Strategies to Achieve Alignment, Collaboration, and Synergy across Delivery and Financing Systems

Housing for Health: Cross-Sector Impacts of Supportive Housing for Homeless High Users of Health Care

Research In Progress Webinar
Wednesday, December 6, 2017  12:00-1:00pm ET/ 11:00am-12:00pm CT

Funded by the Robert Wood Johnson Foundation
Welcome: CB Mamaril, PhD, RWJF Systems for Action National Coordinating Center, University of Kentucky College of Public Health

Presenter:
Ricardo Basurto-Dávila, PhD, MS, Chief, Policy Analysis Unit, Los Angeles County Department of Public Health
rbasurto@ceo.lacounty.gov

Presenter & Commentary Speaker:
Corrin Buchanan, MPP, Deputy Director, Office of Diversion and Reentry, Los Angeles County Department of Health Services
cbuchanan@dhs.lacounty.gov

Questions and Discussion: Moderated by Dr. Mamaril
Corrin Buchanan, MPP
Deputy Director
Office of Diversion and Reentry
Los Angeles County Department of Health Services
cbuchanan@dhs.lacounty.gov
HOUSING FOR HEALTH:
CROSS-SECTOR IMPACTS OF PROVIDING PERMANENT SUPPORTIVE HOUSING TO HIGH UTILIZERS OF HEALTH SERVICES

Ricardo Basurto-Dávila, PhD
Los Angeles County Department of Public Health

Corrin Buchanan, MPP
Los Angeles County Department of Health Services
Homelessness in Los Angeles County

• In 2016, LAC had largest local population in the United States of:
  – Homeless individuals (43,854; 8% of US)
  – Chronically homeless (12,970; 17% of US)

Sources: HUD, Annual Homeless Assessment Report, 2010-2016;
LAHSA, LAC CoC Homeless Count Summary, 2017
Homelessness and Health

• Homeless populations are at higher risk of
  – Acute and chronic illness
  – Mental health disorders
  – Mortality

• Significant gaps in access to health services

• Heavily reliant on emergency department visits

• High rates of hospitalizations for preventable conditions
## Homelessness is Also Costly to Other Public Sectors

<table>
<thead>
<tr>
<th>LAC Department</th>
<th>Unique Homeless Individuals Served</th>
<th>Expenditures on Homeless, FY 2014</th>
<th>Avg. Cost per Person</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Services</td>
<td>114,037</td>
<td>$ 293.7 million</td>
<td>$ 2,600</td>
</tr>
<tr>
<td>Mental Health</td>
<td>39,073</td>
<td>291.7 million</td>
<td>7,500</td>
</tr>
<tr>
<td>Health Services</td>
<td>47,431</td>
<td>255.3 million</td>
<td>5,400</td>
</tr>
<tr>
<td>Sheriff</td>
<td>14,754</td>
<td>79.6 million</td>
<td>5,400</td>
</tr>
<tr>
<td>Public Health</td>
<td>6,939</td>
<td>32.2 million</td>
<td>4,600</td>
</tr>
<tr>
<td>Probation</td>
<td>2,795</td>
<td>12.1 million</td>
<td>4,300</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>148,815</strong></td>
<td><strong>$ 964.5 million</strong></td>
<td><strong>$ 6,500</strong></td>
</tr>
<tr>
<td><strong>Most Costly 10%</strong></td>
<td><strong>14,882</strong></td>
<td><strong>$ 499.1 million</strong></td>
<td><strong>$ 33,500</strong></td>
</tr>
</tbody>
</table>

*Source: Wu and Stevens, LAC CEO Report, 2016*
Housing for Health Initiative (HFH)

- Created in 2012 by Department of Health Services
- Provides *permanent supportive housing* (PSH) and *rental subsidies* to homeless individuals who are high-utilizers of public health care services

**Program Objectives:**
- To reduce homelessness
- To improve health outcomes among homeless
- To reduce inappropriate use of health care resources
Housing for Health Client Process

Focus of this Study
Our Research Questions

• Does HFH improve health outcomes for its clients?
• Does HFH reduce inappropriate use of health care services by its clients?
• How does the effectiveness of HFH compare to other PSH programs?
• How does HFH affect service utilization and costs across public sectors when compared to other PSH programs?
Mixed-Methods Approach

Qualitative Analysis

• Focus groups
  – HFH clients
  – Non-HFH PSH clients
  – HFH service provider staff
  – Non-HFH PSH service provider staff

• Key informant interviews

• Client survey
  – Derived from analysis of focus groups and key informant interviews

Quantitative Analysis

• Difference-in-differences analysis of matched samples of:
  – HFH clients
  – Non-HFH PSH clients
  – Non-PSH homeless

• System dynamics simulation model
  – Participatory approach involving key stakeholders
Linked Data from Multiple Systems

**ADMINISTRATIVE DATA**
- 2013-2017
- HOUSING FOR HEALTH

**ELECTRONIC HEALTH RECORDS**
- 2010-2017
- DEPARTMENT OF HEALTH SERVICES

**LAC ENTERPRISE LINKAGES PROJECT**
- 2010-2017
  - HEALTH SERVICES
  - MENTAL HEALTH
  - SUBSTANCE USE TREATMENT
  - PUBLIC SOCIAL SERVICES
  - PROBATION DEPARTMENT
  - SHERIFF DEPARTMENT
  - HOMELESS MGMT. INF. SYSTEM

**LAC CEO STAFF:**
- PROBABILISTIC LINKAGE

**S4A RESEARCH TEAM GETS**
- DE-IDENTIFIED LONGITUDINAL DATASET
Where We Are: Qualitative Analysis

• Led by team from UCLA’s Center for Health Policy Research

• Focus Groups
  – 8 already completed
    • Each of them had between 7 and 10 participants
  – 1 more scheduled in December

• Key Informant Interviews
  – 12 already completed
    • HFH, funding agencies, other key stakeholders
  – 2 more scheduled in December
Where We Are: Quantitative Analysis

• Data
  – We have received linked data through June 2016 from HFH, DHS, and ELP
  – Data review and cleaning process ongoing
  – Preparing for 2nd extract (through June 2017)

• Analysis
  – Only preliminary descriptive analysis

• Simulation model
  – We held a participatory modeling session in November
PRELIMINARY ANALYSIS:
HFH Client Characteristics Upon Enrollment

<table>
<thead>
<tr>
<th>Age</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-29</td>
<td>7%</td>
</tr>
<tr>
<td>30-39</td>
<td>10%</td>
</tr>
<tr>
<td>40-49</td>
<td>21%</td>
</tr>
<tr>
<td>50-59</td>
<td>40%</td>
</tr>
<tr>
<td>60-69</td>
<td>13%</td>
</tr>
<tr>
<td>70+</td>
<td>2%</td>
</tr>
<tr>
<td>Unknown</td>
<td>7%</td>
</tr>
<tr>
<td>Average</td>
<td>50.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>20%</td>
</tr>
<tr>
<td>Black</td>
<td>44%</td>
</tr>
<tr>
<td>Latino</td>
<td>25%</td>
</tr>
<tr>
<td>Other</td>
<td>4%</td>
</tr>
<tr>
<td>Unknown</td>
<td>7%</td>
</tr>
</tbody>
</table>

NOTE: Tables include 1,627 clients housed as of June 30, 2016
Growth Over Time of Housed HFH Clients
Housed Clients: Project-Based vs. Scattered Sites

- Project Based
- Scattered Site
PRELIMINARY ANALYSIS:
HFH Clients’ 12-Month Retention Rates

<table>
<thead>
<tr>
<th>Type of Site</th>
<th>Housed by June 30, 2015</th>
<th>Still Housed June 30, 2016</th>
<th>Retention Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project-Based</td>
<td>392</td>
<td>369</td>
<td>94%</td>
</tr>
<tr>
<td>Scattered</td>
<td>460</td>
<td>446</td>
<td>97%</td>
</tr>
<tr>
<td>Total</td>
<td>852</td>
<td>815</td>
<td>96%</td>
</tr>
</tbody>
</table>

**NOTE:** Table excludes clients with missing site information (n=16) and those who died after they were housed (n=36)
Change in Type of Income Support Received by HFH Clients Over Time

Months After Program Enrollment

- General Relief
- SSI/SSDI
**PRELIMINARY ANALYSIS:**
Pre- and Post-HFH Use of Health Services

<table>
<thead>
<tr>
<th>Type of Visit</th>
<th>Unique Clients, One Year Before</th>
<th>Unique Clients, One Year After</th>
<th>Change %</th>
</tr>
</thead>
<tbody>
<tr>
<td>ER Visit</td>
<td>250</td>
<td>170</td>
<td>-32.0%</td>
</tr>
<tr>
<td>Inpatient Visit</td>
<td>135</td>
<td>79</td>
<td>-41.5%</td>
</tr>
<tr>
<td>Outpatient Visit</td>
<td>352</td>
<td>217</td>
<td>-38.4%</td>
</tr>
<tr>
<td>Any Type</td>
<td>417</td>
<td>319</td>
<td>-23.5%</td>
</tr>
</tbody>
</table>

*NOTE: Information for HFH clients who had been housed by June 30, 2015*
Participatory Simulation Model Development
Next Steps…

**Qualitative Analysis**
- Analyze focus group data
- Analyze key informant interviews data
- Develop client survey, collect, and analyze the data

**Quantitative Analysis**
- 2\textsuperscript{nd} data extract (through June 2017)
- Create samples for comparison groups using propensity score methods
- Difference-in-differences analysis
- Continue developing system dynamics simulation model
OUR S4A TEAM
Emily Caesar (DPH)
Kathryn Kietzman (UCLA)
Whitney Lawrence (DHS)
William Nicholas (DPH)
Alina Palimaru (UCLA)
Leepi Shimkhada (DHS)
Irene Vidyanti (DPH)
Faith Washburn (DPH)

TO CONTACT US:
Ricardo Basurto-Davila
RBasurto@ceo.lacounty.gov

Corrin Buchanan
CBuchanan@dhs.lacounty.gov
# Webinars

## Archives

[http://systemsforaction.org/research-progress-webinars](http://systemsforaction.org/research-progress-webinars)

## Upcoming

**Wednesday, December 20, 12-1pm ET/ 9-10am PT**

**Integrating Behavioral Health with TANF to Build a Culture of Health**  
Mariana Chilton, PhD, MPH, Associate Professor, and Sandra Bloom, MD, Department of Health Management & Policy, Drexel University Dornsife School of Public Health

**Wednesday, January 10, 12-1pm ET/ 9-10am PT**

**Improving Population and Clinical Health with Integrated Services and Decision Support**  
Joshua Vest, PhD, MPH, Associate Professor, Health Policy and Management, and Director, Center for Health Policy, Indiana University-Purdue University Indianapolis
Thank you for participating in today’s webinar!

For more information about the webinars, contact:

SystemsforAction@uky.edu
111 Washington Avenue #201, Lexington, KY 40536
859.218.2317

www.systemsforaction.org
Speaker Bios

**Ricardo Basurto Davila, PhD, MS**, is a Health Economist at the Los Angeles County Department of Public Health, where he leads the Policy Analysis Unit. His work involves economic evaluation and quantitative analysis in general of programs and policies in public health and other sectors that affect health outcomes. He previously was a Prevention Effectiveness Fellow at the US Centers for Disease Control and Prevention and an Assistant Policy Analyst at the RAND Corporation.

**Corrin Buchanan, MPP**, oversees programming to divert individuals who have a mental or substance use disorder away from the criminal justice system and into community based treatment, including a new permanent supportive housing program for homeless jail inmates.