Center for Data Insights & Innovation Legislative Report

2021 Year in Review

April 27, 2022

Executive Summary

[The Center for Data Insights and Innovation](#) (CDII) within the California Health and Human Services Agency (CalHHS) was officially established as a new office in October 2021. The mission is to help support and shape the Agency's internal data strategy and improve the lives of all Californians by turning data into insights, knowledge, and action. The vision is to support programs that are person-centered, equity-focused, and data-driven.

To accomplish this, CDII is integrating knowledge and skills derived from several disciplines including strategic communication, data analysis, and human-centered design to identify actionable insights and build new, safer approaches to sharing data. By establishing a standardized and reliable data-sharing infrastructure, CDII provides Agency leadership with the tools to integrate CalHHS data sets, detect and address gaps within Agency programs and services, and foster more effective, equitable, and consistent decision-making.

CDII continues the mandated responsibilities of its four component offices as well as developing new data-centric products and services for CalHHS. A few of CDII's current efforts include the Agency Data Hub (Data Hub), the All-Hazards Dashboard (AHD), the Equity Dashboard, and the CalHHS Data Exchange Framework ([AB133](#)). Each of these projects support a specific CalHHS objective and fulfills a unique Agency data initiative.

CDII's Four Guiding Principles:

1. **Focus on Equity**–Advise on and lead strategic data initiatives with Agency-wide data standards, projects, and outcomes.
2. **Use Data to Drive Action**–Build tools and advise on projects that help deliver quality data and insights to decision-makers and enhance reporting capabilities on key topics.
3. **Put the Person Back in Human-Centered Design**–Improve ease of data sharing and integration through data standards and refined user experiences.

4. **Cultivate a Culture of Innovation**–Increase data literacy across CalHHS by creating communities of data practitioners and promoting data-driven decisions.
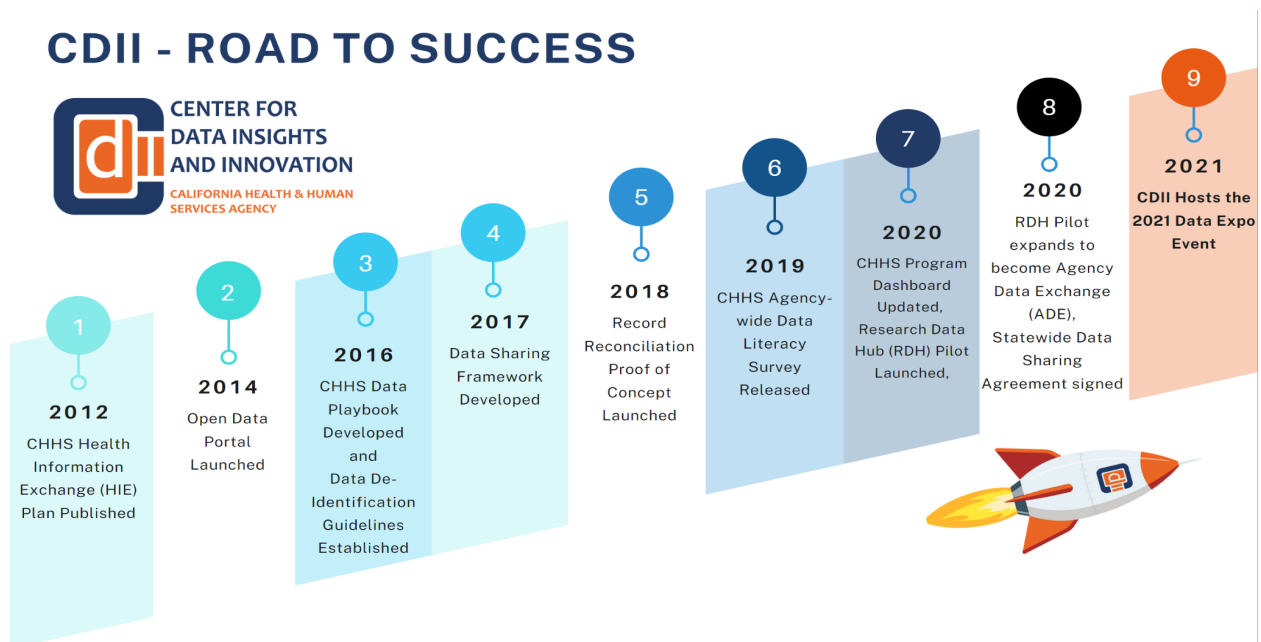
Formation of CDII

As mentioned above, CDII was created through the merger of four component offices/committees within CalHHS: The Committee for the Protection of Human Subjects (CPHS), Office of Health Information Integrity (CalOHII), Office of Innovation (OI), and the Office of the Patient Advocate (OPA). Each of the four component offices was chosen specifically because they possess key data-sharing/governance-related operational units whose capabilities and experience are aligned with CDII strategic priorities.
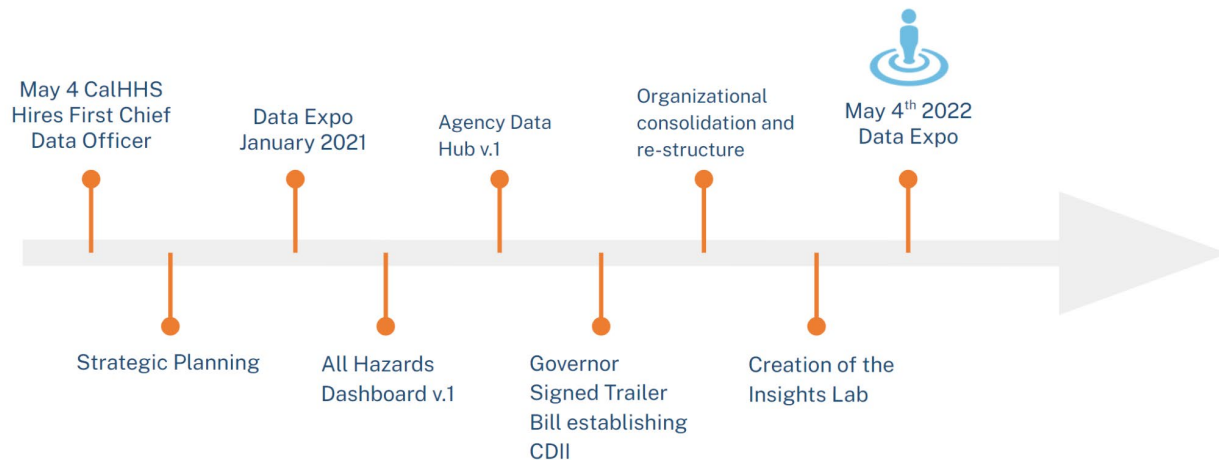
With the enactment of AB 172 (Chapter 696, October 10, 2021), CDII has now completed strategic planning to merge the four offices and added resources to form a team model to advance key data insights initiatives. All four component offices continue to perform their existing statutory functions while expanding their scope to include this new entity's projects and services.

Achievement Timelines

CDII - ROAD TO SUCCESS

1 — **2012** CHHS Health Information Exchange (HIE) Plan Published

2 — **2014** Open Data Portal Launched

3 — **2016** CHHS Data Playbook Developed and Data De-Identification Guidelines Established

4 — **2017** Data Sharing Framework Developed

5 — **2018** Record Reconciliation Proof of Concept Launched

6 — **2019** CHHS Agency-wide Data Literacy Survey Released

7 — **2020** CHHS Program Dashboard Updated, Research Data Hub (RDH) Pilot Launched,

8 — **2020** RDH Pilot expands to become Agency Data Exchange (ADE), Statewide Data Sharing Agreement signed

9 — **2021** CDII Hosts the 2021 Data Expo Event

(CDII (Origins, 2012 to 2021)

(CDII Achievements 2021-2022)

Strategic Initiatives

The Center for Data Insights and Innovation (CDII) built on its accomplishments from the inaugural 2020-2021 year. Adhering to the core strategic priorities set in the 2020 CDII Operations Plan, our primary objectives for CDII in 2021 still stand. In addition to the change management, office transition, and stakeholder engagement work involved in building out the Center, we also focused on four Strategic Initiatives:

1. **Develop Agency 'Data Hub'**: Present a minimally viable product of ongoing data hosting for cross-departmental research and public-facing data that is managed by a single team.
2. **Coordinate Data Sharing Standards**: Identify key datasets across CalHHS and identify areas to align for metadata, data mappings, and fields.
3. **Data-Sharing Guidance Pilot**: Identify a new pilot to expand the State Health Information Guidance (SHIG) framework to provide guidance for proper sharing of data between additional healthcare and community-based organizations.
4. **Streamline Data Requests**: Improve the speed at which research and inter-departmental data requests are approved based on a centralized process.

Data Sharing Projects

- **Insights Lab** – The CDII Division is tasked with providing tools to facilitate decision-making supported by data. Powered by the Agency 'Data Hub,' the Insights Lab provides integrated Health and Human Services solutions with the purpose of whole person, whole-life wellness, and resiliency. It will assist with streamlining data management workflows, advance user experience, and design, and unlock open data for identified stakeholder groups.

- **Agency Data Hub Service Platform** - Formerly known as the Research Data Hub and then the Agency Data Exchange, the 'Data Hub' is the secure, cloud-based data-sharing ecosystem for linking data among CalHHS departments/offices. Its purpose is to spark new insights and to promote collaboration across departments and with outside researchers; new inter-departmental data sharing projects are already in the queue to be vetted and will be reviewed as soon as the Data Hub build-out for the requested functions is complete.
  - *The Data Hub is also*:
    - A secure enclave for researchers.
    - A cloud-based project workspace for research analysis of Agency data that keeps sensitive data within CalHHS.
    - A way to reduce the administrative burden of sharing and accessing data.
    - A Data Catalog that provides a more efficient and simplified way for researchers to find and access the data they need.
- **All-Hazards Dashboard** - The All-Hazards Dashboard (AHD) v1 was released in July 2021 and is a situational awareness tool developed by the Center for Data Insights and Innovation (CDII) in partnership with departments from across CalHHS. The AHD provides an Agency-wide perspective regarding potential impacts on CalHHS services and populations during emergency events such as wildfires, earthquakes, and Public Safety Power Shut Off (PSPS). The AHD is part of a broader initiative to strengthen agency-wide emergency management functions.
  - *The AHD also*:
    - Increased automation of data collection and displays of near-real-time updates.
    - Brokered a collaboration between California Department of Public Health (CDPH) and Department of Health Care Access and Information (HCAI) to streamline updates.
    - Built a "Shelters App" in collaboration with California Department of Social Services (CDSS) Disaster Services Branch (DSB) to streamline shelter data collection and reporting.
    - Established a common understanding of CalHHS facilities for users to reconcile impacted facility counts with geographic areas of impact.
    - Curated datasets of all CalHHS facilities (Integrated Facilities Dataset) that feed into the AHD and can support other dashboards and analytical efforts, such as the Equity Dashboard.

(Screenshot of the All-Hazards Dashboard)

- **Equity Dashboard** - CDII consolidates existing resources and expands the Agency's efforts "to improve the transparency, efficiency, availability, and utilization of data, while also managing the data's integrity, quality, and strategic use to promote person-centered, data-driven decision-making and integrated care and service." With that in mind, CDII is leading the development of an equity dashboard to assist in identifying and addressing equity data gaps and disparities among CalHHS programs. This Equity Dashboard shall measure and drive progress toward achieving key outcome metrics for improving racial and health equity at the state and program levels.
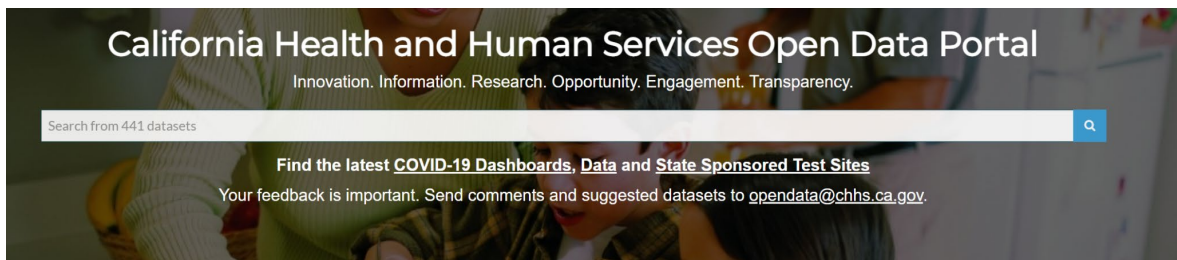

(Image of the Equity Dashboard Projected Timeline)

- **Data Exchange Framework Advisory Group** - Governor Newsom's signature on Assembly Bill 133 (AB 133) in 2021 put California on the path to building its first-ever, statewide Health and Human Services Data Exchange Framework.

Assisted by CDII Director John Ohanian, CalHHS Secretary Dr. Mark Ghaly leads the Stakeholder Advisory Group of 26 diverse healthcare providers and stakeholders to produce a data exchange framework, a single data-sharing agreement, a common set of policies and procedures, and a digital identities strategy that will govern the exchange of health information among healthcare entities and government agencies beginning in June 2024.

CDII Initiatives and Services

- **Refining CalHHS Data Resources** - Through inter-departmental collaboration, CDII is working to create a data-driven ecosystem of products and services designed to improve data sharing and analytics processes for Agency, which includes supporting Agency products such as:
    - *[CalHHS Open Data Portal (ODP)](#)*: CDII helped curate the ODP for public access to non-confidential health and human services data. The goal is to spark innovation, promote research and economic opportunities, engage public participation, increase transparency, and inform decision-making.

California Health and Human Services Open Data Portal
Innovation. Information. Research. Opportunity. Engagement. Transparency.

Search from 441 datasets

Find the latest COVID-19 Dashboards, Data and State Sponsored Test Sites
Your feedback is important. Send comments and suggested datasets to opendata@chhs.ca.gov.

(Open Data Portal Landing Page)

    - *[CalHHS Data Playbook](#)*: CDII revised the Data Playbook upon Stanford University's recommendations, which serves as a center for data-related resources available to all Departments who can leverage/customize components of the Playbook to their needs. The goal is to facilitate an organizational culture built on data and data-driven decision-making.
    - ***CalHHS Common Application***: The Common Application's central purpose is to streamline the research request process and shorten the time between request and release of data. The Common App will also create a single point of entry for external research request data from participating departments.
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- [**Oversight of the Committee for the Protection of Human Subjects**](#) **(CPHS)** - CPHS serves as the institutional review board (IRB) for CalHHS. The role of the CPHS and other IRBs is to ensure that research involving human subjects is conducted ethically and with minimal risk to participants. CDII assumed oversight of this committee and is dedicated to following the federal regulations to protect

the rights and welfare of human subjects involved in research conducted under the offices of CalHHS. In compliance with Federalwide Assurance (FWA), the CPHS is obligated to review all research involving human subjects, regardless of funding source, meeting any of the following criteria:

- ○ Research sponsored by CalHHS or any of its departments.
- ○ Research conducted by or under the direction of any employee or agent of CalHHS or any of its departments.
- ○ Research using personally identifiable data held by CalHHS or any of its departments.
- ○ Research involving subjects for whom CalHHS or any of its departments have direct responsibility, such as patients in State Hospitals.

- ● ***Children and Youth System of Care (AB2083)*** - In California, foster children and youth may receive services from different state programs administered under CalHHS. AB 2083 focuses on improving holistic support for children and youth in foster care across CalHHS administered programs at the county level. To achieve this goal, CalHHS departments (DHCS, CDSS, and DDS) will link and share data across systems to evaluate gaps in foster care service delivery, access, and capacity. CDII will provide CalHHS departments use of the Agency Data Exchange (ADE) to securely and efficiently share data via the Administrative Data Research Facility (ADRF) platform.

- ● ***Brilliant Beginnings/Early Childhood Integrated Data System (ECIDS)*** - CDII will serve as the conduit between the CDSS data in the Early Childhood Integrated Data System (ECIDS) and the other CalHHS departments. The use of the Agency Data Hub will serve as a vehicle for data sharing and dissemination, from a single point at The Department of Social Services. Using the information gleaned from this experience, and the collaborative environment agreed upon by CDSS, CDII will be able to document and share out a successful example of how beneficial the platform can be and what this means for CalHHS integrated data as a whole.
  - ○ ECIDS will serve as the first use case of the ADE (using ADRF).
  - ○ This engagement perfectly aligns with CDII's mission and purpose to turn data into insights, knowledge, and action.

CDII Policy and Governance

CDII also continues to provide policy development as well as privacy and security compliance reviews of involved state departments. These efforts include:

- ● ***State Health Information Guidance*** (SHIG) - The SHIG was a collaboration of the former California Office of Health Information Integrity (CalOHII), absorbed by CDII, with various organizations to develop specific materials to help clarify

federal and state laws that affect disclosure and sharing of health information. The SHIG efforts comprise comprehensive research, drawing from a broad group of stakeholders that reflect cross-industry insights and experience, to provide a clear understanding of the problems different groups were facing in the field. Five volumes of the SHIG have been published covering the following topics: sharing behavioral information in California, sharing health information to address food and nutrition insecurity in California, sharing HIV/AIDS information in California, sharing health information of people living with intellection and/or developmental disabilities in California, and sharing minors and foster youth information in California. The SHIG volumes include how sharing of information can affect older Americans who are affected by the above topics.

- *State Health Information Policy Manual* (SHIPM) - Also supported by the former CalOHII office, CDII now maintains the SHIPM to provide State Departments with a resource that provides guidance on how to protect patient privacy while promoting coordinated care, promotes uniform interpretation and application of health information laws including those relating to security, patients' rights, and transactions and code sets, and helps state entities avoid fines and sanctions resulting from unauthorized disclosures of health information. The SHIPM is a living document and is updated annually with changes to all applicable state or federal laws.

- *CalHHS Data De-identification Guidelines (DDG)* - Describes a procedure to be used by departments and offices in CalHHS to assess data for public release. As part of the document, specific actions that may be taken for each step in the procedure are described. These steps are intended to assist departments in assuring that data is de-identified for purposes of public release that meet the requirements of the California Information Practices Act (IPA) and the Health Insurance Portability and Accountability Act (HIPAA) to prevent the disclosure of personal information.

- *Compliance Reviews*: CDII assumed the statutory responsibility to evaluate, advise, and report on state departments' compliance with the Health Insurance Portability and Accountability Act (HIPAA) and other state and federal laws and regulations pertaining to the privacy and security of patient health information. The goals of the Compliance Review Program are to:
    - Create a collaborative culture of compliance for state departments.
    - Keep Californian's health information safe.
    - Provide technical assistance and leadership on California's HIPAA and other state and federal health information privacy and security laws.
    - Track security breaches within all state departments that handle and maintain patient health information.

- *Privacy Office:*

- - Provide expert advice to state departments and non-state organizations regarding patient privacy.
    - Provide training to prevent CDII incidents/security breaches.
  - *Legal Office:*
    - Provide legal analysis and advice to all CDII offices and project groups as well as Agency and other state organizations that handle patient health information.
  - *Technical Assistance:*
    - Assist state organizations with evaluation and analysis of the effectiveness of their existing patient privacy and security protections.
  - *Legislative Tracking and Analysis of State and Federal Bills Regarding Policy and Governance*:
    - Track and conduct legislative analysis of bills related to privacy and security of patient health information.
  - *Health Plan Report Cards*: Overseen by the former Office of the Patient Advocate (OPA), CDII continues supporting the data analysis and production of the Health Plan Report Card, Medical Group Commercial, and Medicare Report cards.
  - *Health Care Complaint Data Reports*: CDII manages the annual report of complaints from California consumers to the Department of Managed Health Care, Department of Health Care Services, California Department of Insurance, and Covered California. This multi-departmental report provides information about health care complaints and includes details about state consumer assistance centers.

Stakeholder Engagement and Communication

- **Data Expo Virtual Event** - The official launch of CDII at last year's CalHHS Data Expo not only confirmed the Center's mission but also unveiled CDII values and its conviction to transition from program-specific analytics to person-centered and data-driven methodologies. Though data insights and innovation are at the heart of CDII's mission and vision, this does not detract from our inherent responsibilities as an office within Agency. CDII is building upon existing data-related efforts undertaken by CalHHS departments for data governance, data sharing, and shared analytics.

- ○ In 2021, CDII hosted the seventh annual CalHHS Data Expo for 900+ virtual attendees to advance data literacy and build a data community. The Data Expo was established to tout the achievements of the CalHHS Data Subcommittee (DSC). Because the DSC falls under the umbrella of CDII, this Office continues to act as the host for the event and is currently finalizing guest speakers, presentation topics, and Agency presenters for the 2022 Data Expo on May 4, 2022.
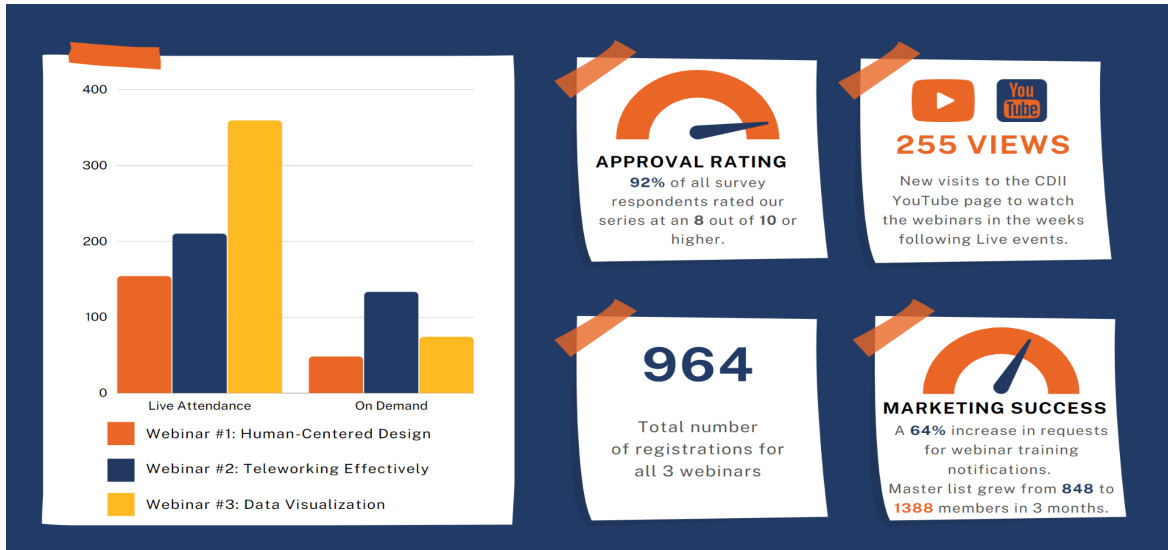
- **Data Hub Governance Virtual Town Halls** - In Fall 2021, CDII hosted three Town Halls to discuss various components of the Agency Data Hub Governance Package, consisting of a Participation Agreement and an Engagement Charter. Two of the three Town Hall events were for general attendance and questions. The third was aimed specifically at attorneys and legal counsel representatives who would be reviewing and providing edits to the two legal framework documents. The total number of attendees at all three Town Halls approached 200 and comprised members from all 17 Agency Departments/Offices.

(Town Hall invitation email header)

- **Successful Webinar Series** - In the Fall of 2021, CDII designed, produced, and released a series of webinars on thought-provoking data topics such as human-centered design and data visualization. These webinars drew nearly 1,000 CalHHS staff and leadership from 16 of 17 Agency Departments/Offices with an overall approval rating of 92% from attendees.

(Webinar series attendance and approval statistics)

- **Social Media Accounts** - CDII maintains four social media accounts on [Facebook](), [Twitter](), [YouTube](), and [LinkedIn](). In addition to disseminating information, social media offers the opportunity to engage with diverse sets of stakeholders and address questions and concerns involving CDII. Social media is meant to be a part of the larger communications effort from CDII to involve our six identified groups of stakeholders: General Public, State Agencies, Universities and Researchers, CalHHS Leadership, State Legislators, and Media/Reporters. CDII continuously works to identify suitable content and topics for use on its social media accounts.

Important CDII Initiatives: A Look Ahead

Looking into 2022, CDII is focusing on communicating the technology and value-add of the projects, initiatives, and services we continue to develop, build and refine. Some potential upcoming project areas include, but are not limited to:

- **The Homelessness Data Integration System (HDIS)** - The HDIS is a statewide data warehouse of data from the 44 local homelessness response systems in California. The HDIS is being housed within the CA Business, Consumer Services and Housing Agency, with inputs coming from homelessness programs through CalHHS and other sources.
  - It is set up as a comprehensive data source, allowing California to measure progress toward the state's homelessness and housing goals.
  - There is significant opportunity ahead for data sharing between the HDIS system and a multitude of CalHHS programs.

- ○ CDII is staying in the conversation with CalHHS Agency and the California Department of Social Services (CDSS), ready to serve as a centralized resource for data sharing when the opportunity arises, to support data-driven policies around homelessness.
- **The Master Plan for Aging (MPA)** - In June 2019, Governor Newsom's Executive Order N-14-19 called for the development of the MPA to prepare the state for demographic changes that will impact communities, families and individuals of all ages and abilities.
  - ○ MPA already has its initial dashboard in production.
  - ○ A key initiative of the MPA is the California Aging and Disability Research Partnership, a research partnership on aging between CalHHS and university research partners.
  - ○ CDII is actively connecting with this group to mutually leverage data products, efforts, and best practices, and to support emergent needs for data sharing.

CDII, in 2022, will continue refining the CalHHS Agency strategy on data sharing guidance, tactics in data analytics, and person-centered communication of outcomes. Some activity areas for CDII include, but are not limited to:
- Onboarding CalHHS departments and offices to the Agency Data Hub and articulating its boundaries and capabilities.
- Continuing to support the development of department data sharing processes and automating data request procedures.
- Continued support of the CalHHS Data Exchange Framework Governance to define and establish policies and procedures to safely exchange health information between health care entities and government agencies.
- Streamline Research Requests and CPHS/IRB Process (reduce time to access data).
- Build out the Insights Lab to improve decision support tools for CDII and our internal stakeholders.
- Improve recruitment, hiring, and support for all data professionals and leadership in data projects to attract and retain data professionals.
- Integration and standardization of connected CalHHS and Departmental datasets.
- Building data literacy and community by assisting CalHHS with developing a culture of data literacy by implementing recommendations from the 2019 Data Literacy Survey, conducting our own environmental scan of current Agency-wide data literacy initiatives, and continually identifying new ways to increase data literacy within CalHHS departments.

We have a monumental task ahead of us, but we continue to be encouraged by Departmental and CalHHS Leadership support of CDII efforts. CDII's purpose is to aid CalHHS and its departments/offices in improving systems and processes by promoting equitable, data-driven decisions and data literacy across CalHHS. With 2021 behind us and another year full of potential ahead, CDII appreciates all of the individuals, workgroups, and volunteers that continue to invest in CDII's vision.

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