

COVID-19 Symptom Checker: MyChart Self-Triage & Self-Scheduling Tool

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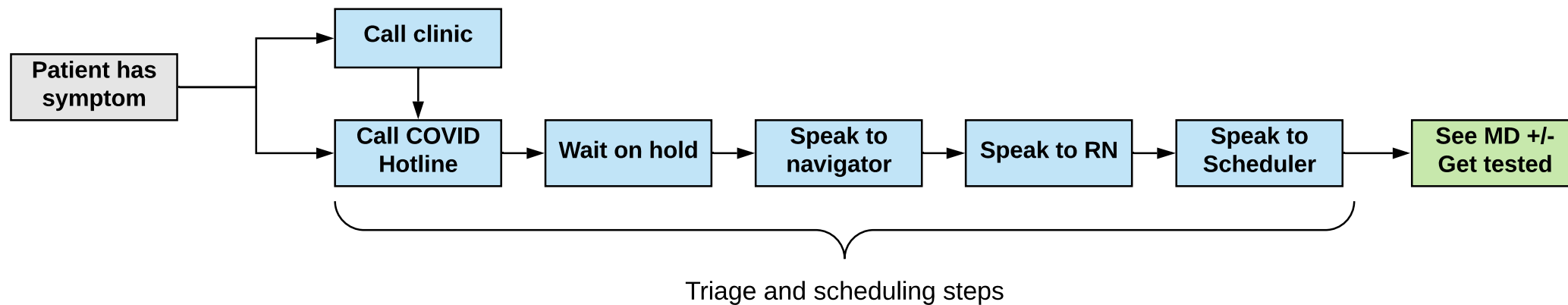
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In collaboration with: Clinical Innovation Center, Center for
Digital Health Innovation, Digital Patient Experience, Office
of Population Health

Background

- COVID-19 caused a surge in ambulatory demand
- Practices were inundated with phone calls, messages and appointment requests
- A COVID-19 hotline was created to centralize triage, but the process remained manual and resource-intensive

State of triage in March 2020 (beginning of COVID pandemic)

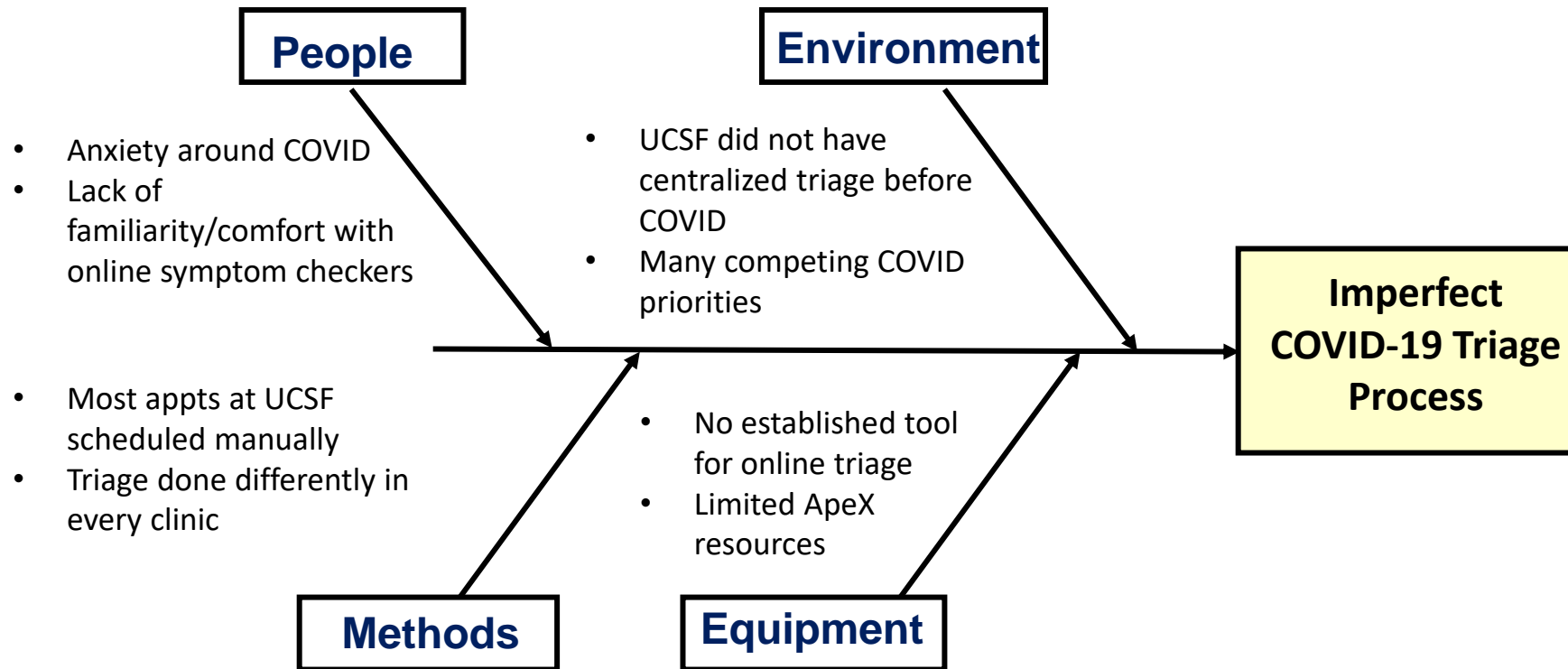


- True North Pillars addressed:
 - **Patient Experience:** Improve access
 - **Quality and Safety:** Standardize triage
 - **Financial Strength:** Decrease triage and scheduling costs
 - **Learning Health System:** Be a national leader in COVID-19 Symptom Checkers

Project Goals

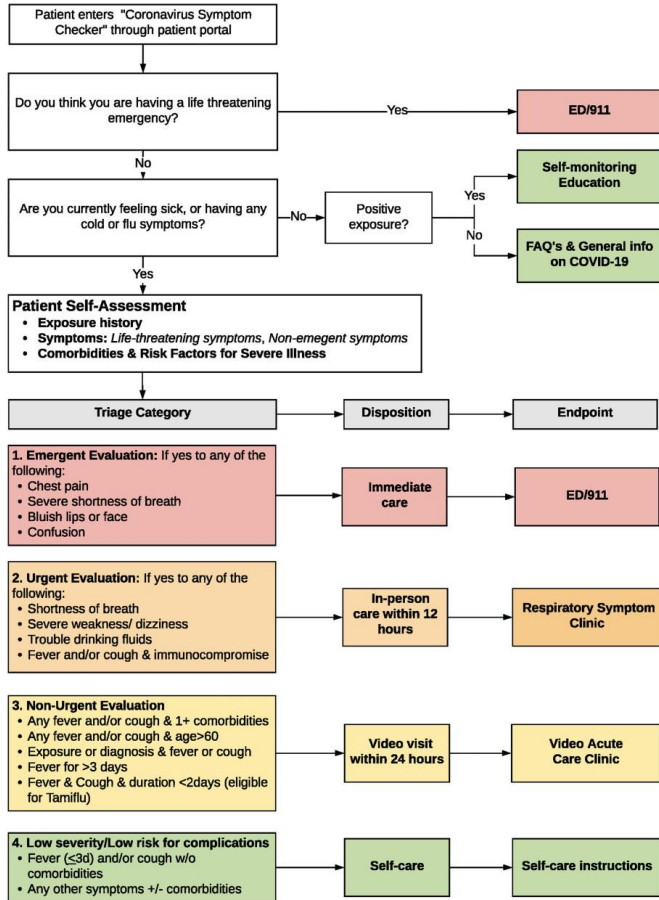
- **Primary Goal:** To improve the triage and scheduling process for COVID-19, specifically by providing patients with 24/7 access to triage and scheduling for COVID-19 symptoms and concerns, and offload work from front-line staff in clinics and from triagers at the COVID-19 Telephone Hotline
- **Target state:**
 - Divert $\geq 30\%$ of call volume from clinics/Hotline to an online, self-service portal
 - Build fully integrated triage and scheduling for all dispositions
 - Provide a patient-friendly digital solution in multiple languages and help address health disparities
- **Learning health system goal:** Provide a proof of concept for digital-first solutions to acute patient concerns at UCSF

Gap Analysis



Project Plan & Interventions

1. Created standardized triage algorithm



2. Built that algorithm into a Symptom Checker in MyChart

The screenshot shows the MyChart Symptom Checker interface. It features a progress bar at the top with three steps: "You'll answer a series of questions to narrow in on your symptoms.", "We'll analyze your responses based on the latest evidence.", and "We'll provide you with next steps to take." Below this are several questions with radio button options:

- * Indicates a required field.
- * How many days have you been feeling sick with this illness? (Options: <48 hours, 2-14 days, More than 14 days)
- * During this time have you had a cough that is not usual for you? (Options: Yes, No)
- * In the past 48 hours, have you had any fevers? (Options: Yes, No, I'm not sure)
- * Have you had any of the following symptoms as part of this illness? (Select all that apply. Options: Unexplained muscle aches, Fatigue (feeling more tired or run down than usual), Diarrhea, Headache, Sore throat, Abdominal (belly) pain, Runny nose, Shaking chills, Loss of ability to smell or taste, None of the above)
- * Have you had any vomiting? (Options: Yes, No)

At the bottom, there are buttons for "BACK", "CONTINUE", "FINISH LATER", and "CANCEL". A footer note states: "MyChart® is a registered trademark of Epic Systems Corporation."

3. Streamlined direct scheduling for each disposition

The screenshot shows the "Schedule Appointment" interface. It includes a header with a calendar icon and the text: "Click below to schedule your testing appointment at the UCSF drive-thru Francisco, CA. Make sure you follow the instructions until you see the appointment has been scheduled." Below this is a section for "Locations" with a checkmark icon, "UCSF Respiratory Screening Mobile Clinic", and a "Time" selection icon. A section titled "What time works for you?" shows a "Start search on" date of "05/05/2021" and a calendar icon. Below this is a grid of available times for "Wednesday May 5, 2021":

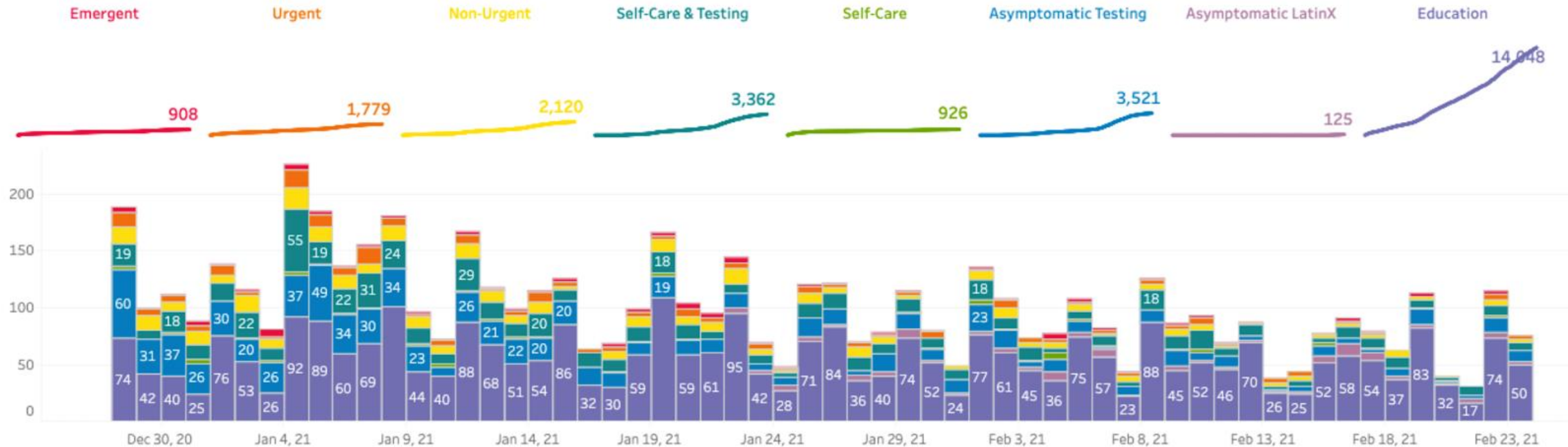
12:30 PM	12:40 PM
1:10 PM	1:15 PM
1:45 PM	1:55 PM
2:30 PM	2:45 PM
3:45 PM	4:00 PM
5:00 PM	5:15 PM
6:15 PM	6:30 PM
7:30 PM	7:45 PM

At the bottom, there are buttons for "All available times" and "Filter times".

Project Evaluation & Impact

- >30,000 total uses (hotline: ~20,000 patient calls)
- >3,300 direct scheduled appointments into Respiratory Screening Clinic, Video Acute Care Clinic, and Drive-Thru testing
- Available in English & Spanish
- Decreased time from triage to confirmed appt
- Decreased burden on COVID-19 Hotline

Self-Triage Recommended Dispositions by Day



Next Steps & Lessons Learned

Next Steps:

- Formal analysis of operational impact
- Gather additional patient feedback
- Adapt this model to other common conditions to improve triage experience and efficiency

Lessons Learned:

- **Integration is key.** This product was useful for patients not just because they could get triage advice, but because they could then be linked with the necessary appointment type for their symptoms.
- **A Symptom Checker should triage, not diagnose.** To avoid errors, liability and the need for complex analytic tools, we aimed only to triage patients based on well-established criteria, not to diagnose their condition.
- **Appropriate use is possible with digital tools.** The tool was used by a diverse array of patients, and we found very few cases of mis-use or “gaming” of the system

Symptom checker expanded to

- Affiliates (MarinHealth)
- Pediatrics
- Lessons shared with other UC's, other AMCs across the country

Work featured in

- JAMIA
- AMIA Journal Club
- AAMC Clinical Guidance Repository
- Care Zooming Implementation Guide

Journal of the American Medical Informatics Association, 27(6), 2020, 860–866

doi: 10.1093/jamia/ocaa051

Advance Access Publication Date: 13 May 2020

Research and Applications



Research and Applications

Rapid design and implementation of an integrated patient self-triage and self-scheduling tool for COVID-19

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