



LEVERAGING CIE INFRASTRUCTURE TO MANAGE COMMUNITY NEEDS AND RESPONSE DURING THE COVID-19 PANDEMIC



Community
Information
Exchange

Karis Grounds, MPH, VP of Health and Community Impact, 2-1-1/CIE San Diego
Beth Johnson, MPH, Director of Strategic Initiatives, 2-1-1/CIE San Diego

ISSUE



The COVID-19 pandemic was instantly deemed a global healthcare crisis. The world needed to quickly understand the disease spread, symptoms and prevention methods. Healthcare providers had to aggressively prepare and respond to the influx of patients with limited resources. Simultaneously, to flatten the curve or inhibit the spread of new infections, communities were asked to stay at home, close down non-essential businesses and work and educate at home. Because of these safety measures, unemployment rates are at a peak, food insecurity has skyrocketed and homeless, housing, and legal needs are rapidly increasing.

COVID-19 has impacted our most vulnerable populations the hardest, demonstrating the direct correlation between health and social outcomes.

Today, we understand that differential conditions, which are often closely linked to race, social class, and gender, create health inequities with impact on health outcomes, as severe as higher child mortality rates and lower life expectancy rates.

OPPORTUNITY



Through modeling like Health Leads' [Flattening the Curve](#), we can see an increased demand on essential basic needs, yet a lack of supply, with expectations that the underfunded and limited infrastructures of social and human service organizations will continue to support the growing needs in our communities. In addition to lack of supply, there have been issues around lack of coordination among organizations, leading to inefficient and uneven distribution of resources.

The [Community Information Exchange \(CIE\)](#) is an emergent concept and practice. At its core, this community-driven tool is meant to coordinate care using a universal client/patient record, a shared language, and an essential resource database for closed loop electronic referrals.

The CIE in San Diego has demonstrated the utility of having the mentioned components and a powerful and diverse network of providers to manage need during a time of crisis. Organizations across San Diego County have leveraged CIE's cloud-based technology to share information for individual care coordination and have used real-time data for community-wide coordination. The CIE facilitates the rapid response to evolving needs of community members and the ever-changing resource landscape that includes health care, food, housing, and mental health services.

At this moment in time, a CIE could be used to manage community needs related to the pandemic, helping to close the gap between supply and demand across the country and help organizations respond in real-time to the unique needs of their community.



EXAMPLES OF CIE LEVERAGED IN RESPONSE TO COVID-19:

REAL TIME NEEDS AND RESPONSE

Currently many social service and healthcare agencies use different technology platforms to monitor clients' needs and connect clients to services. These siloed systems cause duplicative processes and hinder the ability to collect comprehensive data on population needs. A CIE captures fourteen types of social needs of individuals^[i] into one longitudinal record. The CIE enables organizations to collect, document, and share data in real time, showing trends based on type of need, demographic, and impacted populations. A CIE also pushes and collects closed-loop referrals, which allows for providers across systems to cross-refer to organizations that specialize in their need.

CIE San Diego Example: The COVID-19 pandemic caused the demand for resources (e.g. food assistance, housing, utility, etc.) to shift significantly over time, creating a critical opportunity to manage and allocate resources and services in direct response to community needs. In response, CIE San Diego created prevalence maps and used the data to demonstrate change in needs over time by geography. Additionally, the CIE data has also presented trends in demographics, including gender identity, age group, race/ethnicity, preferred language, health insurance, health insurance type, health concern, education, household size, number of children, area median index, military/veteran status and disproportionate rates of people of color impacted by COVID-19. Community-based organizations and funders could use this data to make resource investment decisions for communities and populations.

[i] Multi-domain SSM research citation

EVER-CHANGING RESOURCE DATABASE

The pandemic has changed the nature of social services delivery. As in-person, direct services have quickly shifted to accommodate social distancing requirements, more remote services are in place. The ability to monitor which services are available is key to helping people and supports the timely access of the best and most appropriate help and information.

CIEs are built on the understanding that up-to-date information is core to connecting people to services. The CIE becomes the primary source of information, providing real-time updates to service listings as operations during COVID-19 may be variable due to the nature of the pandemic.

CIE San Diego Example: CIE San Diego has created a virtual space called Knowledge, a feature that allows the sharing of up-to-date information specific to COVID-19-related services with the community. Knowledge has been used internally for 2-1-1 San Diego to respond to phone calls from the public about community-based resources, but allows for shared communication across the provider network, including highlighting resources available for pandemic relief such as hotel availability for homeless with symptoms and legal support for updated policy changes like eviction moratoriums and other communication.

CROSS-SECTOR COLLABORATION

Communication and collaboration are key to keeping services operational. Leveraging a network of providers, the CIE is able to share and communicate ongoing unmet needs and trends to organize and shift needed services and capacity support. This dynamic also allows healthcare providers utilizing telehealth to use the CIE to gain more insight into a person's needs, absent an in-person interaction.

CIE San Diego Example: In order to collaborate on shared approaches, the Partner Network increased the frequency of their communication interactions, opting to meet bi-weekly instead of monthly to communicate about observed community trends, resource and service needs, and unmet community needs. The Network also agreed to survey the over 80 partners on joint efforts around trending needs, like over-the-phone application assistance. More frequent touchpoints and collecting of this partner data allowed for more strategic collaboration on shared approaches to meeting client needs and the pursuit of joint funding opportunities.

INFRASTRUCTURE

Social services have long been underfunded and overburdened, with the expectation of “do more with less.” During COVID-19, there have been similar expectations for community-based organizations to meet client demands with limited resources. Further, in anticipation of a second wave of COVID-19 infections, more robust infrastructure is needed through capacity-building, technology, and coordination.

CIEs operate out of a grassroots-based shared governance structure, which can be leveraged to support the organizational and fiscal capacity of community-based organizations. Through the trend and needs of the community, collective efforts leveraging the CIE results in efficiencies, shared frameworks, and access to programs that meet the identified demand of services.

CIE San Diego Example: CIE San Diego data trends showed an increased need among low-income individuals who had symptoms of COVID-19 or who were at-risk of contracting COVID-19 but lacked access to pick up basic items like groceries. In collaboration with multiple CIE partners, a shared resource was created to support delivery of food to these households to support quarantine measures that were in place and to decrease the risk of exposure for these families. Through this partnership, each organization played a specific role (e.g. onsite food storage, transportation, supply of food boxes, etc.), leveraging existing strengths and expertise to respond quickly. Although this service was created as a result of COVID-19, the infrastructure now exists to replicate this process for future public health emergencies.

NEXT STEPS



COVID-19 has emphasized the need for a coordinated system that supports the most vulnerable in our communities. Pandemics like COVID-19 need comprehensive systems of care to manage and meet needs that are mostly outside of the scope of our healthcare system.

The CIE model could help essential businesses respond directly to gaps in services and move towards holistic change that moves towards a more equitable and sustainable community for all.