Our submission is a working prototype of a few key concepts we’ve not seen in other solutions.

As a team, we’d even be thrilled if a few of these concepts made it into other public offerings, as we see the potential value in the data we want to make available to health professionals.

Many of us, myself included, are now staying at home, shut off from the world – and we want to do something.

We know public health entities like the NHS or CDC are aware of suspected cases COVID-19 – those that are clear enough to get tested or show up in emergency departments – but what if there was a way for our health systems to know how I’m doing, and everyone else in the community? How could hospitals anticipate the swell of patients before they arrive?

Our solution is simple: enable and encourage everyone to participate in a symptom survey – every day (like a mood tracker) and track not only the presence of symptoms, but their severity and change over time.

Could this be data then be used to help monitor the health of the community and prepare for emergency swells, potentially saving lives? Could we in retrospect understand more about the prevalence of symptoms in those who will be tested in the future, but weren’t severe enough to get tested now? Could we also get a pulse on when the crisis is over by measuring something other than hospital visits?

Our key considerations were:

* Questions and outcomes –focus on risk and tracking for the community at scale and avoid diagnoses
* Use of a scale, like the FACES scale used by health professionals today to track severity
* Transparency – your data needs to be visible to you, but available aggregate data should not be so transparent as to incite panic

(JENNI)

To understand potential patients in the community, we created an simple intake form that focused on key risk factors already identified by researchers, plus optional testing data. In our discussions with health professionals, it was keep to keep a token of locality, but generalize it to an area, like a postal or zip code, to maximize participation.

For our survey form, we wanted to keep it as simple as possible, enabling someone to respond within a few seconds. We ask for just a few key data points using a variant on the common FACES pain scale, so we can track changes in experienced severity over time.

To maximize user reach, we chose react-native for its flexibility in addressing iOS and Android users.

(ART)

We feel only a public health organization or institution could be trusted stewards of the data

To do this, we focused on using compliant protocols storage for our data

(MARCELLO)

Things we still have to solve:

* Find a trusted public health entity who can be the single source for this – a proliferation of studies like this would quickly reduce statistical relevance
* Implement identity and measure user’s willingness to participate
* Find a way to remove participation bias from the system – while most people have smart phones, those most likely to participate could potentially be the younger and more anxious among us.

While these hurdles still exist, we believe that this crisis is a unique opportunity for everyone help *0*community, and help give just those managing the crisis a little more data by asking everyone to do something for just a few seconds a day.

Thank you.