Alameda County Care Connect Social Health Information Exchange (SHIE)

OVERVIEW

Alameda County and its technology partner, Thrasys, created the Social Health Information Exchange (SHIE) to securely collect and integrate individuals' medical, mental health, substance abuse, housing, social care, legal, incarceration, and crisis response data between medical and non-medical providers.

To support more efficient and streamlined care, data from the SHIE feeds into the Community Health Record (CHR) portal according to all relevant privacy rules, where care team members across sectors can use the data to perform more coordinated care. More information about the CHR can be obtained from the Alameda County Care Connect Community Health Record (CHR) handout.

PRIVACY & SECURITY

The SHIE enables secure integration of data from source systems while protecting the privacy and security of consumer data. The Care Connect team has built a privacy framework incorporating state and federal privacy regulations for medical data, behavioral health data, social services data, and HUD mandates. Elements of the privacy framework include:

Consumer Privacy: In addition to complying with state and federal privacy regulations, only authorized users of the CHR can access, view, and input data for the individuals they serve.

Data Governance: A 15-member Data Governance Committee, comprised of participants from organizations contributing and/or using data and community representatives, meets monthly to guide management and policies relating to data in the SHIE.

Consumer Consent: With the Information Sharing Agreement (ISA), consumers authorize sharing of the most critical information between all of their care team members, regardless of sector, for more effective care coordination and care experience.

Data Sharing Agreement (DSA): Alameda County Health Care Services Agency maintains a growing number of Data Sharing Agreements with participant organizations.

DATA INTEGRATION

Data Systems feeding into the SHIE

The following data sources share consumer information within the SHIE, as allowed by their DSA.

- Alameda Alliance for Health
- Anthem Blue Cross
- MEDS (Medi-Cal Eligibility Data System)
- Alameda County Social Services Administration
- Alameda Health System
- St. Rose Hospital
- Collective Medical Services (CMT)
- Emergency Medical Services (ESO)
- Santa Rita Jail Census and Release
- Homeless Management Information System (HMIS)
- Alameda County Department of Public Health

Types of Data Collected

- Clinical encounter details
- Health Plan
- Diagnoses
- Benefits
- Unique Identifiers
- Care Management Program Enrollment
- Housing Information
- Lab
- Fact of death
- Jail Census and Release data

SHIE BENEFITS & OPPORTUNITIES

- For the first time in Alameda County, the SHIE creates an opportunity for comprehensive population analysis (e.g., seeing homelessness information alongside healthcare utilization)

- Patient matching from different sectors of data allows us to analyze services and care needs to better respond to health disparities

- System-level analysis of services and outcomes allow us to identify successful interventions, and support organizations with capacity development

CASE EXAMPLES

Population management, program planning and operations support for care coordination and system integration

Project Roomkey: COVID-19 Isolation Housing for Unsheltered Consumers

Alameda County Care Connect collaborated with a number of county departments and community-based organizations to mobilize isolation housing for consumers experiencing homelessness, who tested positive or were especially at risk throughout the pandemic. The data in the SHIE and CHR were a critical aspect of this response effort. Alameda County Care Connect developed several reports and dashboard tools to guide and support isolation hotel operations.

This work is actively in place, sourced from the SHIE and available in the CHR to both hotel and non-hotel care team member end users:

- FEMA Shelter Report: Identifies universe of population that has ever been registered at the COVID-19 shelter facilities and includes a curated set of critical care coordination information for each consumer
- COVID-19 Shelter Encounter Report that includes aggregate utilization information by consumer (e.g., emergency department (ED) and in-patient (IP) encounters for shelter residents who had two (2) or more ED or three (3) or more IP encounters in the past 6 months)
- Roomkey Exits Dashboard supporting hotel exits
- Ad Hoc contact tracing reporting
- State Enrollment & Utilization reporting documenting

COVID-19 Targeted Outreach: Mam-Speaking Community

The County hospital observed an unusual spike in COVID19 positive cases within a specific indigenous population in the community (Mam/Mayan Language speakers). The SHIE was used to create a holistic picture of that population's demographics (Race, Ethnicity, Language, Residence (zip code and neighborhoods) and utilization (types of services accessed, assigned medical homes, assigned health plans, etc.) to support targeted outreach efforts. This work also highlighted some of the gaps we have with Race, Ethnicity and Language data collected across the County by as well as the opportunity to begin standardizing collection and quality of that data in partnership between providers and the County.

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