Asthma Critical Event Response System

New York, NY

Client

New York City Department of Health and Mental Hygiene

Problem

The New York City Department of Health and Mental Hygiene's Asthma Initiative Program was designed to help improve the outcomes of New York City school children by:

- Monitoring student's asthma critical events more effectively;

- Notifying healthcare personnel and parents of student critical asthma events;

- Promoting general awareness; and

- Improving preventative maintenance of the disease

The overall scope of the project was to collect and transmit information about asthma related critical events. Participants of the initiative who would receive system information included school nurses, emergency room personnel, primary care physicians, caseworkers, parents, and DOHMH employees. Communication methods needed to be able to accommodate the diverse needs of these groups, while ensuring that the information collected was managed dependably and effectively.

DOHMH needed a sophisticated communication backbone for their citywide program in order to implement their asthma management protocol. Their program included data collection and automated notification and reporting in a highly dependable and effective manner. Furthermore, communication methods needed to accommodate the diverse group of participants and the resources available to them.

Scope

Warshaw Group designed and developed an integrated solution to suit the needs of the users that could be readily accessed by fax, Internet, mobile and stationary computers.

Warshaw Group's Mobile Validity® software was implemented for the collection of demographic and clinical information at various citywide locations. Depending on the results of the questionnaires, different participant groups were advised using the available system communication modes. Information was also faxed to the Warshaw

Group data center, entered into the intranet based application, then processed and alerted to various users.

Warshaw Group performed the following:

- Designed and developed an overall, integrated solution that would suit the needs of very diverse users, utilizing fax, Internet, mobile and stationary computers
- Implemented Mobile Validity data collection software for the collection of demographic and clinical information at citywide locations
- Used Mobile Validity State Flow software to automate case management
- Implemented Mobile Validity Communication/Notification Engine to automate information delivery based on DOHMH program guidelines
- Used Mobile Validity Report Server and Filter Builder so that DOHMH could evaluate their program
- Employed distributed computing, and Virtual Private Networks (VPN)
- Utilized Warshaw Group's data center to perform data monitoring, quality assurance and response to requests for information

Solutions/Benefits

The New York City Department of Health was able to track school students' asthma critical events, collect important clinical information from various healthcare sources related to these critical events, and provide a resource for students and parents to receive key asthma maintenance information.

The outcome of the project was that DOHMH was able to drastically reduce the number of emergency room visits and critical incidences. In addition, DOHMH had the ability to integrate student clinical information with environmental, familial and other information to better understand some of the causes of asthma in NYC school children.

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