The Basics: What is MyCap?

**A tool for researchers** – a customizable participant-facing mobile application freely available to capture patient reported outcomes based a REDCap project.

**A tool for participants** – a centralized study ‘home’ for information and actions that facilitates continuous participant engagement and participant retention.
The Basics: MyCap Features

- Supports REDCap surveys
- Captures mobile sensing / active tasks (e.g., audio recording, video recording, tone audiometry, tapping speed)
- Offers unlimited flexibility in scheduling per instrument
- Allows for data collection multiple times per day
- Automates alerts on days tasks/surveys are due
- Supports bi-directional, secure messaging between study teams and participants
- Supports the sending of announcements to all participants
- Allows for custom information screens
- Captures hyperlinks to web-based resources
- Supports multiple projects/studies for a single participant
- Offers 6-digit passcode security
- Supports offline data collection
The Basics: When to Use MyCap

- Recurring outcomes or monitoring
- Multiple, frequent data collection points
- Remote populations or remote trials
- Minimize 1:1 contact due to contagious diseases or immunocompromised participants
- Researchers need to use Active Tasks
MyCap Basic Workflow

1. Create the REDCap Project and configure MyCap settings
2. Create participant record in REDCap (e.g., screening survey, enrollment form, consent)
3. Participant uses QR code or ‘dynamic link’ to join project on their iOS or Android device
4. Participant completes tasks on device and data are sent to REDCap
MyCap Studies: **Select Highlights**

- **Experiences of spontaneous labor** – Participant track contraction frequency and duration and document symptoms and coping methods as the latent phase of labor progresses.
- **Remote patient monitoring of COVID-19** – Participants recorded their blood pressure, heart rate, and symptoms using daily questionnaires.
- **Medication adherence** – Participants photographed their medication after receiving MyCap alert to take their medication.
- **Medication effectiveness** – Participants completed the Tapping Speed active task 2 x day, 3 x week for 5 weeks.
- **Drug efficacy** – Participants complete daily activity forms and weekly symptom questionnaires.
- **Use of behavioral intervention strategies** – Participants (staff) log the presence and type of behavioral problems, treatment dosage, and engagement with professional development programs.
- **Medication impact** – Participants log daily sleep diary of ‘to bed’ and ‘wake times’, as well as medication use.
- **Disease surveillance** – Participants scan barcode attached to (saliva sample) test tube. After lab processing, results are reported back.
MyCap Use: Task Schedules

Tasks Due Today

- Sleep Survey
- Exercise Survey
- Pain Survey
- Tapping Speed Active

Overdue Tasks

- Sleep Survey (12)

Upcoming Tasks

- Sleep Survey
  - Due on 10-24
- Sleep Survey
  - Due on 10-23
- Sleep Survey
  - Due on 10-22

- 2023-10-26 (4)
- 2023-10-27 (4)
- 2023-10-28 (4)
- 2023-10-29 (4)
- 2023-10-30 (4)
- 2023-10-31 (4)
MyCap Use: Participant Surveys

Exercise Survey

Did you exercise today?
- Yes
- No

On a scale of 1-10, how energized did you feel after your workout today? (1 = no energy and 10 = most energy possible).

What kind of exercise did you do? Select all that apply.
- Swim
- Run
- Walk
- Bike
- Cross fit
- Other

How often do you normally exercise? Select only one option.
- Daily
- Weekly
- 2-3 x weekly
- Other

What day is it?

Date: 
MyCap Use: Additional Features
MyCap Use: Active Tasks

Active tasks are designed to measure sensory information using a device’s sensors (camera, microphone, screen, or speakers). Active tasks can capture the following information through the MyCap App:

- Range of motion
- Spatial memory
- Reaction time
- Speech recognition abilities
- Tapping speed
- ... and more!
The Participant’s “Research Home” away from clinic

Participants can:

• Submit data and complete research activities
• Send / receive messages (e.g., ask study questions; receive reminders for upcoming events, appointments, visits)
• Locate study & contact information
• Access links to web-based information and resources
1. “Learn more about MyCap” within REDCap
2. Email us for a consult: MyCap@vumc.org
3. From our website: https://projectmycap.org/
   a. Check out our use cases
   b. Read the FAQs
   c. Browse our end-user resources
3. Sign up for our newsletter
4. Check out our YouTube Channel
5. Read the MyCap Marker Paper: MyCap Marker Paper
6. Demo a MyCap project by scanning the QR code below:
   > Submit the survey > Click the MyCap link > Demo project.
   > You can demo MyCap Active Tasks and Scheduling [here].