HIEs and Human Services Across Communities

A Plenary Panel Discussion with 2-1-1 San Diego, MyHealth Access, and SHIEC

Kelly Hoover Thompson, CEO, Strategic Health Information Exchange Collaborative (SHIEC)
Dr. David Kendrick, CEO, MyHealth Access Network
John Ohanian, CEO, 2-1-1 San Diego
Mark Vafiades, Senior Advisor to the National Coordinator, ONC (Panel Moderator)
History of CIE

2010
Community Initiative around frequent fliers

2-1-1 joins

2011
Community Exchange Created through Alliance Healthcare Foundation i-2 grant to 2-1-1

Cohort 1
Homeless Providers (Single sign on to HMIS)

Cohort 2
Senior Providers

2016
CIE returns to 2-1-1 San Diego

2018
Launch of CIE within new Salesforce platform with bi-directional referrals

Expanded to all agencies and target populations

2017
Launch referral network for veterans, UniteUS platform
Year 1: Homeless Cohort Analysis

- **26%** reduction
  - EMS Transports Post CIE enrollment
- **44%** improvement
  - Remained housed in permanent housing
Shared Goal:
Assist in the transition from hospital discharge to home by assessing and connecting to social determinants of health resources through electronic referrals from EHR to 2-1-1 Health Navigators

Measures:
• Percent of individuals readmitted into hospital
• Improvement on shared risk rating scale
• Patient Satisfaction
• Self-Efficacy

Year 1 Outcomes: 2016-2017

Hospital Readmission Rates

- 211 Patients: 9.6%
- Comparison Group: 30.0%
Community Information Exchange

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

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

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

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

Community Care Planning
Longitudinal record with a unified community care plan that promotes cross-sector collaboration and a holistic approach.
Resource Database

Hub for social and health sites and providers

- Shared taxonomy language for referrals (AIRS)
- Dedicated resource staff
- Regular updates made to resources
- Standards to listings and requirements
- Inclusion/Exclusion Criteria
- Linked to health conditions
- Tracks resource availability and unmet needs
FOOD & NUTRITION

Long-term and sustainable access to nutritious foods and to support services to maintain access

CIE Risk Rating Scale

CRISIS
- Less than One Day Supply of Food

CRITICAL
- 1-3 Day Supply of Food
- Ability to Maintain Food Supply up to 30 Days

VULNERABLE
- Connected to a Limited Number of Short Term Resources (CalFresh, WIC, Supplemental)
- Knowledge to Buy and Prepare Nutritious Food

STABLE
- Some Barriers (e.g. Lack Access to Grocery Stores) and Limited Friend or Family Supports
- No Barriers (Supports to Food Preparation and Finances)

SAFE
- Adequate Food
- Nutritious Food

THRIVING
- Knowledge to Buy and Prepare Nutritious Food
- Practices Healthy Eating and Wellness

BARRIERS AND SUPPORTS
- Limited Supports and Lack of Transportation, Finances
- Some Barriers (e.g. Lack Access to Grocery Stores) and Limited Friend or Family Supports

KNOWLEDGE AND UTILIZATION
- No Access or Knowledge of Resources
- Some Access (Food Banks & Food Pantry)
- Connected to a Limited Number of Short Term Resources (CalFresh, WIC, Supplemental)

IMMEDIACY
- Less than One Day Supply of Food
- 1-3 Day Supply of Food
- Ability to Maintain Food Supply up to 30 Days

FOOD INSECURE WITH HUNGER
- Limited Supports and Lack of Transportation, Finances
- Some Barriers (e.g. Lack Access to Grocery Stores) and Limited Friend or Family Supports

FOOD INSECURE WITHOUT HUNGER
- Adequate Food
- Nutritious Food

FOOD SECURE
- Knowledge to Buy and Prepare Nutritious Food
- Practices Healthy Eating and Wellness

IN COLLABORATION WITH:

211 SAN DIEGO IMPERIAL

The Office of the National Coordinator for Health Information Technology
Concern about Food Supply
During the last 30 days, how often are clients concerned about their food supply? How often do they actually run out of food?

45% of clients are often worried their food supply will run out

39% of clients often actually run out of food during the month

Decisions over Nutrition
What other basic needs do clients need to meet before they can address their nutrition needs?

- Transportation: 26%
- Education & Human Development: 2%
- Utility & Technology: 24%
- Primary Care: 7%
- Housing: 24%
CIE Shared Record

Client Profile
- Demographic and important information about the client

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

Care Team
- Case Managers working with client across agencies
- Contact Information

Referrals & Program Enrollment
- Agencies or programs client is referred
- Connection to Services

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

Feed
- Ability to communicate like Twitter to other Care Team members
Community Information Exchange Partners

[Logos and names of various organizations]
Driving Interoperability

- Patient identification
- Consent management
- Notifications and alerts
- Data quality
- Data provenance
- PHI and PII
- Public health to primary care
- Proper presentation summary
- Closed loop referral system
Please address follow-up questions to:

**John Ohanian**  
Chief Executive Officer  
[johanian@211sandiego.org](mailto:johanian@211sandiego.org)
SHIEC—A Nationwide Approach to Interoperability

Providing health data to more than 75% of Americans

SHIEC Membership spans from coast-to-coast

More than 130 Members

70+ HIE Members

60+ SB&T Members
• Master patient index / patient matching services
• ADT or other alerting services
• IHE Query/Retrieve services
• Clinical data repository
• HISP / secure messaging between Providers
• Clinician Portal
• Data quality / mapping services
• Public Health Data delivery/interface to state Dept. of Health
• Results / clinical message delivery
• Population Health Management data service
• Transitions of Care services
• Provider Directory
• Referral Services
• Patient focused services
HIE Use Cases

- **Georgia**—School Nurses—*immunization information to school nurses & rural counties*
  —American Heart Assoc. & World Economic Forum Heart Failure Projects—*reduce readmission and improve outcomes*
- **Louisiana**—Coroners and Prisons—*supports transitions in care*
- **Colorado**—Youth Services and Medical Clinics—*supports care coordination*
- **New York**—Discovered cancer diagnosis of a resident—*provides comprehensive records*
  —Provided access to records during ransomware attack
- **Nebraska**—PDMP—*leading HIE and PDMP partnerships: 1M+ records*
- **Indiana**—Population Health—*caring for the community across the continuum*
- **Pennsylvania**—Payers—*serves as data aggregator to calculate quality measures, supports CMS CPC+ program*
- **Kentucky**—Public Health Data—*deliver to state agencies, specialized registries*
- **Oklahoma**—Real Time Data—*text between patient and provider screens*
- **Michigan**—End of Life Care—*provide patient preferences POA, POLST, Organ Donation*
- **New Jersey**—Cross Sector Data Sharing—*partnering with community leaders*
- **Arizona**—Part 2 Data—*sharing comprehensive patient information*
- **California**—Wild Fires—*supporting thousands of displaced residents and patients*
HIE—Disaster Preparedness and Response

**Texas:** Hurricane Harvey—Megashelters 30,000+ evacuees

**Carolinas, TN, VA, GA, AL, FL:** Hurricane Florence & Michael—1 M+ evacuees

**California:** Wild fires—60,000+ evacuees

Providers can Assess, Diagnose, Treat, Fill Medications
Connect to Portals, Patients avoid unnecessary medications and tests,
tracking dialysis patients, electricity dependent patients

This is why Patient Centered Data Home™ is so important.
Patient Centered Data Home™ (PCDH)

**PCDH™ is a SHIEC initiative that creates a nationwide network connecting health information exchanges (HIEs).**

Deliver patient health information across state lines and across health systems, improving the patient experience by making their health information available whenever and wherever their care occurs.

Based on triggering episode alerts, PCDH™ notifies providers a care event has occurred outside of the patients’ “home” HIE, and confirms the availability and the specific location of the clinical data, enabling providers to initiate a simple query to access real-time information across state and regional lines and the care continuum.
Please address follow-up questions to:

Kelly Hoover Thompson
Chief Executive Officer
kelly.Thompson@strategiche.com

@SHIECLive