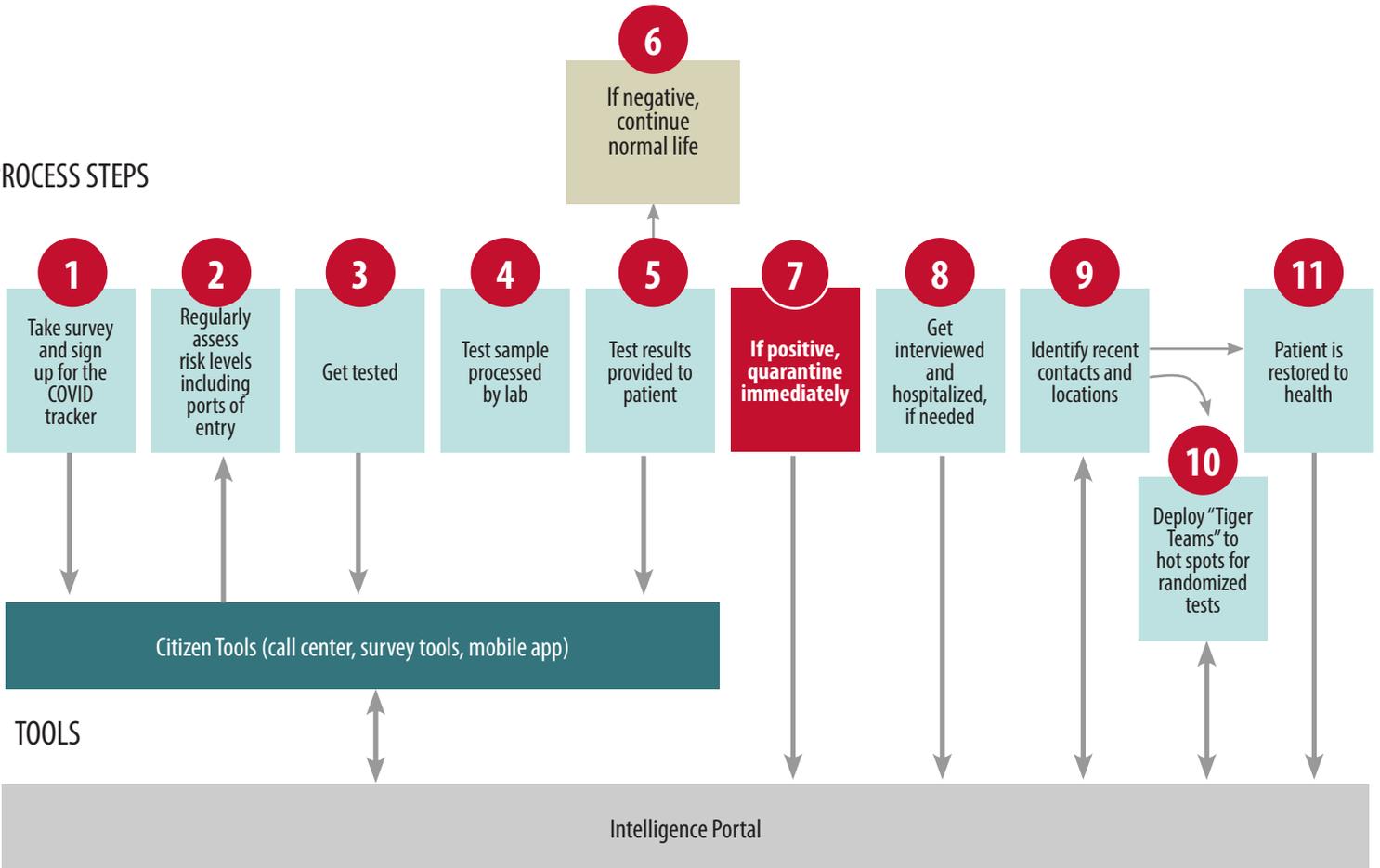


# UTAH LEADS TOGETHER

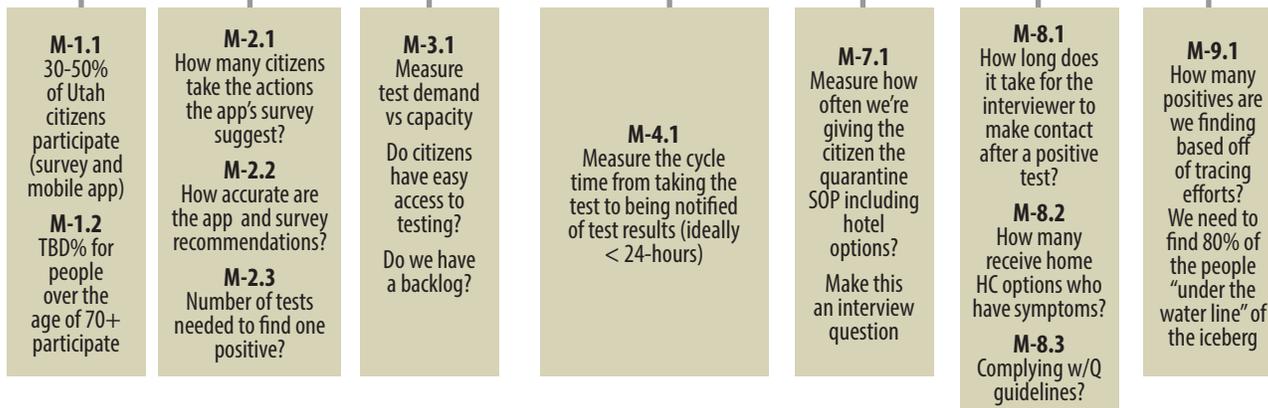
## SYSTEM MAP



### PROCESS STEPS



### PROCESS MEASURES



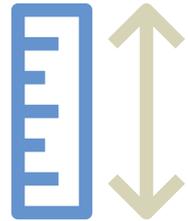
**NOTE:** The system map may be refined as the situation develops.

## Description of Process Steps and Measures

**STEP 1:** Utahns take the survey and download the app. The State of Utah is deploying innovative tools to combat the virus while returning power to the citizens. This information will provide state and public health officials with a new trough of information.

Utahns will be encouraged to take the “Test Utah Health Assessment” online survey. The survey will quickly identify high-risk individuals through randomized testing to get immediate statewide data about potential infection hotspots.

Later, Utahns will also be encouraged to download an app. The app can predict and notify users of potential at-risk encounters where an infected person has come in contact with others. Data generated by the app will provide the following value:



- Encourage Utahns to take part in a health-related survey
- Help people to understand their level of risk based on exposure to others who have tested positive
- Help public health officials conduct contract tracing by identifying at-risk interactions between infected persons and others over the infection period
- Help health officials to understand where infections originate to change protocols and focused interventions

Success will be measured by:



**M-1.1: 30-50% of citizens participate in the survey and download the app**

**M-1.2: TBD% of citizens over age 70 participate in the survey and app**

**STEP 2:** Regularly assess risk levels including ports of entry. Through the app and other tools, the intelligence portal will feed information to the public to inform their actions. The State of Utah will send information to local health departments and providers so they are aware of developing hotspots. In turn, local health departments will know where to mobilize testing sites to meet the demand of emerging risks. This ability to quickly capture trends and deploy testing is critical.

Success will be measured by:



**M-2.1 How many citizens take the action that the survey/app suggests**

**M-2.2 The accuracy of survey/action recommendations**

**M-2.3 Number of tests needed to find one positive**

**STEP 3:** People who are referred to testing get tested. Resources from the public and private sector will be galvanized to scale innovation and accelerate testing. The State of Utah recently set aside over \$50 million to ensure a PPE supply chain for the next three months. It also set up a process to collect respirators and ventilators from the public and private sector.

Success will be measured by:



**M-3.1 Measure test demand vs. capacity**

**Easy access to testing and the ability to watch testing backlogs**

**Identifying how many tests are needed and if all who want to be tested can be tested**

**STEP 4:** Labs process test samples. In addition to traditional testing, Utah is watching the market for innovative testing options that could be less costly.

Success will be measured by:



**M-4.1 Measure the cycle times of a citizen taking the test to being notified of the test results (ideally less than 24 hours)**

**Establishing a short cycle time is important because the virus' transmission rate is 2.5 over 5 days. This means if 100 unidentified infected people continue living normally, 50 more people will be infected each day.**

*Note: The way cycle time is measured will likely change as new testing methods come online.*

**STEP 5:** Individuals receive test results.

**STEP 6:** Individuals test negative and return to normal life.

**STEP 7:** Individuals test positive and are quarantined immediately. Statewide standard operating procedures (SOPs) will ensure those who test positive receive the same level of quarantine protocol to mitigate confusion.

Success will be measured by:



**M-7.1 Measure how often citizens receive quarantine SOPs, including hotel options**

**STEP 8:** Get interviewed and hospitalized if needed. A person who tests positive will be interviewed to see who they have come in contact with during the infection period. The investigations will confirm labs provided infected individuals with the right quarantine SOPs.

Investigators will be the linchpin to the success of direct contact tracing.

*Note: The model described above cannot find all the people under the water line of the glacier alone. The app and survey will supplement the investigators' work and make tracing more successful.*



Success will be measured by:



**M-8.1 How long does it take for the interviewer to make contact after a positive test?  
Ideally, this happens within hours.**

**M-8.2 How many receive home healthcare options who have symptoms by region?**

**M-8.3 Did the interviewer ensure the patient received the SOPs when they received their lab test, including the need to quarantine.**

**STEP 9:** Identify recent contacts and locations. Recent contacts and locations of contacts will be identified through the tracing effort. Local health departments will need 1,000 workers to help scale, interview, and contact tracing operations. 100 of the 1,000 workers must have the skills to scope the investigation up front. The private and public sectors are being leveraged to help find these workers.

Success will be measured by:



**M-9.1 How many positives are being found based on tracing efforts?.**

**STEP 10:** Deploy “tiger teams” to hot spots for randomized tests. A tiger team is like a SWAT team. It’s an agile group of experts who can go to suspected, emerging hotspots. Tiger teams will enter these areas and conduct randomized testing to see what is happening before it becomes a problem.

**STEP 11:** Patient is restored to health.