

Sara Alert: An enduring national resource to support public health monitoring & disease containment

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Background:

Public health agencies had to respond swiftly to the novel coronavirus that emerged in 2019 (COVID-19) to try to contain the virus, which requires early identification of new cases. Monitoring exposed individuals is labor intensive and available tools are often limited. MITRE, a company that operates federally funded research and development centers for the U.S. government, rapidly developed a configurable monitoring tool that allows public health authorities to monitor potentially exposed individuals in their jurisdictions.

Methods:

A team, including public health leaders, field epidemiologists, software engineers, and health communication specialists, was quickly assembled to design and develop an open source, disease-independent monitoring tool called Sara Alert. Outreach to key public health stakeholders, including partner organizations and local and state health departments, was conducted early for requirements gathering and to validate assumptions. Public health law experts were consulted regarding data privacy and security.

Results:

By four weeks, a minimally viable monitoring tool was available for testing by public health partners. Exposed individuals can be enrolled and reminded daily to enter a temperature and any symptoms by web or mobile interface, SMS messaging or phone. Public health officials monitor and can quickly take action if symptoms consistent with COVID-19 are reported or if there is failure to report within a configurable time frame. Dashboards provide insight into aggregated data appropriate to level of view.

Conclusions:

Sara Alert serves as a force multiplier that supports disease containment and allows resources to be directed where they are most needed. Successful development was possible because key stakeholders across public health practice were consulted early. Sara Alert is available, free, to state and local public health departments and serves as an enduring resource easily configured for the next public health emergency.

Key messages:

- Sara Alert serves as a force multiplier that supports disease containment and allows resources to be directed where they are most needed.
- Sara Alert serves as an enduring resource easily configured for the next public health emergency.