

COVID screening tool for health care workers helped identify cases and prevent spread

December 6 2021



Credit: Unsplash/CC0 Public Domain

Any fever or chills? Cough? Shortness of breath? Answering these questions and others has become a familiar part of daily life during the pandemic. In March of 2020, the Massachusetts Department of Public Health and the Commissioner of Public Health issued an order requiring

all hospitals to screen employees and visitors for symptoms of COVID-19. Mass General Brigham rapidly developed and launched COVID Pass, a daily attestation tool that has been used to record more than 15 million attestations since its inception. But how well do attestation tools like COVID Pass work in catching symptomatic employees before they walk through the door and potentially transmit the virus to others? A new analysis led by investigators at Brigham and Women's Hospital assessed the effectiveness of daily symptom attestation for health care providers across the Mass General Brigham system. Rates of cases were low, but more than 100 employees who attested to symptoms using COVID Pass went on to test positive for COVID-19—reflecting the tool's potential for preventing transmission events. Results are published in *Infection Control & Hospital Epidemiology*.

"When the COVID-19 pandemic began, we wanted to take every step possible to make sure that our employees weren't bringing COVID-19 into the [hospital](#)," said senior author Hojjat Salmasian, MD, MPH, Ph.D., of the Brigham's Division of General Internal Medicine. "COVID Pass is just one of many layers of protection, but it does give employees a moment to pause and evaluate themselves. And if they do attest to symptoms, the tool immediately prompts them to get tested and directs them to resources for how and where they can get that test done."

The research team evaluated more than 2 million attestations over 99 days between March 23, 2020 and June 30, 2020 during the height of the pandemic in the Boston area. These included attestations from more than 65,000 employees across 52 hospitals and clinic sites within the Mass General Brigham system. Employees who came to campus were screened daily before being permitted on site and those who attested to at least one symptom were referred to Occupational Health Services for further evaluation, including testing if indicated, before being cleared for work. Health care providers could also contact Occupational Health

daily or get tested if they were concerned about exposure or symptoms.

Of the 2 million attestations evaluated, 99.9 percent reported no symptoms. There were 2,062 employees who attested to at least one symptom, with the most common symptom being sore throat (reported in 25 percent of symptomatic attestations). Of these, 905 employees were tested within 14 days and 114 (13 percent) tested positive for COVID-19.

"While the number of positive cases identified was low, attestations may have helped keep some of these unwell employees off campus and may have prevented some exposures and transmissions," said Ellen Kim, MD, MPH, the lead author of the manuscript who is a radiation oncologist at Brigham and Women's Hospital and Dana-Farber Cancer Institute, and a Clinical Informatics fellow at Mass General Brigham.

During the same time period, 1,289 employees tested positive for COVID-19. During the two weeks before their positive test, 9 percent had attested to symptoms, 58 percent had no symptoms, and 33 percent had not completed an attestation. Investigators identified this last group as potentially concerned employees skipping attestation and directly calling Occupational Health or independently scheduling a test. Employees only submitted attestations if they were planning to come in to work in a clinical setting.

"COVID symptom attestation screening tools have been adopted by hospitals across the world," said co-author Adam Landman, MD, interim chief information officer at Mass General Brigham. "This study provides initial evidence supporting [symptom](#)-based screening of [health care providers](#) for COVID-19."

For health care workers who attested to symptoms, the research team cross-correlated that data with lab results from tests conducted at a Mass

General Brigham facility—if the person was tested elsewhere, their data would not have been captured in the study. The authors also note that attestation occurs before a person arrives at work—if symptoms developed over the course of the day, that may not have been reflected in their attestation.

"Our ultimate responsibility to our patients is to do no harm," said Salmasian. "COVID Pass allowed us to identify more than 100 cases of COVID-19 and helped those employees receive the right level of care and testing so that they would not transmit this disease to their patients or their co-workers. It may seem like a small number when you think of millions of attestations, but when you think of the potential harm that can come from just one person spreading the virus, there is no such thing as a small success."

More information: Ellen Kim et al, Coronavirus disease 2019 (COVID-19) screening system utilizing daily symptom attestation helps identify hospital employees who should be tested to protect patients and coworkers, *Infection Control & Hospital Epidemiology* (2021). [DOI: 10.1017/ice.2021.461](https://doi.org/10.1017/ice.2021.461)

Provided by Brigham and Women's Hospital

Citation: COVID screening tool for health care workers helped identify cases and prevent spread (2021, December 6) retrieved 27 April 2024 from <https://medicalxpress.com/news/2021-12-covid-screening-tool-health-workers.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.