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Final Copy of Case Study

Status:

Laureate

Year:

2013

Organization Name:

Commonwealth of Pennsylvania, Department of Public Welfare

Organization URL:

<http://www.dpw.state.pa.us/>

Project Name:

Enterprise Incident Management (EIM)

Please select the category in which you are submitting your entry:

Safety & Security

Please provide an overview of the nominated project. Describe the problem it was intended to solve, the technology or approach used, how it was innovative and any technical or other challenges that had to be overcome for successful implementation and adoption. (In 300 words or less.)

Under the Centers for Medicaid and Medicare Services (CMS) regulations governing Medicaid waivers, the Pennsylvania Department of Public Welfare (DPW) is responsible for quality oversight and monitoring for home and community-based services provided by hundreds of third party agencies to more than 29,500 elderly and physically or mentally disabled individuals with long term care needs. Program offices began implementing incident tracking methodologies ranging from paper-based processes to custom developed systems. As a result, there were redundancies, inefficiencies and a general lack of standardization and inconsistent reporting capabilities. EIM was developed and launched as an enterprise wide, Internet enabled tool to facilitate protection of the health and welfare of Pennsylvania's most vulnerable citizens by allowing

providers to report their incidents to the commonwealth and allowing commonwealth officials to review incidents to determine that appropriate actions were taken, conduct further investigation and document outcomes and improvements to participant care. DPW defines an incident as an action that puts the health and welfare of a program participant at risk. A complaint is the dissatisfaction in a program's administration. Additionally, EIM has a defined structure to provide uniform business processes, and is flexible enough to adapt to the unique needs of each program office. EIM accesses information from DPW systems to automatically populate incidents with participant and provider information, thus preserving data integrity and reducing unnecessary data entry. EIM was developed using innovative technologies including the .NET 4.0 Framework, Silverlight, AppFabric Caching and the Corticon Business Rules Engine. Using this technology provides benefits such as: maximized performance and system usability, decreased maintenance costs, and user modifiable configurable features. EIM also utilizes COGNOS Ad Hoc Reporting, which allows users from each program office to build reports to provide visibility into incident and complaint metrics to help guide business decisions

When was this project implemented or last updated? (Please specify month and year.) Has it incorporated new technologies and/or other innovations since its initial deployment? (In 300 words or less.)

After EIM was launched for the Office of Long-Term Living (OLTL) and the Bureau of Autism Services (BAS) in Apr. 2011, OLTL users provided feedback which drove the implementation of several EIM enhancements in Sept. 2011, Oct. 2011 and Jan. 2012, including updates to the My Dashboard screen which will provide users with greater ability to prioritize incident and complaint review and completion. Additionally, the Jan. 2012 updates were a milestone for DPW as it was the first time that enhancements and/or changes that were configured entirely by program office business users, rather than technical staff, were implemented in any DPW system. Business users made updates using a Silverlight custom built application to manage configuration and Corticon Business Rules. This was a monumental step in providing DPW with the tools to reduce costs, increase system flexibility and maintain version control to minimize impacts to existing incident and complaint data.

Is implementation of the project complete? If no, please describe the project's phases and which phase the project is now in. (In 300 words or less.)

The vision for EIM was for it to be initially implemented with OLTL and BAS, and then to incrementally integrate additional DPW program offices into the system. The initial implementation phases for OLTL and BAS were complete as of Jan. 2012, and data pulled as of Jan. 2013 highlights the successful adoption of the

system by 333 commonwealth staff and 2,465 providers who have logged more than 6,590 incidents and complaints since EIM was launched in Apr. 2011. DPW employs a system development methodology (SDM) for all new initiatives that consists of the following high level phases: business requirements, system requirements, general and detailed system design, development, testing, and deployment. While EIM has been deployed for OLTL and BAS, several DPW departments and the Department of Aging (PDA), are in the system requirements phase of EIM implementation. The successful implementation of EIM for PDA will give OLTL, a shared office between DPW and PDA, one comprehensive location for incident and complaint management serving their entire participant population. Over the long term, EIM will be rolled out to additional DPW program offices in order to provide a single repository and process for all of DPW's incident and complaint data. This is a win-win situation for both DPW and Pennsylvania's citizens and improves productivity for the workers who protect the health, safety and rights of consumers.

Please provide at least one example of how the technology project has benefited a specific individual or organization. Feel free to include personal quotes from individuals who have directly benefited from the work. (In 300 words or less.)

EIM has benefitted DPW program offices in many ways. OLTL is now able to comply with the Centers for Medicaid and Medicare (CMS) waiver assurances as the EIM system provides the required capability for incident reporting, conducting and recording investigations of reported incidents, and development of corrective action plans and remediation strategies. Prior to the EIM implementation in Apr. 2011, OLTL had no formal incident management policy in place to protect consumers and was therefore at risk of being noncompliant with the Centers for Medicaid and Medicare (CMS) waiver assurances. Failure to meet the CMS mandates would have resulted in decreased funding from the federal government. Additionally, OLTL now benefits from using EIM to comply with the Pennsylvania Older Adult Protective Services Act by ensuring that incidents with an Abuse, Neglect or Exploitation categorization are reported to Adult Protective Services and investigations are kept confidential. EIM provides users with the ability to classify an incident with a primary type such as Abuse, Neglect or Exploitation, which is further refined to include a secondary category such as Abuse Physical Abuse or Abuse Verbal Abuse. OLTL uses these categorizations to determine the next steps in the incident investigations and the urgency of the incident. OLTL tracks outcomes to certify actions were taken to prevent recurrence and remove participants from an abusive setting. From Apr. 2011 to Jan. 2013, OLTL has used EIM to manage 257 cases of abuse, 155 cases of participant exploitation and 138 cases of neglect. One OLTL program office representative said of the EIM implementation: "Your efforts have helped to


reshape OLTL's data processing and further its mission of ensuring the health and safety of our participants."

Would this project be considered an innovation, a best practice or other notable advancement that could be adopted by or tailored for other organizations and uses? If yes, please describe that here. (In 300 words or less.)

The EIM project is a notable advancement for DPW that is currently being adopted for fraud waste and abuse (FWA) tracking across DPW due to the success of the project, positive feedback from users, and flexible design. Modifications are underway that take advantage of EIM's rules based and configurable structure to provide tracking capabilities to increase the effectiveness of DPW's Program Integrity efforts. The initial implementation in Sept. 2013 will focus on monitoring FWA referrals for recipients of programs managed through the Office of Income Maintenance such as Medicaid, Low-Income Home Energy Assistance Program (LIHEAP), Temporary Assistance for Needy Families (TANF), Supplemental Nutrition Assistance Program (SNAP), and the cash assistance program. Future phases will extend recipient fraud reporting to the remaining DPW programs with the end goals of minimizing wrongful benefit payouts, reducing wasteful spending and deterring fraudulent behavior. DPW's Program Integrity Office (PIO) will continue to expand fraud tracking to include provider fraud and employee waste using EIM to process, review, and investigate complaints to determine outcomes and cost savings. Of the 12.7M citizens of the commonwealth, approximately 2.7M receive assistance through DPW. This program is expected to provide significant budget savings to DPW as metrics become available to assess and report on the state of fraud and abuse in Pennsylvania's welfare system across counties and program offices. The PIO will use this data to generate fraud and error profiles to proactively deter fraud waste and abuse and reduce the need to retroactively seek overpayments on issued benefits.

If there are any other details that the judges should know about this project, please note them here. (In 300 words or less.)

In addition to incident and complaint management, EIM was designed with a custom built Administration Tool to support the unique needs of each program office and reduce maintenance costs. The EIM Administration Tool gives each program office the ability to configure its own incident/complaint types, documents, pages, questions, validations and reference tables. In addition, integration with the Corticon Business Rules Engine allows each program office to configure their own alerts, conditionally mandatory validations, document deadlines and reduce the steps in the incident/complaint workflows. Program office business users can configure incident/complaint forms independently and



customize underlying workflows and business rules. By providing a common framework shared across program offices, EIM represents a reduction in maintenance costs compared to having separate systems for each program office with redundant functionality. User configurable technology minimizes maintenance costs by allowing business users to apply system changes with minimal support from technical staff and allow system changes to be deployed on an accelerated release schedule. The innovative configuration functionality also reduces the cost and time to production for small scale system changes and allows for increased flexibility for program offices to develop forms and workflows that adhere to their unique business needs. Inherent version control minimizes impacts to existing incident and complaint data. EIM further reduces maintenance costs by leveraging existing data within DPW such as individual, provider and case management information from other systems. This usage of existing data and technical assets helps ensure the quality of data and minimizes redundant data entry.