



*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*

# 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



## **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.



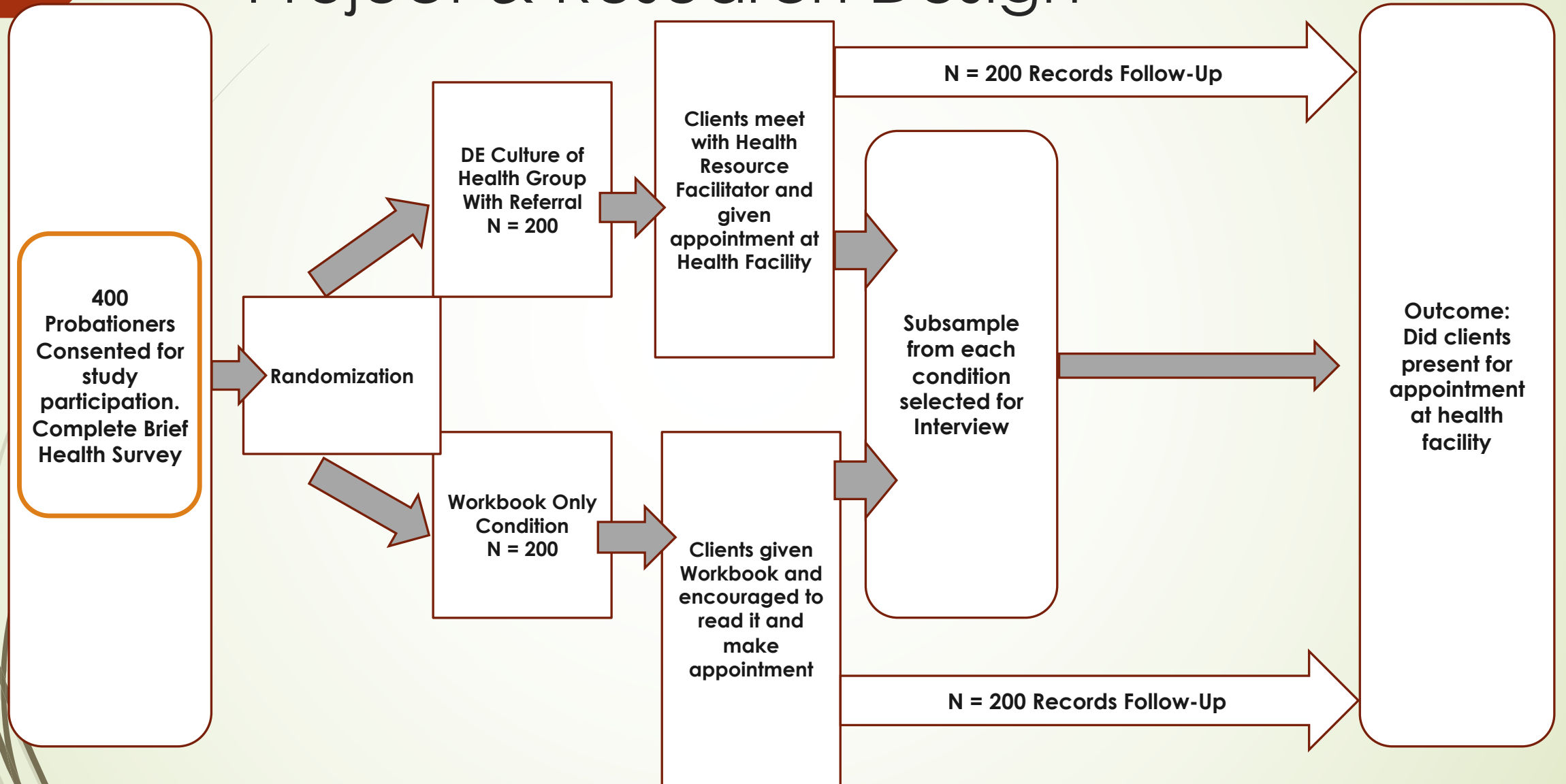


# RCT Design

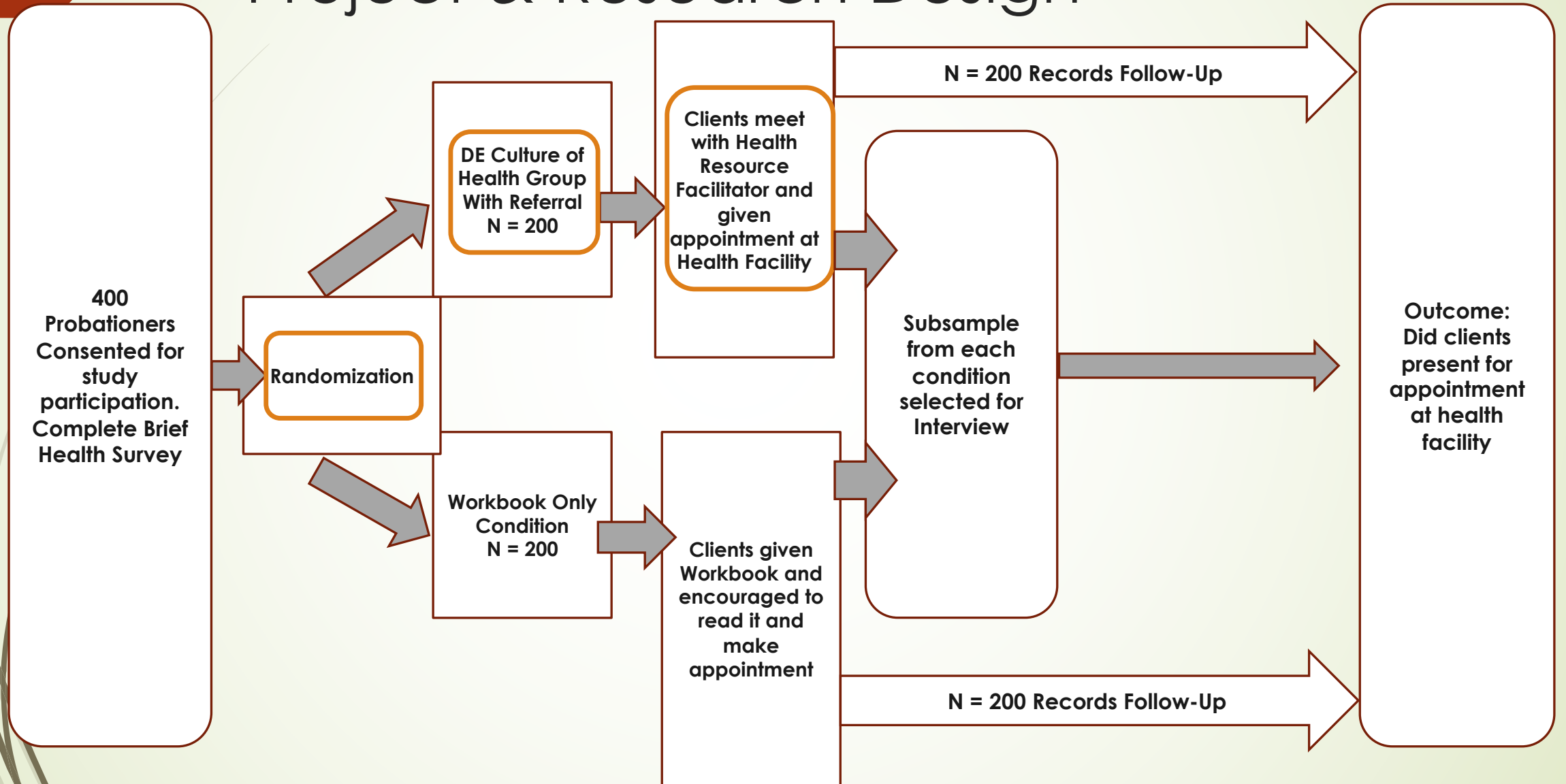
N = 400. 200 x 2.

- 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

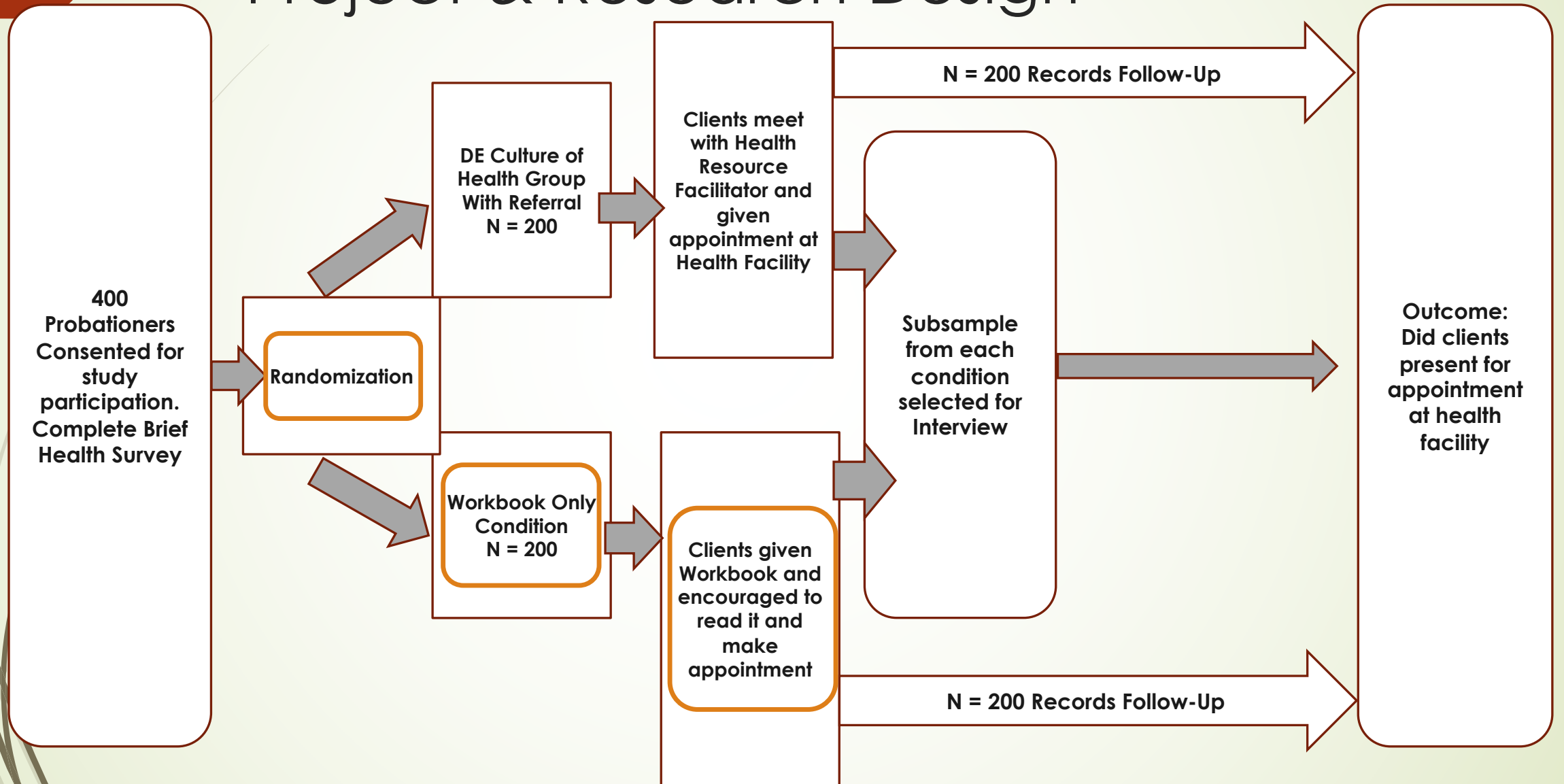
# Project & Research Design



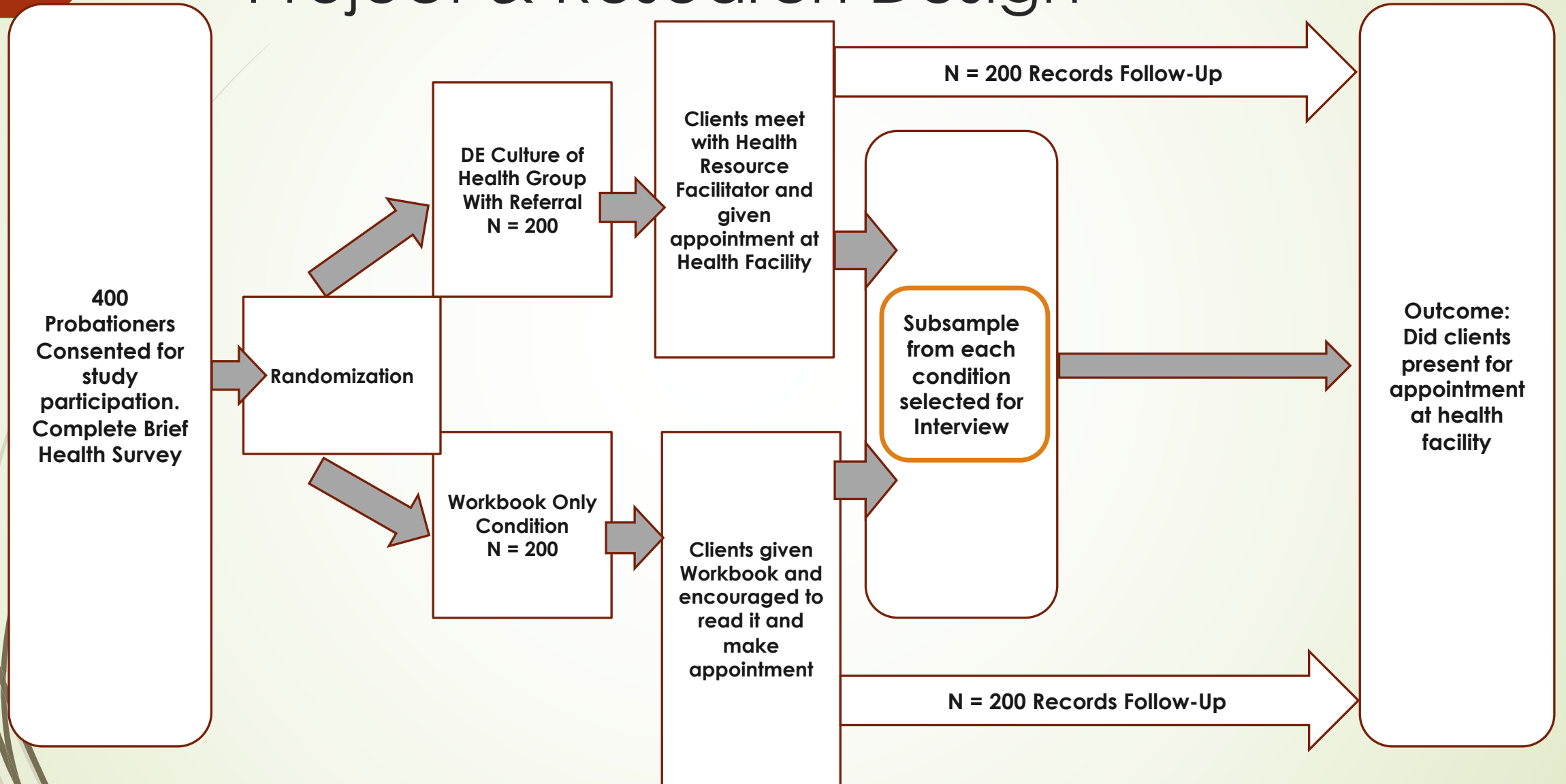
# Project & Research Design



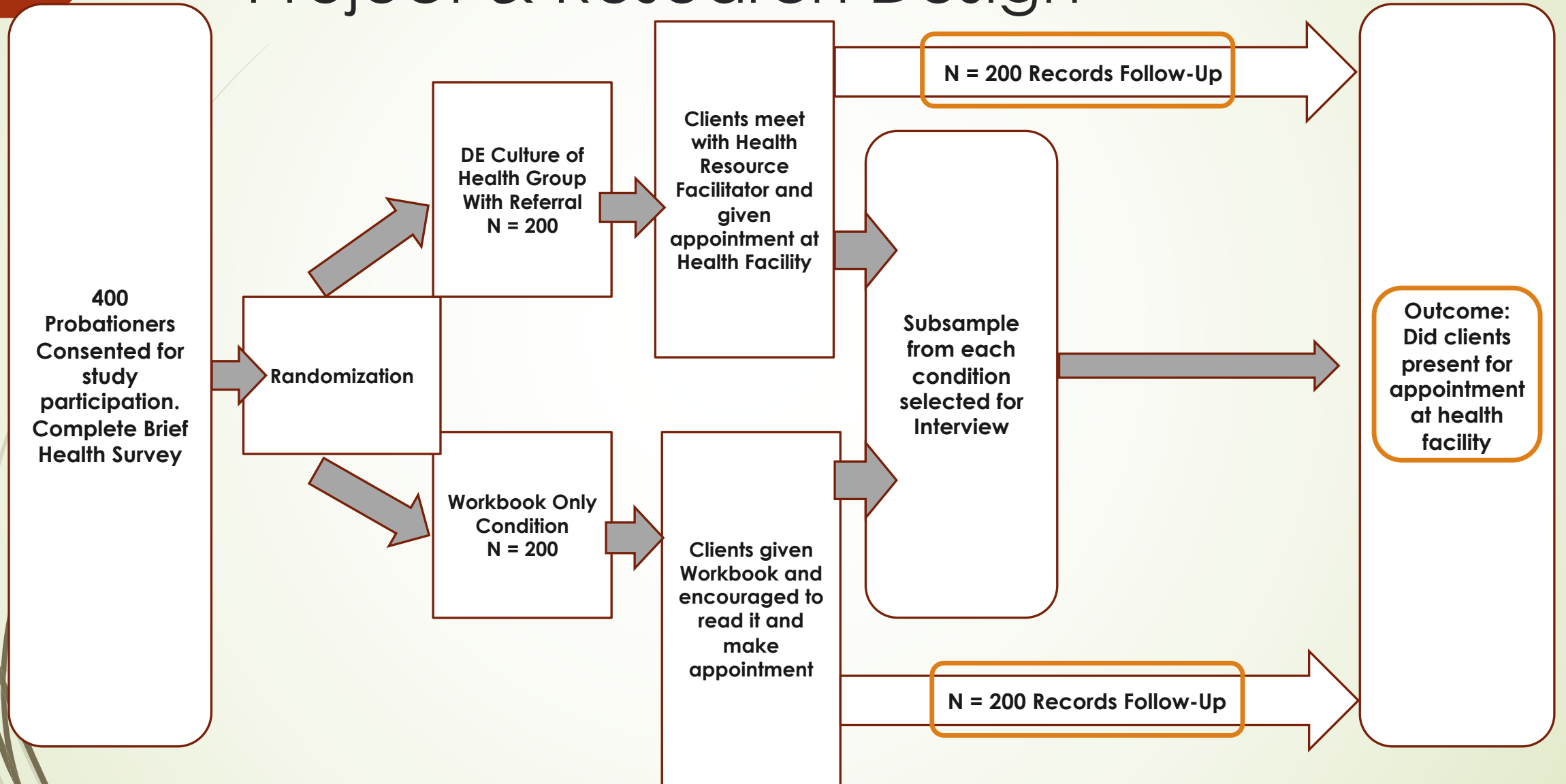
# Project & Research Design



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# Project & Research Design

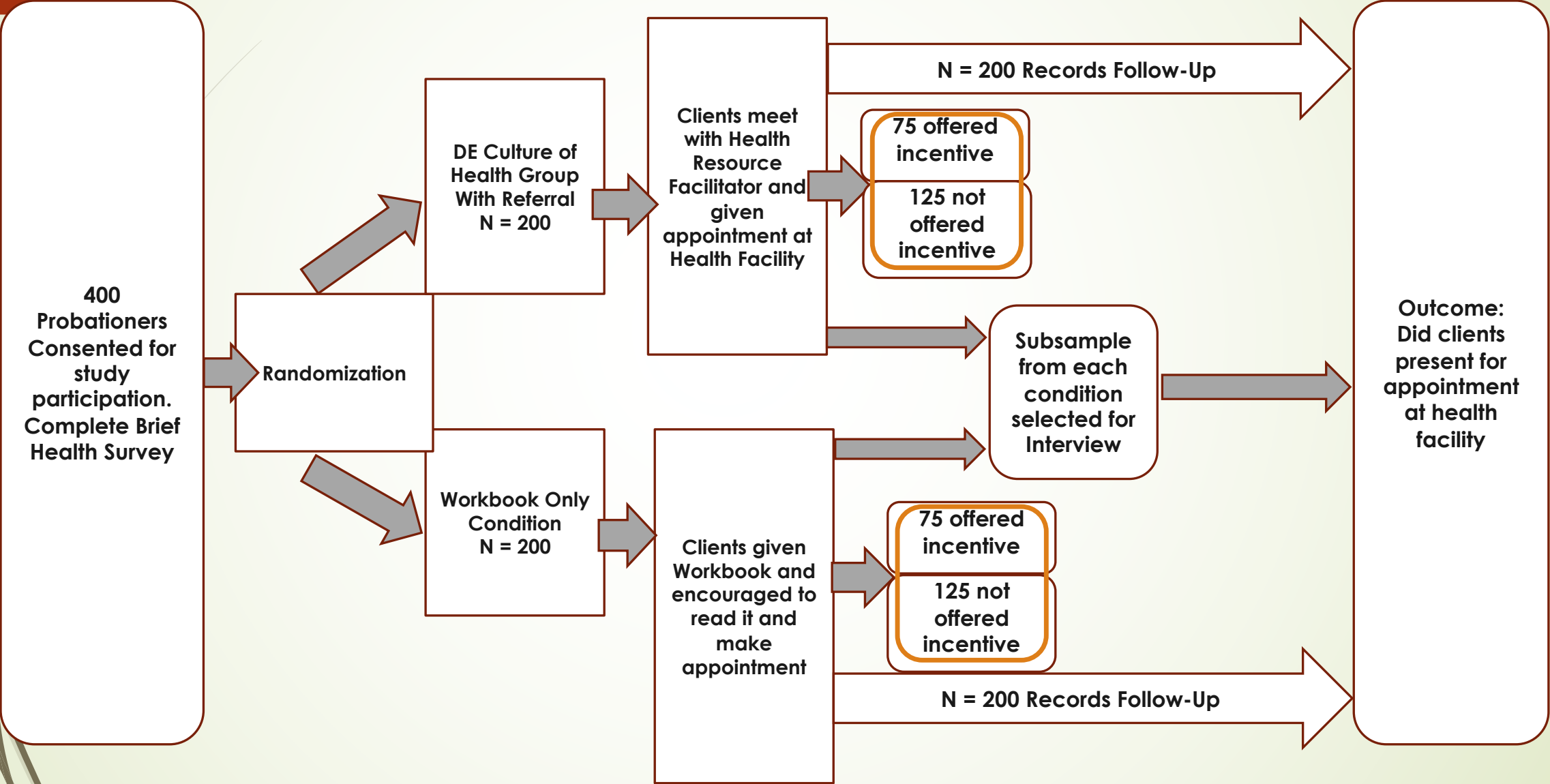




# The Use of Incentives

- ▶ 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







# 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?	Percent
Very Healthy	<b>16.3%</b>
Healthy	<b>42.5%</b>
Somewhat Healthy	<b>33.3%</b>
Unhealthy	6.8%
Very Unhealthy	1.3%

Do you have a primary care doctor that you see regularly?	Percent
Yes	<b>44.1%</b>
No	55.9%

# Survey Results of Health Needs

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

Have you ever been told by a doctor that you have any of the following?	Percent
Depression	<b>37.7%</b>
High Blood Pressure	24.4%
Anxiety	<b>37.4%</b>
Hepatitis C	8.5%
Asthma	21.4%
ADD/ADHD	15.5%
PTSD	<b>15%</b>
Diabetes	7.7%
Bipolar Disorder	<b>20.2%</b>
Sexually Transmitted Diseases	5.5%
Obesity	6%

# Survey Results of Health Needs

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

Currently have health insurance?	Percent
Yes, through work	5.3%
Yes, through family	4.6%
Yes, Medicaid	<b>69%</b>
Yes, other	3%
No	<b>18%</b>

# Survey Results of Health Needs

Has anyone you know ever been injured by gunfire?	Percent
Yes, a family member	29.2%
Yes, a close friend	24.9%
Yes, someone from the neighborhood	17.2%
Yes, myself	9.2%
No	41.6%

Q 21. If you answered yes to question 20, please mark below if you have experienced any of the following things in the PAST 30 DAYS. **(PLEASE MARK ALL THAT APPLY)**

- Have had nightmares about it or thought about it when you did not want to?
- Tried hard not to think about it or went out of your way to avoid situations that reminded you of it?
- Were constantly on guard, watchful, or easily startled?
- Felt numb or detached from others, activities, or your surroundings?

## 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

**February 13, 2019, 12 p.m. ET**

*Systems for Action Intramural Research Project*

[Multi-sector Alliances in the Post-Affordable Care Act Era: Key Patterns and Trends](#)

*Glen P. Mays, PhD, MPH, and CB Mamaril, PhD, MS, Systems for Action National Program Office, University of Kentucky College of Public Health*

**February 27, 2019, 12 p.m. ET**

*Systems for Action Individual Research Project*

[Housing for Health: Cross-Sector Impacts of Supportive Housing for Homeless High Users of Health Care](#)

*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*

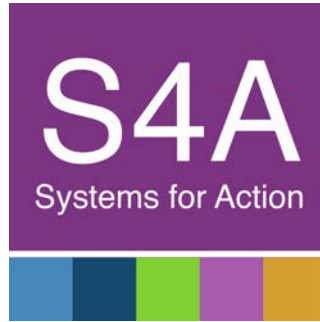
**March 13, 2019, 12 p.m. ET**

*Systems for Action Individual Research Project*

[Community Complex Care Response Team to Improve Geriatric Public Health Outcomes](#)

*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*

# Questions?



[www.systemsforaction.org](http://www.systemsforaction.org)

# Acknowledgements

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