LYNIATE

BioIntelliSense Uses Lyniate for COVID-19 Screening, Monitoring & Trials

The Customer

BioIntelliSense provides medical-grade continuous health monitoring and COVID-19 screening at scale. Their proprietary FDA-cleared BioSticker™ and medical-grade BioButton™ wearable devices and algorithmic data services provide clinical intelligence that sets a new standard in Remote Patient Monitoring (RPM). In response to the COVID-19 pandemic, BioIntelliSense accelerated the development and launch of its COVID-19 solution to facilitate the detection of signs and symptoms of an early infectious process for safe return to work, school, travel, and events.

The BioIntelliSense Data-as-a-Service (DaaS) platform also includes the BioHub™, a cellular 5G-enabled gateway designed for seamless and secure Bluetooth wireless data transmission to the BioCloud for advanced analytics. The BioSticker and BioButton wearable devices are also compatible with BioMobile, an iOS and Android downloadable app, conveniently offering a range of deployment options for RPM programs.

The Challenge

The initial challenge BioIntelliSense faced was integrating JSON device data into Epic via HL7 for a leading healthcare system in Colorado. "We needed a technology partner who understood the regulated medical device industry and could meet a diverse set of data integration requirements," said Mike Hawn, SVP Data Services & Product Solutions for BioIntelliSense.

After evaluating integration solutions, BioIntelliSense selected the fully managed cloud-based interoperability solution from Lyniate. "We wanted a cloud-based option and a fully managed service — a partner who knew health integration, so our engineers could focus on one pipe and one protocol to get data to the integration engine, and then trust that service to securely share the data downstream with our clients," Hawn said.

Additionally, BioIntelliSense required a technology partner who could keep pace with their growth and integrate with a diverse set of enterprise systems, including EHR systems, RPM applications, telehealth solutions, and clinical trial platforms.

"We occasionally encounter clients or partners with limited integration resources and systems that rely on data exchange that is FTP-based," Hawn explained. "To have Lyniate pull up a comma delimited file, massage it, and hit our JSON APIs, without any engineers having to be involved on our side, is very efficient."

"All that magic behind the scenes — Lyniate makes it happen."

— **Mike Hawn**, SVP Data Services & Product Solutions for BioIntelliSense
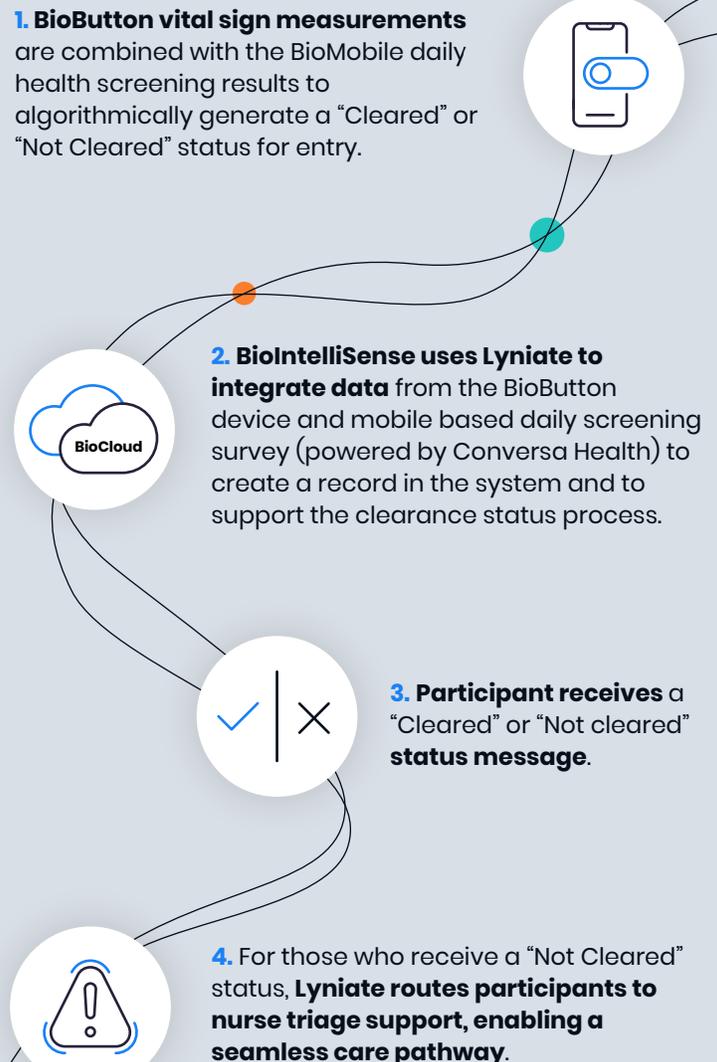
The Solution

Leveraging Lyniate capabilities, BioIntelliSense was able to successfully integrate with a leading EHR's environment along with more than 20 best-in-class RPM applications and telehealth solutions to address the COVID-19 pandemic and medical-grade care at home. BioIntelliSense is uniquely positioned to address virtual care strategies and the demand for hospital-to-home programs with existing and planned enterprise-grade integrations, supported by Lyniate, that are designed to accelerate and scale deployments for providers and health plans.

The following use case scenarios further illustrate the combined Lyniate and BioIntelliSense capabilities and value:

BioButton Medical Grade COVID-19 Screening Solution

The BioButton COVID-19 Screening solution provides an added layer of safety and protection in managing return to work, school, travel, and events. Enterprise organizations nationally, along with the Saint Lucia Ministry of Health, have selected the BioButton COVID-19 screening solution to monitor for signs and symptoms of an early infectious process, as illustrated in the workflow on the right.

Building Lyniate into the BioIntelliSense platform architecture from the beginning, allows for repeatable use case across multiple clients and market segments.

1. **BioButton vital sign measurements** are combined with the BioMobile daily health screening results to algorithmically generate a "Cleared" or "Not Cleared" status for entry.

BioCloud

2. **BioIntelliSense uses Lyniate to integrate data** from the BioButton device and mobile based daily screening survey (powered by Conversa Health) to create a record in the system and to support the clearance status process.

3. **Participant receives** a "Cleared" or "Not cleared" **status message**.

4. For those who receive a "Not Cleared" status, **Lyniate routes participants to nurse triage support, enabling a seamless care pathway**.

> "Because we chose **integration as a fully managed service**, we were able to quickly launch this clinical trial and automate an otherwise manually intensive workflow."

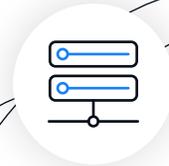—— **Mike Hawn**, SVP Data Services & Product Solutions for BioIntelliSense

Automatic Device Ordering for COVID-19 Detection Trial

Philips, BioIntelliSense, and University of Colorado have received U.S. Department of Defense funding for early COVID-19 detection. The 2,500-person clinical trial is designed to validate BioIntelliSense FDA-cleared BioSticker device for the early detection of COVID-19 symptoms. The goal is to accelerate the use of wearable diagnostics for the benefit of military and public health through the early identification and containment of pre-symptomatic COVID-19 cases. BioIntelliSense is leveraging Lyniate capabilities to automate the ordering and distribution of its BioSticker and BioHub devices to study participants, as illustrated in the workflow to the right.

BioIntelliSense

1. When a participant enrolls in the clinical study, their **demographic information is saved on an FTP site**. Lyniate picks up the data and initiates a device order.

2. The order is shipped and the **participant receives a BioSticker and BioHub**.

3. Lyniate communicates the tracking number and device IDs back to the ordering system via FTP. Lyniate then **automates the activation of the SIM card in the participant's BioHub**.

Curious how Lyniate can help you connect data in the cloud?

[**Let's talk**]