

Council of State and Territorial Epidemiologists (CSTE)

When the pandemic started in early 2020, Experian Health met with the U.S. Department of Health and Human Services to see how we could offer support of national- and state-level efforts to slow the spread of COVID-19. That was the catalyst for the working relationship between Experian Health and the Council of State and Territorial Epidemiologists (CSTE).

The Council of State and Territorial Epidemiologists (CSTE) and its member organizations

The CSTE is a national organization of member states and territories representing public health epidemiologists. It strives to advance public health policy and epidemiologic capacity.

As the COVID-19 pandemic surged, the group looked for ways to support effective and expedient surveillance and understanding of infection rates so that state-level health departments could use timely data to make informed decisions for action in their states and local communities. Sunbal Virk, public health attorney of CSTE, sought to support member organizations with data tools that could be stood up quickly and that could be mastered by new users fast enough to keep up with and get ahead of the spread of COVID-19.

The health departments in Massachusetts, Tennessee and Washington, all members of CSTE, are tackling ever-evolving population health challenges related to COVID-19 and other epidemiological situations in their respective states. Each of these state organizations works with CSTE and the resources it provides to address different aspects of COVID-19 infection and vaccination rates within their communities, along with other disease control initiatives.

Throughout 2020 and 2021, a common theme at the state level was to be able to efficiently identify citizens and contact those infected and those in close proximity with COVID-19-positive citizens.



Use case: localized decision-making

The Massachusetts Department of Public Health (MDPH), specifically the Division of Surveillance, Analytics and Informatics (DSAI), was responsible for providing local governments with data around community spread of COVID-19 and the presence of COVID-19-positive clusters within their communities. These data were used to help inform local and state officials' decision-making around public health response (e.g., opening or closing schools and whether or not to hold local public events).

Patient privacy considerations temporarily delayed the initiative. It took several months to work through the MDPH legal team's concerns and establish that the initiative met the team's privacy standards. DSAI agreed that a best practice going forward would be to have an "expiration date" on usage rights to demographic data provided by Experian.

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Another challenge this team faced stemmed from the transitory nature of unique segments of the state's citizens: college students, nursing home residents and incarcerated people. DSAI found that addresses on file for these residents often showed these residents' home addresses as linked to their health insurance data, and not to their current addresses during the pandemic. Inaccurate address information could skew data resulting in potentially inaccurate data representations. These gaps in current address data brought a significant risk to the report-outs that the MDPH needed to deliver.

The DSAI team measured and monitored the level of completeness of patient records, including data points on addresses, geographies, gender, race and ethnicity. In the early days of COVID-19 testing, incomplete patient records were common. This group was able to complete patient records by pulling phone number, address and other demographic data, using the Universal Identity Manager Experian Single Best Record.

These complete records increased the value and usefulness of their dashboards among stakeholders at the local level, enabling them to make timely, hyper localized decisions for their communities throughout the pandemic. These records also facilitated accurate triage to appropriate local authorities among the 351 local boards of health in Massachusetts.

Localized COVID-19 dashboards provided the data-driven support needed to make public health decisions at the local level.



Use case: patient outreach amid mass relocations

David Fields, Epidemiologist and COVID-19 Team Lead with the Tennessee Department of Health (TDH), identified the trend of mass relocation among citizens as just one major factor making patient outreach around contact tracing extremely difficult during the pandemic. Factors that exacerbated patient outreach included:

Residential displacement caused by job loss

Fluid and shared living spaces and phone numbers among migrant farmworkers

Stale contact data held by private laboratories that expanded into COVID-19 testing

Because of the rapid pace of community spread and missing or dynamically changing demographic data — including phone and address — patient outreach was hindered. David and his team at the TDH helped community health departments with about 150 demographic data requests per day. By providing this patient contact data, these local health groups could then connect with community members who had been tested or needed to be tested for COVID-19.

Before the pandemic, David's team used proprietary and third-party databases that aggregated and made available public record data. Through CSTE, the team adopted Experian Health's Universal Identity Manager as a supplementary tool. The Universal Identity Manager always produced results and was especially helpful in providing contact data for hard-to-contact residents. It also aided in the team's call-down efforts by providing the most accurate phone numbers for COVID-19-positive community members and people who needed to be included in contact tracing. Demographic data returned, like gender and race, helped with statistical analysis on the Tennessee populace.

“Around one in five U.S. adults (22%) say they either changed their residence due to the pandemic or know someone who did.”

— Pew Research Center¹

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Use case: contact tracing

As infection rates of COVID-19 grew in Washington state, the contact tracing efforts of the state's Department of Health (DOH) went into overdrive. The mission: to drastically slow the spread of COVID-19 among the state's communities.

As positive test results rolled in from over 400 labs, the Public Health Outbreak Coordination, Informatics, and Surveillance team at the Washington DOH, led by Executive Director Leigh Bacharach, found that they didn't have the contact data they needed to get in touch with those infected. Not having accurate or complete contact data wasn't new to this team — some level of incomplete or inaccurate patient records is the norm within their information systems — but given the speed of the spread and possible severity of infection, attempting phone calls to providers to track down the most recent contact information on COVID-19-positive people wasn't a workable solution during this public health emergency. This method was far too slow and unreliable for the DOH's contact tracing efforts to be impactful.

The team had some data sources available to them to track down citizens in the cases of infectious disease, but these sources weren't full proof. And with an ambitious goal of having 100% of positive cases connected to valid addresses and contact information without having to exhaust all resources, this group needed a data source that could address remaining gaps in demographic information.

“The Washington State Department of Health team was able to close gaps in previously unmatched contact records more than 50% of the time through the Universal Identity Manager.”

These gaps were closed using Experian Health's Universal Identity Manager portal. Closing gaps in contact data enabled local public health officials to successfully connect with community members infected with COVID-19 and provide quarantine instructions, information around comorbidities and access to care coordination. Potential close contacts and exposure locations could also be identified and contacted to drive awareness of possible COVID-19 exposure, allowing people to take precautionary measures to mitigate further spread and to be aware of symptoms that may arise.

“About a fifth of U.S. adults moved due to COVID-19 or know someone who did.” by D'Vera Cohn with the Pew Research Center. <https://pewrsr.ch/2Z4sqP3>