# Health Care Hot Spotting: A Randomized Trial Lessons from the Field

### **Annetta Zhou, Harvard University**

(w. Amy Finkelstein, MIT and JPAL NA, Joseph Doyle, MIT, Sarah Taubman, MIT, and Jeffrey Brenner, CCHP)

PHSSR Keeneland Conference Lexington, KY April 22, 2015





### Link2Care Care Management Program



### Target population:

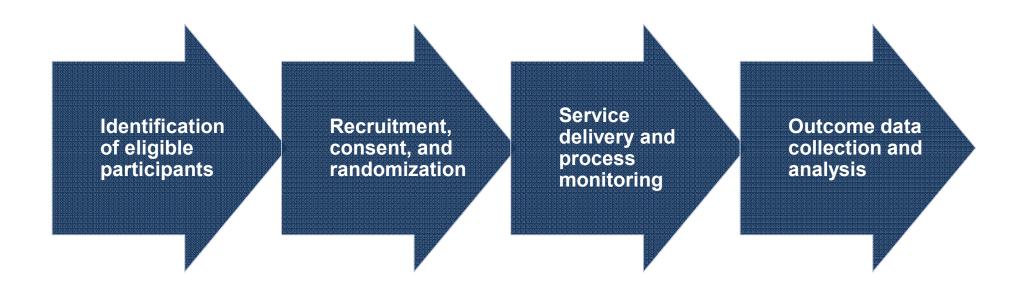
Adult high-utilizers of hospital care in Camden, New Jersey

- 2+ inpatient admissions in 6 months
- 2+ chronic conditions
- Medically and socially complex

### Intervention:

- Multidisciplinary care team including RN, LPN, social worker, health coaches
- Home-visits and accompanying patients to initial PCP and specialty visits
- Supporting individuals as they navigate and enroll in social service programs

### **Study Workflow**



Leveraging Health Information Exchange and hospital chart information Leveraging the power of technology while staying mindful of the "human" in human subject research

Real-time data monitoring enables continuous process improvement Leveraging administrative data and providing real time feedback on primary outcome using HIE

### Identification of eligible participants





- HIE provides daily report of patients who have had 2+ hospital admissions in the last 6 months
- Staff reviews hospital chart data daily to further verify eligibility
- Staff capacity constraints made randomization feasible

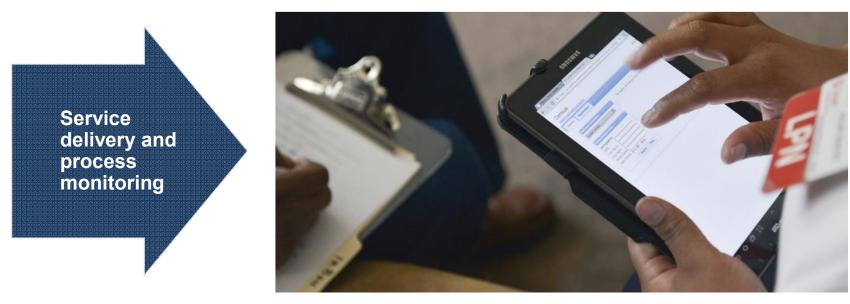
### Recruitment, consent, and randomization

Recruitment, consent, and randomization



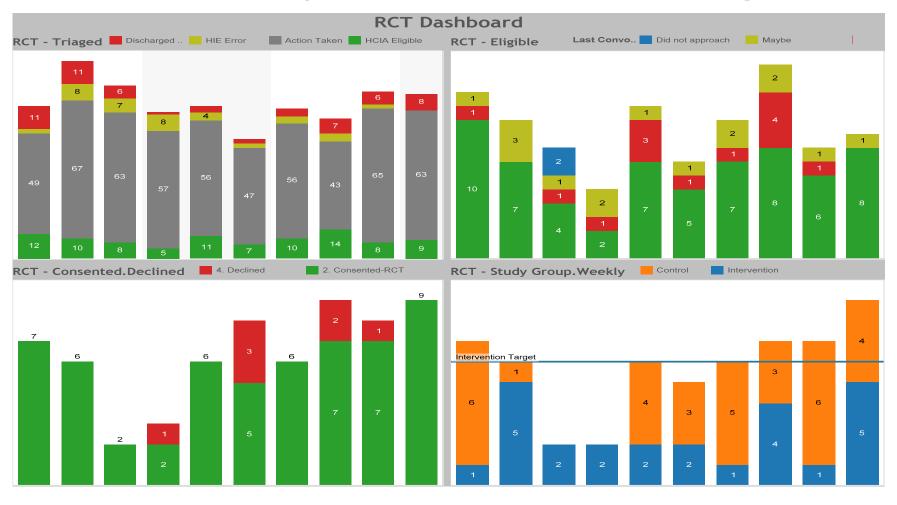
- Targeted sample size: 400 controls and 400 intervention (06/2014-01/2017)
- 50/50 randomization using survey software on tablets
- Randomization after consent

### Service delivery and process monitoring



- Daily and weekly dashboard tracks recruitment progress
- Real-time data recorded on service delivered to the intervention group -informative on take-up after randomization and potential mechanisms of effect

# Service delivery and process monitoring



## Service delivery and process monitoring



## Outcome data collection and analysis

Outcome data collection and data analysis

- More than 250 study participants enrolled to date
- HIE data allows for real-time analysis on primary outcome (readmissions)
- Leverage administrative data for all outcomes
  - Claims data
  - Social service data from NJ
     Department of Health and Human
     Services

# Thank you and stay tuned!