

FILNET CASE STUDY

District of Columbia's Department of Health

Leadtrax File Manager User Interface

CLIENT	 District of Columbia's Department of Health
PROJECT	Leadtrax File Manager User Interface
WEBSITE	http://doh.dc.gov/doh/site/default.asp
TECHNOLOGY	.NET, SSL
DURATION	07.2004 - 09.2004

LeadTrax File Manager

Department of Health

File Upload | Tracking Receipts | Help

Logged in as [user]
Wednesday, April 28, 2004

Upload New File

File Upload
Click the browse button to find the file and then click the submit button to upload.

Enter notes below:

Most Recent Uploads

	Tracking Number	Date/Time	Uploaded By	Commented By
<input type="checkbox"/>	1023456789	08/27/2004 5:00PM	jdoe	ejones
<input type="checkbox"/>	1023456789	08/27/2004 5:00PM	jdoe	ejones
<input type="checkbox"/>	1023456789	08/27/2004 5:00PM	jdoe	ejones

Terms of Use paragraph goes here. Lorem ipsum ea vix platonem intellegam. Id est essent electram, ea voluptua copiosae vis, mel an dicat inani tation. Hinc regione alterum sed ne, nusquam laboramus assentior mea te, ea oporteat hendrerit gloriatur mel. Diam erat ea usu. Lucilius pertinacia disputando vis te, eum te animal alterum, quando ignota forensibus no est.

Overview

According to some research sources, lead poisoning is the leading environmental health issue affecting children in the United States. For young children, exposure to lead may impede cerebral and nervous system development. The District of Columbia (DC) has put in place a system that tests children for exposure to lead. DC laws require that laboratories report any cases of children who test positive to lead exposure to the DC Department of Health (DOH). In the past, there were various ways of sending this sensitive information to DOH including postal mail and courier/messenger services. There was, however, no standard delivery system in place, which increased the chances for errors to occur, and the likelihood for protected health information on children to be compromised. To resolve delivery inefficiencies and data securities flaws inherent under the old system, the Department called in Filnet to develop a website for laboratories that test children for lead exposure. Filnet also created an intranet system for DOH specialists who collect and distribute personal and private healthcare information accordingly.

Challenge

The *Health Insurance Portability and Accountability Act of 1996 (HIPAA)* requires national standards for electronic health care transactions, and addresses the security and privacy of healthcare related data. The purpose of the law is to improve efficiency and heighten electronic information security within healthcare systems nationwide. In an effort to comply with HIPAA and its own standards, DC overhauled its lead reporting systems by enhancing its data collection systems. Under the old system, it was difficult to collect information from laboratories that report DC children who test positive for lead exposure to DOH. As a matter of fact, there were few safeguards to protect sensitive information of patients' health status. Essentially, the process made tracking errors and identifying the source of the collected data challenging. Under the old system, there were times when files were incomplete and data would have to be recollected. Ultimately, the ability of DOH to audit the source and accuracy of data submitted by labs was problematical.

Solution

Each laboratory had unique ways of collecting the data that would in time be sent to DOH. Typically, data was sent in printed forms to the Department in various formats, which created a host of administrative and processing issues since there were no standards in place. To complicate the process even more, from time to time data sent from labs was incomplete. As a result, any missing data would have to be found and re-delivered to DOH. Moreover, because files were sent via courier service or US mail, there were very little security precautions in place to protect the information of patients. Filnet effectively resolved those issue with a .Net solution.

On the public side, Filnet's .Net solution allows labs to access a special Leadtrax website where lab specialists may upload patient information based on formats specific to each organization. In fact, information that is sent to the site is then analyzed for integrity data. The lab files are delivered to DOH

electronically and securely. In order to verify whether information is acceptable or complete, Filnet developed a database to which files from the laboratories would be downloaded. Filnet wrote the rules that instructed the database on how to process the information collected from various labs. Using Secure Sockets Layer (SSL) technology, all data sent to DOH are encrypted and then deciphered by DOH servers. This process ensures data integrity and security. The procedure allows DOH specialists to download patient records easily and quickly by accessing the user-friendly Leadtrax intranet developed by Filnet. If errors are detected in the files sent by an individual lab, the Leadtrax application alerts the specialists of the incomplete status. Unlike the previous collection system, the origins of the files are easily and readily available when records are identified as being incomplete.

Results

Washington, DC is by far the most unique city in the country because the municipality conducts business processes as if it were an all-in-one city, county and state. With a tax based of nearly 600,000 constituents, DC introduced Leadtrax, a patient data collection system for tracking children living in the District who have tested positively for lead exposure. With the introduction of Leadtrax, the DC Department of Health is in compliance with Health Insurance Portability and Accountability Act (HIPAA) standards. Using .NET technology, laboratories are now able to upload data securely to a website and deliver confidential records about their patients to DOH. There, the data is collected by DOH specialists, downloaded, and converged and reconciled for reporting as needed. In effect, the DC government is running more efficiently thanks in part to the Leadtrax intranet and website. Both applications allow for more secure delivery of confidential healthcare information on patients, and quicker data collection. Similarly, report errors have been reduced because of the data verification functionality built into the collection system.