

Children's Behavioral Health Initiative Implements New HIE Workflow to Reduce CANS Reporting Errors



The Children's Behavioral Health Initiative (CBHI), part of the MassHealth Office of Behavioral Health, ensures that MassHealth-insured children with significant behavioral, emotional, and mental health needs, along with their families, receive the services they need to be successful at home, school, in the community, and in their lives.

CBHI partners with state agencies, providers, and payers to make sure that MassHealth covered services meet the individual needs of each child and family, are easily accessible, and that all families feel welcomed and respected when seeking care.

Challenge

MassHealth requires certain providers, for example, outpatient, inpatient, In-Home Therapy, Intensive Care Coordination, and Community Based Acute Treatment (CBAT) providers (Providers) to conduct a comprehensive assessment of youth seeking treatment. These Providers must use the Child and Adolescent Needs and Strengths tool (the CANS), a standardized comprehensive assessment and screening tool to conduct this assessment.

The Providers utilize the CANS tool to gather information about the needs and strengths of children and youth aged 20 years and younger. This enables Providers to get to know the child, the problems the child faces, and plan treatment. The CANS must be completed or updated at least every 90 days. This process helps ensure that treatment plans address a child's needs that require help or serious intervention, and can be based on the child's strengths.

In the past, Providers had to submit the CANS assessments to MassHealth's CANS database via the Commonwealth's 'Virtual Gateway'. Due to reporting regulations, Providers typically had to enter the CANS twice: once through the Virtual Gateway and once in their Electronic Health Records (EHRs).

This process took two hours of staff time per patient per quarter, an onerous time-intensive activity prone to data-submission errors. Furthermore, clinicians occasionally experienced timeouts while entering data, requiring them to enter the information on forms more than once, increasing the chance of mistakes.

To reduce duplicity and increase efficiency, CBHI collaborated with MeHI, the Massachusetts eHealth Institute, to develop new methods to improve the reporting process and reduce the amount of time clinicians would need to spend entering information.

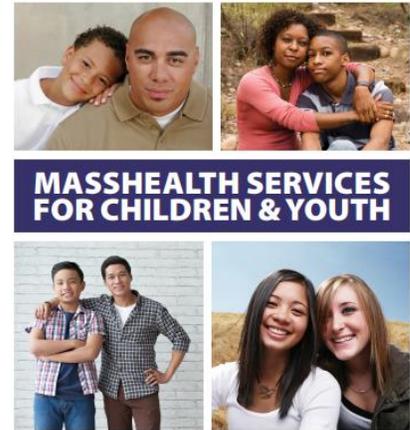
Solution

CBHI and MeHI worked with qualified behavioral health EHR system vendors to develop and implement CBHI CANS interfaces for their products. The vendor implementations enable the clinicians to complete the assessments within the EHR, automatically extract the data from the EHR into the required CANS format, and then send the assessment via the Mass HIway to MassHealth’s CANS database. An active Mass HIway connection is required to use the new workflow.

The implementations also allow the clinicians to copy their previous assessment into their next assessment. This copy functionality enables clinicians to focus on updating the details, as needed.

These features significantly cut down on the time needed to complete new assessments. Creating the interfaced implementations eliminated the need to manually copy information from each behavioral health organization’s CANS assessment tool through the Virtual Gateway. Once an assessment is completed, clinicians can now send the assessment directly to MassHealth’s CANS database without using the Virtual Gateway.

MeHI’s CBHI CANS Interface Development Grant provided \$193,000 in funding to four EHR system vendors to develop the new automated implementations. Each one worked with three behavioral health organizations across Massachusetts to pilot the new solution:



Grantee EHR System	Behavioral Health organizations
eHana	<ol style="list-style-type: none"> 1. Bay State Community Services 2. CHD (Center for Human Development) 3. Eliot Community Health (MSPCC)
Netsmart Technologies (MyEvolve)	<ol style="list-style-type: none"> 1. The Edinburg Center 2. Gosnold on Cape Cod 3. The Home for Little Wanderers
PsyTech Solutions	<ol style="list-style-type: none"> 1. Amesbury Psychological Center 2. Multicultural Wellness Center 3. Priority Professional Care
Qualifacts Systems	<ol style="list-style-type: none"> 1. Youth Opportunities Upheld, Inc. 2. Family Services Association of Fall River 3. BHN, Inc.

Implementation Challenges

The main barrier to automating the workflow was designing the new functionality required in the EHRs. Copying information from previous CANS assessments to new ones could only be done manually in the old workflow, so automating the copying in a logical way needed to be designed from the ground up.

As is the case with implementing any new workflow, there was a learning curve when it came to training staff members and breaking old habits. For instance, clinicians at CBHI organizations such as The Home for Little Wanderers needed time to learn and adopt the new automated process. There was initial pushback as some staff members were less eager to try the automated workflow, believing the old methods worked well enough. However, as the workflow was integrated into their daily routines, the benefits became clear and reluctance dissolved.

Feedback from Staff

Implementation at the twelve pilot sites was successful, and the participating behavioral health centers observed a decrease in mistakes on forms and assessments, as they no longer had to copy the information manually through the Virtual Gateway.

“The implementation of the automatic CBHI CANS interface through our vendor has positively impacted our workflow. Not having to visit the Virtual Gateway website every time and the ability to enter the data once into one system rather than two makes life easier for our clinicians.” - Amesbury Psychological Center

As staff became more used to the new workflow, staff dissent lessened. For example, The Home for Little Wanderers reported 98 percent compliance, with the vast majority of staff members now using the automated workflow.

Support from MeHI

MeHI’s CBHI CANS Interface Development Grant was funded from MeHI’s eHealth Institute Fund. Furthermore, MeHI worked with the behavioral health community to prioritize the CBHI CANS interface because the automation has the potential for significant impact and high return on investment. By leveraging the eHealth Institute Fund and working closely with vendors, healthcare organizations, and the Executive Office of Health and Human Services, MeHI was able to coordinate a complicated program and provide the project management and grant funding to secure a significant positive impact on the workflow for behavioral health providers.

“This project was a great example of leveraging MeHI’s eHealth Institute Fund to build a new solution that improves access to and use of technology to help behavioral health practices across Massachusetts.” – Laurance Stuntz, MeHI Director

HL7 interface to the CANS database

MeHI also worked with EOHHS to provide funding for the development of an HL7 interface which would allow providers to automatically submit assessments via the Mass HIway. The HL7 interface defines the business rules for formatting and sending the data to the state’s CANS database. All the vendors used the HL7 interface to develop their automated EHR solution for sending the assessments to the state’s CANS database via the Mass HIway.

Impact

As of June 2018, all behavioral health organizations that participated in the MeHI grant program have been sending CANS assessments via the new workflow. Soon after implementation, it was easy to observe the benefits from the automated process.

The old method was multi-step and offered many avenues for unintentional data errors. The new workflow is streamlined, with data being pulled directly from the patient’s existing record in the EHR. The new interfaced implementations compile the data, enable the clinicians to complete the assessments more quickly, and then submit it directly to MassHealth’s CANS database without requiring clinicians to spend hours entering the information manually.

Thousands of CANS assessments are submitted annually by Providers to the CANS database. This new automated workflow process was expected to expedite approximately 40,000 assessments sent to the CANS database from the twelve pilot organizations. The goal was to have 20 percent of those assessments sent through the new workflow. The pilot organizations far exceeded this goal by a factor of four, with roughly 80 to 85 percent of reports compiled during the pilot being sent to MassHealth using the automated process. The CANS project was successful well beyond the original impact and return on investment expectations.

*“Many of the children we work with at The Home have complex behavioral healthcare needs. We serve thousands of patients annually and offer five types of CBHI services, which results in many provider hours spent on CANS assessments submitted solely through the Virtual Gateway. The CBHI CANS Interface Development Grant allowed our EHR vendor to develop and implement an automatic CANS interface at The Home. By enabling this automatic interface, our workflow has become more efficient. We no longer encounter timeouts, cutting out the need for re-entry of data, and the ability to enter the data into one system rather than the previous two has streamlined our workflow. Our providers can more easily and efficiently achieve the CANS reporting requirements, allowing for more time spent on patient care.” - **The Home for Little Wanderers***

Recommendations

At the beginning, some pilot organizations faced issues when their clinicians were adjusting to the new workflow process. For instance, The Home for Little Wanderers found that clinicians needed more guidance on how to troubleshoot errors as they learned the new system. With their implementation now successfully completed, their biggest recommendation to other organizations is to document everything.

Every potential misstep or error should be noted, along with troubleshooting guides and steps staff members can take to fix them. Having an outline or guide on what to do if mistakes were made would have eased the transition for the pilot organizations, potentially decreasing errors.

Next Steps

Since the conclusion of the grant, the grantee EHR vendors have continued adding the HL7 interface at other behavioral health organizations, and other vendors, including Credible, are implementing an interface for their customers as well.

MassHealth encourages additional behavioral health organizations to implement the automated process. If an organization uses an EHR that did not participate in MeHI's CBHI CANS Interface Development Grant, it may be necessary for their vendor to develop the functionality before implementation is possible. MeHI and CBHI can provide guidance on working with your vendor.

For more information, email masshiway@state.ma.us.

To learn more about CBHI, visit <https://www.mass.gov/masshealth-childrens-behavioral-health-initiative>.

MeHI is interested in learning about additional challenges and areas that are ripe for innovative technology solutions that improve healthcare quality and efficiency in the Commonwealth. Let us know at ehealth@masstech.org about your ideas for projects that we should explore.