CHHS

Data Integration

May 2018
Data collection efforts are inherently “program-centric”, but we want to design and deliver “client centered” services.

Structure
Twelve departments within California’s Health and Human Services Agency oversee the administration of the state’s largest public benefit programs (*services coordinated across 58 counties, home to 39 million people*)

Data
Transactional / interoperable data system development is underway, but there is lots of work that can be done without real-time data...

Opportunity
Establish a common client identifier across historical records to generate cross-program statistical information.
Becoming a Data-Driven Agency

1. Formalizing data governance and leadership bodies (ownership)
2. Establishing CHHS Open Data Portal (culture shift)
3. Developing Agency-wide global data sharing agreement (mechanism)
4. Conducting record reconciliation "proof of concept" (means)
5. Defining "business use cases" for linked records (value)
Record Linkage
Machine Learning and Probabilistic Algorithms
Programs

Relative size of client populations in each program

- Medi-Cal
- CalWORKs
- Child Welfare
- Developmental
- WIC
- F Pact
- IHSS

All Clients

Adults (18+ yrs)

Children (<18 yrs)
Probabilistic de-duplication and cross-program linkage of records using an algorithm trained / customized for California data (machine learning)
Summary Findings

By Program
<table>
<thead>
<tr>
<th></th>
<th>Medi-Cal</th>
<th>CalWORKs</th>
<th>CalFresh</th>
<th>Child Welfare</th>
<th>Developmental</th>
<th>WIC</th>
<th>FAPCT</th>
<th>IHSS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medi-Cal</td>
<td></td>
<td>10.1%</td>
<td>30.9%</td>
<td>1.5%</td>
<td>1.7%</td>
<td>10.0%</td>
<td>4.5%</td>
<td>3.3%</td>
</tr>
<tr>
<td>CalWORKs</td>
<td>99.9%</td>
<td></td>
<td>91.2%</td>
<td>5.2%</td>
<td>1.2%</td>
<td>24.8%</td>
<td>3.3%</td>
<td>0.2%</td>
</tr>
<tr>
<td>CalFresh</td>
<td>95.5%</td>
<td>28.5%</td>
<td></td>
<td>2.5%</td>
<td>0.8%</td>
<td>16.5%</td>
<td>3.6%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Child Welfare</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>child</td>
<td>93.0%</td>
<td>48.4%</td>
<td>48.6%</td>
<td></td>
<td>8.2%</td>
<td>30.1%</td>
<td>1.5%</td>
<td>0.5%</td>
</tr>
<tr>
<td>parent</td>
<td>64.2%</td>
<td>14.3%</td>
<td>39.6%</td>
<td></td>
<td>1.2%</td>
<td>7.3%</td>
<td>7.4%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Developmental</td>
<td>82.6%</td>
<td>5.9%</td>
<td>13.4%</td>
<td>3.6%</td>
<td></td>
<td>16.4%</td>
<td>0.4%</td>
<td>21.9%</td>
</tr>
<tr>
<td>WIC</td>
<td>89.2%</td>
<td>23.1%</td>
<td>49.1%</td>
<td>2.9%</td>
<td>3.1%</td>
<td></td>
<td>6.2%</td>
<td>0.2%</td>
</tr>
<tr>
<td>FAPCT</td>
<td>45.5%</td>
<td>3.4%</td>
<td>12.2%</td>
<td>1.0%</td>
<td>0.1%</td>
<td>7.1%</td>
<td></td>
<td>0.1%</td>
</tr>
<tr>
<td>IHSS</td>
<td>99.9%</td>
<td>0.5%</td>
<td>10.3%</td>
<td>0.6%</td>
<td>13.3%</td>
<td>0.5%</td>
<td>0.3%</td>
<td></td>
</tr>
</tbody>
</table>
Cross-Program Data

- Medi-Cal
- CalFresh
- CalWORKs
- Developmental Services
- In Home Supportive Services (IHSS)
- Family Planning, Access, Care & Treatment (FPACT)
- Child Welfare (child)
- Women, Infants, & Children (WIC)
• Nearly 1/3 of individuals on Medi-Cal received CalFresh benefits
• Roughly 1 in 10 Medi-Cal enrollees were receiving CalWORKs benefits (this increased to 22% among children)
More than 90% of CalWorks clients were enrolled in CalFresh; nearly 25% were enrolled in WIC
• Roughly 1 out of every 4 CalFresh recipients received CalWORKs benefits
- Two populations involved with the child welfare system: *children and parents*
- Receipt of other public benefit services varied substantially
• More than 20% of clients receiving developmental services also received supports through the IHSS program
Nearly 50% of individuals enrolled in WIC received CalFresh benefits
In a departure from other programs, only 45.5% of FPACT clients were enrolled in Medi-Cal, suggestive of a different demographic served.
Nearly 100% of clients receiving IHSS were also enrolled in Medi-Cal, but rates of participation in other programs were relatively low.
Multi-Program Estimates
Multi-Program Involvement (by program)

1 in 10 individuals involved with the child welfare system touched at least 5 CHHS programs in 2016

Two-thirds of CalWORKs clients received benefits from 3 CHHS programs in 2016; another quarter were involved with 4 programs

More than half of Medi-Cal enrollees did not receive services from any other CHHS programs