

# Facilitator's Guide

Problem Discovery

Nabil Khan | Devin Hubbard | Andrew Kant | Nicole Wiley | Shawn Gomez



## What's a 'MicroSprint'?

**Answer:** An organized, condensed 1-hour session tailored specifically for healthcare aimed at identifying tractable problems and opportunities for innovation.

'Sprints' have long been popular among the startup community, engineers, designers, educators and software developers—essentially a short burst of work within a team to address specific goals, for example, UX/UI user testing for product redesign. There are many variations of Sprints but all these methods distill down to (1) defining the correct problem, (2) achieving good

problem-solution fit and some form of feedback from experts or users. They typically last days or weeks. While effective for organized teams with well-defined goals, Sprints don't fare as well for busy healthcare practitioners (HCP), particularly across organizations who haven't worked together before.

### Quickstart

Refer to the Quickstart guide for faciltating a session. It includes a checklist for recommended materials/resources and cheatsheet to ensure a smooth MicroSprint.

#### For Healthcare Professionals

The goal of the MicroSprint is to rapidly identify and filter high-impact clinical problems to pursue.

- Simple, Structured & Fast (< 1 hr)
- No prior knowledge or prep required
- Effective virtually or in-person
- Adaptable to other uses like quality improvement, program development, etc.
- Includes healthcare-specific examples, content and mental models
- Increases engagement among clinical collaborators, departments, and administrators

The work of NC TraCS is supported by the National Center for Advancing Translational Sciences (NCATS), National Institutes of Health, through Grant Award Number UL1TR002489.

This content is solely the responsibility of the authors and does not necessarily represent the official views of the NIH.

#### **Developing the MicroSprint**

The FastTraCS team researched, and tested, similar design frameworks like Stanford's Biodesign program, Google Ventures Sprint, Jobs-to-be-Done and others that set a foundation for our internal process and Toolkit dissemination. We then iteratively modified the type and order of design activities to create an effective workshop while meet the time constraints of our HCP colleagues. FastTraCS team member Devin Hubbard was also able to provide meaningful feedback and insight into the workshop through his experience teaching design to undergraduates in the UNC & NC State Joint Department of Biomedical Engineering. In the end, the FastTraCS team arrived at the base "recipe" we are presenting in this guide.

We will continue to update the guide and Toolkit as we gather feedback, review improvements and create additional tools.

## MicroSprint Breakdown



#### Get Started | Welcome

- » Tell them what you'll be doing as Facilitator (guiding them through the process and keeping time).
- » Clearly define the session goal, and have it prominently visible throughout the session help focus the panels effort.
- » Record the session or designate a colleague to take notes.
- » Confidently manage personalities in the room. Interrupt lengthy responses or remind people about 'rules'. Be respectful and stay on task.

#### **Cultivate an Elastic Mind | Warm-ups**

- » Warm-up activities are critical: they set the stage for divergent thinking (common in design thinking activities).
- » We use word association to "warm up" the brain; there are other activities you could envision running—but it helps to run an activity twice and ensure that it's divergent/encourages wild ideation.
- » Warm-up also creates a slightly more inclusive environment by showcasing how different each person can think, and to demonstrate the power of divergent thinking.

#### Rules of the road

- Encourage full attention from participants. Put phones away, on silent mode (notwithstanding urgent clinical pages).
- Steer away from solutions, focus on problems.
- Avoid crosstalk, especially in-person.
- Trust the process, embrace any uncertainty and discomfort.
- Stay on time. Lengthy discussion will have a domino effect.

#### **Quiet Time | Reflection**

- » Reflection is important to allow participants to organize thoughts.
- » Orients participants to the activity—the entire process is rapid and can be a bit of a "shock" for new participants.
- » Avoid group think early to allow people equal opportunity to think/share.
- » Present a challenge or problem statement to get people thinking around a certain area without setting too many constraints.

#### The Main Event | Ideation

- » Give a big picture outline of things up until now.
- » Break out the post-its/get into Mural!
- » Separate convergence and divergence—Remind Participants to "think big" and focus on quantity (not quality).
- » Setting a timer is one way to control things; number of ideas is an alternative. We prefer a timer in general; even with "number of ideas" as a limit, it can take a very long time and people finish at different times.
- » Encourage participants to focus on problems, NOT solutions.
- » Choose participants from similar backgrounds to help focus the pool of needs and provide expertise while voting.
- » It is wise to have the Facilitator be clear that this activity is considered "work alone together". In other words, no crosstalk—especially in person.
- » Next we will begin focusing the output of our brainstorming session the idea being that we have diverged, now we need to converge onto problems that we can take and do further research.

#### Avoid Rabbit Holes | Blocklist

- » This is where we shift into convergence.
- » We like to avoid problems that we cannot likely solve.
- » Use this to pre-screen for needs that might make their way to the top.
- » You could imagine creating a different screening list if you were doing this for a QI project, or if you had different skills

#### Choose your Favorite | Individual Voting

- » This point is where we are using the "gut check" for HCPs. The output from this and the subsequent vote are where the expertise and power of this technique come in. It is the job of the moderators (or people who run it) to follow up and scope problems/research problems more.
- » Facilitator sets a timer for 2 minutes per problem.
- » Each participant selects their top 1-3 problems. We suggest choosing this number to not exceed ~15 total favorite problems for group to vote on.

#### One Minute per Problem | Problem Pitch

- » Facilitator: set a timer that everyone can see/hear!
- » Each participant has 1 minute to describe their favorite problem(s) to the group.
- » Have a co-facilitator cluster similar ideas as they are shared OR spend 1 minute clustering after report out.

#### **Democratic Problem Discovery | Voting**

- » Each participant gets 3 votes to allocate however they please (Vote 3x for same problem, 2x for one, 1 x for another, 1x for 3 problems).
- » Ensure voting is done simultaneously to avoid undue influence from dominant personalities/individuals.
- » Allow clarifying questions to be asked before starting the vote.

#### Fin | Wrap-up

- » Emphasize success; no matter what, something about the problems in the space were discovered or emphasized or confirmed. The output of the MicroSprint will always inform next steps!
- » Thank the participants for their time and efforts.

#### Things We've Learned

#### Tips on potential challenges or pitfalls while you're facilitating:

- Steer aware from solutions-centric discussions that often lead to skipping too far ahead and create bias during conceptualization.
- Be mindful of group think; encourage diversity of opinion.
- Note any power dynamics in the room and adjust accordingly.
- Be upfront about how intellectual property is handled and encourage questions.
- While doing a divergent activity, be firm about limiting crosstalk. It can be distracting and limits creative thinking.
- If time allows, scheduling discussion at the end is extremely helpful. Often people will offer interesting insights in the last five minutes. Listen.



Our service is focused on innovation from existing research and identifying unmet needs at UNC Hospitals. We have a strong focus on derisking technologies for commercial development, enabling clinicians and researchers to prioritize studies that advance translational innovations towards a startup company, license to an established firm, or directly into clinical practice.

TOOLKIT FastTraCS Program v.20211208

