

Orion Health's Rhapsody™ Solutions Aid Health Agencies in Managing Disease Outbreaks

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With health surveillance being the cornerstone of decision making for public health, Orion Health Inc. has developed the Rhapsody™ Public Health Integrator (PHI) platform to enable public health authorities to electronically report health information. The platform will help automate reporting by allowing the collection and consolidation of data from the regional laboratories, hospitals, and clinics. PHI was introduced at the 2009 conference of the Council of State and Territorial Epidemiologists (CSTE), a professional alliance of over 1,050 public health epidemiologists.

In attempts to curtail the spread of reported notifiable diseases and taking preventive measures, providers are required to report every case that manifests with particular conditions to public health authorities of that region. In 1969, the World Health Organization (WHO) initiated the International Health Regulations for the global surveillance of plague, cholera, and yellow fever. The US came up with the National Notifiable Diseases Surveillance System (NNDSS) in 1878, when the US congress authorized the U.S. Marine Hospital Service (precursor of Public Health Service [PHS]) to gather incidence reports on cholera, plague, smallpox, and yellow fever. In 1998, the Centers for Disease Control and Prevention (CDC) initiated the development of the National Electronic Disease Surveillance System (NEDSS) to utilize the large volumes of data collected for analysis of health surveillance, and serve as a tool for CDC's Public Health Information Network (PHIN). PHIN is a national initiative introduced to improve public health through standards-based electronic exchange of data.

Orion's Rhapsody™ Public Health Integrator automates the collection and integration of health data, enabling the entire continuum of care to better manage the reporting processes. The Health Integrator, using PHIN approved tools, is expected to enable the secure transfer from paper-based to automated health data collection and reporting, to public health agencies, regional health information organizations (RHIOs), health information exchanges (HIEs), and others. The solution collects data from hospital or laboratory information systems, filters, maps, and aligns with national standards before transferring to public health agencies.

It also has the ability to connect facilities to the Nationwide Health Information Network (NHIN), an ongoing secure nationwide, interoperable health information infrastructure, and other prospective public health services. The solution is expected to improve the accuracy and timeliness of health data reporting, further enabling public health professionals to detect and respond to potential disease outbreaks faster. The platform can be installed on a blade server, and provides the option of including additional reporting types.

To aid in implementation and reporting by the providers, Orion has partnered with OntoReason, LLC, a private software and informatics company. The alliance is expected to help providers meet legal requirements for the transferring of data of 85 mandated reportable conditions. The Mississippi State Department of Health is currently deploying 70 Rhapsody Public Health Integrator platforms across state healthcare providers.

Orion Healthcare, a clinical workflow and integration technology vendor, offers applications and solutions for enabling enhanced care outcomes and clinical decision making. Globally connecting health information communities like IB Salut of Spain, the Vermont Health Information Exchange and Maine's HealthInfoNet, the company caters to more than 1,000 clients including UCLA Medical Center, various NHS Trust Hospitals, and CDC.

With US federal agencies like CDC encouraging state health departments to fortify their health tracking, emergency preparedness, and response systems, above 45 departments across the nation are currently employing Orion's software technology for supporting early detection and response to potential public health emergency situation and infectious disease outbreak.

Orion's Rhapsody™ Integration Engine offers tools to streamline the processing of health data, and improve the speed and accuracy of data collection from disparate sources. Through its PHINMS Public Health Information Messaging Service, the vendor allows facilities to transfer these messages to public health agencies. State workers can automatically submit health data to CDC's national disease surveillance systems to develop reports, while enabling local, regional and national professionals to access these data, which could be vital at the time of an emergency. The solution is being employed in 27 states as a part of the NEDSS.

Orion's efforts in integrating and processing large volumes of health information can come a long way in aiding the federal agencies in early detection and prompt response to probable catastrophic health-related emergencies like the swine flu and avian influenza, which could not only affect the nation as a whole but also other parts of the world too. With all the information processed and diverged to a central source, health professionals will have ready information at hand to make the right decision in curtailing the disease outbreak.