CSTE

Development and use of Salesforce as a COVID-19 surveillance system



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CATEGORY: Epidemiology and Laboratory Capacity (ELC)

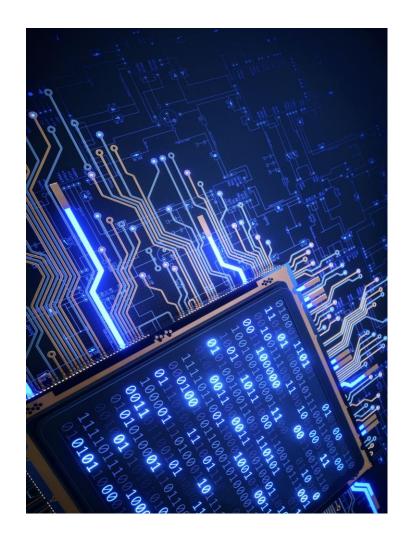
CATEGORY: Enterprise Approach to Data Systems Modernization

When existing systems proved inadequate to support the COVID-19 response, Rhode Island Department of Health (RIDOH) adopted a new system. Now, RIDOH is embarking on a landscape analysis to understand what functionality is needed across programs.

The "What"

During the COVID-19 pandemic, existing infectious disease surveillance and response systems were inadequate to meet the demands of the volume of reporting and the types of engagement that the public and partners required. Salesforce was utilized as the Rhode Island COVID-19 System to overcome these challenges. It offered a customizable solution for receiving results and processing entered information, and offered expanded services like test scheduling portals, result look-up portals, and messaging (email and text) to the public, which fit the demands of the ever-changing nature of the COVID-19 pandemic.

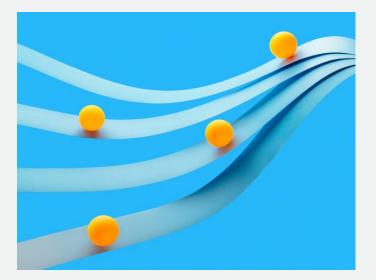






The "So What"

Salesforce helped Rhode Island Department of Health (RIDOH) achieve nearly universal electronic lab result reception, moving away from a history of largely paper-based surveillance. The Salesforce implementation allowed case investigators to perform direct data entry while interviewing cases. With data entering the system faster, the data could be analyzed faster, ultimately culminating in effective public health action. Use of Salesforce allowed the public to schedule their own tests, look up their own results, and enter their own information in lieu of a phone interview. This reduced the burden of work on RIDOH staff and was critical during surges in COVID-19 case counts. Salesforce allowed for custom queues to route cases to the correct case investigation specialty teams quicker than previous systems. With Salesforce, age and geographic indicators on lab results were used to facilitate prioritization. Custom queues collected results for various subpopulations for work to occur. Salesforce was even designed to detect potential clusters without human intervention, again saving time. Finally, Salesforce allowed custom reports and dashboards to show real-time information about operational metrics like timeliness of response and throughput.



The "Now What"

As COVID-19 moves to endemic, RIDOH is embarking on a landscape analysis of surveillance systems to understand what functionality is available at what cost from Salesforce, National Electronic Disease Surveillance System Base System (NBS), and other systems. Knowing what has been achieved with Salesforce, can similar improvements be made for other surveillance systems? Can these functionalities be employed for other surveillance systems and can they be done so through Salesforce or other systems? The COVID-19 response has been a proof of concept that RI can accept electronic lab results in multiple formats, can create public and partner interfaces to get data quicker and improve the public's experience with RIDOH, and that technology and automation can support teams so time can be spent on more valuable activities.

Key contributors to this project include Jaime Comella, Chief, Center for COVID-19 Epidemiology; Sarah Bowman, COVID-19 Quant Team; Daniela Quilliam, Chief, Center for Acute Infectious Disease Epidemiology, COVID-19 Tech Team, Simplus/Infosys.

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