1,000,000
Products/Completed Operations Aggregate	$1,000,000
Personal and Advertising Injury	$1,000,000
Cyber Liability with Extortion Coverage	$1,000,000
Professional Liability	$1,000,000
General Aggregate	$2,000,000

9.3 Professional Liability for IT Technology including Cyber Risk. Technology, professional liability, data protection, privacy, and cyber liability and extortion insurance policy shall provide coverage for the following risks, among others: financial loss, as well as all costs, including damages 2-1-1 San Diego is obligated to pay a third party, which are associated with any Security Incident or Breach or loss of Data, regardless of cause (including, without limitation, negligence or gross negligence and unlawful third party acts), and resulting or arising from acts, errors, or omissions in connection with the performance of this and associated Agreements. Costs to be covered by this insurance policy shall include without limitation: (a) costs to notify individuals whose personal Data might have been lost or compromised; (b) costs to provide credit monitoring and credit/identity restoration services to individuals whose personal Data might have been lost or compromised; (c) costs associated with third party claims arising from a Security Breach or loss of personal Data, including litigation costs and settlement costs; and (d) any investigation, enforcement or similar miscellaneous costs incurred in relation to a Security Breach. "Security Breach" means (1) the failure of Participant to properly secure, transmit, handle, manage, store, backup, destroy or otherwise control, or the unauthorized use or disclosure by Participant of: (a) Data in any format, or (b) third party proprietary information in any format specifically identified as confidential and protected under a confidentiality agreement or similar contract; (c) a violation of Participant's privacy policy, (d) violation of Applicable Laws; or (e) any other act, error, or omission by Participant that is reasonably likely to result in the unauthorized disclosure of Data.

9.4. Other Insurance Requirements. Participant shall furnish 2-1-1 San Diego with certificates of insurance and additional insured endorsements evidencing compliance with all requirements prior to registering Authorized Users with the Database and/or within five (5) business days of a written request therefore. If the above insurance is written on a claims-made form, it shall have a retroactive date of placement prior to or coinciding with the Effective Date of this Agreement and continue for a minimum of three (3) years following Termination. The coverage specified above shall be primary with respect to indemnities owed to the other party under this Agreement. Such insurance shall be with insurers with at least an A.M. Best's Insurance Guide rating of "A-VII" or maintained through adequate programs of self-insurance. The insurance policies shall provide that the insurance company notify 2-1-1 San Diego in writing at least thirty (30) days in advance if Participant's insurance coverage is to be canceled, modified or changed so as not to comply with the requirements of this Agreement. If Participant is self-insured, Participant shall provide written evidence satisfactory to 2-1-1 San Diego, not less than sixty (60) days in advance, should Participant be or become unable to cover liability claims in the amounts stated herein.

9.5 2-1-1 San Diego Insurance. 2-1-1 San Diego shall obtain and keep in force, at all times during the Term of this Agreement, insurance covering 2-1-1 San Diego's activities as contemplated by this Agreement, including, but not limited to coverage minimums as stated in Section 9.1.1 and 9.1.2. 2-1-1 San Diego shall provide Participant with a certificate of coverage within ten (10) business days of a written request therefore.

10.0 DEFINITIONS.

10.1 Rules of Interpretation. If, and to the extent there is a conflict between the definition given a term by this Participation Agreement and the BA Agreement or other attachment, the definition stated in the BA Agreement or attachment shall govern. The following terms are defined by HIPAA and incorporated herein as if fully restated: "Business Associate Agreement," "Breach," "Permitted Use" "Protected Health Information" and "Security Incident."

"Applicable Law" means all laws which govern the subject matter of this Agreement, including without limitation all federal, state and local laws which govern the privacy and security of personally identifiable information under State Law and protected health information under both State and Federal Laws and Regulations. Applicable Laws include without limitation the Health Insurance Portability And Accountability Act of 1966 and the regulations promulgated there under at 45 CFR Parts 160 and 164, ("HIPAA"), the Health Information Technology For Economic and Clinical Health Act, Title XIII of Division A and Title IV of Division B of the American Recovery and Reinvestment Act of 2009 ("HITECH"), and California Civil Code Sections 56.10 et seq., the California Medical Information Act, ("CMIA") and California Civil Code Sections 1798.80 et seq.

"Authorized User" means an individual Participant or an individual designated by a Participant to access and use the Database, including without limitation, an employee or Business Associate of the Participant.

"Authorization" means and refers to a written authorization satisfying the requirements of 45 CFR Section 164.508, 42 CFR Part 2, and/or California Civil Code Section 56.11, or other Applicable Law that requires a patient's express written permission for the disclosure of health information including certain types of sensitive healthcare information such as drug or alcohol abuse information by a federal or state program, or HIV Test Results.

"Client" means an individual receiving health care, mental health, or social services or government benefits from a Participant or referral services from 2-1-1 San Diego whose

information will be shared pursuant to this Agreement with other Participants. Client does not mean or include those clients whose information is not entered into the Database.

"Client Data" means the protected information relating to a Client, including without limitation, personally identifiable information and protected health information; name, address, telephone number, financial information, health condition and other information relevant to the provision of services.

"Community" means 2-1-1 San Diego and all Participants registered to use the Database, collectively.

"Consent" means and refers to a Client's express permission for a Participant to use or disclose the Client's Data to 2-1-1 San Diego and other Participants.

"Database" means the software and hardware systems owned and operated by 2-1-1 San Diego and the processes and procedures, collectively, that enables access, retrieval, use, disclosure and exchange of Participant and Client Data between 2-1-1 San Diego and the Participants through the Database.

"Participant" means an individual or entity that has entered into a Participation Agreement with 2-1-1 San Diego. References to Participant include its employees, agents, contractors and Authorized Users if and to the extent such individual accesses the Database or Client Data.

"Permitted Use" means all activities in connection with submitting, viewing, accessing, using, disclosing and exchanging, and retrieving Client Data for the purpose of providing treatment, payment, healthcare operations, public health, the determination of eligibility for government or other benefits, care coordination including information and referral and program enrollment assistance or other activities performed for or on behalf of a Client or Participant and as permitted by Applicable Law.

11.0 GENERAL PROVISIONS.   .

11.1 No Exclusion. The Parties each warrant and represent that neither they nor any of their Related Parties have been placed on the sanctions list issued by the office of the Inspector General of the Department of Health and Human Services pursuant to the provisions of 42 U.S.C. 1320a(7), or have been excluded from government contracts by the

General Services Administration. A Party will provide the other immediate notice in the event either is placed on the sanctions list.

11.2 <u>Severability</u>. If any provision of this Agreement is determined to be invalid or unenforceable, such provision shall be changed so as to best accomplish the objectives of the Parties within the limits of applicable law, provided, however, if that is not possible or feasible, such provision will be severed from this Agreement to the extent of such determination without affecting the validity or enforceability of such remaining provisions.

11.3 <u>Governing Laws</u>. This Agreement is governed by and shall be interpreted in accordance with the laws of the State of California without regard to its conflict of law provisions. The parties waive any objections and agree to the venue and personal jurisdiction of the courts of the State of California and the federal courts situated in San Diego County over any action arising out of or relating to this Agreement.

11.4 <u>Force Majeure</u>. No Party shall be liable to the other for any failure to perform its obligations under this Agreement, where such failure results from any act of God or other cause beyond such party's reasonable control, including, without limitation, any mechanical, electronic, or internet communications failure, terrorist acts, cyber terrorism or malicious mischief.

11.5 <u>Notices</u>. Except as otherwise provided herein, all notices, requests, demands, and other communications required or permitted by this Agreement will be in writing and shall be deemed to have been duly given, made and received on the date when delivered to the other Party at the address stated below the signature line when actually delivered by a nationally recognized courier service, or on the third business day following the day when deposited in the United States mail, certified, postage prepaid, return receipt requested. A Party may change its address for Notice, at any time, by giving Notice of such change as provided herein.

11.6 <u>No Agency, No Third Party Beneficiaries</u>. 2-1-1 San Diego provides the Database services to Participant but does not act as the Participant's agent. Participant will not be deemed an agent of another Participant as a result of participation in the Database. Nothing in this Agreement is intended to confer upon any third party any rights, remedies, or obligations.

11.7 <u>Modifications</u>. Except as specifically provided herein, no modification to the terms of this Agreement or the Business Associate Agreement shall be valid, unless in writing and signed by the parties hereto.

11.8 Registered User Signatures and Signed Documents. Upon registering with the Database, Participant acknowledges and agrees that its Authorized User is authorized to adopt as its signature an electronic identification consisting of symbols or codes that are to be affixed to or contained in an exchange of Data made by the Participant ("Signatures"). Any transmission or exchange of Data made pursuant to this Agreement shall be considered a "writing" or "in writing" and any such exchange when containing, or to which there is affixed, a Signature shall be deemed for all purposes: (a) to have been "signed" (a "Signed Documents") and (b) to constitute an original when printed from electronic files or records established and maintained in the normal course of business. Participant will not contest the validity or enforceability of Signed Documents under the provisions of any applicable law as they may relate to the requirement that certain agreements be in writing or signed by the party to be bound thereby. Signed Documents, if introduced as evidence on paper in any judicial, arbitration, mediation, or administrative proceedings will be admissible as between the parties to the same extent and under the same condition as other business records originated and maintained in paper form.

11.9 Complete Agreement. The terms of this Agreement and its Attachments and Exhibits collectively represent the entire understanding between the Parties and supersede all previous agreements, whether oral or in writing. The Attachments and/or Exhibits attached to this Agreement and identified in the Summary box on page one, are fully incorporated and made a part of this Agreement by this reference as if fully stated herein.

11.10 Survival. Notwithstanding any expiration or earlier termination of this Agreement, those provisions which by their meaning are intended to survive termination, including, or in addition to the following provisions of this Agreement relating to the following matters, shall survive termination in accordance with their terms: (Indemnification), (Representations and Warranties; Limitations), (Liability Limitations), (Survival), (Section 10 Definitions), (General Provisions) and Exhibit A (Business Associate Provisions). Termination of this Agreement by a Party shall not relieve the other Party hereto from any liability that at the time of termination already accrued to the other Party or which thereafter may accrue in respect of any act or omission of such Party prior to termination or any continuing obligation imposed by applicable law.

11.11 Authorized Agent Signature. By signing this Agreement, the undersigned represents and warrants that he or she has received and read a copy of this Agreement, inclusive of attachments and exhibits, and that he or she is either (a) the Participant or, (b) if the Participant is an organization, an individual acting on the Participant's behalf who is authorized to sign and enter into this Agreement.

11.12 <u>Counterpart Signatures and Facsimile Signatures</u>. This Agreement may be executed and delivered in counterparts, all of which taken together shall constitute one single agreement between the parties. A facsimile transmission of the executed signature page of this Agreement shall constitute due and proper execution and delivery of this Agreement.

SIGNATURES:

By: _____   By: _____
Its: Authorized Representative   Its: Authorized Representative
Date: Date:

<u>Address for Notice</u>:   <u>Address for Notice</u>:

EXHIBIT A
BUSINESS ASSOCIATE AGREEMENT

[The attached BAA applies to the parties only to the extent that a business associate relationship exists within the meaning of 45 CFR 160.103.]

HIPAA:
Business Associate Agreement

This HIPAA Business Associate Agreement ("**BAA**"), is entered into by and between Infoline of San Diego County, dba, 2-1-1 San Diego, ("**Business Associate**") and the Covered Entity or Business Associate named on the signature page hereto ("**Covered Entity**"), each a "Party" and collectively, the "Parties." This BAA shall be effective on the date indicated at the signature page hereto, or the date commensurate with the effective date of the Participation Agreement or other agreement entered into by the Parties ("Agreement") pursuant to which Business Associate will be granted access to protected healthcare information, (whichever effective date is earlier). *This BAA applies to the parties only to the extent that a business associate relationship exists within the meaning of 45 CFR 160.03.*

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RECITALS

Whereas, at times, 2-1-1 San Diego, may serve as a Business Associate that creates, receives, maintains, stores, aggregates, transmits or facilitates the exchange of protected health information ("PHI") for, behalf of and between "Covered Entities" or other Business Associates for Permitted Purposes.

Whereas, at various times, Business Associate may provide Services for, or on behalf of a Covered Entity that requires Business Associate to collect, store, transmit, retrieve, use or disclose an Individual's protected health information, orally, or in paper or electronic form. In doing so, it is the intent of each of the Parties to this Agreement to observe and faithfully perform the duties and obligations of a Business Associate, and Covered Entity, as the context may require, in accordance with the "Privacy Laws" and the following Terms and Conditions.

Now therefore, in light of the foregoing Recitals and for valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties hereto hereby agree as follows:

TERMS AND CONDITIONS

ARTICLE I
DEFINITIONS:

1.1. Definition of Capitalized Terms. Unless otherwise defined in this BAA, capitalized terms shall have the meaning set forth in the Privacy Laws.

"Agreement" means and refers to collectively, the Participation Agreement and each statement of work, if any, and this BAA, or if there is no Participation Agreement, then Agreement means this BAA.

"Privacy Laws" means and refers to the Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), the regulations promulgated thereunder by the U.S. Department of Health and Human Services (45 CFR Parts 160, 162 and Subparts A, C, D and E of Part 164, the "HIPAA Regulations"), and the Health Information Technology for Economic and Clinical Health Act of 2009 (the "HITECH Act") Title XIII of Division A and Title IV of Division B of the American Recovery and

Reinvestment Act of 2009, Pub. L. No. 111-5 (February 17, 2009).

"Breach" as defined by 45 CFR §164.402 means the unauthorized acquisition, access, use, or disclosure of PHI or any activity that compromises the security or privacy of such information, except where an unauthorized person to whom such information is disclosed would not reasonably have been able to retain such information.

"Business Associate" as defined by 45 C.F.R. 160.13, includes any entity that creates, receives, maintains, or transmits protected healthcare information ("PHI") on behalf of a Covered Entity.

"Business Associate Subcontractor" or "Subcontractor" means a contractor to Business Associate that performs services as a Business Associate as that term is defined in 45 CFR §160.103.

"Covered Entity" refers to a Health Plan, Health Care Clearinghouse, or Health Care Provider that transmits any protected healthcare information in electronic form in connection with a transaction covered by HIPAA and shall have the same meaning as the term "Covered Entity" as stated at 45 CFR §160.103.

"Permitted Purpose" means and refers to the purposes for which PHI may be used and disclosed under the Privacy Laws, including, without limitation, treatment, payment, healthcare operations, healthcare oversight, public health, emergency medical services and the determination of eligibility for and the delivery of government benefits to the Individual that is the subject of the PHI.

"Protected Healthcare Information" or "**PHI**" means any information, whether oral or recorded in any form or medium, including electronic PHI or "ePHI": (i) that relates to the past, present, or future physical or mental condition of an individual; the provision of health care to an individual; or the past, present or future payment for the provision of health care to an individual, and (ii) that identifies the individual or with respect to which there is a reasonable basis to believe the information can be used to identify the individual, and shall have the meaning given to such term at 45 CFR §160.103.

"**Security Incident**" means the attempted or successful unauthorized access, use, disclosure, modification, or destruction of information or interference with system operations in an Information System, and shall have the meaning given to such term at 45 CFR §164.304.

"Services" shall mean, to the extent and only to the extent they involve the creation, use, storage, transmission, encryption, destruction or disclosure of PHI for a Permitted Use by a Business Associate or Business Associate Subcontractor under the Participation Agreement.

"Participation Agreement" means and refers to the agreement between Business Associate and Covered Entity and each statement of work pursuant to which Business Associate agrees to perform Services that involve the use or disclosure of PHI.

ARTICLE II
COMPLIANCE WITH THE PRIVACY LAWS

2.1. Parties Mutual Obligation to Comply with Privacy Laws. The Parties to this BAA shall observe and comply with the Privacy Laws and faithfully perform the duties and obligations of a Business Associate, or Covered Entity, respectively as such terms may pertain to them from time to time under the Privacy Laws, at all times during the Term of this Agreement and for such period of time following termination as may be required by the Privacy Laws.

2.2. Effect of BAA. This BAA amends, supplements, and is made a part of any and all Agreements between 2-1-1 San Diego and the Covered Entity, to the extent 2-1-1 San Diego is to perform Services as a Business Associate. To the extent the terms and conditions of the Participation Agreement are inconsistent or conflict with the terms of this BAA, this BAA shall govern.

ARTICLE III
USE AND DISCLOSURE OF PHI

3.1. Permitted Uses and Disclosures: Business Associate may use or disclose PHI if necessary and consistent with 42 U.S.C Section 17935(b) only to the extent necessary to perform functions, activities or services specified in this BAA, or the Participation Agreement on behalf of Covered Entity, provided such use or disclosure would not violate the Privacy Laws, if done by Covered Entity.

3.2. Management and Administration. Except at otherwise indicated in this BAA, Business Associate may use and disclose PHI (a) to properly manage and administer Business Associate's business, and carry out Business Associate's legal responsibilities.

3.3. Data Aggregation. Business Associate may use and disclose PHI to provide Data Aggregation services relating to the Health Care Operations of the Covered Entity.

3.4. De-Identified. Business Associate may use PHI to de-identify the information in accordance with 42 CFR 164.514(a)-(c) for any lawful purpose.

3.5. Limited Data Set. Business Associate may request PHI in the form of a Limited Data Set, to be used for research, public health or health care operations.

3.6. Minimum Necessary. Business Associate shall limit access to PHI within its own workforce and place the same requirements upon its Business Associate Subcontractor's to those knowledgeable of the Privacy Laws and only on a need to know basis.

ARTICLE IV
OBLIGATIONS OF BUSINESS ASSOCIATE:

4.1. Nondisclosure. Business Associate shall not use, access or disclose PHI other than as permitted or required by the Participation Agreement, this BAA or by the Privacy Laws.

4.2. Safeguards. Business Associate shall adopt, implement and update administrative, physical and technological safeguards that reasonably and appropriately protect the privacy, integrity, and security of PHI and to comply with the applicable standards of Subpart C of 45 CFR Part 164. Covered Entity shall have the right to audit these security controls and review Business Associates' written information privacy and security policies and procedures, from time to time upon not less than five (5) business days notice to Business Associate. Business Associate will implement technology or methodology specified by the Secretary pursuant to 42 USC Section 17932(h) that renders PHI unusable, unreadable, or indecipherable to unauthorized individuals.

4.3. Report Unauthorized Use or Disclosures to Covered Entity. Business Associate shall report to Covered Entity any use or disclosure of PHI not provided for by the Agreement that is not otherwise permitted by Law. In this regard, Business Associate will report Breaches of Unsecured ePHI as required at 45 CFR 164.410,

4.4. Business Associate Subcontractors. In accordance with 45 CFR 164.502(e)(1)(ii) and 164.308(b)(2), if applicable, Business Associate will take reasonable steps to ensure those of its subcontractors, (and their employees or agents) that create, receive, maintain, or transmit PHI on behalf of Business Associate agree to substantially the same restrictions, conditions, and requirements, including requirements for reporting any Breaches or Security Incidents as apply to Business Associate herein,

4.5. Accounting to Individual of Disclosures. Business Associate shall maintain, and within twenty (20) days of a written request, provide the information required or reasonably necessary to permit Covered Entity to satisfy its obligations under 45 CFR 164.528 to provide an accounting of disclosures to an Individual. Unless otherwise agreed, Business Associate shall not be required to provide an accounting of disclosures directly to the Individual, but shall forward such requests to Covered Entity.

4.6. Amendments to PHI. To the extent Business Associate maintains PHI in a central database on behalf of Covered Entity, Business Associate will make such amendments to PHI in a Designated Record Set as directed or agreed to by Covered Entity pursuant to 45 CFR 64.526.

4.7. Compliance Audit. Business Associate shall make its internal practices, books, and records available to the Secretary and/or Covered Entity upon request, for purposes of determining compliance with the Privacy Laws, and to investigate any Breach or Security Incident.

4.8. Marketing or Sale of PHI. Subject to the limitations set forth in Section 13405(d)(2) of the HITECH Act, and in compliance with 45 CFR Section 164.502(a)(5), except for compensation for services provided under the Participation Agreement, Business Associate shall not directly or indirectly receive remuneration in exchange for any PHI from a third party.

4.9. Indecipherable or Lost PHI. Business Associate shall take reasonable steps, at its sole cost and expense, to trace lost PHI or translate and recreate indecipherable transmissions of ePHI where such loss or corruption is the result of or related to a disruption or malfunction of Business Associate's internet connection, hardware, software or a breach of or defect in its security system.

4.10. Designated Record Set. Within ten (10) day of receiving a request, and to the extent Data is maintained

by Business Associate, Business Associate shall make PHI available to Covered Entity in a Designated Record Set to permit Covered Entity to satisfy its obligations under 45 CFR 164.524.

4.11. Standard Transactions. To the extent Business Associate conducts Standard Transactions, Business Associate shall comply with the Privacy Laws and specifically the Administrative Requirements set forth at 45 CFR Part 162.

4.12. Covered Entity's Obligations. To the extent Business Associate is to carry out Covered Entity's obligations under 45 CFR Part 164, Subpart E, comply with the requirements of Subpart E that apply to Covered Entity in the performance of such obligations.

4.13. Export of PHI. Business Associate, its agents or Subcontractors not perform any services that require the export of PHI outside the United States of America without the prior written consent of the Covered Entity.

4.14. Notice and Opportunity to Oppose Disclosure. In the event Business Associate is required by law to disclose PHI pursuant to a court order or other legal proceeding or investigation, Business Associate shall promptly Notify Covered Entity of such requirement so as to afford Covered Entity sufficient time to take appropriate action to oppose the disclosure.

ARTICLE V
COVERED ENTITY OBLIGATIONS

5.1. Restriction on Use or Disclosure. Covered Entity will immediately notify Business Associate of any restriction on the use or disclosure of PHI that Covered Entity has agreed to or is required to abide by under 45 CFR §164.522, to the extent that such restriction may affect Business Associate's (or that of its Subcontractor) use or disclosure of PHI.

5.2. Consent or Authorization. Covered Entity will not disclose or provide Business Associate or its Subcontractors access to PHI except to the extent Covered Entity is permitted or required to do so under the Privacy Laws or pursuant to the consent or authorization of the Individual (or his or her representatives) that is the subject of the PHI.

5.3. Notice of Privacy Practices. Covered Entity shall provide Business Associate with a copy of its most current Notice of Privacy Practices, and updates as and when made.

ARTICLE VI
BREACH OR SECURITY INCIDENT

6.1. Breach or Security Incidents. Business Associate shall promptly notify Covered Entity as required by 45 CFR 164.410, but no later than five (5) business days after Business Associate becomes aware of a Breach or Security Incident. Business Associate shall be deemed to be aware of a Breach or Security Incident as of the first day on which such Breach or Security Incident is actually known or reasonably should have been known by any of its officers, employees, agents or subcontractors.

6.2. Investigation and Corrective Action. The Parties will cooperate with each other in good faith in the investigation of the Breach or Security Incident. Business Associate will promptly take such steps as are reasonable to mitigate any harmful effects of such Breach or Security Incident and shall Notify Covered Entity, no later than twenty (20) days after discovery of the Breach or Security Incident of; (i) the identity of each Individual whose Unsecured PHI was accessed, acquired, used or disclosed as a result of the Breach, and (ii) such other information required by the actions taken by Business Associate to mitigate any harmful effect of such Breach or Security Incident, and (ii) the corrective action such Party has taken or shall take to prevent future similar Breaches or Security Incidents, and (iii) any other action required by Applicable Laws pertaining to the Breach or Security Incident.

6.3 Notification To Individuals. Unless the parties agree in writing otherwise, Covered Entity shall provide Individuals affected by a Breach or Security Incident such notification required by the Privacy Laws.

6.4. Notification to Media. A notification required to be given to the public via the media pursuant to 45 CFR 164.406 shall be provided by Covered Entity, unless the parties agree in writing otherwise. Business Associate will not communicate with the media concerning a Breach or Security Incident unless directed to do so by Covered Entity in Writing.

ARTICLE VII
TERM AND TERMINATION

7.1. Term. The Term of this BAA shall commence on the Effective Date and terminate on the date that is commensurate with the Termination Date of the Participation Agreement, (as the same may be extended or renewed).

7.2. Termination for Cause. Either Party may terminate this BAA (and the Participation Agreement) immediately upon Notice for "Cause." "Cause" shall mean and refer to (i) a Party's failure to cure a material breach of this BAA within thirty (30) days of Notice of such breach; (ii) any act or omission of a Party resulting in a Breach or Security Incident, (iii) failure of Business Associate to provide the accounting of disclosures or security audit in a timely manner, (iv) failure of a Party to take reasonable corrective action to prevent Breaches or Security Incidents. In addition, Covered Entity may terminate this BAA for any reason upon one (1) month's Notice.

7.3. Obligations of a Party Upon Termination. Upon termination of this BAA for any reason, and with respect to PHI received solely from Covered Entity or created, maintained, or received by Business Associate solely for Covered Entity, Business Associate shall, if feasible, return to Covered Entity or (if agreed to by Covered Entity), destroy the PHI retained by Business Associate when it is no longer needed by Business Associate for the proper management and administration of its business and legal responsibilities or for the Permitted Purposes for which such PHI was originally used or retained.

ARTICLE VIII:
MISCELLANEOUS PROVISIONS.

8.1. Contradictory Terms; Construction of Terms. Any capitalized term or provision of the Agreement that contradicts one or more terms and conditions of this BAA, including the definition of a Capitalized Term shall be superseded by the definitions and term and conditions set forth in this BAA for the purposes of complying with the Privacy Laws.

8.2. Amendment. This BAA shall be amended from time to time as is necessary in order for a Party to comply with the requirements of the Privacy Laws. All other amendments must be in writing and executed by both parties to be effective.

8.3. Interpretation. This BAA represents the Parties' entire understanding and supersedes any and all prior agreements between the Parties whether written or oral, as they may pertain to the subject matter of this BAA. Any ambiguity in this BAA or the Business A Agreement shall be interpreted to permit or require compliance with the Privacy Laws. The terms and conditions stated in this BAA shall control over any conflicting or varying terms and conditions in the Participation Agreement.

8.4. No Agency. Nothing in this BAA is intended to create or imply an employment relationship, partnership or joint venture between Covered Entity and Business Associate. Nothing express or implied in this BAA is intended to confer, nor shall anything herein confer, upon any person other than the Parties and their respective successors and assigns, any rights, remedies obligations or liabilities.

8.5. Survival. Those obligations of a Party which by their meaning are intended to survive termination, including, but not limited to the obligations to protect the privacy and security of PHI from unlawful disclosure, shall continue in effect for a period of seven (7) years following termination.

8.6. Notice. Any Notice required   address provided other Party shall be in writing and shall be sent by first class certified U.S. Mail, return receipt requested, overnight courier and delivered to the by such Party below, or to such change of address as a Party may specify by Notice.   If any part of any

8.7. Severability. The provisions of this Agreement shall be severable, and the invalidity or unenforceability of any provision (or part thereof) of this Agreement shall in no way affect the validity or enforceability of any other provision (or remaining part thereof.) provision contained in this Agreement is determined to by a court of competent jurisdiction to be invalid, illegal or incapable of being enforced, the provision shall be interpreted in a manner so as to enforce it to the fullest extent permitted by law.

8.8. Debarment, Suspension. certifies that neither it, nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in this transaction by any federal, or state

8.9. Attorneys Fees. Each party shall bear its own costs in connection with any legal action or proceeding brought to enforce, enjoin or interpret this Agreement or the rights and obligations of a Party hereto.

8.10. Jurisdiction/Venue. This BAA shall be governed by California law notwithstanding any conflicts of law provisions to the contrary. Venue for any legal proceeding brought to enforce, enjoin or interpret this BAA shall be conferred on the State or Federal Court situated in San Diego County.

8.11. Counterparts. Any number of counterparts of this Agreement may be signed and delivered, each of which shall be considered an original and all of which, together, shall constitute one and the same Agreement.

IN WITNESS WHEREOF, the Parties identified below have executed this Business Associate Agreement.

BUSINESS ASSOCIATE:

Signature:

_____

By:
Its:
Date:

Address For Notice:

COVERED ENTITY/BUSINESS ASSOCIATE:

Signature:

_____

By:
Its:
Date:

Address For Notice:

Appendix D: Endnotes

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