A SHARPER IMAGE: GEORGIA'S NEW INCIDENT MANAGEMENT SYSTEM FOR STATE'S BEHAVIORAL HEALTH AGENCY

NASCIO 2023 State IT Recognition Awards

STATE: Georgia

AGENCY: Department of Behavioral Health and Developmental Disabilities (DBHDD)

AWARD CATEGORY: Business Process Innovations

PROJECT BEGINNING DATE: March 1, 2021

PROJECT END DATE: December 31, 2022

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DBHDD serves a vulnerable population. Folks who can't always help themselves. The Georgia Department of Behavioral Health and Developmental Disabilities provides them treatment and support services. That's people with behavioral health challenges and addictive diseases, as well as individuals who live with developmental disabilities. This is care that needs to be done right.

Over 120,000 people receive care through DBHDD and its network of 600 providers, 23 community service boards, 18 crisis stabilization units, six regional field offices, five state psychiatric hospitals, and five behavioral health crisis centers. With that kind of volume and scale, managing incidents and subsequent investigations and keeping everyone informed are difficult tasks. (Incidents are events that jeopardize the care, health or safety of someone in DBHDD's care.) DBHDD set out to combine two legacy systems into one new comprehensive application called IMAGE that would help organize workflows, collect data, and improve user experience.
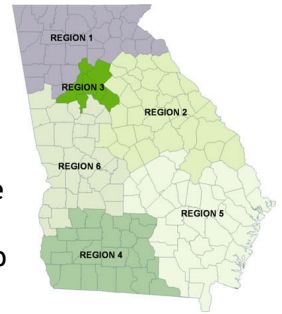
120,000+ people receive care & network of **600** providers → **23 community** service boards → **18 crisis** stabilization units → **6 regional** field offices → **5 state** psychiatric hospitals → **5 behavioral** health crisis centers

DBHDD works with community partners throughout the state. Each field office manages a community-based system of care for people in the surrounding area. These offices also coordinate with the DBHDD state hospitals to facilitate transitions into the community. Collaboration across this sprawling network has often been accomplished via email, and not without challenges. Through the new IMAGE incident management application, DBHDD and its providers have a single hub where they have visibility into complete workflow management, from incident reporting to investigation. They can view issues related to individual care, key performance indicators (KPIs) associated with incident types, risks and deficient practices, and more. Not only does this benefit a particular hospital or care center, it also helps DBHDD determine commonalities among statewide incidents and then correct issues.
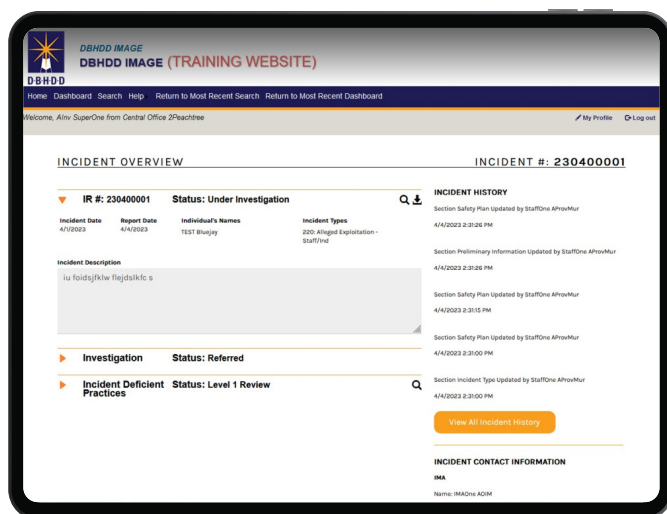
Incident Overview - shows general info about a specific incident, along with information about each of its associated workflows

IMAGE allows streamlined management of incidents. That's everything from hospitalizations to COVID-19 exposures, to deviations from an individual's care plan that result in physical or psychological harm, and even deaths. Incident reporting and investigation have been standardized, resulting in enhanced accountability, oversight and accuracy, and time saving. In a matter of minutes, the incident investigation timeline is automatically populated – a previously manual and time-consuming process. IMAGE also enables easy tracking of reports submitted by care teams to DBHDD. DBHDD uses this information to maintain compliance with the Americans with Disabilities Act (ADA) and develop plans to better support vulnerable Georgians.

The new IMAGE application provides a reliable and secure central source of incident data. And DBHDD grants access to all parties involved in incident management and investigation, so they all have access to the same tools, regardless of the care center size or budget.

DBHDD manages a network of providers and vendors to accomplish its mission of serving individuals with behavioral health and intellectual disabilities. Over 120,000 individuals receive services that include substance abuse support, mental health counseling, suicide prevention, homelessness assistance, supportive housing, supported employment, and family support via the provider network. DBHDD sought to create a streamlined, efficient process for incident reporting and investigations. Incidents include hospitalizations, COVID-19 exposures, deaths, and any other events that involve an immediate threat to the care, health, or safety of an individual who is in the care of DBHDD. The responsiveness of support coordination agencies is a key element to the DBHDD mission. IMAGE alerts support coordination agencies to an incident as soon as it is submitted, allowing them to respond quickly to the individuals in their care while increasing the quality of care and compliance with the settlement agreement.

The IMAGE incident tracking and investigation system allows DBHDD to:

1 Institute standard workflows around incident reporting and investigations to ensure consistency of process, enforce security, and allow for detailed tracking.

2 Automate incident and investigation processes that were previously manual and time-consuming.

3 Expand the incident and investigation data collected and increase data integrity to allow for informed decision-making about risk to individuals and performance issues within the provider network.

4 Support tracking of team reports and investigations.

5 Increase accountability of providers and staff by tracking of incident key performance indicators and timely completion metrics.

IMAGE introduces a data-driven approach to providing high quality care on both micro and macro levels, including individual, location-of-service, regional, provider, and systems levels. It allows for conducting assessments of risk, thereby informing decisions that lead to interventions.

Incidents usually introduce risk for those in DBHDD's care, so incident trend analysis is important. It allows the agency to proactively initiate risk mitigation strategies through referrals to program areas, subject matter experts, regional offices, and other state agencies. By enabling the staff to be proactive instead of reactive, this helps improve or even save the lives of those directly affected.

IMAGE was launched during the COVID-19 pandemic, and it was easily adjusted to collect data on COVID-19-related exposures, positives, and deaths throughout the DBHDD network. The application continues to provide consistent data collection across the enterprise. This equips DBHDD to provide reliable reports on the impact of COVID-19. It is used for tracking the spread of COVID-19 in DBHDD state hospitals and identifying hot spots in regions or day programs.

The new IMAGE system covers new ground in terms of software development, including the following:

Comprehensive workflow:

A comprehensive workflow enforces the steps that must be followed to complete an incident report. The application manages detailed workflows to ensure the standard steps are followed and that security is enforced around who can edit or see investigation data. For both incident reports and investigation workflows, an email alert system is in place to let users know when they have data or tasks to complete.

Responsive data collection:

The system responsively adjusts input fields based on data collected in other parts of the form. For example, additional fields are displayed if the reporter indicates a death was involved in the incident. The system helps to prompt the reporter to enter the correct incident types by dynamically suggesting incident types based on prior information entered.

Sophisticated security model:

IMAGE has a broad set of users, including DBHDD as well as hospital staff, contracted providers and third-party support coordinators. IMAGE supports each of these groups, and even various levels of access needed between supervisors and staff within their organization.

COVID-19 response:

When COVID-19 became a critical health issue for the state of Georgia, tracking exposures to the virus became a top priority. DBHDD was able to produce a mechanism for tracking discrete events related to COVID-19, such as exposures, diagnoses, and deaths, in a matter of days.

Improved user experience:

The system interfaces with available data sources to increase data integrity and improve user experience. The system auto-fills data whenever possible, which greatly increases data integrity and the ability to analyze data in multiple fields.

Enhanced key performance indicators (KPIs):

The increased data integrity also provides the ability to track KPIs associated with incident types, risks, and deficient practices.

The legacy community incident tracking system created in 2002 lacked these key components in the workflow. Although a newer hospital incident tracking system was written in 2012, it too was aging. These systems were not designed to identify patterns of risk to individuals or quality of care concerns across the provider network. They did not handle the entire work cycle, which includes investigations and deficient practices.

The launch of IMAGE allowed DBHDD to eliminate two systems that performed near identical functions and to address the entire workflow cycle.

IMPLEMENTATION

Managing incidents across all DBHDD providers is complicated, and building support for key business processes takes time. Those considerations shaped a decision to implement the new IMAGE system at go-live as a minimum viable product (MVP) version. After this initial release, IMAGE was enhanced with additional data collection and workflow capabilities. The MVP release focused on the core of incident management, building a fully functional incident report. It also included data collection and workflow control with improved core security.

In this phase, IMAGE automated the agency's manual investigation process, added the deficient practice module, and introduced the reporting tools needed to collect data for the KPIs. Given the complexity of the investigation process, the functionality has been rolled out in stages.

During the COVID-19 pandemic, DBHDD configured IMAGE so it could serve as a key reporting tool for COVID-19 exposures, positive infections, and deaths.

Who Was Involved

DBHDD Office of Incident Management and Compliance

As the project's business sponsor, they provided the content for business requirements and workflows. They also provided subject matter experts (SME), policy and procedural documents, guidance, and supplemental information that grounded the discovery and requirements-gathering processes. In addition to their constant and continued engagement with the DBHDD Office of IT, the Office of Incident Management and Compliance served as a liaison with other stakeholders.

DBHDD Office of IT

OIT staff collaborated with the agency's Office of Incident Management and Compliance to understand the business need and scope of work. The three application developers, business analyst, and project managers supporting this effort worked with the Office of Incident Management and Compliance, support coordination agencies, community providers, hospital providers, and other stakeholders. They documented requirements, developed functionality, tested, and delivered solutions to add value and alleviate pain points.

Focus groups

Focus groups were conducted and included representatives of numerous stakeholders. After project go-live, ongoing assessments were conducted with stakeholders to obtain feedback. The project team consulted with users, including external parties, to ensure workflow and system function met their needs. Before project launch, in-person training and communications were conducted across the state.

Customers

The project team involved hospital and community providers, two key stakeholders, in developing IMAGE. That included holding sessions to discuss needs and pain points. Customers were kept informed of application progress with communications, training, and in-person discussions. The project team gave careful attention to how the needs of community providers differed from hospital providers.

IMAGE succeeded in addressing all business processes associated with DBHDD incident management, from start to finish, and made them more efficient. The benefits were significant.

✓ Improved DBHDD's ability to make informed decisions, leading to increased safety and quality of care for the individuals served.

✓ Provided a single system for managing incidents and investigations including communications, incident workflow through deficient practices and corrective action plans.

✓ Reduced the agency's reliance on emails, Excel spreadsheets, and other tracking systems to manage the complexities of the work.

✓ Allowed providers to directly access IMAGE, upload requested documents, communicate with the agency, and review findings.

✓ Allowed DBHDD to process incidents and investigations in a timely and efficient manner, including tracking and performance indicators.

✓ Alerted support coordination agencies to an incident as soon as it is submitted, allowing them to respond quickly to the individuals in their care.

✓ Allowed DBHDD to track the incident and investigation across the entire lifecycle of the workflow and identify when things are lagging or seemingly missed.

According to DBHDD's Office of Incident Management and Compliance: "[With IMAGE,] there is improved communication between incident management and investigations; investigators have access to all records; investigation assignments are seamless and quicker, and the investigation review process is more effective. Alerts are sent to investigators, so an investigation can be started immediately."

IMAGE has streamlined and automated many manual processes, leading to more effective use of resources.

The quality and integrity of the data has improved the timeliness and efficiency of processing incidents and performing investigations by more than 30 percent.
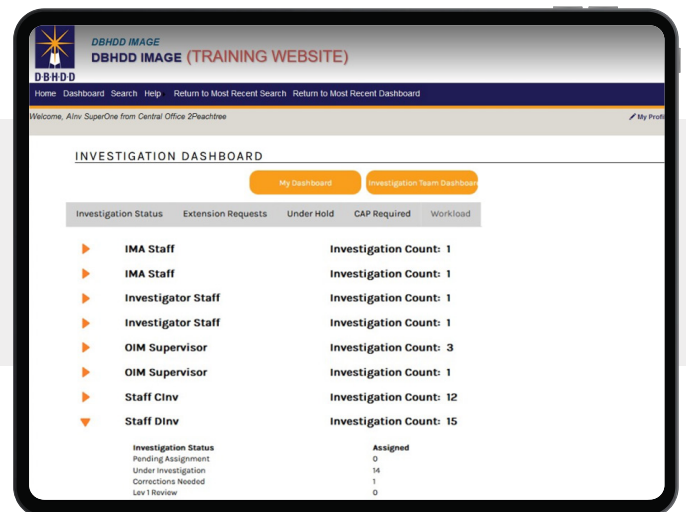
Workload View on the Investigation Team Dashboard – shows how many investigations are assigned out in various stages by user

DBHDD is committed to documenting the accountability, effectiveness, and quality of services offered by the agency and provider network. With the new system came a host of opportunities to provide more accurate and timely data extraction and analysis to report KPIs. This allows DBHDD to work with other agencies and departments to provide valuable information.

With IMAGE, data is used to make informed decisions across all DBHDD programs with confidence.

Here are just a few examples:

Annual mortality report – This report includes data and information concerning adults who died while receiving services from DBHDD. The purpose of the report is to glean what DBHDD has learned about deaths, identify trends or patterns in mortality, and to identify indicators that may assist in the prevention and treatment of certain conditions that contribute to death. The data is captured using the IMAGE application. For the first time, in 2023, deficient practice data can be included in the report thanks to enhancements in IMAGE.

Regular data requests – The DBHDD commissioner and other Georgia agencies request data monthly and yearly. They use incident report and investigation data to shape policy and make informed decisions for the Georgians they serve.

New Option Waiver (NOW) and Comprehensive Support Waiver Program (COMP) data – These Medicaid waivers are for eligible people with intellectual and developmental disabilities who require an intermediate care facility. The Georgia Department of Community Health administers the funds to DBHDD, and DBHDD performs the day-to-day operation of the services. IMAGE data allows for oversight of these services to ensure the waiver programs are helping Georgians.

COVID-19 reports – IMAGE data helps in the tri-weekly incident reports required to monitor COVID-19 outbreaks in the vulnerable populations DBHDD serves.

Suicide rates – Suicide is the 10th leading cause of death in Georgia. It spans rural and urban areas and touches every racial and age group. Using data from IMAGE, DBHDD and suicide prevention stakeholders across the state wrote the Georgia Suicide Prevention Strategic Plan to prioritize goals and strategies to address the burden of suicide. Every six months, data is pulled to analyze and update the plan.

Looking forward, plans for IMAGE include adding the ability to formally manage the interactive investigation process, including reviewing findings with providers. This will create a formal method for DBHDD and providers to collaborate and better serve Georgians in their care.