

The COVID-19 pandemic has demonstrated the challenges faced by state and local governments, as well as by healthcare providers and payers, when data management and analytics capabilities are inadequate and hamper preparation and response to infectious disease outbreaks.

As part of our Health Performance Accelerator (HPA) collaboration, Health Management Associates (HMA) and HealthEC developed a framework for how organizations should leverage data to improve their ability to proactively address and rapidly respond to disease outbreaks. Consistent with that framework, HMA offers consulting and advisory services and HealthEC offers data management and analytics solutions designed specifically for state and local public health agencies.

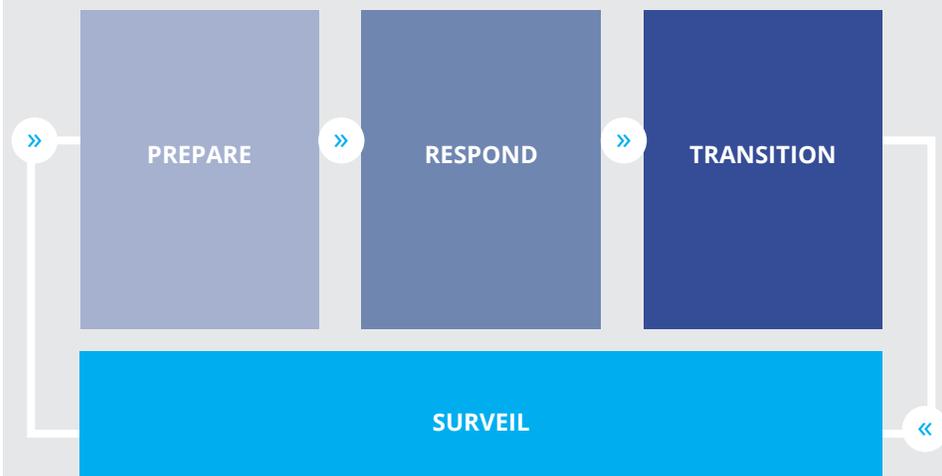
THE CHALLENGE

Ideally, state and local public health agencies would have a cohesive suite of information systems connected as needed – either directly or through third parties such as health information exchanges (HIE). These systems would be connected to provider systems, laboratory networks (including state and local public health labs), pharmacies, and federal systems to aggregate and disseminate critical information required for preparation, response, transition, and surveillance functions tied to the prevention and management of communicable disease outbreaks.

THE SOLUTIONS

By deploying HPA solutions, organizations can improve their capabilities across the four critical communicable disease management functional areas:

- » **Surveillance** including “early warning” capabilities made possible by more robust contact tracing functionality, the evolution of Internet-enabled devices such as thermometers and remote monitoring systems, and more timely access to data as enabled by HIEs and other systems.
- » **Preparation** capabilities such as risk stratification and predictive modeling that support smart pre-deployment of certain resources/assets, outreach to certain populations, and the proactive establishment of programs aimed at ameliorating the impact of outbreaks on the “whole person” which includes the prevention of unwanted outcomes such as a rise in domestic violence and food insecurity.
- » **Response Management** capabilities such as more robust real-time, adaptive modeling that can drive resource allocation and deployment and more data-driven evaluation of the effectiveness of certain spread prevention and control measures, clinical interventions, care management protocols, and human services programs.
- » **Transition Management** capabilities including modeling that enables a state or locality to confidently relax measures designed to prevent and control the spread of diseases.



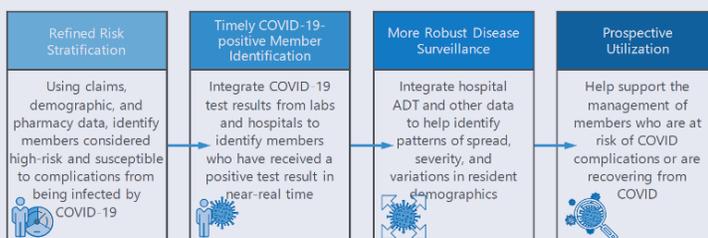
KEY SOLUTION FEATURES

HMA

- » Information technology (IT) roadmap development
- » Development of optimal IT solution implementation and funding plans
- » IT solution procurement support
- » IT solution contracting support
- » IT solution implementation support
- » Information governance – development of data ownership, stewardship, and data access, use, and sharing protocols
- » Process redesign
- » Organizational change management and coaching

HealthEC

- » Proactive use of data analytics systems to help prevent infectious disease outbreaks
- » Risk stratification and predictive modeling that support smart outreach to vulnerable populations
- » Geo-mapping and tracking relevant cohorts to provide valuable insights into disease impact, spread, and projected utilization of certain services
- » Ability to develop and operationalize care management protocols
- » Improved compliance monitoring



PROVEN RESULTS

Our tailored consulting and advisory services and customizable analytics platforms have positioned an array of clients to succeed. Our work includes:

Department of Health and Social Services

HMA helped a state procure an IT vendor to build out Salesforce as the web platform for contact tracing during the pandemic. HMA worked with key stakeholders to continue to revise the platform through bi-weekly, and eventually, monthly User Acceptance Testing (UAT) processes, and trained call center and field investigators on the platform.

State Department of Health

The department sought to acquire an integrated IT system for supporting several disease surveillance programs, including tuberculosis, HIV/STD, and epidemiology, to replace several individual systems currently supporting these programs. HMA worked with multiple stakeholders and state agencies to consolidate these disparate IT resources and developed requirements to enable the department to procure an integrated disease surveillance system.

Primary Care Association

HealthEC deployed an enterprise data warehouse that aggregated data from nine community health/federally qualified health centers (FQHC) at more than 50 care delivery sites that deliver critical services to more than 200,000 patients. The data warehouse integrated data from the FQHC electronic medical records (EMR), Medicaid claims, admission/discharge transfer (ADT) feeds, and area HIEs to create single longitudinal patient records which could be used to conduct a broad set of analytics and reports, including tracking the progression of COVID-19 infections and identification of individuals at risk for more severe COVID-19 cases.