Brookton Neighborhood Health Center and Signature Healthcare Brockton Hospital: New Workflow Protocols and Communication Trees Enable Optimal Use of HIT to Exchange Continuity of Care Documents (CCDs) and Referrals to Improve Care Coordination for Patients in Need of Psychiatric Evaluation under Section 12A

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Overview
The Clinical staff at both Brockton Neighborhood Health Center (BNHC) and Signature Healthcare Brockton Hospital (Brockton Hospital) created new workflows for patients needing Section 12A evaluation (emergency restraint and hospitalization of persons posing risk of serious harm by reason of mental illness) and using communication trees, they were able to better coordinate and ensure continuity of care for some of the most vulnerable patients referred to and discharged from the hospital.

Due to the urgent nature of these referrals, the newly established workflow protocols retained the initial step of placing a phone call to the Emergency Department (ED). Accordingly, when a patient presents at BNHC in need of a Section 12A evaluation, BNHC Mental Health staff will make a phone call directly to the Emergency Department (ED) staff at Brockton Hospital to alert them that a patient is on the way. In addition, the new workflow requires BNHC staff to send a Continuity of Care (CCD) and Referral document through their NextGen EHR to the Emergency Department at the Hospital ahead of the patient’s arrival to the ED. Hospital staff monitor the webmail inbox for the CCD and referral. When the CCD and referral arrive, the Hospital staff are able to identify the Primary Care Provider (PCP) from BNHC with whom they can communicate.

During the time of the Connected Communities Implementation Grant, Brockton Hospital did not have an EHR that could receive the CCD and therefore, a secure direct message sent by webmail over the Mass HIway was used for the transmission of the CCD. As the patient moves from different departments for care, Hospital staff are able to access the CCD through the webmail inbox. For example, if after being seen in the ED, ED staff decide to admit the patient to the Hospital’s C3 (Psychiatric) Unit, the CCD is accessible to hospital staff on that Unit.

Before the patient is discharged from the hospital, BNHC Mental Health Staff are called and given a report that includes medications, plan of care and a follow up appointment is scheduled. A Discharge Summary or CCD follows the call. By using communication trees and being able to identify the responsible provider at each organization early on, HIT is optimized to support significant improvement in continuity of care and care coordination for patients with challenging behavioral health conditions.

Description of Use Case and Trading Partner
BNHC is a federally qualified Community Health Center serving the Brockton area community. In addition to family medicine and a mental health department, BNHC offers an Office Based Addiction Treatment (OBAT) program and Harm Reduction Clinic for patients with substance use disorders.

Brockton Hospital founded in 1896, is the oldest and largest inpatient facility in its service area, which is designated as the city of Brockton and twenty-one surrounding municipalities. The Hospital is part of the Signature Healthcare network and is a community-based non-profit teaching hospital with 216 licensed beds. In addition to providing medical/surgical, pediatric and obstetric services, the hospital offers inpatient and outpatient psychiatry, radiation oncology, cardiac catheterization, Level II nursery, and magnetic resonance imaging.
People with mental health disorders are more likely than people without mental health disorders to experience an alcohol or substance use disorder. According to SAMHSA’s 2014 National Survey on Drug Use and Health (NSDUH) (PDF | 3.4 MB), approximately 7.9 million adults in the United States had co-occurring disorders in 2014. The consequences of undiagnosed, untreated, or undertreated co-occurring disorders can lead to a higher likelihood of experiencing homelessness, incarceration, medical illnesses, suicide, or even early death. (https://www.samhsa.gov/disorders/co-occurring) According to the Mass Chapter 55 report, entitled “An Assessment of Fatal and Nonfatal Opioid Overdoses in Massachusetts (2011-2015)” issued in August 2017, the risk of fatal opioid-related overdose is six times higher for persons diagnosed with a serious mental illness (SMI) and three times higher for those diagnosed with depression. (https://www.mass.gov/files/documents/2017/08/31/legislative-report-chapter-55-aug-2017.pdf)

Patients with substance use disorders, mental health disorders and/or co-occurring substance use and mental health disorders present to BNHC through its Mental Health Department, OBAT program and Harm Reduction Clinic. When a patient who is being seen at BNHC requires emergency psychiatric evaluation, the mental health clinician, after completing the necessary Section 12A paperwork and calling for transport, calls Brockton Hospital’s ED to alert them that the patient is on route to the hospital. Before the patient arrives in the ED, a CCD is sent from BNHC’s Next Gen EHR by webmail over the Mass HIway, providing the ED staff a clear view of the patient’s history and a contact person at BNHC to contact when the patient is released. After the patient is evaluated and determined to require admission to the hospital’s C3 (Psychiatric) Unit, the C3 staff will access the CCD and the latest information on the patient. Prior to the time of discharge, the C3 staff will ensure the correct follow up personnel at BNHC receives the discharge CCD and is aware of the care plan by placing a follow up call to the appropriate staff at BNHC.

Goals
BNHC’s overriding goal for the Connected Communities grant was to create a collaborative healthcare environment in the Brockton area, where disparate organizations use HIT to improve intra-organizational communication and better coordinate care for complex behavioral health patients.

Lessons Learned
Project Team
BNHC: The Project Manager, whose full-time job was dedicated to coordinating all project activities, and ensuring they remained a priority at each organization so that the project remained on time, on budget, and was executed as intended, was key to the project’s success. She worked closely with BNHC’s IT specialist who was able to set up the technical aspects of the CCD workflow, and ensure that the integration worked effectively between the Hospital and in BNHC’s NextGen EHR.

The Mental Health Program Manager was essential to fleshing out the details of the Use Case and determining how the workflow would operate in the practice setting. The Director of Social Services was able to work with The Mental Health Program Manager around the development of workflow, and also created buy-in and support among the staff in the Mental and Behavioral Health Departments as their senior supervisor.

BNHC’s Compliance Manager ensured that BNHC was abiding by privacy laws within the Use Case by reviewing patient authorization to release information protocols, and updating internal forms as needed to meet these requirements. She was also able to provide technical assistance to the Hospital around privacy considerations and authorizations.
Finally, it was extremely helpful to have the buy-in of the Senior Leadership team. With their support the project was a priority, and any issues that arose were escalated.

**Signature Brockton Hospital:** It was essential for the success of this Use Case to have BNHC and the Hospital direct care staff sit down for meetings together. The direct care staff provided insight into how the workflow should operate in its real setting, and were able to identify the needs related to care coordination and the Use Case.

The Director of Social Work was integral in developing and implementing the workflow in the practice setting (i.e. who should send/receive and at what time during care). Together with the Nursing Informatics Coordinator who developed the staff training for using the CCD workflow, and was able to implement the training for the Emergency Department secretaries, the workflows became operational.

The Clinical Systems Analyst/Meaningful Use Specialist, was key to establishing the technical workflow between the Hospital and BNHC, and identifying workarounds to issues between the EHRs. He was also able to help coordinate reporting.

Finally, buy-in of senior leadership at the Hospital helped move the process along and increased accountability.

**Technical and Data Requirements: Use Work Arounds When Needed**

During the time of the Connected Communities Implementation Grant, BNHC utilized NextGen EHR to produce the CCD and Referral Form. However, Brockton Hospital’s Meditech system could not receive the CCD. To accommodate this issues, Brockton Hospital set up a Mass HIway webmail inbox in order to receive a CCD over the Mass HIway via Direct message. The Hospital is undergoing an upgrade to its Meditech EHR that will allow it to receive the CCD directly into its EHR. The Hospital has the capacity to send discharge summaries, lab reports and x-ray reports through its EHR to BNHC.

**Integrating Workflow: Ensure that Clinical/Program Staff are Involved**

At BNHC, the primary workflows impacted included those for behavioral health, mental health, and Harm Reduction Clinic referrals and care coordination. Careful consideration from the perspective of clinical staff at BNHC and Brockton Hospital was crucial to adoption and actual use of the HIT tools. Therefore, it was important to design the workflows with clinicians and staff at each provider organization. By doing so, providers came to value the new workflows as a means to provide better quality and more timely care to their patients.

In June 2017, BNHC Mental and Behavioral Health Departments and Brockton Hospital C3 Unit implemented communication charts with the names, phone numbers and email addresses of specific staff who were necessary to communicate with regarding the care coordination for a patient sent to the ED for a Section 12A evaluation. See Appendix A.

BNHC Mental Health staff were trained on sending CCD and improved communication workflow. Instead of faxing patient information to Brockton Hospital, a CCD is sent to the ED at the Hospital ahead of the patient’s arrival. The CCD contains the contact person at BNHC and any other pertinent information in the free text field of the CCD.

BNHC continues working to improve communication with Brockton Hospital C3 (Psychiatric) Unit via periodic meetings between departments.
**Patient Consent Process**

BNHC updated its Consent to Treatment and Release form given the recent updates made to 42 CFR Part 2 around sharing of substance use treatment information. BNHC used the guidance from MeHI’s Behavioral Health Information Sharing Learning Collaborative to inform to develop a consent template. ([https://mehi.masstech.org/support/learning-collaboratives](https://mehi.masstech.org/support/learning-collaboratives)) BNHC also updated policies to reflect the use of HIE. To date, BNHC’s General Designation Consent Form\(^4\) can be signed with an electronic signature and is stored in the patient’s EHR. The process for setting up this capability was managed by BNHC IT staff with TempDev (a consulting company in partnership with NextGen), and was straightforward, requiring only a short period of time to complete.

A significant amount of time was spent developing new workflows and training staff on the new process for obtaining consent to share 42 CFR sensitive patient information and data. Now, when patients present to BNHC’s Mental Health Department they are asked to sign a Consent to Treatment and Release, giving BNHC staff the authority to send a CCD and Referral to other providers participating in the patient’s care. BNHC’s NextGen EHR has a tab on the patient’s chart to generate the Consent template. There is also an alert on the EHR when the Consent has expired. Once the consent form is generated and reviewed with the patient, the patient is asked to electronically sign the form on an ePad. The signed Consent is then stored in the patient’s EHR.

**Timeline**

Both BNHC and the Hospital had the IT technology in place to move forward with the project and both Project Teams were motivated to create necessary workarounds and staff trainings to implement the new workflows. Another organization with similar readiness to exchange data electronically should anticipate nearly a year to implement this Use Case.

**Feedback from Staff**

Patients requiring a Section 12A evaluation are in need of immediate assessment and care and staff are focused on completing the required legally mandated paperwork to ensure swift transfer to the Hospital. Accordingly, they continue to need reminders to send the CCD and Referral forms to the hospital prior to the patient’s arrival. It is anticipated that the new workflows will be used more often as staff become more accustomed to using them. BNHC staff are already seeing the benefits of the new workflows when patients are discharged from the Hospital.

For example, a clinician from BNHC’s Harm Reduction Clinic recently reported that she received a phone call from the Hospital’s C3 (Psychiatric) Unit staff who gave a specific report on a BNHC patient who was being discharged. She learned that the patient was on extended release Risperdal medication (an injectable medication to treat Schizophrenia) and the specific date on which he was due for his next shot. This exchange of timely, critical care information between clinicians attending to a shared patient is the direct result of the new workflows, staff trainings on the workflows, face to face meetings between staff at both provider organizations and the use of communication trees. Coupled with the timely electronic transmission of CCDs and Discharge Summaries, this communication exemplifies the high standard of care coordination that is not only possible, but is now occurring for BNHC’s most high-risk patients.

**Staff Resources and Costs**

The Hospital’s estimated costs to implement the Use Case was $25,000-$35,000; approximately $15,000 spent on IT and $15,000 on Staff salaries.

BNHC’s costs to implement this Use Case totaled approximately $40,000; $15,000 spent on IT and $25,000 on Staff salaries.

**Risks, Challenges and Resolutions**

The Primary risks that we identified in this Use Case included: (1) Competing health IT priorities at trade partner organizations; (2) The chance that integrating referrals and CCDs into EHR complicates or overwhelms the workflows; (3) The limitations on time and resources; and (4) Staff turnover.
The risks were mitigated as follows:

(1) Competing health IT priorities at trade partner organizations:
BNHC continues to emphasize the importance of HIE in the context of ACO model of care – exchanging patient information in a timelier, more efficient manner will become more important in the ACO structure, and this may help keep priority higher between trade partner organizations. They learned that setting priorities and deadlines together is helpful. Keeping communication open between IT departments is key during the implementation phase and ensuring all the technical pieces of the CCD process are fully complete as we continue to troubleshoot.

(2) Integrating referrals and CCDs into EHR complicates or overwhelms the workflow:
Keeping direct care staff actively involved in the troubleshooting process, and soliciting feedback from them as they are trained and begin to regularly use the CCD/referral workflow. From this, adjustments can be made by IT as a result. Obtain monthly feedback from staff who are using the CCD workflow. Review monthly reports to see if the providers with significantly fewer Referrals entered/CCDs sent to trade partner organizations. Monitor volume of transactions now occurring electronically. Ideally, both Trade Partners should be sending electronic documents when needed.

(3) Limitations to time and resources:
Keep regular meeting times for both internal staff and external partners. Schedule Quarterly Meetings earlier to ensure maximum participation. Identify opportunities to continue working on HIE between organizations and expand to other providers in the area. Discuss potential funding and identify ways to work together in the future.

(4) Staff turnover:
Add EMR/CCD training to standard onboarding procedure and IT new hire training. Document detailing the steps of sending a CCD/eReferral created, shared with applicable staff, and available on BNHC’s Wiki. CCD workflow must be included in standard trainings for sustainability. Review monthly reports to make sure that all new applicable providers have sent at least a test CCD/Referral. Provide training.

Recommendations

The following recommendations are offered to inform the work of other provider organizations to create the necessary changes in workflows that will optimize the use of HIT to improve care coordination and ensure continuity of care for patients with complex behavioral health issues:

- It is helpful to have someone with adequate time to oversee the project. Completing a similar project would be difficult without an individual dedicated solely to it.
- Be sure to include any trade partners/stakeholders in the design of the project. Their input is crucial to success and helps build a relationship among organizations that is conducive to care coordination. For example, one of the most difficult challenges faced in the grant project was determining where incoming CCDs should live in each trade partner’s EHR. The group of trade partners want to be sure that incoming patient information is readily accessible to the right clinical staff member.
- Give yourself adequate time to plan. The more discussions that occur internally and externally from an organization, the more opportunities and issues arise. Having time to work through these is important for project success.

How will you apply this experience to the next big thing?

In becoming an ACO, BNHC must be exceptional at coordinating and documenting all aspects of care for the most high-risk patients, including substance use disorder patients. The ACO will be evaluated on how well members are linked to an accountable unit or team of providers that is responsible for coordinating and ensuring continuity of care. The new workflows, communication tools, consent templates and HIT tools developed and implemented during this project enable BNHC to offer the highest standard of care coordination, increase the number of patients it serves and improve the health and wellness of its patients.
Are there materials, websites, tools that the grantee used to support their implementation of this use case they would encourage others to use?

In addition to the MeHI Learning Collaborative Consent Templates and Guides, the MeHI HIE Use Case Planning Form and HIE Technology and Workflow Project Plan were extremely helpful to the implementation of this Use Case. (https://mehi.masstech.org/support/learning-collaboratives) Moreover, the Communication Trees BNHC developed with the Hospital proved invaluable to the success of the project. (Appendix A)

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1 https://malegislature.gov/Laws/GeneralLaws/PartI/TitleXVII/Chapter123/Section12

2 Communication Trees, created by BNHC’s Mental Health Manager through face-to-face meetings with the Staff from the Hospital's C3 Psychiatric Unit, included names, email addresses and phone numbers for key personnel involved in the admission, care and discharge of shared patients. See Appendix A.

3 The Mass HIway is a secure statewide network that facilitates the electronic transmission of healthcare data and information among providers, hospitals and other healthcare organizations as allowed by applicable state and federal laws. (https://www.mass.gov/orgs/the-massachusetts-health-information-highway)

4 42 CFR Part 2 Final Rule allows patients to complete a consent form with specific provider names and a general designation such as “to all my providers who advise me on my healthcare”.
Appendix A

Brockton Neighborhood Health Center Communication Chart

For coordinating care of Brockton Hospital C3/Psychiatric patients

**Behavioral Health** (integrated with Primary Care)

- For new primary care patients or those who haven't seen MH in 3 months

  **POD 1 PCPs**
  - Dr. Syed Musquadas
  - Dr. Susan Zimenter
  - Dr. Marie-Claude Francaise
  - Dr. Lujana Eteromi
  - Dr. Rekha Samuel

  **Assigned BH Staff:**
  - Tony P.
  - Email
  - Direct Phone

  **POD 2 PCPs**
  - Dr. Sejal Shreevannawala
  - Dr. Asmat Masood
  - Dr. Olivia Pop
  - Dr. Benjamin Lightfoot
  - Andrea Haffy, NP

  **Assigned BH Staff:**
  - Jacqueline G.
  - Email
  - Direct Phone

  **POD 3 PCPs**
  - Dr. Joe Parente-Filangeri
  - Dr. Douglas Ribulio
  - Dr. Peggy Mentor
  - Dr. Rachel Harsent
  - Katrina Thomas-Fox, NP

  **Assigned BH Staff:**
  - Debra V.
  - Email
  - Direct Phone

  **POD 4 Urgent Care**
  - Dr. Nikhil Gohil
  - Dr. Shrestha Puthuk
  - Dr. Shilpi Dutta
  - Jessica Santulli, NP
  - Madeleine Hockney, NP
  - Ruth Tetteh-Elon, NP

  **Assigned BH Staff:**
  - Elana L.
  - Email
  - Direct Phone

- Don't know if patient has BNHC MH Clinician

  **MH Admin:**
  - Erickson F.
  - Email
  - Phone

  *or MH main phone*

- Harm Reduction Clinic (Suboxone & Vivitrol)

  **POD 5 (Vincent's) PCPs**
  - Disa F. Obedin
  - Dr. Rahana Ali
  - Valerie (Racine) Adorjolo, NP
  - Pamela Francez, NP

  **Assigned BH Staff:**
  - Debra V.
  - Email
  - Direct Phone

- Mental Health
  - (ongoing counseling & psychiatry)

  **POD 6 (Vincent's) PCPs**
  - Sunny Chavan
  - Dr. Nicolas Palacios
  - Dr. Adriana Scott
  - Francesca Villanueva, NP

  **Assigned BH Staff:**
  - Casey S.
  - Email
  - Direct Phone

**Main Site**

- Martha Ayano, NP

- For existing HRC Patients:

  **Clinical Secretary**
  - Michelle S.
  - Email
  - Direct Phone

  **Program Manager**
  - Amanda S.
  - Email
  - Direct Phone

- Program Manager
  - Claudia S.
  - Email
  - Direct Phone

- For patients already established with BNHC MH Clinician

  **Mental Health Depart. Main Phone**
  - (508) 559-6099
  - Ext. 750

  **MH Admin.**
  - Erickson F.
  - Email
  - Direct Phone

**e-Fax Number for all of BNHC:** (508) 584-XXXX