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

Implementing a Culture of Health among Delaware’s Probation Population

Research-in-Progress Webinar
Wednesday, January 23, 2019
12:00-1:00 pm ET/ 9:00 am-10:00 am PT

Funded by the Robert Wood Johnson Foundation
Agenda

**Welcome:** CB Mamaril, PhD  
*Research Faculty*  
RWJF *Systems for Action* National Coordinating Center  
University of Kentucky College of Public Health

**Presenter:** Daniel J. O’Connell, PhD & Christy Visher  
University of Delaware

**Commentary:** Christopher Maxwell, PhD  
Michigan State University

**Q & A:** Moderated by CB Mamaril, PhD
Daniel J. O’Connell, PhD
Senior Scientist, Center for Drug and Health Studies
Associate Professor, Department of Criminal Justice
University of Delaware
Presenters

Christy Visher, PhD
Director, Center for Drug and Health Studies
Professor, Sociology and Criminal Justice
University of Delaware
Christopher Maxwell, PhD

Professor

School of Criminal Justice
Michigan State University
Implementing a Culture of Health Among Delaware’s Probation Population

Support for this work was provided by the Robert Wood Johnson Foundation through the Systems for Action National Coordinating Center, ID 73694.
Delaware’s Culture of Health Project

- Study implementation of a **Local Change Team**
- Brought together a team to attempt to increase access to health care among Delaware probationers.
  - Attempted to improve motivation through the use of media- TV in waiting room, posters etc.
- Created the **Healthier You Workbook**
- Placed a **Health Navigator** in Cherry Lane to link people to healthcare (largely to Christiana network)
- Tested via a randomized controlled trial whether the Health Navigator was more successful at linking individuals to care than just providing the workbook and suggestion that they make an appointment
RCT Hypothesis

- H0: Screening and referral of probationers by an onsite practitioner *will lead to* a greater proportion of probationers accessing services compared to those receiving an interactive workbook.

- H1: Screening and referral of probationers by an onsite practitioner *will not lead* to a greater proportion of probationers accessing services compared to those receiving an interactive workbook.
RCT Design

N = 400. 200 x 2.

- **Condition 1:** Provision of interactive Culture of Health Workbook coupled with on site screening and referral by a health practitioner.

- **Condition 2:** Provision of the interactive Culture of Health Workbook only.

- **Data:** Electronic health and Medicaid data. Treatment access data from agencies.

- **Survey Data:** from probationers at baseline

- **Interview data:** semi-structured interviews

- **Randomization:** Urn program
Project & Research Design

- 400 Probationers Consented for study participation. Complete Brief Health Survey

Randomization

DE Culture of Health Group With Referral
N = 200

Clients meet with Health Resource Facilitator and given appointment at Health Facility

Clients given Workbook and encouraged to read it and make appointment

Workbook Only Condition
N = 200

Subsample from each condition selected for interview

N = 200 Records Follow-Up

Outcome: Did clients present for appointment at health facility

N = 200 Records Follow-Up
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Workbook Only Condition N = 200

N = 200 Records Follow-Up

Outcome: Did clients present for appointment at health facility

N = 200 Records Follow-Up
The Change Team suggested the use of incentives to increase the likelihood that participants will schedule and attend doctor appointments.

RWJ approved the approach.
Revised Research Design

400 Probationers Consented for study participation. Complete Brief Health Survey

Randomization

DE Culture of Health Group With Referral
N = 200

Clients meet with Health Resource Facilitator and given appointment at Health Facility

75 offered incentive
125 not offered incentive

Clients given Workbook and encouraged to read it and make appointment

Subsample from each condition selected for Interview

75 offered incentive
125 not offered incentive

N = 200 Records Follow-Up

Outcome: Did clients present for appointment at health facility

N = 200 Records Follow-Up

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125 not offered incentive

N = 200 Records Follow-Up
Final Report

- 403 people randomized
  - 72.7% male, 66.2% Minority
- 192 = Culture of Health
- 208 = Workbook Condition

Outcome Reporting Based on Two Data Sources

1) Probationer Survey Results

2) Pilot Trial Results.
# Survey Results of Health Needs

## How healthy would you rate yourself?

<table>
<thead>
<tr>
<th>Health Status</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Healthy</td>
<td>16.3%</td>
</tr>
<tr>
<td>Healthy</td>
<td>42.5%</td>
</tr>
<tr>
<td>Somewhat Healthy</td>
<td>33.3%</td>
</tr>
<tr>
<td>Unhealthy</td>
<td>6.8%</td>
</tr>
<tr>
<td>Very Unhealthy</td>
<td>1.3%</td>
</tr>
</tbody>
</table>

## Do you have a primary care doctor that you see regularly?

<table>
<thead>
<tr>
<th>Answer</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>44.1%</td>
</tr>
<tr>
<td>No</td>
<td>55.9%</td>
</tr>
</tbody>
</table>
### Survey Results of Health Needs

<table>
<thead>
<tr>
<th>Reasons for not having a primary care doctor?</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Don’t know how to find one</td>
<td>33%</td>
</tr>
<tr>
<td>Transportation</td>
<td>9.1%</td>
</tr>
<tr>
<td>Time constraints</td>
<td>11.4%</td>
</tr>
<tr>
<td>Cost</td>
<td>8.5%</td>
</tr>
<tr>
<td>Don’t need one</td>
<td>5.7%</td>
</tr>
<tr>
<td>No Insurance</td>
<td>19.9%</td>
</tr>
<tr>
<td>Worried</td>
<td>7.4%</td>
</tr>
<tr>
<td>Have a PCP</td>
<td>44.1%</td>
</tr>
</tbody>
</table>

### Have you ever been told by a doctor that you have any of the following?

<table>
<thead>
<tr>
<th>Condition</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>37.7%</td>
</tr>
<tr>
<td>High Blood Pressure</td>
<td>24.4%</td>
</tr>
<tr>
<td>Anxiety</td>
<td>37.4%</td>
</tr>
<tr>
<td>Hepatitis C</td>
<td>8.5%</td>
</tr>
<tr>
<td>Asthma</td>
<td>21.4%</td>
</tr>
<tr>
<td>ADD/ADHD</td>
<td>15.5%</td>
</tr>
<tr>
<td>PTSD</td>
<td>15%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>7.7%</td>
</tr>
<tr>
<td>Bipolar Disorder</td>
<td>20.2%</td>
</tr>
<tr>
<td>Sexually Transmitted Diseases</td>
<td>5.5%</td>
</tr>
<tr>
<td>Obesity</td>
<td>6%</td>
</tr>
</tbody>
</table>
Survey Results of Health Needs

<table>
<thead>
<tr>
<th>Usual Source of Medical Care?</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Care Doctor</td>
<td>51.1%</td>
</tr>
<tr>
<td>Clinics</td>
<td>7.4%</td>
</tr>
<tr>
<td>VA</td>
<td>1.3%</td>
</tr>
<tr>
<td>Urgent Care</td>
<td>2.6%</td>
</tr>
<tr>
<td>Emergency Room</td>
<td>27.8%</td>
</tr>
<tr>
<td>None – I self care</td>
<td>6.6%</td>
</tr>
<tr>
<td>Other</td>
<td>2.6%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Currently have health insurance?</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, through work</td>
<td>5.3%</td>
</tr>
<tr>
<td>Yes, through family</td>
<td>4.6%</td>
</tr>
<tr>
<td>Yes, Medicaid</td>
<td>69%</td>
</tr>
<tr>
<td>Yes, other</td>
<td>3%</td>
</tr>
<tr>
<td>No</td>
<td>18%</td>
</tr>
</tbody>
</table>
Survey Results of Health Needs

<table>
<thead>
<tr>
<th>Has anyone you know ever been injured by gunfire?</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, a family member</td>
<td>29.2%</td>
</tr>
<tr>
<td>Yes, a close friend</td>
<td>24.9%</td>
</tr>
<tr>
<td>Yes, someone from the neighborhood</td>
<td>17.2%</td>
</tr>
<tr>
<td>Yes, myself</td>
<td>9.2%</td>
</tr>
<tr>
<td>No</td>
<td>41.6%</td>
</tr>
</tbody>
</table>

- **Question 21 – PTSD Screener**
  - 41.6% exhibit one or more
  - 13.7% exhibit two or more
  - 8.2% exhibit three or more
  - 9.9% exhibit all four

This reveals a population that suffers from high rates of trauma exposure.
Key Findings

- **80 out of the sample of 403 persons (20%)** attended a doctor’s appointment
- Examining the data by condition, **45 persons (23%)** in the treatment condition attended a doctor’s appointment while **35 persons (17%)** in the control condition attended a doctor’s appointment.
  - Chi-Square test was .09, greater than .05 but less than .1
- **223 (55.3%)** of the individuals screened already had a general care physician.
- When selecting only those **176 people** who did not have a doctor, **20 individuals (26%)** in the treatment condition attended a doctor’s appointment while only **10 (10%)** individuals in the control condition did.
  - This difference was significant at p<.01
Challenges

- The main challenge proved to be our inability to receive Medicaid data.
- We are convinced that having Medicaid data would not have impacted the outcomes as the vast majority of people in Delaware use the Christiana Healthcare system.
Lessons Learned

- Correctional organizations are both willing and able to coordinate with health organizations to provide access to health services to their populations.
- Health care organizations and state health agencies were willing to meet and to coordinate with other entities in the Delaware Culture of Health Change Team to develop the screening and referral model utilized in the pilot study.
- The pilot study demonstrated proof of concept.
  - Placing a health mentor in a probation office significantly increased the likelihood of a probationer attending a healthcare appointment.
Sustainability

- It is clear that resources are not currently available to maintain an onsite mentor in the probation office.
- These results indicate that while an onsite mentor is preferred, it is enough to equip individuals on probation with the health resources needed to make appointments in order for some (35 out of 200, or 17.5%) to engage with a health care provider.
- These findings show how this justice-involved population exercises agency.
  - When armed with the resources in the “Culture of Health Workbook” that may be more accessible and easier to understand (i.e. 8th grade reading level) than other resources out there, individuals in this study were able to access primary care and specialty care services.
Last Steps and possibilities:

- Do we want to maintain a healthcare presence in probation?
- Do we want to set up screening for HIV/HCV in Probation?
  - If so, **HOW**?
- UD is backing out at this stage but remains willing to assist
- Need health and state agencies to link with DOC to carry project forward
- It is a possibility to seek additional funding but we need a new approach
  - We already have proven that this can be done and that it has an impact
# Upcoming Webinars

## Archives

http://systemsforaction.org/research-progress-webinars

## Upcoming

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Project</th>
<th>Topic</th>
<th>Speakers</th>
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</thead>
<tbody>
<tr>
<td>February 13, 2019</td>
<td>12 p.m., ET</td>
<td>Systems for Action Intramural Research Project</td>
<td>Multi-sector Alliances in the Post-Affordable Care Act Era: Key Patterns and Trends</td>
<td>Glen P. Mays, PhD, MPH, and CB Mamaril, PhD, MS, Systems for Action National Program Office, University of Kentucky College of Public Health</td>
</tr>
<tr>
<td>February 27, 2019</td>
<td>12 p.m., ET</td>
<td>Systems for Action Individual Research Project</td>
<td>Housing for Health: Cross-Sector Impacts of Supportive Housing for Homeless High Users of Health Care</td>
<td>Ricardo Basurto Davila, PhD, MS, Chief Executive Officer, Policy Analysis Unit, Los Angeles Co. Department of Public Health and Corrin Buchanan, MPP, Program Manager, Housing for Health, Los Angeles Co. Department of Public Services</td>
</tr>
<tr>
<td>March 13, 2019</td>
<td>12 p.m., ET</td>
<td>Systems for Action Individual Research Project</td>
<td>Community Complex Care Response Team to Improve Geriatric Public Health Outcomes</td>
<td>Carolyn E. Z. Pickering, PhD, RN, School of Nursing, U.of Texas Health Science Center at San Antonio and Christopher D. Maxwell, PhD, School of Criminal Justice, Michigan State University</td>
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Questions?

www.systemsforaction.org
Acknowledgements

*Systems for Action* is a National Program Office of the Robert Wood Johnson Foundation and a collaborative effort of the Center for Public Health Systems and Services Research in the College of Public Health, and the Center for Poverty Research in the Gatton College of Business and Economics, administered by the University of Kentucky, Lexington, Ky.