

CASE STUDY:

Denver Health Leverages Zivaro to Design and Deploy a Web-Based Application for At-Home Disease Testing

THE CHALLENGES:

Public healthcare providers responding to urban infectious disease outbreaks face many challenges. Urban Families often can't take time away from work for scheduled appointments, and stigma, fear, and a sense of shame can keep people from visiting clinics for in-person tests.

With personal protective equipment (PPE) and staffing shortages restricting availability for in-person testing, at-home tests are an attractive solution that helps public health organizations better monitor and manage infectious disease outbreaks.

Denver Health needed an affordable, secure, scalable, and easy-to-operate HIPAA-compliant infrastructure to meet community public health needs.

Zivaro worked closely with Denver Health to design and deploy a secure online testing portal built on AWS (Amazon Web Services) to manage a potential health epidemic. The secure online testing portal can:



Eliminate provider-to-patient contact



Increase the levels of testing access



Collect any sample type (i.e., COVID-19, HIV, and more)



Integrate with Electronic Medical Records (EMR) systems



Provide data to analyze the effectiveness and containment of outbreaks

Zivaro solves contemporary healthcare challenges with **modern technologies.**

THE SOLUTION:

Healthcare providers need tools that increase testing across large populations to manage infectious disease spread in urban communities. At-home testing provides the logistics and infrastructure to distribute and collect tests, integrate with medical records systems, and use geo-targeting to reach at-risk populations.

Without a robust remote testing solution, healthcare officials can't conduct enough tests to determine the location and spread of outbreaks, limiting their ability to control community disease spread.

Zivaro partnered with Denver Health to design an easy-to-deploy and secure, cloud-based solution built on AWS that augments or integrates with existing intake systems. The solution is scalable in real-time, inexpensive to operate, secure, and doesn't tax Denver Health's IT resources. AWS provides the scalability and elasticity to ensure the testing portal has enough capacity to meet community demands. Their tools allow Zivaro to deliver secure at-home testing at scale, with minimal operational overhead.

THE POSITIVE OUTCOMES SPEAK FOR THEMSELVES.

Denver Health now has a secure, easy-to-manage, and cost-effective solution to deliver at-home tests. Thanks to autoscaling for database and application tiers, there is no need to worry about spikes in demand bringing the system down. Additionally, Denver Health doesn't have to fret about scaling down the environment as utilization tapers to save dollars. Maintaining application servers and databases is left to AWS, so Denver Health can focus on saving lives.

DENVER HEALTH REALIZED SEVERAL PUBLIC HEALTH BENEFITS:

- Patient-to-provider contact is eliminated, reducing the risk of infectious disease community spread.
- Unnecessary in-person visits are removed, which is critical during a health crisis.
- The solution saves time for healthcare professionals and patients.
- Patients can discretely take tests and receive their results from the comfort of home.
- Healthcare providers can quickly scale operations and treat a more significant number of patients.