

# Study Planning 1: Project Goals and Stages

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Measuring and Modeling Health Behavior  
with Smartphone Mediated Data  
Collection

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# Diversity of Mobile Health Studies

## **Smartphones as surveillance**

- Understanding health behaviors
- Understanding exposures
- Convenient delivery of surveys
- Convenient delivery of EMAs

## **Smartphones as interventions**

- Participant learning: Feedback to participants
  - Example: GDM
- Reflection
- Messaging to participants
  - Preset
  - Contextually triggered
- Social sharing
- Building networks

# A Continuum

- Smartphone/wearable for data collection will typically have potential to influence behavior
  - Hawthorne effect (even if entirely passive on the part of the participant)
  - Reflection on subjects of questions
  - Reminder of health considerations
  - Perception that research team may judge behavior
- Data collection mechanisms can leverage intervention effectiveness
  - Recognition of which pathways
    - Are successfully being nudged by intervention
    - Are adversely or not at all changed
  - Triggered questionnaires or prompts
  - Identifying appropriate times for messaging
  - Small nudges

# Common Stages of the Participant Experience

- Encountering Promotion
- Learning about
- Taking eligibility survey
- Watching / being delivered information for informed consent
- Offering consent
- Baseline entry survey
- Participation (mechanisms below)
- Exit
  - Opt out
  - Completion
    - Exit survey

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