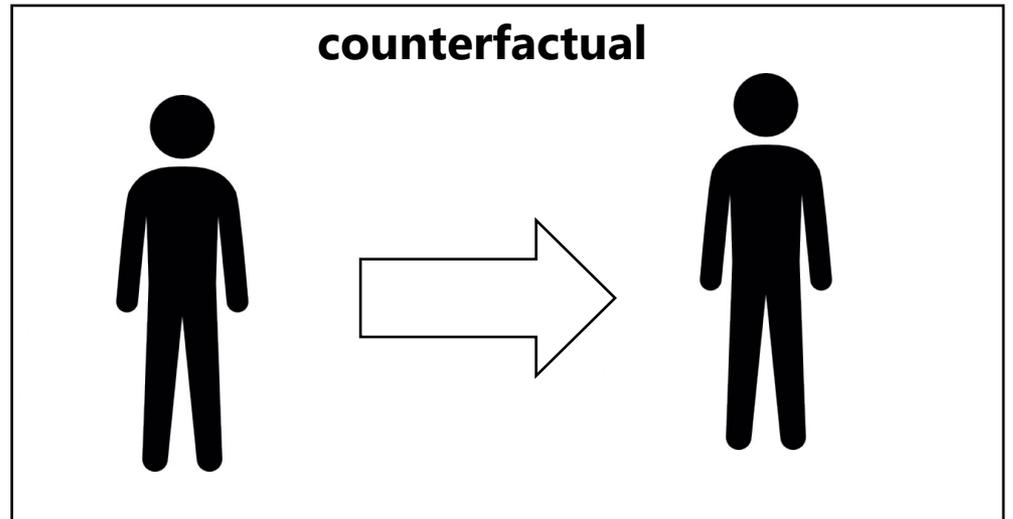
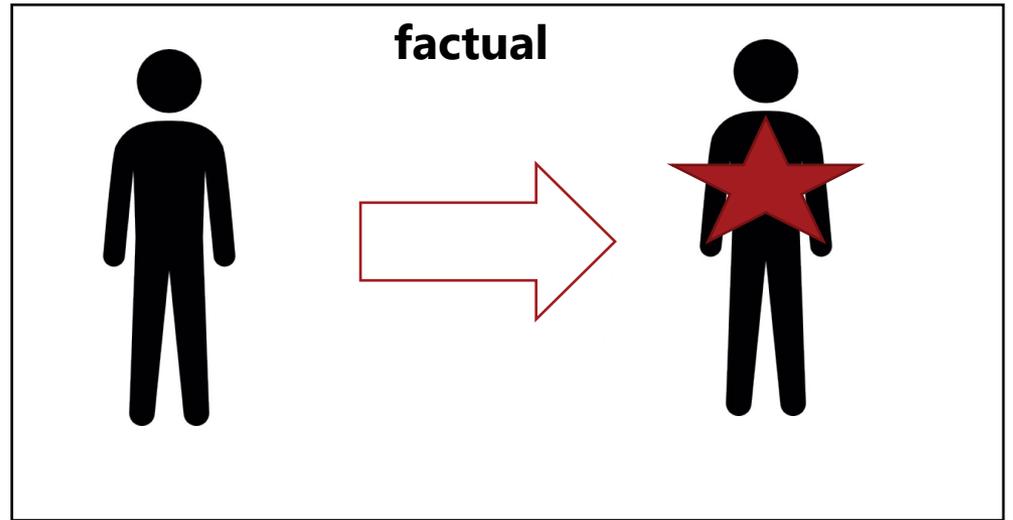
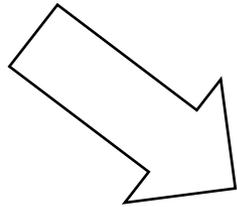
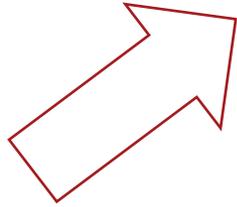
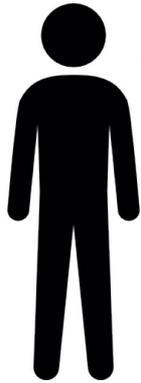


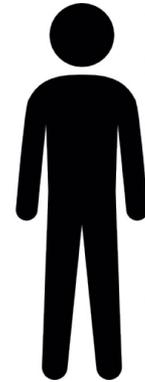
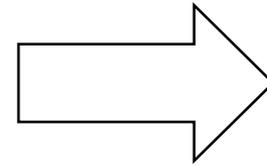
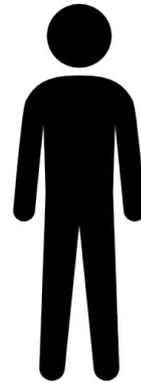
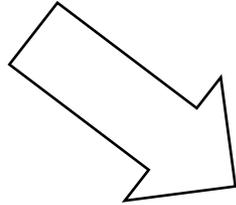
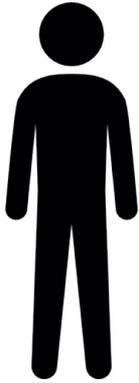
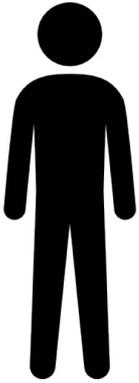
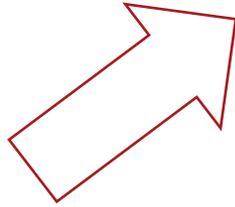
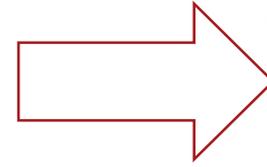
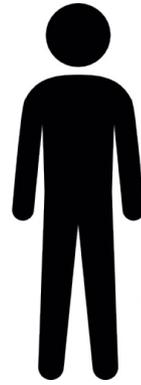
Adaptive clinical trails

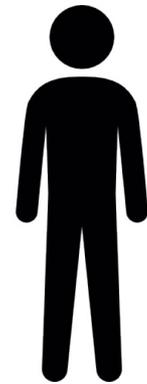
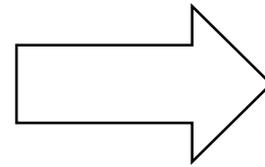
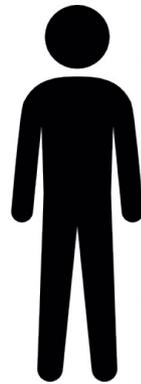
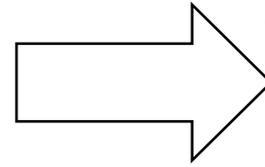
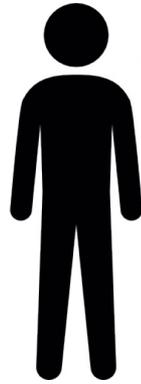
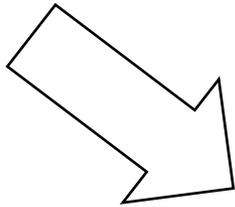
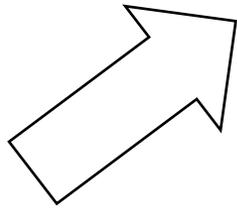
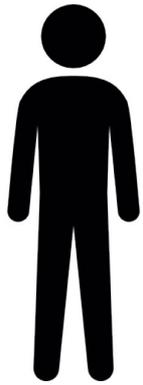
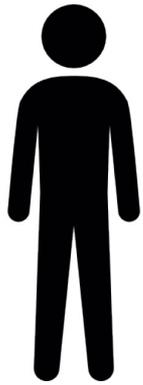
Maarten Rozing, Dpt. of Public Health, Copenhagen University

UNIVERSITY OF COPENHAGEN









CAMBRIDGE LIBRARY COLLECTION

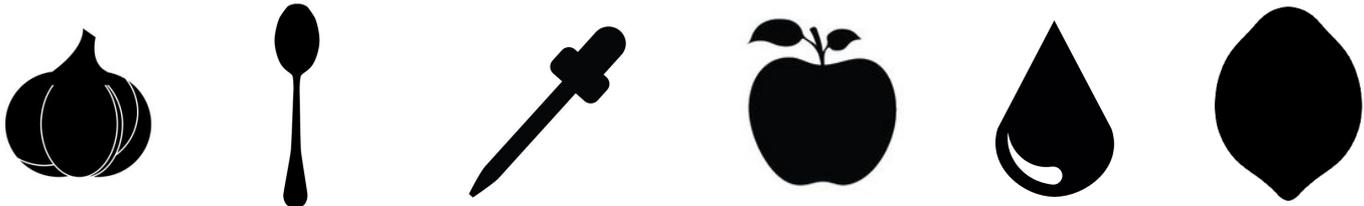
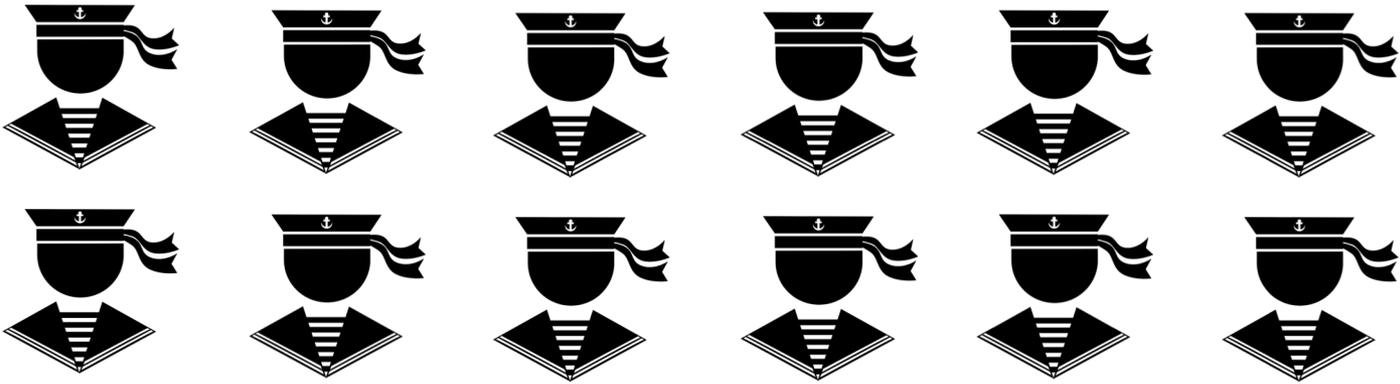
A TREATISE OF THE SCURVY

CONTAINING AN INQUIRY
INTO THE NATURE, CAUSES,
AND CURE, OF THAT DISEASE

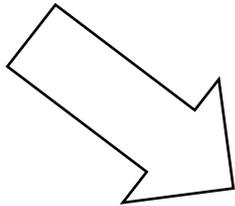
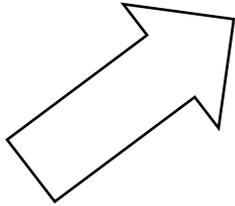
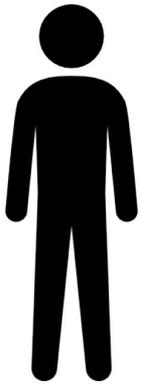
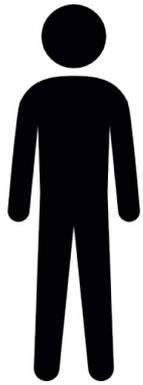
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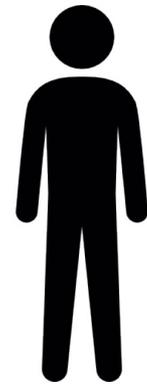
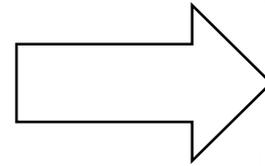
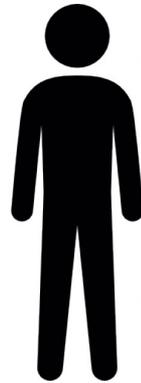
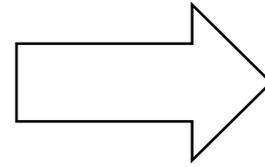
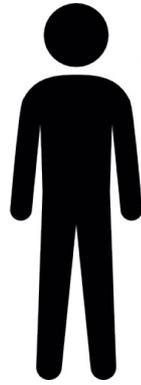
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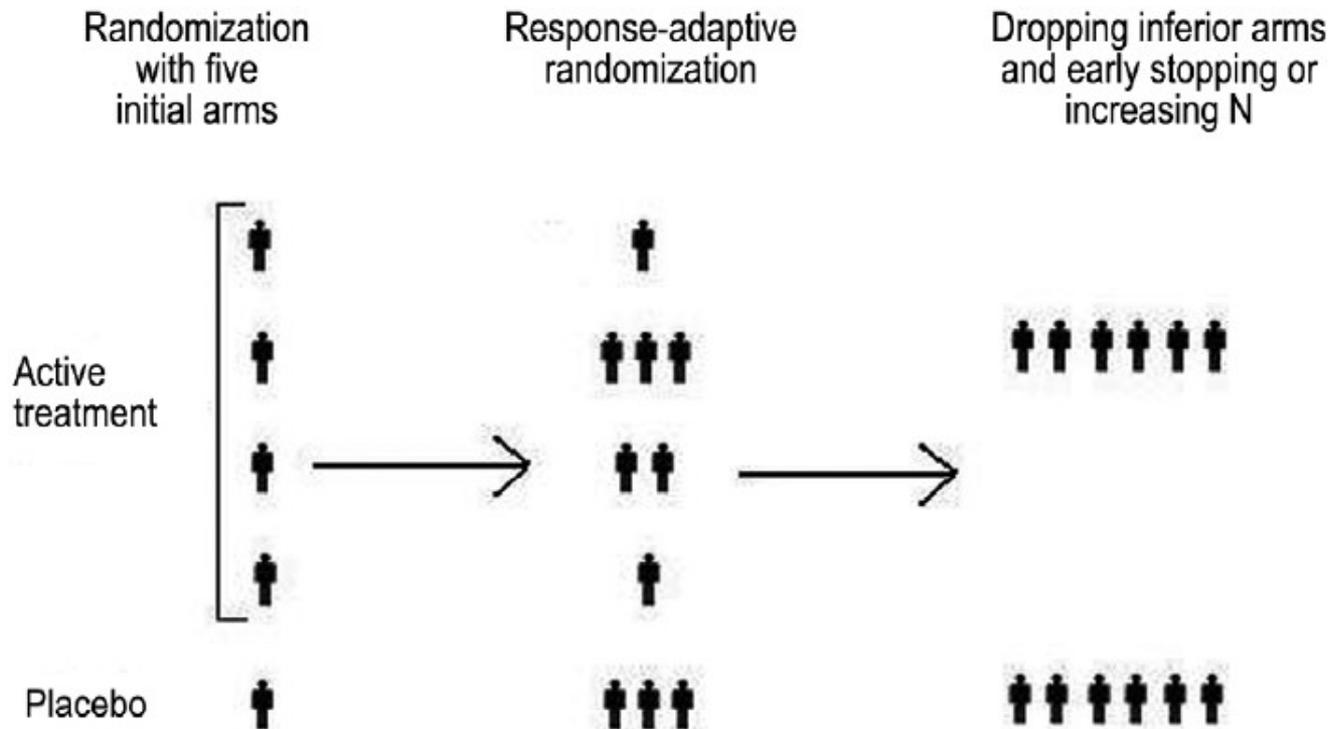
"as similar as I could have them,' accommodated in the same quarters and had the same basic diet"



A



A'

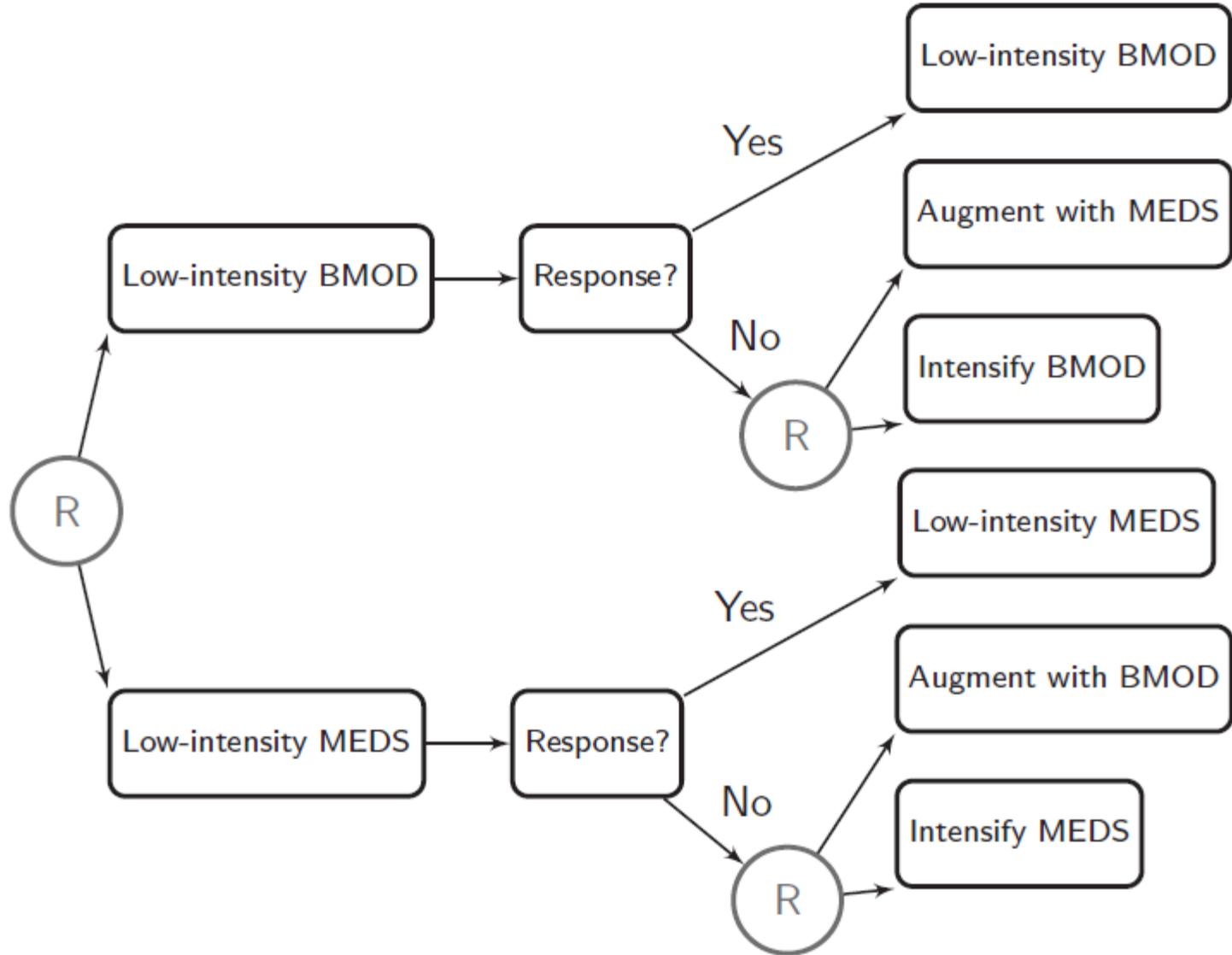


Reasons for Adaptation interventions

- Participants differ in response to treatment
- Treatment effectiveness changes over time
- Participants may develop new comorbidities
- Participants may relapse
- Participants develop side effects
- Tailor treatment to wishes/resources patient

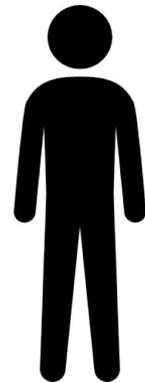
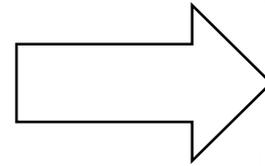
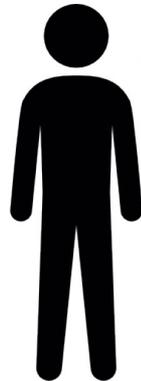
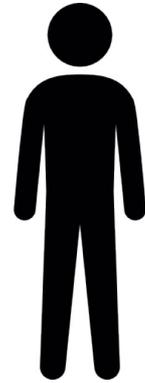
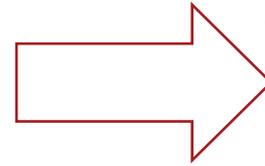
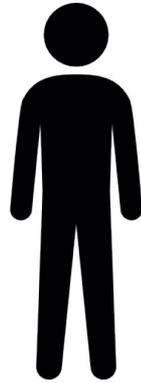
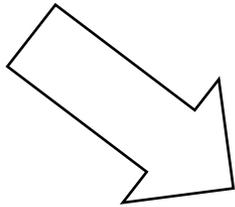
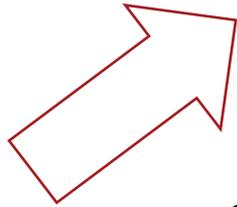
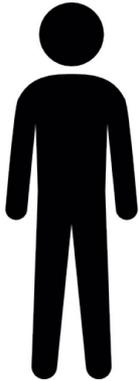
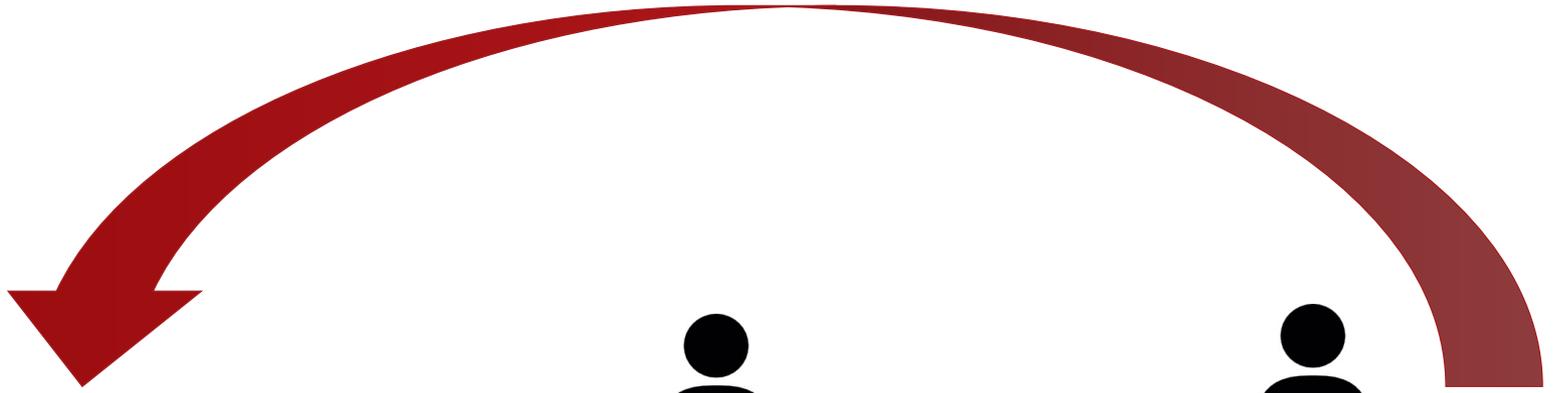
SMART Design

- Sequential Multiple Assignment Randomized Trial
- Individualization of intervention options and adaption
- Critical decisions points
- Sequence of intervention options at critical points
- Example ADHD treatment



“Micro-randomized trials” and “JITAIIs”

- Just-in-Time Adaptive Interventions (JITAIIs)
- Tailor components and timing of intervention
- Example Heartsteps study
- Android app designed to encourage walking
 - Activity planning for the next day
 - Contextually-tailored suggestions for physical activity

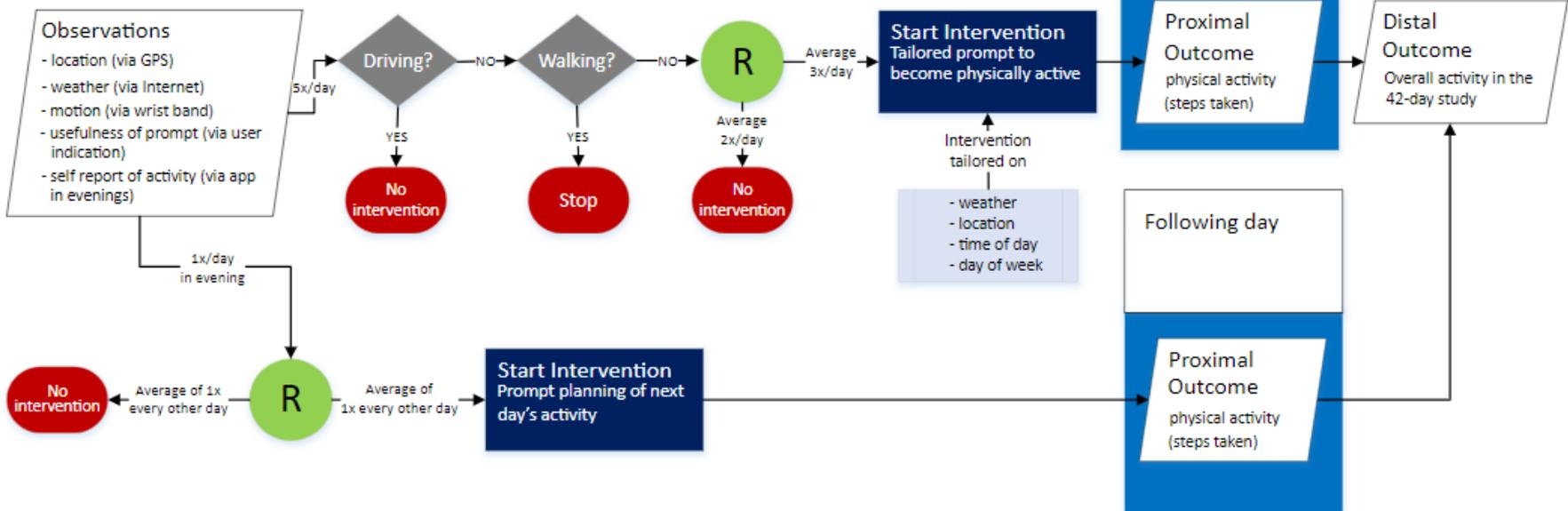


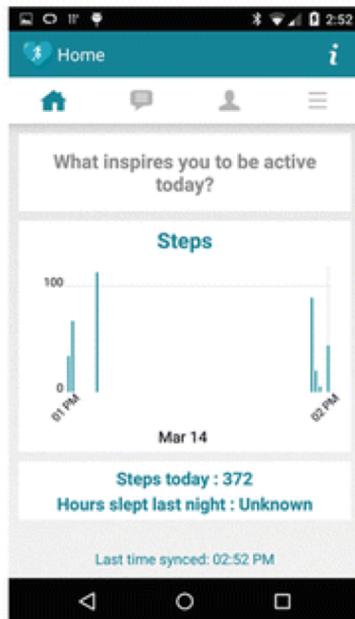
Heartsteps MRT to Promote Physical Activity Among Sedentary People

Each day of study
 Observations are continuous (except self report)
 Randomizations to activity prompts occur 5x/ day at likely times for increasing physical activity

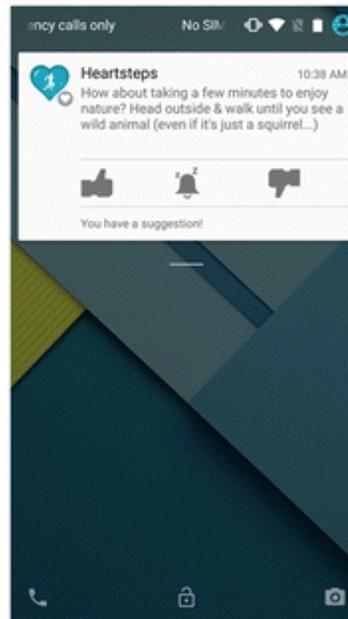
Next 30 minutes
 after intervention is
 delivered

Measured via
 accelerometer
 throughout study

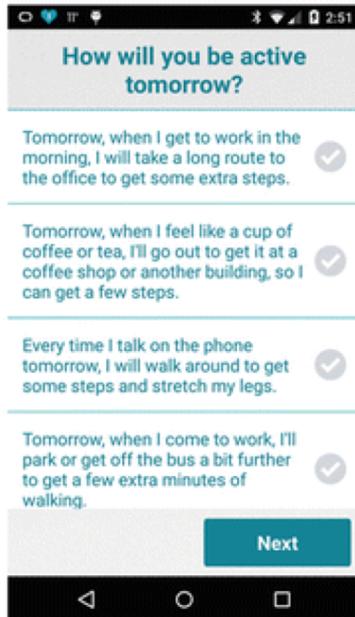




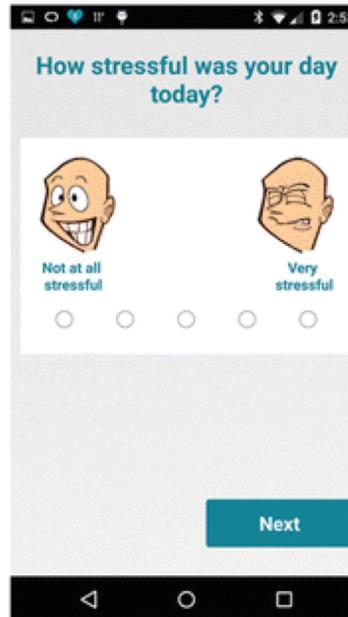
Panel A: HeartSteps homepage, including step count



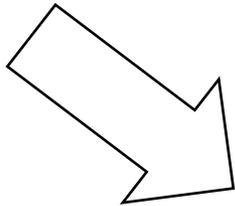
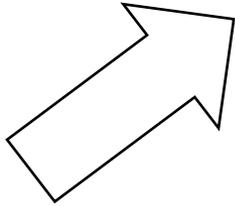
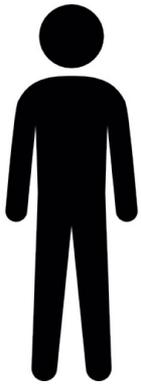
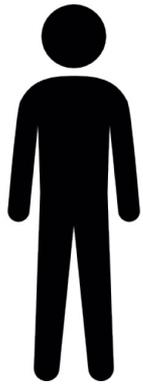
Panel B: Example HeartSteps activity suggestion



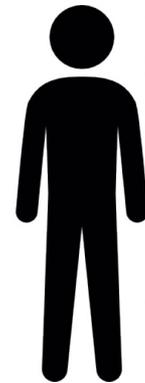
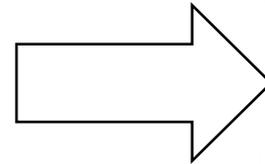
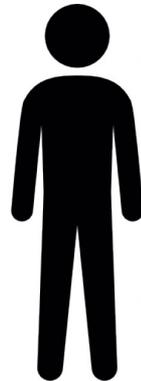
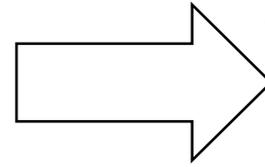
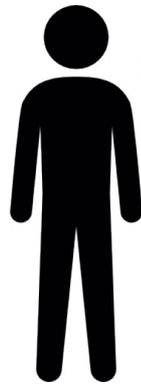
Panel C: Example of structured evening planning



Panel D: Sample question from evening survey



A



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THANK YOU

for your attention