



Stanford
MEDICINE

Rapid Improvement of and Sustained Response Rates to a Daily Workforce Health Check

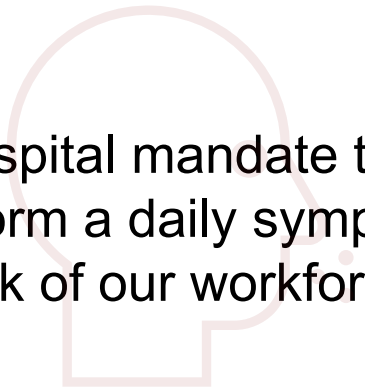
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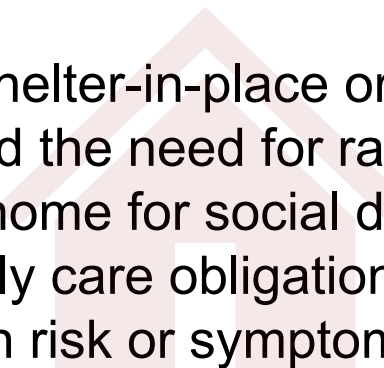
Stanford University School of Medicine

Background

Our academic radiology department faced two requirements simultaneously early in the COVID-19 pandemic:



A hospital mandate to perform a daily symptom check of our workforce.



A local shelter-in-place order that increased the need for radiologists to work at home for social distancing and family care obligations, as well as for health risk or symptoms.

We needed to rapidly develop a highly reliable daily surveillance system to monitor the health and distribution of radiologists.

Methods

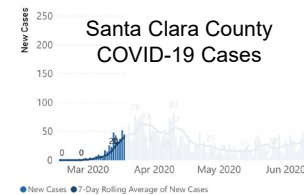
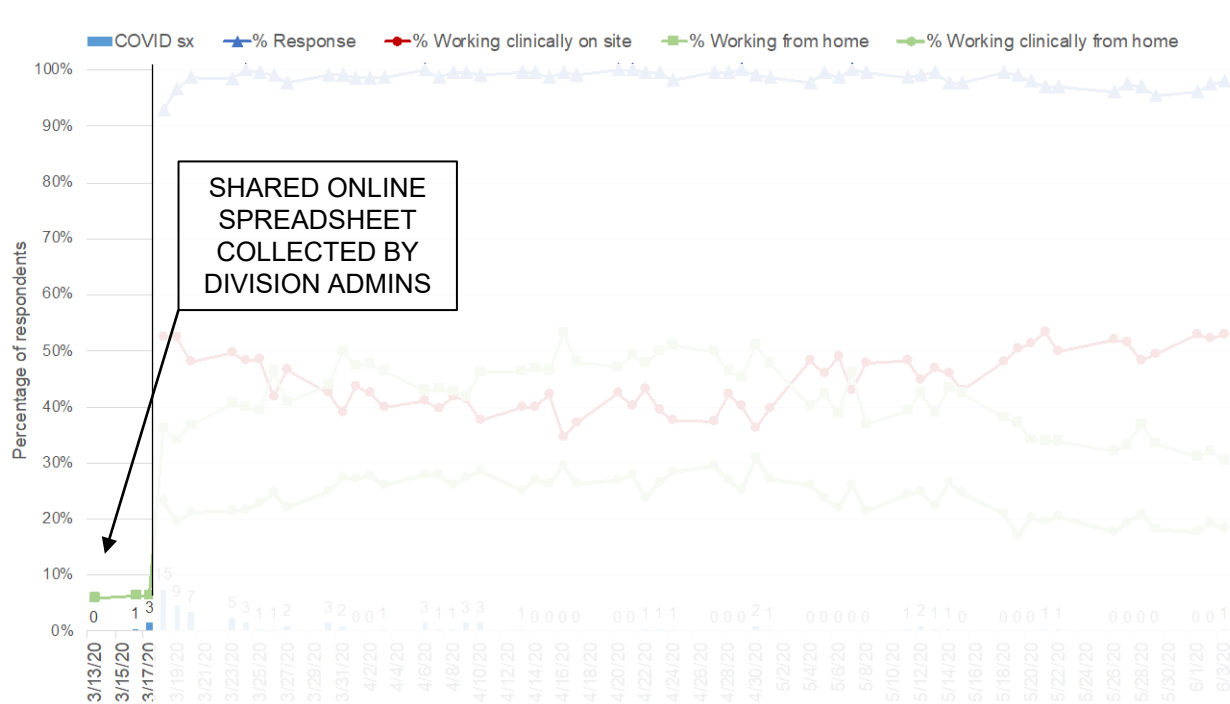
Traditional quality improvement methods were used in a highly compressed timeframe to develop a high-reliability daily workforce monitoring program, target >95% response rate

- Phase 1: Communication of goal with department leadership and delegation of data collection to administrative staff
- Phase 2: Direct survey to all radiologists
- Phase 3: Survey links and names of non-responders sent to administrative staff to solicit responses in early afternoon

Results were reported in a daily morning huddle that was introduced for COVID-19 related communications.

Results


Phase 1: Communication of goals to Division Chiefs, data collection by division administrative staff of shared spreadsheet



- Only recorded whether radiologist reported “working clinically from home”
- Overall response rate *assumed* to be 100%
- Resulted in underestimation of % radiologists working from home

Results

Phase 2: Direct 2-3 question survey to all radiologists, using personalized links so no need to enter demographic data



What is your Work Location today?
(On-site means at a hospital or outpatient center location)


Working clinically from home ▾

Are you currently experiencing any symptoms that have been described as concerning for COVID-19 infection? These include flu-like illness or fever (subjective or T>100°F/37.8°C) or cough or shortness of breath or sore throat.

Yes

No

→



What is the reason you are working clinically from home (select all relevant answers)


As assigned/social distancing

Childcare/elder care

Current illness

Other

→



You have reported that you are experiencing symptoms concerning for COVID-19 infection. Please do the following:

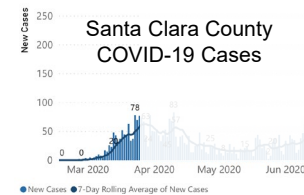
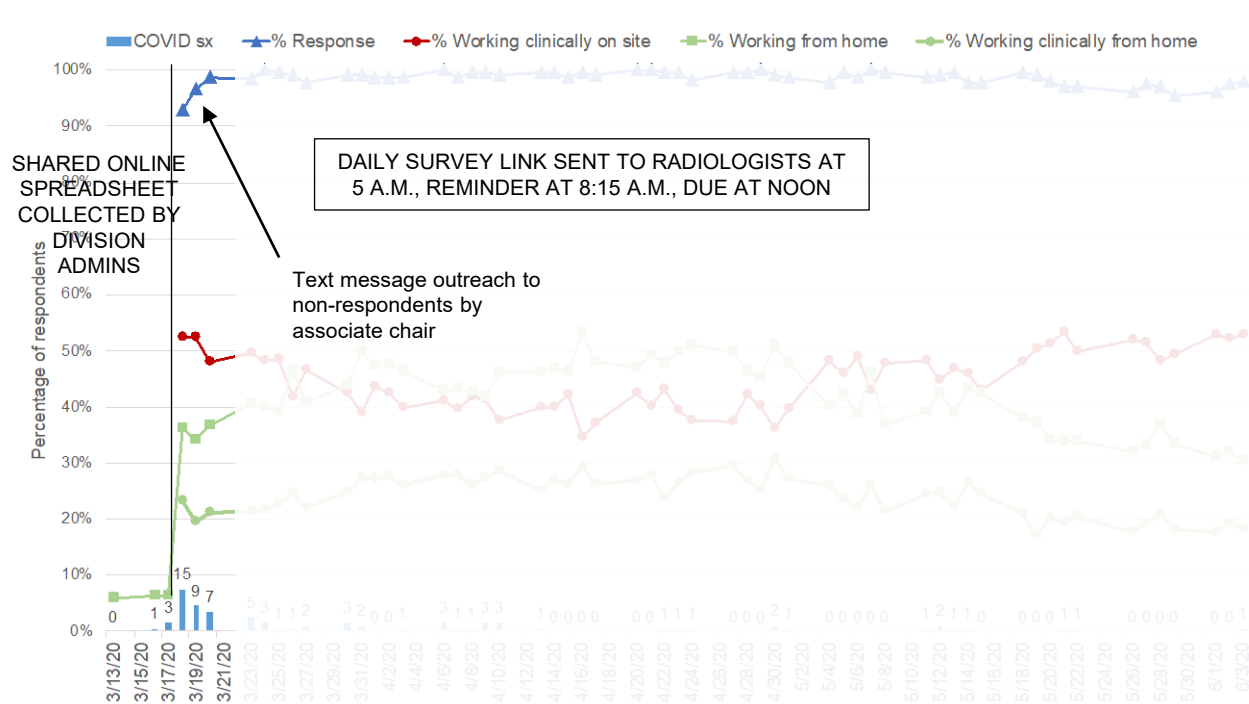
- Notify your division chief or designate and, if you are a resident, the program director and chief residents.
- Remain at home and, if you have not already done so, contact Occupational Health Services (650) 723-5922.

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- Based on work location response, respondent may receive follow-up question
- Instructions provided if respondent reports COVID-19 symptoms

Results

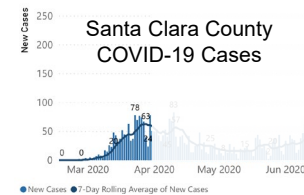
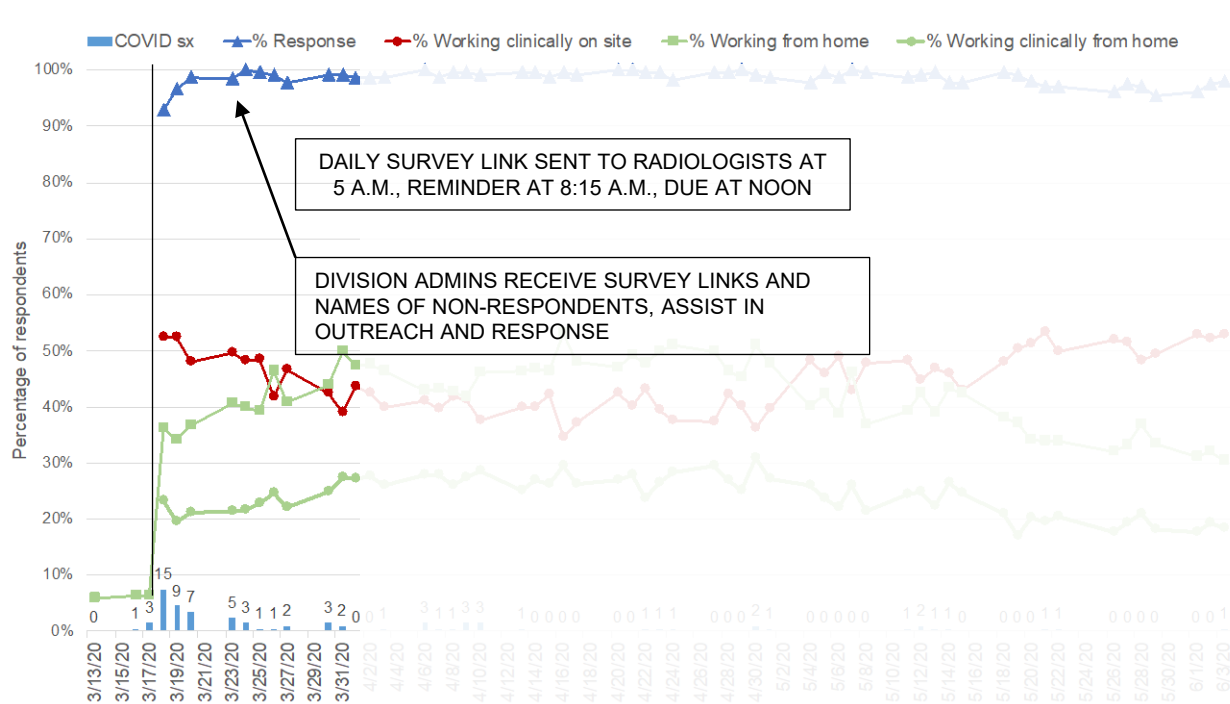
Phase 2: Direct 2-3 question survey to all radiologists, using personalized links so no need to enter demographic data



- “Working clinically from home” response jumped to 36.3%
- Initial response rate 93%
- On second day of survey, direct outreach by text messaging was performed in early afternoon to non-respondents

Results

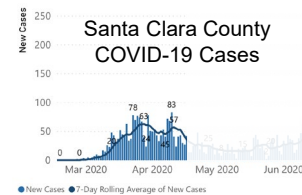
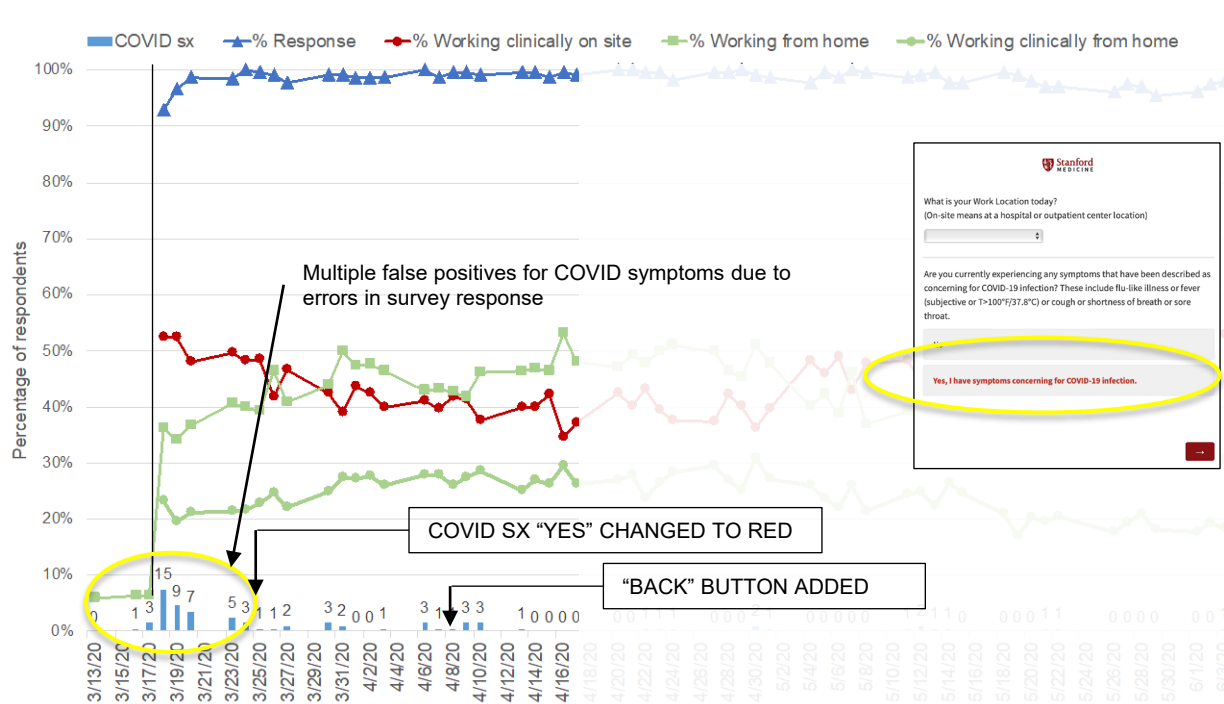
Phase 3: Direct survey to all radiologists with individualized links, outreach to non-respondents by admin staff



- On fourth day of survey, system developed to send names and links of non-respondents to division admins in early afternoon
- Subsequent occasional text message outreach by Associate Chair to non-respondents
- Response rate increased to 98-100%

Results

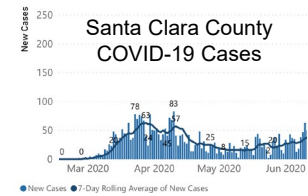
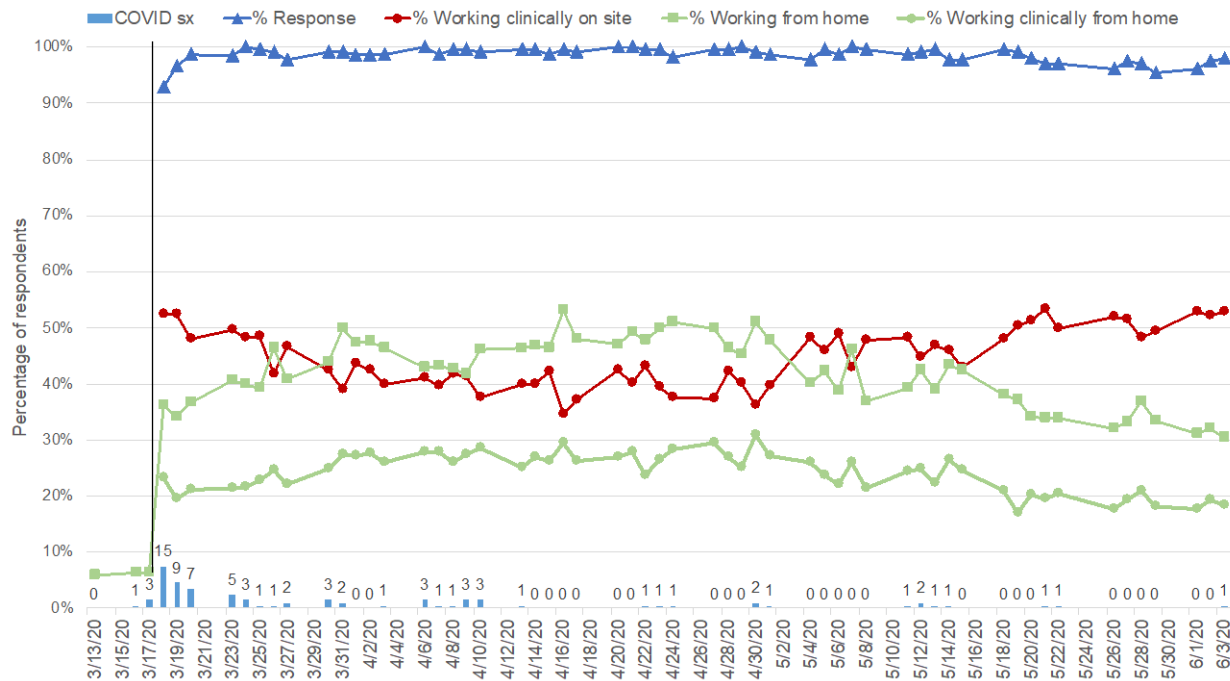
Changes made to survey to prevent false positive entries for COVID-19 symptoms



- Based on outreach to "symptomatic" respondents, we discovered that many responses were accidental
- Symptomatic response button color changed to red to distinguish from asymptomatic
- "Back" button added so respondent could go back to revise entry
- Free text field added so that symptomatic respondent could communicate plan

Results

Additional survey modifications performed in response to hospital updates and radiologist feedback




- Survey updated to communicate broadened definition of COVID symptoms (4/6/2020) and to communicate updated hospital protocols
- Follow-up questions removed 5/9/2020 to shorten survey
- Survey continued through 6/3/2020
- County shelter-in-place restrictions eased 6/5/2020

Conclusions

- High response rates (98-100%) achievable on daily department survey through multiple measures:
 - Communication of results during department huddles
 - Minimize number of questions to 2-3
 - Personalized links to avoid need for demographic information and to allow for targeted reminder emails and focused outreach to non-respondents
- Survey modifications improved the accuracy of COVID symptom reporting
 - Provided a “Back” button
 - Provided visual cues for (e.g., red for symptomatic)
 - Allowed respondent to free-text additional details about symptoms and testing plan

JUNE 4, 2020

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Although the department is discontinuing our daily check, we will need to continue to take measures to protect our health and that of our colleagues and patients. These measures include:

- **Social distancing:** 6 feet of distance from others, wearing a mask in hospital public spaces and in rooms with other people.
- **Hand hygiene**
- **Avoid touching your face:** Use hand hygiene before and after handling masks.
- **Workspace cleaning:** On arrival and throughout the day; avoid sharing workstations.
- **Reporting when ill:** Please contact your division chief, program director, Occupational Health, and Gloria Hwang.

COVID symptoms include:

- Fever (subjective or $T \geq 100^\circ$ Fahrenheit/ 37.8° Celsius) or
- Cough or
- Shortness of breath or
- Sore throat or
- Fatigue or
- Muscle ache or
- Loss of smell and/or taste or
- Runny nose/congestion/sneezing or
- Headache or
- Diarrhea or
- Nausea or
- Vomiting

Please indicate below that you understand and will adhere to our department's infection control measures.

I understand and will adhere to our department's infection control measures and will report to Gloria Hwang, my division chief/program director, and Occupational Health if I develop symptoms.

I would like to discuss this further with department leadership before agreeing to this.