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## networks

# Public Health Reporting for COVID-19

## St. Ann's Community of New York Finds Smart Solution in Shasta Networks

**Challenge:** To help protect staff and preserve quality of care during the COVID-19 pandemic, St. Ann's Community implemented in-house point-of-care (POC) testing. To avoid time-consuming data entry for public health reporting, they needed a way to automatically retrieve, combine and transmit employee data alongside test results.

**Solution:** With Shasta Networks' Public Health Reporting capabilities and expertise, St. Ann's Community successfully automated and streamlined their COVID-19 public health reporting process. Compared to manual entry, this integrated solution optimizes efficiency and accuracy, ensures effortless compliance, and supports faster return to work.

**Outcome:** By eliminating manual data entry, St. Ann's Community saved approximately 80 hours per week – the equivalent of two full-time employees – allowing their team to focus on projects that enhance patient experiences. As a result of this time-savings, St. Ann's estimates just 3-4 months for full return on their investment with Shasta Networks.

## ^ The Impact of Automation in Public Health Reporting

St. Ann's Community employs 1,200 staff members across its various sites – including long-term care (LTC) centers, assisted and independent living facilities. Under a statewide mandate issued early in the COVID-19 pandemic by the New York State Department of Health (NYSDOH), all nursing home employees must be tested for COVID-19 at least once a week. Those in regions with high positivity rates (a moving target) must be tested twice a week, and if a staff member tests positive at any point, everyone on that unit must be retested immediately.

Like many nursing homes across the country, St. Ann's Community experienced staffing shortages due to COVID-19 cases and exposure-related self-isolation precautions. Many times during the pandemic in 2020, St. Ann's had up to 12 percent of its employees in quarantine, unable to work. Adding to the strain were the days spent waiting for lab-based RT-PCR test results.

> " After a staff member quarantines for 14 days, he or she must test again and receive a negative result before returning to work. When PCR test results take an average of 3-5 days, two-week absences become three-week absences, which is unsustainable. We needed to get our people back to care for our residents as soon as it was safe to do so. "
>
> — Aaron Fields, Chief Information Officer, St. Ann's Community

St. Ann's leadership acted quickly to integrate rapid-result testing protocols into their LTC operations for in-house staff testing. They knew tests could be administered with minimal operational impact utilizing their skilled nursing staff, but the reporting component, required by state and federal law of any facility conducting COVID-19 tests, would pose significant administrative obstacles.

Knowing this, Aaron Fields, Chief Information Officer, and Matt Evans, Clinical Informatics Coordinator prioritized the need to automate the public health reporting process. They needed a way to:

- Extract demographic and contact information from employee files maintained by Human Resources (HR)
- Extract test-specific data from the POC test results application
- Combine these data points into secure, NYSDOH-compliant HL7 messages for automatic transmission to NYSDOH's Electronic Clinical Laboratory Reporting System (ECLRS) within the state-mandated three-hour timeframe

For a solution that could be implemented quickly and scaled up easily for additional volume and use cases over time, they turned to their longtime HIT partner, Shasta Networks. With proven systems and expertise for public health reporting in other states, Shasta Networks responded by delivering a fully compliant, fully automated public health reporting solution that eliminated approximately 80 hours of data entry per week, turning the per-test reporting process from 50+ entry points into "a scan and two clicks," according to Fields, adding: "That makes a big difference."

## State and Federal Reporting Requirements

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|---|---|
| NYSDOH reporting requirement:<br>**3-hour max** | HHS reporting requirement:<br>**24-hour max** |
| Required data per test:<br>**50+ points** | Required reporting formats:<br>**CSV or HL7** |

> ❝❝ **Our staff cannot improve residents' quality of life by filling out spreadsheets, so automation was the clear answer. With the administrative labor savings, we will achieve full return on our investment with Shasta Networks in a few months—but the ability to keep staff focused on projects that enhance outcomes and experiences, that's where the real value comes in.** ❞❞

— Aaron Fields, Chief Information Officer, St. Ann's Community

## ⌃ Secure Data Integration & Transmission

To meet all reporting requirements, the data integration process begins with St. Ann's Community's barcoded employee badges. At the point of COVID-19 testing, the employee's badge is scanned, and his or her employee number serves as the unique patient identifier for the POC test results application.

The Shasta Networks Public Health Reporting solution automatically retrieves data from multiple sources – including employee files, the HR database and the COVID-19 test results application – to populate a compliant HL7 message for automatic delivery to NYSDOH through a secure process.
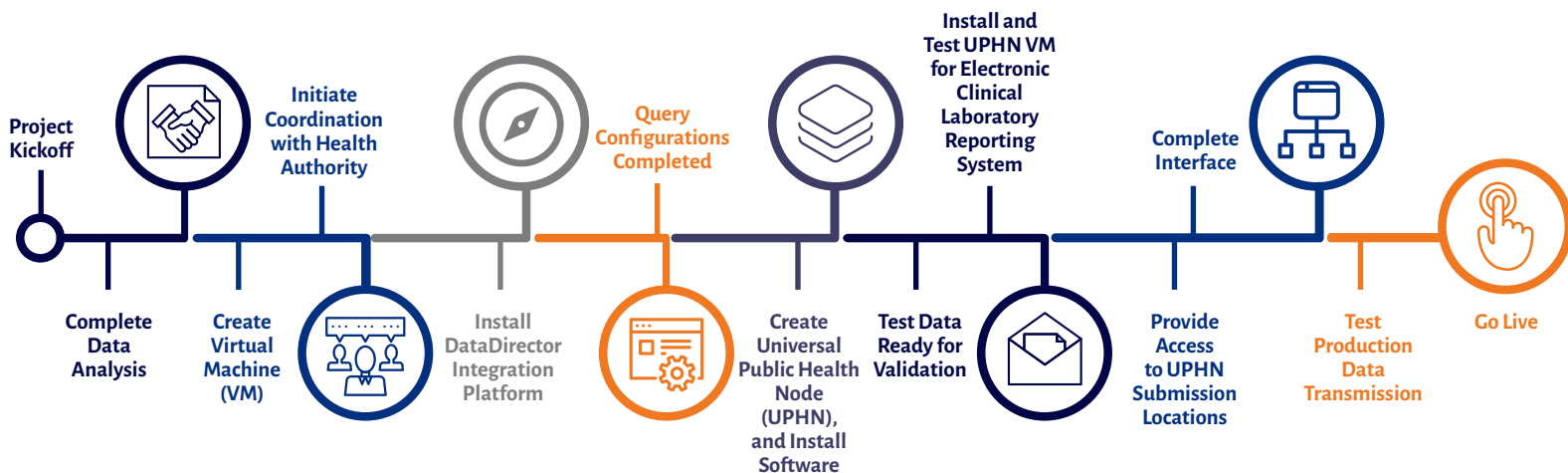
## ⌃ Rapid Implementation with Expert Project Management

In simultaneously managing the health and safety of their staff while serving an at-risk resident population, speed of implementation was critical for St. Ann's Community to effectively respond to COVID-19. Drawing on previous successes and experience in public health reporting solutions, the Shasta Networks team worked swiftly to develop and execute on a total timeline of fewer than eight weeks from project initiation to go-live. Shasta Networks managed the project from start to finish, working in tandem with the St. Ann's Community team to ensure seamless execution and successful transmission to the ECLRS.



> " Shasta Networks is great to work with. They had a project plan and managed it very well for us, setting up the necessary integration capabilities, working with the state on our behalf and sending us clear action items to complete. It was their first implementation in New York so there were hurdles to overcome, but they always did so with great speed and professionalism. "
>
> — Matt Evans, Clinical Informatics Coordinator, St. Ann's Community

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**Project Kickoff**

**Initiate Coordination with Health Authority**

**Query Configurations Completed**

**Install and Test UPHN VM for Electronic Clinical Laboratory Reporting System**

**Complete Interface**

**Complete Data Analysis**

**Create Virtual Machine (VM)**

**Install DataDirector Integration Platform**

**Create Universal Public Health Node (UPHN), and Install Software**

**Test Data Ready for Validation**

**Provide Access to UPHN Submission Locations**

**Test Production Data Transmission**

**Go Live**

## ⌃ Versatility & Scalability

Because Shasta Networks' Public Health reporting solution makes the process effortless and requires no manual intervention, it is highly scalable. Fit for use by any testing facility from nursing homes to labs, hospitals and health systems, this solution can scale to any volume, extract from any EHR or application using standard protocols or via custom interfaces, and transmit to a public health system endpoint. At St. Ann's Community, expansion plans and possibilities include the following:

- Gradually increase in-house staff testing (while continuing to provide additional access points through local pharmacy partners and their New Jersey–based clinical laboratory partner)
- Expand in-house testing to include residents
- Expand to include other infectious diseases that require public health reporting
- Expand to include HHS reporting once the Centers for Disease Control and Prevention (CDC) provides the necessary HL7 integration capability
- Expand to include vaccine registry reporting

Fields and Evans say they have full confidence in Shasta Networks to support their expansion plans and all other HIT initiatives.

**"For more than a decade, St. Ann's has partnered with Shasta Networks on a range of projects, and they always come through, no matter the request," says Evans. "It seems no solution is beyond their reach, and no customer need too large or small. That's great to have in a HIT partner."**

After automating public health reporting for COVID-19, Shasta Networks and St. Ann's began work on ECLRS reporting of influenza tests to NYSDOH for its Influenza Activity, Surveillance and Reports program.

## ⌃ Results & Outcomes

**Rapid implementation:** The Shasta team's proven solution and experience informed the project plan, enabled end-to-end project management and facilitated rapid implementation to accommodate pressing demands.

**Time savings:** St. Ann's estimates saving approximately 80 hours per week – the equivalent of two full-time employees – by eliminating manual data entry. As a result, the administrative team can focus on more value-added activities.

**Quick ROI:** Through the time savings, St. Ann's estimates full return on investment for the Public Health Reporting solution within 3-4 months. St. Ann's will see additional time and labor cost savings by automating the federal reporting process as well.

**Enhanced safety:** Automated data extraction decreases risk of human error. In all the interconnected complexities of a pandemic, even slight errors can potentially affect everyone's health and safety, from employees to residents, families and communities at large.

**Faster return to work:** The secure, compliant data exchange made possible by Shasta Network's Public Health Reporting solution supports St. Ann's strategies for rapid-result testing to combat the staffing crisis, which is critical to preserving quality of care.

# Shasta Networks Public Health Reporting

## Solutions

- Communicable Disease Reporting and Surveillance
- Immunization Reporting
- Syndromic Surveillance
- Cancer Registry Reporting
- Parkinson's Disease Registry Reporting

## Features

- Cloud-based reporting gateway can retrieve information from any database or electronic health record
- Shasta Networks provides a full project plan with highly experienced project management
- Requires no user training because data collection and transmission is automated end-to-end
- Includes Managed Services after go-live to identify and troubleshoot errors detected by the public health agency
- Versatile and scalable for any size institution and across a wide range of use cases
- Expert guidance in the compliance process for new projects and changing regulations

## Benefits

- Eliminates manual effort with automated data retrieval and public health reporting
- Increases accuracy by decreasing risk of error, which enhances staff and resident safety
- Ensures compliance with state/federal laws for electronic submission of COVID-19 test result reporting and all reportable conditions
- Supports rapid results and reporting requirements, which helps protect quality of care and integrity of operations
- Significant impact from greater clarity and precision in public health reporting while requiring minimal time and financial investments

> " Shasta's automation technology is critical to supporting our efforts to bring rapid-result testing in house, which essentially reduced the wait time from several days to 15 minutes, allowing us to get people who are clear of COVID-19 back to work faster. "
>
> — Aaron Fields, Chief Information Officer, St. Ann's Community

Are you ready for increased efficiency, superior accuracy and effortless compliance in your public health reporting processes? Shasta Networks provides a broad range of expert HIT solutions and services for healthcare organizations of all sizes and types.

To explore what Shasta Networks can do for you, visit **shastanetworks.com** or call **(541) 488-6820**.

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