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

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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.

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

1. Working clinically from home
2. As assigned/social distancing
3. Childcare/elder care
4. Current illness
5. 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.
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