

Health IT Adoption and Interoperability across Behavioral Health Organizations

SUPPORTING STATEMENT

B. COLLECTION OF INFORMATION EMPLOYING STATISTICAL METHODS

B.1. Respondent Universe and Sampling Methods

Survey Goals

As described previously, both SAMHSA and ONC are working together to conduct a survey of behavioral healthcare organizations to serve their respective needs. For SAMHSA the goals of the survey are to assess the overall use of health IT and interoperability *across* multiple behavioral health grant programs which have been identified as potentially benefiting from health IT. SAMHSA also seeks to examine variation in use of health IT and interoperability between and within behavioral health grant programs. For ONC, the goal is to advance the measurement of health IT and interoperability among behavioral health care providers by using this survey to identify questions to include in future national surveys to be conducted in partnership with SAMHSA. Additionally, although this survey is not generalizable nationally, these grant programs are fairly diverse and differ widely. Thus, ONC will benefit from insights into the use of health IT and interoperability across these grant programs that have the potential to value health IT.

Selection criteria to meet survey goals

Given these goals, we selected SAMHSA grant programs that met the following criteria: the grant program provides services and/or treatment directly to clients in settings that would benefit from the use of health IT. We wanted to focus on grantees that directly interact with clients because the health IT use we sought to measure related to the storage, management and sharing of client health information. Additionally, we sought to measure whether health IT was used to share health information with clients and engage clients in their care. Given the in-depth focus on various aspects of health IT for this survey, we chose to focus on those settings that could potentially benefit from the use of health IT rather than include settings or services where the use of health IT might not be warranted or applicable.

Description of Potential Respondents

A total of 10 grantee programs and 533 grantees fit the selection criteria. SAMHSA recommended some of these grant programs adopt health IT in their funding announcement as these programs could benefit from the use of health IT. We also supplemented this by selecting programs that provided services directly to clients in settings could benefit from the use of health IT, such as hospital settings or clinics.

A description of the grant programs and the approximate number of grantees within each program is listed in Table 1 (next page). The grantees represent behavioral health organizations. Each grant program description includes how health IT is recommended by SAMHSA or indicates whether the grant programs provides direct services to clients in settings that would benefit from the use of health IT.

Three Centers within the SAMHSA—the Center for Mental Health Services (CMHS), the Center for Substance Abuse Prevention (CSAP), and the Center for Substance Abuse Treatment (CSAT)—fund these grant programs. Given that these programs are funded across 3 different SAMHSA centers, with different emphases, it is not altogether surprising that the programs vary widely in terms of the types of services they offer and populations they target. Additionally, other factors that may affect health IT use will vary across (and within) the programs. Based upon the prior 2015 BHITS survey (OMB No. 0930-0352), there is evidence to indicate that SAMHSA grant programs do differ in health IT adoption rates, and that there are cross-cutting factors across grant programs that may be associated with variation in health IT adoption. In the 2015 survey, the overall EHR adoption rate was 62%, with EHR adoption varying from 9% to 87% across the different grant programs. Additionally, factors such as geographic location were associated with variability in EHR adoption. For example, grantees located in non-urban areas had EHR adoption rates that were 10 percentage points lower than the survey respondents located in urban areas.

Table 1. Description of Grantee Programs and Number of Grantee Organizations

Program	Description of Program	# of grantee organizations per program
Screening Brief Intervention and Referral to Treatment (SBIRT):	SBIRT is a treatment program that implements screening to quickly identify and assess the severity of substance use disorders; brief intervention to increase insight and awareness; referral to treatment for those in need. The purpose of the SBIRT program is to expand/enhance the state and tribal continuum of care for SUD services and reduce alcohol and other drug consumption, reduce its negative health impact, increase abstinence, reduce costly health care utilization and promote sustainability, and the integration of behavioral health and primary care services through the use of health information technology (HIT).	16
Grants to Expand Care Coordination Targeted Capacity Expansion (TCE) Through the use of Technology-Assisted Care (TAC) in Targeted Areas of Need:	The TCE-TAC program is a population-focused initiatives that enhance or expand the capacity of substance use disorder treatment providers to serve youth and adults with substance use disorders or co-occurring substance use and mental disorders who have been underserved (due to rural location, transportation challenges in the community, shortages of primary	15

	<p>medical care and SUD treatment providers) and/or special needs. The use of technology will expand and/or enhance the ability of providers to effectively communicate with persons in treatment and to track and manage their health to ensure treatment and services are available where and when needed. Grantees must use SAMHSA’s services grant funds primarily to support allowable direct services and EHR infrastructure</p>	
<p>Medication Assisted Treatment (MAT) – Prescription Drug and Opioid Addiction (PDOA):</p>	<p>The purpose of the MAT-PDOA program is to provide funding to states (with having the highest rates of primary treatment admissions for heroin and opioids per capita) to enhance/expand their treatment service systems to increase capacity and provide accessible, effective, comprehensive, coordinated care, and evidence-based medication assisted treatment (MAT) and recovery support services to individuals with opioid use disorders seeking or receiving MAT. MAT is provided in a clinically driven, person-centered, and individualized setting. All SAMHSA grantees that provide clinical services to individuals are encouraged to demonstrate ongoing use of a certified EHR system in each year of their SAMHSA grant.</p>	70
<p>Offender Re-Entry Program (ORP):</p>	<p>The ORP program expands and/or enhances substance use disorder treatment and related recovery and reentry services to sentenced substance-abusing adult offenders/ex-offenders who are returning to their families and community from incarceration in state and local facilities including prisons, jails, or detention centers. This program is administered within public and private nonprofit entities. Grantees may use up to 15 percent of the total services grant award for adopting and/or enhancing your computer system, management information system (MIS), electronic health records (EHRs), etc., to document and manage client needs, care process, integration with related support services, and</p>	7

	outcomes.	
Cooperative Agreement to Benefit Homeless Individuals (CABHI):	<p>CABHI is a jointly funded program with CMHS to further develop, enhance and/or expand infrastructure and mental health and substance use treatment services of states and territories, local governments, and other domestic public and private nonprofit entities, federally recognized American Indian/Alaska Native tribes and tribal organizations, Urban Indian organizations, public or private universities and colleges, and community- and faith-based organizations. CABHI grants increase capacity to provide accessible, effective, comprehensive, coordinated, integrated, and evidence-based treatment services; permanent supportive housing; peer supports; and other critical services for homeless individuals. State grantees may use up to 20 percent of the total grant award for infrastructure development/improvements to provide effective, accessible treatment and recovery support services, and to create a more integrated and collaborative system of care for individuals and families experiencing homelessness who have behavioral health issues.</p> <p>State applicants are required to train case managers and other staff on required documentation for electronic health records (EHRs) and benefit programs.</p>	71
Minority Serving Institutions (MSIs) partnerships with Community-Based Organizations (CBOs):	<p>The purpose of the MSI-CBO program is to prevent and reduce substance abuse (SA) and transmission of HIV/AIDS among at-risk populations, including African American, Hispanic/Latino, Asian American/Pacific Islander (AA/PI), and American Indian/Alaska Natives (AI/AN) young adult (ages 18-24) populations. MSIs partner with one or more community-based organization(s) (CBO) to provide integrated substance abuse, Hepatitis-C, and HIV prevention programs. While EHR adoption is not a requirement for the prevention Minority AIDS Initiative (MAI), approximately 30 percent of the survey respondents</p>	63

	adopted an EHR in 2015.	
HIV Capacity Building Initiative (CBI):	<p>The CBI program supports an array of activities to assist grantees in building a solid foundation for delivering and sustaining quality and accessible state of the science substance abuse and HIV prevention services. The program aims to engage community-level domestic public and private non-profit entities, tribes and tribal organizations to prevent and reduce the onset of substance abuse and transmission of HIV/AIDS among at-risk populations, including racial/ethnic minority youth and young adults, ages 13-24. SAMHSA is particularly interested in eliciting the interest of college and university clinics/wellness centers and community-based providers who can provide comprehensive substance abuse and HIV prevention strategies. While EHR adoption is not a requirement for the prevention Minority AIDS Initiative (MAI), approximately 30 percent of the survey respondents adopted an EHR in 2015.</p>	74
Primary Behavioral Health Care Integration (PBHCI):	<p>The PBHCI program coordinates and integrates primary and specialty care medical services by co-locating services in community-based behavioral healthcare settings. PBHCI further develop the coordination and integration of primary care and behavioral health care services. This program supports SAMHSA's Strategic Initiative on Health Care and Health Systems Integration, as well as aligns with Prevention of Substance Abuse and Mental Illness; Recovery Support; and Health Information Technology. Grantees are expected to implement mechanisms that support routine information collection and sharing regarding the behavioral health and primary care needs of PBHCI consumers, and therefore must use electronic health record (EHR), including population management tools in order to support a robust continuous quality improvement process, and must regularly generate reports by specific</p>	130

	conditions to use for quality improvement, reduction of disparities, research, or outreach.	
National Child Traumatic Stress Initiative (NCTSI):	<p>The NCSTI program provides and increases access to effective trauma-focused treatment and services systems in communities for children, adolescents, and their families who experience traumatic events throughout the nation. This program addresses behavioral health disparities among racial and ethnic minorities by encouraging the implementation of strategies to decrease the differences in access, service use, and outcomes among the racial and ethnic minority populations served.</p> <p>Grantees may use no more than 20 percent of the total services grant award for adopting and/or enhancing your computer system, management information system (MIS), electronic health records (EHRs), etc., to document and manage client needs, care process, integration with related support services, and outcomes.</p>	57
Garrett Lee Smith Youth Suicide Prevention Program (GLS):	<p>GLS facilitates a comprehensive public health approach to prevent suicide in institutions of higher education. Designed to assist colleges and universities in building essential capacity and infrastructure to support expanded efforts to promote wellness and help-seeking of all students. This grant offers outreach to vulnerable students, including those experiencing substance abuse and mental health problems who are at greater risk for suicide and suicide attempts. While EHR adoption is not a requirement for the mental health program, approximately 17 percent of the survey respondents adopted an EHR in 2015.</p>	30

The prior grantee health IT survey (OMB No. 0930-0352) in 2015 yielded a 75% response rate; a similar response rate is expected in the currently proposed study because we are taking similar procedures to boost the response rate. This would result in approximately 400 respondents. These include the following measures:

1. We conducted a pilot survey among a small (less than 9) representative group of potential participants and analyzed the results in order to reduce burden and improve the quality of the survey questions asked.
2. We will promote the survey using the National Council of Behavioral Health (the contractor who has helped develop the survey), a well-respected organization in the behavioral health field, as well using the leadership of SAMHSA and ONC to urge grantees to respond.
3. We will be applying follow-up processes and procedures with all non-responders, similar to what was done with the 2015 survey. We will be identifying non-responders during regular intervals and initiating telephone follow-up with non-responders.

B.2. Information Collection Procedures

B2a. Survey Development

Survey design and construction, especially question selection and development, was informed by the research questions the survey is intended to address and the domains identified to guide selection of health IT areas of interest. These domains include:

- Eligibility to Participate in the Survey
- Facility Characteristics
- EHR Adoption (including use)
- Interoperability and Exchange
- Use of other Types of Health IT

The project team developed a comprehensive glossary to ensure that the key terms related to technology aligned with published definitions of terms. The glossary is included as Attachment 1—Definitions of Key Terms and Concepts. This document was created to ensure consensus among project stakeholders regarding the meaning of various information technology terms. It is also the basis for “layman’s definitions” of key terms used in the survey. This helps guarantee common and accurate understanding of the terms among the participants which supports the quality of data collected.

The survey questions were developed by first collecting questions used in previous surveys. The source of each previous survey question was tracked along with the development of modifications to the question. These modifications tailored the questions to the survey areas of interest. Modifications were proposed and developed in a series of iterative discussions with team members. To address gaps in content areas, some questions were newly developed. The final set of survey questions was methodically cross-walked to the Research Questions the survey will answer. The summary of this crosswalk, along with the rationale for including each question is included as Attachment 2–Survey Questions Crosswalk.

This approach supports both the quality and the usability of the data collected. The surveys reviewed for question sources included:

- HIT Adoption and Readiness for Meaningful Use in Community Behavioral Health, conducted in 2012 by the National Council for Behavioral Healthcare (NCBH)
- American Hospital Association (AHA) Health IT Supplement Survey, 2016
- National Electronic Health Record Survey, 2015, conducted by the National Center for Health Statistics (NCHS)
- The National Mental Health Services Survey (N-MHSS), 2016
- National Survey of Substance Abuse Treatment Services (N-SSATS)
- BHITS 2015 Grantee Survey

Each of the domains were methodically addressed by organizing each of the survey questions by domain into one of 5 (five) Sections. These sections include:

- Section A: Eligibility to Participate in the Survey
- Section B: Facility Characteristics
- Section C: EHR Adoption
- Section D: Interoperability and Exchange
- Section E: Use of other Types of Health IT

Each of these sections was organized to support the effective and efficient implementation of “skip logic,” with stem questions located at the beginning of the section. The stem question determines whether a set of questions is relevant to the respondent. If not, the respondent is automatically forwarded, or “skipped” to the next relevant question or section. The minimum time for the average respondent to complete the survey is 16 minutes, with the maximum time of 25 minutes for a respondent who skips the fewest and therefore answers the most questions. The average response time is estimated to be 20 minutes.

Data collection procedures include two key areas: (1) developing information required for the survey frame, (2) communicating with targeted respondents. These key components are detailed below.

B.2.b. Information Collection Protocol

As noted earlier, we are planning to survey all eligible grantees to meet SAMHSA’s analytic goals of reporting on health IT use at the program level and conducting comparisons across programs. For each grantee organization, we will be contacting the Project Director who is in charge of administering the grant program. Project Directors are considered key staff and provide daily oversight of the grant. SAMHSA possesses the most current contact information needed to effectively communicate with the Project Directors. Additionally, to ensure that the most appropriate person from each organization who is knowledgeable about health IT use fills out the survey, screening questions are included at beginning of the survey. If the Project Director does not possess the knowledge related to health IT complete the survey, they will be given instructions to forward the survey link to the individual who is most able to complete the survey,

for example the grant Program Manager. This approach was successfully used in the 2015 BHITS grantee survey.

B.2.c. Communication with Targeted Respondents

The survey will be conducted online with email, with email reminders and telephone follow-up to non-responders. On the release date of the survey, a customized email from SAMHSA/ONC leadership will go out to each potential respondent (Grantee Letter and BHITS Survey Message to Grantees). This will be followed by an email from the National Council that will contain a link to the survey site and contain information on how to obtain assistance if the respondent has questions or technical issues with completing the survey (See Attachment 4 Grantee Letter and BHITS Survey Message to Grantees). This will include both an email address and a toll-free number for obtaining help should questions or issues arise. (These same contact points will also be listed on the first and last pages of the electronic version of the survey).

Recipients of the initial survey email who do not complete the survey will be sent reminder emails and individuals from the contact list who have not responded within approximately 15 days will receive telephone follow-up. This schedule is designed to establish and maintain a positive relationship with potential respondents, and to encourage their continued engagement and interest while assuring them of the importance of their participation. The communication strategy will be evaluated for effectiveness, and modified if it does not effectively encourage a response. For example, we can increase the frequency of email reminders, if necessary. Follow-up telephone calls to non-responders will be conducted to reach the target response rate.

B.2.d. Sample size and Statistical power.

Neither ONC nor SAMHSA seek to generate national level estimates based upon this grantee population (who are unlikely to be representative of behavioral health care providers nationally). Thus, there is not a need to determine statistical power to generate such estimates

Based upon a 75% response rate, the total number of respondents will be approximately 400 organizations across all grant programs. The number of expected respondents by program is likely to vary widely (see Table 2, next page), ranging from 5 to 98 organizations. Given that this population represents a census of all grantees who meet the eligibility criteria, this does not necessitate the calculation of statistical power. SAMHSA does plan to generate overall estimates related to health IT use across these diverse programs as they all could potentially benefit from health IT use. For example, this will include reporting on overall EHR adoption rate across all respondents. ONC will be using these overall estimates, along with item non-response rates, to help determine which items would be best suited to include in a national survey of behavioral healthcare providers. Additionally, these overall estimates will provide insights into the level of health IT use and interoperability across grantees that should benefit from health IT.

SAMHSA will conduct exploratory analyses to generate hypotheses that it is interested in examining. These exploratory analyses will allow SAMSHA to make qualitative assessments. Given the purpose is to generate hypotheses, no statistical tests will be necessary to conduct. SAMHSA expects to explore health IT adoption and use by type of grant program; by different characteristics that might affect health IT adoption and use; and by patient characteristics/setting. These exploratory analyses SAMHSA will

enable SAMHSA to generate hypotheses that can subsequently be confirmed and examined quantitatively with a national level survey in the future.

Table 2. Number of Potential Respondents by Program

SAMHSA Center that supports grant program	Grant Program	# of Grantee organizations per program	# Potential respondents per program (based on 75% response rate)
CSAT	Screening Brief Intervention and Referral to Treatment (SBIRT)	16	12
CSAT	Grants to Expand Care Coordination Targeted Capacity Expansion (TCE) Through the use of Technology-Assisted Care (TAC) in Targeted Areas of Need	15	11
CSAT	Medication Assisted Treatment (MAT) – Prescription Drug and Opioid Addiction (PDOA)	70	53
CSAT	Offender Re-Entry Program (ORP)	7	5
CSAT	Cooperative Agreement to Benefit Homeless Individuals (CABHI)	71	53
CSAP	Minority Serving Institutions (MSIs) partnerships with Community-Based Organizations (CBOs)	63	47
CSAP	HIV Capacity Building Initiative (CBI)	74	56
CMHS	Primary Behavioral Health Care Integration (PBHCI)	130	98
CMHS	National Child Traumatic Stress Initiative (NCTSI)	57	43
CMHS	Garrett Lee Smith Youth Suicide Prevention Program (GLS)	30	23
CMHS, CSAT, CSAP	Total	533	400

B.3. Methods to Maximize Response Rates

Essential to the success of this data collection is attaining a high response rate (75%). Using data that SAMHSA possesses about all its grantees, we will compare respondents to non-respondents to assess if non-respondents are more likely to possess certain characteristics. For example, we can compare whether respondents are more likely to be located urban vs. rural areas, regional differences, by center funding, and other treatment and organizational characteristics. This will allow us to identify bias and determine whether these results are generalizable.

As noted earlier, the National Council will implement a comprehensive strategy to maximize the response rate to achieve the 75% response rate we achieved the last time a grantee survey was conducted in 2015. This will include the following methods:

1. Survey length will be kept to a minimum of 16 minutes and a maximum of 25 minutes (on average 20 minutes).
2. The survey itself will be deployed on the internet, to make completion of the survey faster and simpler for the participants.
3. Non-responders will be receiving follow-up using email reminders and telephone calls.
4. The planning and administration of the survey will identify and address potential barriers to participation, especially those related to the web-based technology to be used.

Messaging, including scripts to guide follow-up efforts, will be reviewed by staff specializing in communication, to help ensure clarity and effectiveness.

B.4. Tests of Procedures

To mitigate any undue burden and to maximize the effectiveness and utility of the survey instrument, a pilot test was conducted. The pilot was used to determine whether the questions were clearly stated and captured the intended information. The results of the pilot were used to inform efforts to refine the wording of questions that were not clear and to clarify questions that were not understood. The pilot test was also used to determine the actual time of administration for the intended audience and to ensure that the target range was achieved.

The pilot was conducted with the following: 4 National Council staff members with the relevant professional background and experience related to health IT, 2 representatives from health IT companies, and 2 individuals in leadership positions at two behavioral health provider organizations. They were asked to complete the survey at a pre-arranged time, noting the total time for completion. Participants were provided with information concerning the nature and intent of the data collection effort and asked to provide feedback on their experience with filling out the survey. Team members responsible for designing the survey were informed of the time it took each staff to complete the survey and made aware of any issues that emerged.

B.5. Statistical Consultants/Individuals Collecting and/or Analyzing Data

The National Council for Behavioral Health's Information Technology Survey represents a cross-agency collaboration among the ONC and SAMHSA. The data collection efforts are being completed under a contract with FEi Systems, Inc. (FEi), which has a subcontract with the National Council. ONC and SAMHSA have worked with both of these entities to design the

survey. The survey project team, which includes the National Council, is responsible for the data collection of the information collection. National Council team members will initiate and manage the data collection activities and supervise the implementation of the non-responder follow-up plan. They will ensure the provision of weekly reports on the survey response rate, and initiate interventions if the response rate is not satisfactory. They are also responsible for generating the final file with the survey responses and survey documentation. ONC and SAMHSA will be responsible for analyzing and reporting the results.

ONC Key Personnel for this Project

Vaishali Patel, PhD MPH
 Senior Advisor
 Office of Planning, Evaluation, and Analysis, ONC
 U.S. Department of Health and Human Services
 Phone: (202) 690-3912 Email: vaishali.patel@hhs.gov

JaWanna Henry, MPH
 Public Health Analyst
 Office of Planning, Evaluation, and Analysis, ONC
 U.S. Department of Health and Human Services
 Phone: (202) 969-3590 Email: jawanna.henry@hhs.gov

Project Personnel

<p>Kazi Ahmed, PhD Project Director FEi Systems Address: 7175 Columbia Gateway Drive, Suite A Columbia, MD 21046 Daytime Phone: (571) 252-5504 Email: kazi.ahmed@feisystems.com</p>	<p>Adriano Boccanelli Practice Improvement Manager National Council for Behavioral Health Address: 1400 K Street NW, Suite 400 Washington, DC 20005 Daytime Phone: (202) 684-7457 Ext 291 Email: AdrianoB@thenationalcouncil.org</p>
<p>Gordon Campbell Program Manager FEi Systems Address: 7175 Columbia Gateway Drive, Suite A Columbia, MD 21046 Daytime Phone: (443) 518-7293 Email: Gordon.campbell@feisystems.com</p>	<p>Daney Foney Senior Director of Practice Improvement National Council for Behavioral Health Address: 1400 K Street NW, Suite 400, Washington, DC 20005 Email: DanaF@thenationalcouncil.org</p>
<p>Megan Dormond Data and Evaluation Analyst National Council for Behavioral Health Address: 1400 K Street NW, Suite 400 Washington, DC 20005 Daytime Phone: (202) 684-7457 Ext 310 Email: MeganD@thenationalcouncil.org</p>	<p>Wilson Washington, Jr. Senior Public Health Advisor Center for Substance Abuse Treatment (CSAT) Performance Measurements Branch (PMB) 5600 Fishers Lane, 13E05-A Rockville, MD 20857 Daytime Phone: (240) 276-2973</p>

	Email: Wilson.Washington@SAMHSA.hhs.gov
--	---

Dantrell Simmons, DrPH Public Health Advisor, Center for Substance Abuse Treatment Substance Abuse and Mental Health Services Administration Address: 5600 Fishers lane, 13E85-C, Rockville, MD 20857 Daytime Phone: (240) 276-2259 Email: Dantrell.Simmons@SAMHSA.hhs.gov
--

LIST OF ATTACHMENTS

Attachment 1 – Definitions of Key Terms and Concepts

Attachment 2 – Survey Questions Crosswalk

Attachment 3 – Survey Instrument

Attachment 4 –Grantee Letter and BHITS Survey Message to Grantees

Attachment 5– Survey Collection Strategy

Attachment 6 – IRB approval notice

Attachment 7- 60 Day Federal Register Notice