Connecting for Better Health

HIE and Public Health: Statewide Success Stories
Issue Brief, March, 2021

Health information exchange (HIE) networks have been identified as key to assisting public health efforts, especially during the COVID-19 pandemic.[1] State public health departments across the country are working with their HIE network partners to support policy and planning activities. Although HIEs were collaborating with their public health counterparts prior to COVID-19, the pandemic has presented a recognized need for HIEs to assist with immunization reporting, lab result reporting and the development of surveillance tools, among other activities.

This issue brief outlines how HIEs in other states are collaborating with state partners for public health purposes, the current state of public health data sharing in California, and opportunities for California policymakers and stakeholders to support the use of an HIE network for public health.

I.   How health information exchanges in other states are collaborating with state partners for public health purposes

- **Reporting data to public health registries.** Reporting to public health registries, such as cancer and immunization registries, is a key function HIEs can facilitate for health care providers. This function is more critical than ever given the COVID-19 pandemic and the need to ensure timely immunization data updates. For example, New York's Statewide Health Information Network for New York (SHIN-NY) is working with health departments at the state and city levels to integrate into bidirectional data exchanges between providers and health departments for immunization registry reporting for childhood immunizations.[2] During COVID-19, SHINY-NY and other HIEs like CyncHealth are also enabling the reporting of COVID-19 immunization data.[3]

- **Sharing lab results for infectious diseases.** HIEs in nearly every state assist public health departments in surveillance efforts, often through the reporting of lab results to public health departments—a critical need during the COVID-19 pandemic where reporting test positivity rates has been essential to reopening regions across the country.

- **Supplementing public health data with demographic data.** In Maryland, CRISP has added demographic data from CRISP's master patient index to COVID-19 vaccination and case data from the state to create dashboards and reports stratifying by race,

---

[1] Niam Yaraghi and Peter L. Levin, Brookings Institution, *Five ways that health information exchange can help with vaccination efforts*, Brookings Institution (Feb. 1, 2021) https://www.brookings.edu/blog/techtank/2021/02/01/five-ways-that-health-information-exchange-can-help-with-vaccination-efforts/.

[2] New York eHealth Collaborative, *SHIN-NY Services for Payers* (Nov. 11, 2018), http://www.nyehealth.org/nyec16/wp-content/uploads/2018/11/SHIN-NY-Services-for-Payers_111118.pdf.

[3] CyncHealth, *NEHII can help ease required reporting* process (Mar. 20, 2020), https://cynchealth.org/nehii-can-help-ease-required-reporting-process/.

ethnicity, and geography.[4] This data is essential to understanding health disparities among socioeconomic, ethnic and racial groups. Additionally, the utilization of CRISP's master patient index doubles to automate the collection of race and ethnicity data that is often manually collected by providers at testing sites. In several other states HIEs are supplementing race and ethnicity data as well as contact information for cases and immunizations to support COVID-19 tracking, contact tracing and vaccination follow-up.

- **Monitoring hospital bed capacity across regions.** A key, traditional offering of HIEs is the sharing of admit, discharge and transfer (ADT) data from emergency departments (ED) with providers and health plans. As hospital beds have been at a premium during the COVID-19 pandemic, HIE networks across the country have harnessed ADT data to provide real-time data on bed capacity for state public health departments and hospitals. In Arizona, Health Current has collaborated with the Arizona Department of Health Services to create a 24/7 statewide phone line for hospitals to call to locate available beds at other hospitals—using Health Current's ADT data from providers across the state.[5]

- **Developing population health data analyses.** HIEs also have a track record of working with their public health partners in population health and epidemiological modeling. For example, CRISP has worked with the Maryland Department of Health to create COVID-19 response tools to support vaccination initiatives in the state.[6] In addition to providing data feeds to the state on lab results and immunizations, CRISP provides state health leaders with a series of dashboards that illustrate the number and proportions of individuals with positive COVID-19 test results, and the number of individuals that have received the first dose versus both doses of the COVID-19 vaccine. The dashboards' reports are updated daily and can be analyzed at the county, zip code, or census block level so that public health officials can appropriately and continuously tailor their responses based on greatest need. Similarly, HIEs in Colorado (CORHIO) and Indiana (IHIE) have created comprehensive dashboards of COVID-19 cases, using data from the state registry supplemented with demographic and health history data from the HIE.

II. Public health data sharing efforts in California

There are several notable HIE public health collaborations across California's regions. During the early days of the COVID-19 pandemic, Manifest MedEx utilized its claims and clinical data to help Riverside County identify thousands of patients at high risk for COVID complications, to support county prevention and vaccination outreach efforts.[7] Manifest MedEx also compiles regular reports for state and local public health officials on ED and inpatient utilization for its 120 participating hospitals, so policymakers can spot and address concerning trends. Additionally, the Los Angeles Network for Advanced Services (LANES) HIE entered into a partnership with a local testing vendor to ensure that COVID-19 test results were shared with the county's public

---

[4] CRISP, *COVID Vaccine Reports* (Jan. 2021).
[5] HealthCurrent, *Health Current Providing Critical Real-Time Data for Arizona Surge Line's Bed Capacity Tracking* (Jun. 23, 2020), https://healthcurrent.org/covid-19-arizona-surge-line/.
[6] CRISP, *COVID Vaccine Reports* (Jan. 2021).
[7] Inland Empire Foundation for Medical Care, Riverside County Medical Association, Manifest MedEx, Using Data to Proactively Identify and Assist High-Risk Patients During COVID-19 (2020), https://www.manifestmedex.org/category/case-studies/.

hospital system, Los Angeles County Department of Health Services,[8] and is working with providers like Chinatown Service Center to share COVID-19 test results in near real-time with providers providing virtual visits to patients.[9]

Unlike those in other states, California's public health agencies have not leveraged HIEs to support statewide COVID-19 response. Many providers and hospitals do not participate in HIE efforts, so data are not complete, and state agencies do not have formal partnerships with HIEs—a challenge, particularly because there are multiple HIEs across the state with different capabilities.

As outlined in the experiences in other states, a critical role for HIEs is to serve as the information sharing conduit between public health departments and care teams. Public health agencies in other states are sharing COVID-19 lab results and vaccination data on a daily basis with HIEs, so HIEs can provide timely reports and data to providers and health plans to support outreach efforts. This solves a critical challenge for providers and plans, who may not otherwise know whether their patients or members have been vaccinated.

To address these challenges, California needs a robust, statewide network for health information exchange, partnered with state and local public health departments. California's cumbersome public health data reporting approach has strained the state's response to the pandemic, with dependence on ad-hoc county and hospital reports to track COVID-19 testing rates. The COVID-19 crisis revealed significant challenges in California's public health information exchange and laboratory results reporting capabilities with local and state health departments.[10,11] These challenges are surfacing again during the vaccine rollout as organizations struggle to identify priority patient populations for vaccination, and to track and manage vaccine distribution across the state's nine distinct regional immunization registries.[12] While COVID-19 brings data sharing gaps to the forefront, the lack of a statewide data sharing infrastructure prevents California from being able to adequately tackle other public health crises as well, including hot-spotting for future pandemics, evaluating the health impact of wildfires[13] and understanding policy impact on reducing health disparities among Californians.

[8] LANES, *LANES, Fulgent Genetics and LA County Department of Health Services Collaborate to Fast-Track COVID-19 Test Results to Local Healthcare Providers* (Nov. 18, 2020), https://lanesla.org/fast-track-covid-19-test-results/.

[9] LANES, *Chinatown Service Center Turns To LANES And Telehealth Virtual Care To Fight COVID-19* (Apr. 29, 2020), https://lanesla.org/chinatown-service-center-turns-to-lanes-and-telehealth-virtual-care-to-fight-covid-19/.

[10] Ana B. Ibarra, *Going down? Maybe not. State reports technical glitch led to COVID-19 Undercount*, Cal Matters (Aug. 4, 2020), https://calmatters.org/health/2020/08/covid-undercount-technical-glitch/.

[11] Catherine Ho, *California to create new coronavirus data system after tech failure*, San Francisco Chronicle (Sept. 2, 2020), https://www.sfchronicle.com/bayarea/article/California-to-create-new-coronavirus-data-system-15535062.php.

[12] Melody Gutierrez, *Data problems hurt California's COVID-19 vaccine distribution efforts,* Los Angeles Times (Feb. 14, 2021), https://www.latimes.com/california/story/2021-02-14/california-covid-19-vaccine-data-collection-confusion.

[13] Ezra David Romero, *California Has Issues With Wildfire Data, And Experts Say It's Complicating The Fire Fight*, CapRadio (Oct. 29, 2020), https://www.capradio.org/articles/2020/10/29/california-has-issues-with-wildfire-data-and-experts-say-its-complicating-the-fire-fight/.

III.   Opportunities for California policymakers and stakeholders to support the use of an HIE network for public health

Statewide health information exchange tightly partnered with public health departments will strengthen our pandemic response today and prepare us for future public health emergencies. Policymakers and stakeholders can collaborate on three key actions to advance statewide health information exchange in California.

- Ensure every provider and health plan shares needed data so that the whole care team, regardless of where they are in the state, has the information they need to serve their patients.
- Cement an ongoing source of funding. Other states have leveraged available federal funding to build robust health information exchange infrastructure. It is time for California to do the same.
- Build needed statewide infrastructure while leveraging regional efforts, making sure every stakeholder has the appropriate support to participate.