**Tips for Applying for RAP Digital Health Funding**

**Taken from the Digital Health Innovators Forum (archived)**

1. **How can I find a programmer to help me develop my project? How can I get a quote for the RAP application?**

You can look for a programmer within UCSF, or from an external vendor. Within UCSF, there's [SOM Technology Development](http://tech.ucsf.edu) and also [QUIP](http://www.radiology.ucsf.edu/research/labs/quantitative-image-processing).

1. **For app development/feasability proposals, what should go in the research design section?**

If your proposal is for initial build of an app or system and initial user testing, then your research section should focus on the rationale, motivation, methods, and metrics for that. You do not need to detail your future plans for field testing or validation, but you should provide enough rationale and methods that reviewers will be keen to fund your feasibility project.

1. **What do I need to know to create mobile apps?**

There are two important things to learn about creating mobile apps or any apps for that matter:

1. Learning about the overall architecture so you know how they work at a high level: native apps vs web apps; front-end app vs back-end web services and databases; for mobile, specific phone capabilities like: accelerometers for device orientation, GPS, compass, RFID reader, touch sensors via the touch screen, light detection, SMS, proximity sensor, audio sensor, video and image sensing via the camera, and device sensors via bluetooth.
2. Design skills and understanding: your audience, workflow, story-boarding, use-cases, usability, performance and scale.

The key question to ask when contemplating a mobile app is: Why does it have to be mobile?

But even before that you need to exhaustively define the problem to solve and decide whether mobility helps you solve it. If you start with the premise that you want a mobile app then you've got it exactly backwards.

If you want learn how to code to understand the complexities of development or to write your own programs then this is great. However in the "Valley", development is a commodity, design is not.

1. **Should I develop a native app or a mobile web app?**

See Jakob Nielsen's [Mobile Sites vs. Apps: The Coming Strategy Shift](http://www.nngroup.com/articles/mobile-sites-vs-apps-strategy-shift/) for a great summary. Bottom line: native apps for now, but in the longer run, mobile web approaches will win the day (e.g., see UCLA's [Mobile Web Framework](https://oit.ucla.edu/mobile-web-strategy/mobile-web-framework)).

Before deciding you first need to answer the question of what problem you want your app to solve. You then need to consider what you need your app to do to solve that problem and then just as important - who is your audience?

Examples help. Case 1: The clinical nurses in the [Memory and Aging Center](http://memory.ucsf.edu/) are working with dementia patients. They wish to create an app that allows the patient and family to have an updated care plan for the patient once they are discharged. They also need this information made available to the family PCP. As Jakob Nielsen says in his article "It's much easier for others to link to a site than to integrate with a 3rd-party application." So they went with a Web app.

Case 2: Joy Bhosai working via the [Proctor Foundation](http://proctor.ucsf.edu/) created an app to allow healthcare workers to screen for trachoma in villages in Niger. She wanted to take advantage of a special camera that could be integrated with the app on the phone. Given the camera integration and the uncertainty of web access in the remote locations they went with a native app.