# patientLynk

## THE PORTAL UNITING PATIENTS, PROVIDERS, INSURERS



www.abartyshealth.com

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Health record interoperability has long been a pain point for patients, insurers, and labs. The ability to seamlessly exchange patient health information between plans and providers, while simultaneously offering easy access to patients themselves, remains out of reach for many national health systems. Moreover, the issue is compounded by the absence of unifying interface technologies and unique patient identifiers.

Interoperability has been pursued by multiple administrations in the United States, but recent policy changes are finally seeking to coordinate stakeholders, harmonize standards, and promote information exchange. In March of 2020, CMS announced new rules regarding interoperability aimed at empowering patients with better access to their health information, requiring the development of APIs for data including patient claims and insurer provider directory information.

An ally in this critical pursuit of interoperability, Abartys Health has launched its mobile and web portal patientLynk to break down barriers in the global health system once and for all.

For patients, the centralized data delivery system is a one-stop-shop for personal healthcare records, insurance documents, and physician history.

For insurers, patientLynk facilitates access to long-term lab results to offer a comprehensive vision of patient health.

For labs, the platform increases laboratory diagnostic testing capacity, surveillance system, and routine reporting.

The need for universal patient identification and faster lab test response times has, moreover, been dramatically underscored amidst the current international pandemics. A solution of such potential could likely prove pivotal in combating public health



emergencies by working to rapidly detect and transparently report outbreaks.

As we're seeing plainly, health concerns today do not stop at national borders, so the construction and deployment of an interconnected global network that can limit the spread of infectious disease outbreaks, as well as predict risk based on comorbidity, is critical going forward.

patientLynk is this global solution, one which not only offers patient history and instant lab results but one which also holds the potential to mitigate the loss of human life and reduce the economic impact during public health emergencies.

#### Who It Helps

#### **Patients**



Historical medical records are available at a patient's fingertips. At the click of a button, the user can gain secured access to unique, personal patient profiles. The ability to share results with health providers empowers patients to make better informed decisions about their own health.

"I love that all of my healthcare is in one place. I went to the doctor and simply pulled up the record on my phone," one patient said

#### Insurers



Access to historical data sets offers insurers a comprehensive vision of patient health. Instead of simple medical claims, lab results offer individual insights into patient risks with diabetes, cardiac disease, dementia, COPD, thyroid, obesity, seasonal viruses, STIs, and many other chronic conditions. Better patient health information helps insurance companies know that members are taking care of their health and can contribute to adaptive pricing for insurance premiums.



#### One Platform, One System

patientLynk is a health data ecosystem for lab results that works to paint a clearer picture of individual and societal health.

#### So, how does it work?

patientLynk is a lab information system tool that offers access to data and clinical information results via an online patient portal. Lab results and historical information are hosted on each patient profile, which can then be accessed via smartphone, laptop, and SMS.



The goal is to create seamless data flow and communication between insurers, doctors, and patients - something which is desperately needed in medical systems around the world. A survey last year found the U.S. healthcare industry is plagued by almost \$1 trillion in waste each year – including up to \$265.6 billion lost due to administrative complexity, and \$165.7 billion due to failure of care delivery.

The benefits of the platform are clear for each party. patientLynk provides a low-cost solution to help providers digitize and automate some of their most costly administrative processes.

Patients, meanwhile, are able to track, trend, and better understand their personal health regardless of the fragmented systems that were involved in creating their health data. Better yet, some receive cheaper insurance premiums for simply using the platform. Automated tracking allows insurance companies to see the health status of any given patient via their test results. In turn, positive results can work to lower risk profiles and cheapen insurance premium prices.

Similarly, insurers can more easily confirm the health of their members. Instead of simple medical claims, lab results offer individual insights into patient risks with diabetes, cardiac disease, dementia, COPD, thyroid, obesity and many other chronic conditions.

It is important to note that the ecosystem works with overarching lab information systems rather than with individual labs. This is because lab information systems render services to any given lab in any given country, so partnership with just one lab information system can source results from multiple labs.

Moreover, the platform follows global data health standards to facilitate international expansion. By using the standardised HL7 health format, patientLynk is readable to healthcare information systems around the world. And, the platform uses Logical Observation Identifiers Names and Codes (LOINC) to apply universal identifiers to assist in the electronic exchange and gathering of clinical results.



#### **patientLynk In Practice:** Puerto Rico

The benefit of one platform and one system is already being realized in places like Puerto Rico, where Abartys is headquartered.

patientLynk is currently operational in select labs and independent hospitals across the Caribbean island of more than 3 million people.

Currently, more than one hundred thousand lab results are processed and published on patientLynk every month in Puerto Rico. New results are retrieved every four hours with the data then immediately available to the platform's quarter million patients.

patientLynk publishes past and present results from one of the major lab information systems on the island, which equates to roughly 80 partner medical facilities. A second major lab information system is currently being onboarded to the platform which will bring total coverage across the island to about 800 medical facilities.

Currently, the system is storing more than 1.5 million laboratory results.

Right now, patientLynk results display all patient lab results as far back as 2012. However, Abartys Health is currently working with various stakeholders to host historical results from as far back as 1998.

In Puerto Rico, the electronic delivery of lab results remains an underused form of delivery, as most institutions do not have the means to deploy such tools. What's more, when the results are delivered digitally, they are not accessible as a comprehensive collection. They are, instead, delivered as an image (PDF), making them easy to read but next to useless for machine processing.

Abartys Health has been involved with patient data processing and foundational case studies in the U.S. territory since 2016. This led to the first version of patientLynk in 2018, followed by a second version released in 2020.



Evidently, the platform continues to grow in patient numbers and provider partners as the solution benefits are better understood. More patients and older historical results serve to foreground not only the regional potential of the platform but also its international potential.



#### In Times Of Outbreak

An interconnected world needs interconnected health solutions. This is true now more than ever as the coronavirus pandemic highlights the fragility of global health systems.

Contemporary health systems can no longer operate within siloes. This fact is emphasized by the U.S. Department of Health and Human Services (HHS) in their Global Strategy, who write unprecedented changes in the patterns of human health, disease, and longevity demand deeper engagement between international partners to address their causes and consequences.

"No country can operate in isolation," the department writes. "Health concerns of the 21st century don't stop at national borders, and as we strengthen the well-being of communities in our own countries, we must also seek global solutions."



This insistence is echoed by the Center for Disease Control and Prevention (CDC), who are calling for global health security to be based upon three concepts: prevent, detect, respond.

Currently, U.S. healthcare remains unable to provide the quick lab results required to make decisions about the critical care of COVID-19 patients. Even as rapid-results tests began to work their way into clinics and labs, obtaining the results remained a 24 hour or longer process.

Prevention, detection, and response is simply not possible under the current system.

In this regard, patientLynk fills a previously pressing – and now essential – need. The platform's unification of fragmented systems works to more accurately report outbreaks and move quickly to monitor cases.

The ability to visualize this data in this way during times of outbreak holds extraordinary promise. For example, active cases could be mapped according to the patient's address and the locations of the labs where the tests are performed, offering quick mapping of case clusters. This same functionality could be applied to outbreaks beyond COVID-19, tracking the source of infections – from influenza and hepatitis to E. coli – to the point of initial outbreak. The tech could even be leveraged to fight sexually transmitted infections (STIs) such as chlamydia, gonorrhea, syphilis, and HIV.

Delivering faster and smarter results enables better health outcomes – and this is important both for the patients receiving the results and the health workers delivering them. For example, many U.S. states turned to call centers as a method for distributing results in the face of long wait times. However, this is a labor intensive and costly solution that also places at risk those working in call centers in the midst of a health pandemic.

International health needs united systems and clearer patient records. The entire world is witnessing the vulnerability that can result from going without.

#### The Solution Explained



 $patientLynk\ provides\ portable\ and\ centralized\ access\ to\ health\ reports\ and\ healthcare\ documents.$  So, how does it do it?

- Abartys Health leverages Amazon Web Services (AWS) cloud for the platform's infrastructure
- HL7 lab data is continually fed through our pipeline, enabling real-time processing on the patientLynk platform
- Every upload is translated and stored in multiple data formats
- Once live, the platform compares and contrasts user data with various personal identifiers to secure patient access to patient results
- Patients receive email and text notifications when new results are hosted. All lab
  archives are then available for each patient for up to 10 years across lab systems

### The Global Market Gap

Clinical data portability is a global issue, and patientLynk by Abartys Health is a global solution.

Following success in its native Puerto Rico, the health startup has expanded its FHIR-compliant platform to the U.S, and is set for further expansion through the rest of North America and Latin America.

Each of these regions shows the potential for platform integration. In the US, for example, federal agencies continue their active calls for better patient health access. In fact, patientLynk is designed specifically in accordance with new policy from The Centers for Medicare & Medicaid Services (CMS).



In March of 2020, CMS renewed its calls for driving interoperability and patient access to health information through liberating patient data. The ruling puts patients first, giving them access to their health information when they need it most and in a way they can best use it.

U.S. patients do currently have access to some lab results online however, the results are not unified in one location. Each individual lab might have its own online system, but the majority publish PDF results that are not mobile-friendly nor machine-readable. patientLynk works to translate such static documents into editable and searchable data by using Optical Character Recognition (OCR) methods.

Meanwhile, Latin America and Mexico largely do not have any digital result system. This creates an unsustainable paper trail of medical results to the detriment of patients, providers, and insurers. patientLynk is a holistic solution for patient access and public health.

#### The Bigger patientLynk Picture

It is important to keep in mind that bringing lab results online is much more than simple convenience. Uniting scattered information systems to provide an up-to-date database of patient lab results represents an ability to accurately construct public health profiles. Armed with this information, governments and health agencies will be better informed to make long-term public decisions.

The World Health Organization, for example, aims to globally eradicate Hepatitis B and C by 2030. Yet, currently, the infection rates calculated to monitor this goal are merely based on the number of logged prescriptions for Hepatitis B and C medications. Instant patient results would reflect actual infections far more accurately; and allowing for access to increasingly accurate data is invaluable to such efforts at disease eradication.

Instant and accurate analytics on populations around the world will help curb the spread of disease, detect outbreaks and enhance health services; but the benefits, as we've seen, aren't just societal, but also personal. The platform offers patients unprecedented access to their data and a comprehensive vision of their overall health. Empowered with this data, individuals can better understand the impact of their lifestyle choices, make healthier decisions, and ultimately take back control of their own health.

patientLynk fits with Abartys Health mission to solve the global healthcare crisis with smarter, faster care achieved by the use of a unique, centralized data hub that allows for increased medical record portability and universal patient identification.

