

Developed by the National Committee for Quality Assurance (NCQA).  
Contact [alcohollearningcollaborative@ncqa.org](mailto:alcohollearningcollaborative@ncqa.org) for inquiries.

# Screening and Follow-Up for Unhealthy Alcohol Use: Quality Improvement Change Package for Health Plans

Learning Collaborative to Improve  
*Unhealthy Alcohol Use Screening & Follow-Up*  
Measure Reporting & Performance



**Funding Sources:** Support for this project was provided by The Centers for Disease Control and Prevention and The Substance Abuse and Mental Health Services Administration.

Contract No. GS10F0012Y, Order No. 75D30118F02978.

# Contents

<b>LIST OF ACRONYMS AND ABBREVIATIONS</b> .....	<b>3</b>
<b>1. INTRODUCTION</b> .....	<b>4</b>
A. About NCQA and the Alcohol Learning Collaborative.....	4
B. What is the Change Package?.....	5
C. Quality Improvement Change Package Contents.....	5
D. Acknowledgments .....	5
<b>2. BACKGROUND ON UNHEALTHY ALCOHOL USE</b> .....	<b>7</b>
A. The Need for Unhealthy Alcohol Use Screening and Follow-Up .....	7
B. Evidence-Based Intervention/Treatment for Unhealthy Alcohol Use.....	8
C. Prevention and Implementation in Primary Care Settings .....	8
D. Cost Effectiveness of Unhealthy Alcohol Use Screening and Follow-up .....	9
<b>3. UNHEALTHY ALCOHOL USE SCREENING AND FOLLOW-UP MEASURE</b> .....	<b>10</b>
A. Background on the HEDIS ASF Measure .....	10
B. How to Report the Measure .....	11
C. Reporting Electronic Clinical Data Systems Measures .....	12
<b>4. INTRODUCTION TO QUALITY IMPROVEMENT</b> .....	<b>14</b>
A. What is Quality Improvement? .....	14
B. Using a Learning Collaborative Framework for Quality Improvement.....	14
C. Stages of Quality Improvement .....	14
D. QI Readiness Checklist .....	15
<b>5. QI STAGE 1: ENGAGING STAKEHOLDERS FOR QUALITY IMPROVEMENT</b> ....	<b>16</b>
A. Engaging Health Plan Leadership.....	16
B. Creating Quality Improvement Teams .....	16
C. Identifying Champions .....	18
D. Enhancing Patient and Family Engagement.....	19
D.1 Identifying Patient Advisors.....	19
E. Engaging with Providers.....	19
E.1 Identifying Practice Sites.....	20
E.2 Engaging Provider Leadership.....	20
E.3 Identifying Key Personnel .....	20
<b>6. QI STAGE 2: BUILDING INFRASTRUCTURE TO SUPPORT CHANGE</b> .....	<b>21</b>
A. Achieving Staff Commitment and Efficiency .....	21
B. Leveraging Existing Resources to Conduct Screening and Follow-Up.....	22
C. Conducting Screening and Follow-Up.....	22

D.	Capturing Screening and Follow-Up Data .....	22
E.	Accessing Screening and Follow-Up Data .....	23
E.1	Assessing Readiness for Data Access .....	23
E.2	Strategies for Accessing Clinical Data .....	24
F.	How to Help Providers Build Infrastructure to Support Change .....	24
<b>7.</b>	<b>QI STAGE 3: IMPLEMENTATION .....</b>	<b>26</b>
A.	Creating a Model for Improvement.....	26
B.	Using Plan-Do-Study-Act (PDSA) Cycles .....	27
C.	Choosing a Quality Measurement .....	28
D.	Key Barriers, Facilitators of Success and Other Factors to Consider When Improving Unhealthy Alcohol Use Care .....	28
D1.	Data Access Barriers and Solutions.....	28
D2.	Screening and Follow-Up Clinical Workflow Challenges .....	29
D3.	Addressing Concerns about Stigma Related to Unhealthy Alcohol Use .....	30
D4.	Addressing Privacy and Clinician Reporting .....	31
D5.	Maintaining Enthusiasm .....	32
<b>8.</b>	<b>KEY DRIVER DIAGRAMS .....</b>	<b>33</b>
A.	Data Access Goal.....	34
B.	Screening Goal.....	37
C.	Follow-Up Goal.....	41
<b>9.</b>	<b>QI STAGE 4: SUSTAINABILITY, SPREAD AND SCALE-UP .....</b>	<b>45</b>
A.	Sustaining Successful Improvements .....	45
B.	Developing a Spread Plan .....	46
C.	Developing a Scale-Up Plan.....	49
D.	Facilitators and Barriers in Spread and Scale-Up .....	51
<b>10.</b>	<b>ADDITIONAL RESOURCES .....</b>	<b>52</b>
A.	Quality Improvement .....	52
B.	Alcohol Screening, Brief Intervention, and Referral to Treatment (SBIRT) .....	52
C.	NCQA Resources .....	52
<b>11.</b>	<b>APPENDICES .....</b>	<b>53</b>
	Appendix 1. Unhealthy Alcohol Use Spectrum.....	54
	Appendix 2. Allowed Screening Tools for the ASF Measure.....	55
	Appendix 3. Plan for Improvement.....	57
	Appendix 4. Example PDSA Cycle Worksheet.....	59
	Appendix 5. Example Spread Plan Worksheet.....	61
	Appendix 6. Example Scale-Up Worksheet .....	62
	Appendix 7. References .....	63

## List of Acronyms and Abbreviations

<b>ASF</b>	<i>Unhealthy Alcohol Use Screening and Follow-Up</i> quality measure
<b>AUD</b>	Alcohol Use Disorder
<b>BRFSS</b>	Behavioral Risk Factor Surveillance System
<b>CDC</b>	Centers for Disease Control and Prevention
<b>CPT</b>	Current Procedural Terminology
<b>ECDS</b>	Electronic Clinical Data Systems
<b>EHR</b>	Electronic Health Records
<b>HCPCS</b>	Healthcare Common Procedure Coding System
<b>HEDIS</b>	Healthcare Effectiveness Data and Information Set
<b>HIE</b>	Health Information Exchange
<b>HIPAA</b>	Health Insurance Portability and Accountability Act
<b>ICD-10-CM</b>	International Classification of Diseases
<b>IHI</b>	Institute for Healthcare Improvement
<b>LOINC</b>	Logical Observation Identifiers Names and Codes
<b>NCQA</b>	National Committee for Quality Assurance
<b>NIAAA</b>	National Institute on Alcohol Abuse and Alcoholism
<b>PDSA</b>	Plan Do Study Act
<b>QI</b>	Quality Improvement
<b>SAMHSA</b>	Substance Abuse and Mental Health Services Administration
<b>SNOMED CT</b>	Systematized Nomenclature of Medicine—Clinical Terms
<b>USPSTF</b>	United States Preventive Services Task Force

# 1. Introduction

## A. About NCQA and the Alcohol Learning Collaborative

The National Committee for Quality Assurance (NCQA) is an independent, nonprofit organization working to improve health care quality. As the leading health care accreditation entity in the United States, NCQA utilizes evidence-based measures, standards and programs to assess the quality of health care provided by clinicians and health plans.

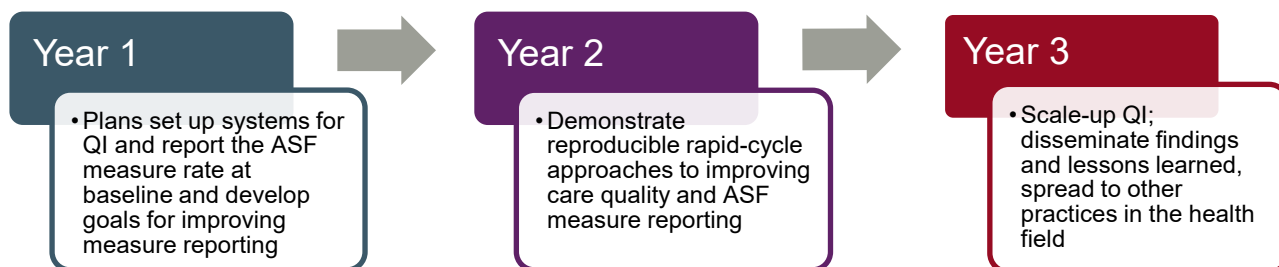
With funding and collaboration from both the U.S. Centers for Disease Control and Prevention (CDC) and the Substance Abuse and Mental Health Services Administration (SAMHSA), NCQA worked with five health plans to improve the quality of health care and reporting of the Healthcare Effectiveness Data and Information Set (HEDIS<sup>®\*</sup>) *Unhealthy Alcohol Use Screening and Follow-Up* (ASF) measure through a three-year Unhealthy Alcohol Use Learning Collaborative (the “Learning Collaborative”).

Participating plans were identified based on geographic diversity and product lines served. These health plans cover all product lines (Medicaid, Medicare, and Commercial) with a combined patient population of over 6.4 million. Screening and brief intervention involved provider screening of adult primary care patients for unhealthy alcohol use and providing a brief counseling session within two months of a positive screen.

The overall goal of the Learning Collaborative was to improve the quality of care for unhealthy alcohol use in adults through ASF HEDIS measure reporting and quality improvement (QI) activities. The Learning Collaborative interacted with an interdisciplinary team of health plan representatives (team lead, clinical expert, data analyst, patient partner) and subject matter experts on increasing measure reporting in outpatient primary care practices of participating health plans.

Building on the Institute for Healthcare Improvement (IHI) framework, participating health plans recruited team members with relevant expertise. Baseline ASF measure results were collected to develop process and outcome goals, and Plan Do Study Act (PDSA) cycles tested change in measure outcomes or processes. Developing PDSA cycles enabled plans to understand and expand QI methods and key drivers. The health plans also learned the importance of engaging patients and families in QI work.

Health plans then tested and applied small changes in their implementation of the ASF measure (screening and brief intervention) with specific practices, assessed the effectiveness of change activities through additional data submissions and expanded successful QI activities to other practices in their networks. The three-year objectives are displayed in the figure below:



Specific Learning Collaborative activities included monthly check-in calls with each health plan team to discuss progress on QI activities; webinars every two months to discuss relevant issues and share knowledge across teams; and office hours with subject matter experts in QI and alcohol screening and

\* HEDIS<sup>®</sup> is a registered trademark for the National Committee for Quality Assurance (NCQA).

brief intervention. Development of the QI Change Package (or toolkit) was based on knowledge gained from the Learning Collaborative, interactions with subject matter experts and published literature reviews.

## B. What is the Change Package?

The Change Package is a toolkit to help health plans improve reporting and performance on the ASF measure by providing resources for supporting QI efforts. Because health plans may work with clinical managers, health plan leaders and network providers to improve the quality of care for unhealthy alcohol use, the Change Package also summarizes strategies and resources that health plans can use when working with providers and key stakeholders in their networks. It was updated throughout the Learning Collaborative as additional ideas, resources and best practices were identified.

## C. Quality Improvement Change Package Contents

QI Change Package components include:

- Background on unhealthy alcohol use and supporting evidence for the clinical- and cost-effectiveness of implementing alcohol screening and brief intervention.
- Details about the ASF measure, including the specification and instructions for reporting Electronic Clinical Data Systems (ECDS) measures.
- Information and resources on QI methods and tools, including best practices identified by health plans implementing alcohol screening and follow-up.
- Change ideas and resources addressing key drivers for improving measure performance.

## D. Acknowledgments

NCQA would like to acknowledge and thank the participating health plans of the Learning Collaborative for their work and input on this Change Package: BlueCross BlueShield of Western New York and BlueShield of Northeastern New York; EmblemHealth of New York; Greater Oregon Behavioral Health, Inc.; Southern California Permanente Medical Group; and Virginia Premier.

We also thank the following individuals for their contribution as subject matter experts in the fields of QI and unhealthy alcohol use screening and brief intervention.

**Katharine Bradley, MD, MPH**  
Kaiser Permanente Washington Health  
Research Institute

**Jennifer McNeely, MD, MS**  
New York University Grossman School of  
Medicine

**Amy Lee, MPH**  
Kaiser Permanente Washington Health  
Research Institute

**Richard Saitz, MD, MPH**  
Boston University of Public Health; Boston  
University School of Medicine

Finally, we thank SAMHSA and CDC for funding the work for this project and contributing significantly to this document. Specifically, we are very grateful to the following individuals from both agencies who provided funding, support and subject matter expertise.

**Lela McKnight-Eily, PhD**  
*Project Lead, Subject Matter Expert*  
Centers for Disease Control and Prevention

**Patricia Santora, PhD**  
*Project Lead, Subject Matter Expert*  
Substance Abuse and Mental Health Services  
Administration

## NCQA Authors and Contributors

Junqing Liu, PhD  
Danielle Rainis, MPH  
Jennifer Strohmeier, BS  
Fern McCree, MPH  
Ashli Barnes, MPH  
Emily Morden, MSW  
Catherine Clair, MHS  
Serene Olin, PhD  
Natalie Omar, MPH  
Brittani Spaulding, MPH

---



For inquiries about the Learning Collaborative, contact [alcohollearningcollaborative@ncqa.org](mailto:alcohollearningcollaborative@ncqa.org).



NCQA website: [www.ncqa.org](http://www.ncqa.org)

## 2. Background on Unhealthy Alcohol Use

### A. The Need for Unhealthy Alcohol Use Screening and Follow-Up

Unhealthy alcohol use is the third leading preventable cause of death in the United States. An estimated 93,000 people (of which 71 percent are male) die from alcohol-related causes every year.<sup>1</sup> Consequences of unhealthy alcohol use, which has increased in prevalence by 30 percent in the last decade,<sup>2</sup> can also lead to short- and long-term morbidity and decrease quality of life. Short-term morbidity related to unhealthy alcohol use includes unintended injuries, risky behaviors, violence, and numerous long-term outcomes, including chronic conditions such as brain damage, cancer, liver disease, cardiovascular disease, fetal alcohol syndrome, and mental health conditions.<sup>3</sup>

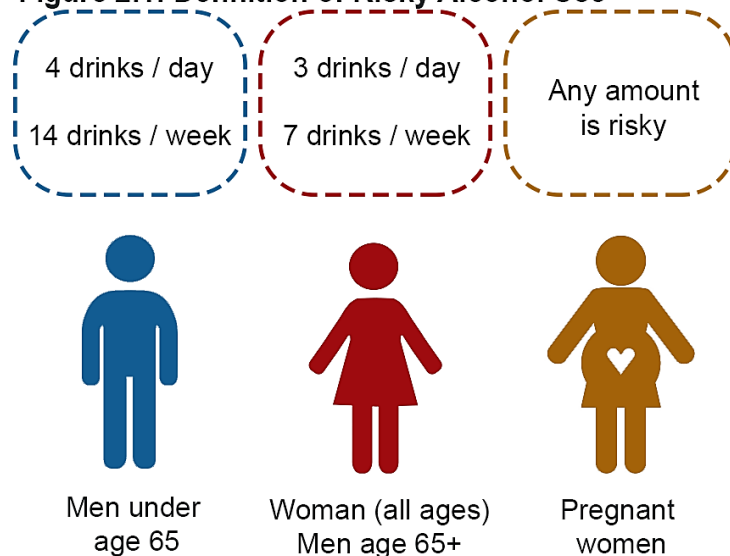
Unhealthy alcohol use occurs on a spectrum ranging from risky use to alcohol use disorder (AUD).<sup>4, 5, 6</sup> About 26 percent of U.S. adults report that they engage in “risky or hazardous drinking”—drinking more than the recommended limits for daily, per-occasion or weekly amounts—resulting in increased risk for adverse health consequences.<sup>5</sup> In this Change Package, we use the term “unhealthy alcohol use.” Refer to [Appendix 1: Unhealthy Alcohol Use Spectrum](#).

The U.S. Preventive Services Task Force (USPSTF) gave a grade B recommendation<sup>†</sup> that clinicians screen “adults 18 years or older, including pregnant women” for unhealthy alcohol use and provide “persons engaged in risky or hazardous drinking with brief behavioral counseling interventions to reduce unhealthy alcohol use.”<sup>7, 8, †</sup> The USPSTF promotes the use of accurate, validated screening tests such as the Alcohol Use Disorders Identification Test (AUDIT), the abbreviated AUDIT-C and the National Institute on Alcohol Abuse and Alcoholism (NIAAA) Single Alcohol Screening Question (SASQ). Risky alcohol use thresholds<sup>§</sup> are shown in Figure 2.1.<sup>3</sup>

The USPSTF recommendation was based on multiple studies with large groups of patients who drink excessively but do not have an AUD. The full recommendation can be found on the [USPSTF website](#). The full evidence report for the USPSTF recommendation is located on the [Journal of the American Medical Association \(JAMA\) website](#).

Although alcohol screening and brief intervention for adult primary care patients

**Figure 2.1: Definition of Risky Alcohol Use**



Source: NIAAA, 2018

<sup>†</sup> Grade B recommendation: The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial.

<sup>‡</sup> In comparison to the 2013 USPSTF recommendation, upon which the ASF HEDIS measure was based, the 2018 recommendation includes pregnant women.

<sup>§</sup> Based on a standard drink size of 12 ounces of beer, 5 ounces of wine or 1.5 ounces of distilled spirits.



has been recommended by USPSTF for over a decade, it has not been broadly implemented into practice. A study analyzing 2017 Behavioral Risk Factor Surveillance System (BRFSS) data suggested there are missed opportunities for brief interventions among U.S. adults. About one third of adults reported being asked the frequency of binge drinking, defined as four or more drinks on an occasion for women and five or more for men. Of adults who reported binge drinking, about 42 percent were advised about the harms of unhealthy alcohol use (Figure 2.2).<sup>9</sup>

**Figure 2.2: Room for Improvement**



Source: McKnight-Eily et al., 2020

Even when unhealthy alcohol use has been identified, many individuals

do not receive appropriate follow-up care. In a study of adults who reported being seen in an ambulatory health care setting and reported unhealthy drinking on a general population survey, only 1 in 20 said they received physician advice to “cut back” on alcohol consumption.<sup>10</sup>

## B. Evidence-Based Intervention/Treatment for Unhealthy Alcohol Use

The USPSTF found that counseling interventions in the primary care setting can reduce weekly alcohol consumption and improve adherence to recommended drinking limits at one-year follow-up. Brief interventions (also called brief counseling), multicontact behavioral counseling sessions of 6 to 15 minutes each, have the best evidence of efficacy.<sup>6, 7, 11</sup> Brief interventions for unhealthy alcohol use that have proved effective in clinical trials use a patient-centered, motivational approach and generally involve:

- Expressing concern that drinking does, or could, adversely impact health.
- Education on recommended drinking limits.
- Explicit advice to drink below recommended limits or to abstain.
- Collaborating with the patient in setting goals and planning next steps for behavior change.

Refer to [Chapter 10](#) for additional resources for **health care providers** implementing unhealthy alcohol use screening and follow up.



## C. Prevention and Implementation in Primary Care Settings

The USPSTF recommends alcohol screening and brief intervention for unhealthy alcohol use in the primary care setting for all adults, including pregnant women. This Change Package focuses on identification of unhealthy alcohol use and providing brief intervention to reduce drinking, and thereby possibly prevent severe alcohol morbidity.

Implementation of screening and follow-up for unhealthy alcohol use varies in primary care settings. Screening can be conducted before a care visit with a pre-visit survey (e.g., telephone, web-based portal),<sup>12</sup> in the waiting room (via paper or computer)<sup>13</sup> or during the care visit by the primary care clinician

or staff (via paper or verbally).<sup>14, 15, 16</sup> Workflow for alcohol screening is facilitated if screening for unhealthy alcohol use is also conducted with screenings for other behavioral health conditions (e.g., tobacco, opioids or other substance use, depression).<sup>17, 18</sup> Patient self-administered screening approaches can improve the quality of screening.<sup>19, 20</sup>

## D. Cost Effectiveness of Unhealthy Alcohol Use Screening and Follow-up

Unhealthy alcohol use is costly; it is estimated to cost the U.S. economy \$249 billion annually.<sup>21</sup> Screening and follow-up for unhealthy alcohol use is cost effective.<sup>22, 23</sup>

Financial burden can fall on health plans for alcohol-related conditions or injuries, which often require costly health services. The average cost to provide screening and brief intervention in an outpatient setting is \$8.56, while the annual cost of unhealthy alcohol use is estimated at over \$800 per person.<sup>21, 24, \*\*</sup> Presumably, given the reasonable cost of alcohol screening and brief intervention for unhealthy alcohol use, health plans benefit financially by encouraging providers to screen patients annually.



**\$8.56**

Average cost to provide outpatient screening and brief intervention

Health plans and network providers are encouraged to use a multidisciplinary approach to alcohol screening and follow-up for unhealthy alcohol use. This Change Package contains strategies and best practices that health plans and providers can use to improve reporting and performance of the ASF measure.



**\$807**

Cost of unhealthy alcohol use per person in 2010

Sources: Sacks et al., 2015 and Barbosa et al., 2015

\*\* This is the *cost of providing the service*, not the reimbursement.

### 3. Unhealthy Alcohol Use Screening and Follow-Up Measure

#### A. Background on the HEDIS ASF Measure

The Healthcare Effectiveness Data and Information Set (HEDIS) *Unhealthy Alcohol Use Screening and Follow-Up* (ASF) measure was adapted from the American Medical Association’s (AMA) provider-level *Unhealthy Alcohol Use Screening and Brief Counseling* measure. In 2016, the National Committee for Quality Assurance (NCQA) team conducted field-testing funded by the Substance Abuse and Mental Health Services Administration (SAMHSA) to evaluate the feasibility and performance of the provider-level measure for unhealthy alcohol use screening and brief counseling at the health-plan level of accountability.



Field-test results showed wide variation in performance rates, depending on the data sources used for measure reporting and whether health plans had initiatives that addressed quality of care for unhealthy alcohol use.<sup>25</sup> Across health plans, NCQA found low use of standardized and validated screening tools (AUDIT, AUDIT-C, NIAAA single question screener<sup>††</sup>), and widespread use of home-grown tools that are not validated or reliable for assessing unhealthy alcohol use.<sup>25</sup> Results also indicated that both screening and follow-up care were not consistently documented in structured data fields in electronic health records. When validated screening tools are not used, unhealthy alcohol use often goes unrecognized and opportunities for intervention are missed.

Overall, field-tests demonstrated gaps in care and highlighted the need for a measure related to care for unhealthy alcohol use at the health plan level. Low use of standardized tools and the lack of systematically recorded screening and brief intervention results in clinical records or administrative claims data reflected a need for practice changes around care for unhealthy alcohol use. Reporting at the health plan level encourages standardized documentation of care for unhealthy alcohol use and influences delivery of evidence-based care. The ASF measure was first implemented in HEDIS 2018 *Volume 2: Technical Specifications for Health Plans*. Refer to Table 3.1 for measure details. The ASF measure is in the Electronic Clinical Data Systems (ECDS) domain, which is covered in the next section.

**Table 3.1: HEDIS *Unhealthy Alcohol Use Screening and Follow-Up* Measure Description**

Unhealthy Alcohol Use Screening and Follow-Up (ASF)		
<b>Level of reporting</b>		Health plan
<b>Exclusions</b>		Dementia, hospice or active diagnosis of alcohol use disorder.
<b>Rate 1: Unhealthy Alcohol Use Screening</b>	<b>Denominator</b>	Members 18 years of age and older.
	<b>Numerator</b>	Members screened for unhealthy alcohol use using a standardized and validated tool (AUDIT, AUDIT-C or NIAAA Single Question Screener)
<b>Rate 2: Alcohol Counseling or Other Follow-Up Care</b>	<b>Denominator</b>	Members with a positive screen for unhealthy alcohol use.
	<b>Numerator</b>	Members who received brief counseling or other follow-up care within 2 months of a positive screening.

<sup>††</sup> Refer to [Appendix 2](#) for background and language for all three screening tools.

## B. How to Report the Measure

The ASF measure is included in the [ECDS domain](#) for HEDIS reporting. Refer to [Reporting ECDS Measures](#), below. It is reported using electronic clinical data from a variety of sources including administrative claims, case management systems, health information exchange (HIE) and electronic health records (EHRs). Standard terminologies are needed to help collect data in a structured way to 1.) support high quality clinical care for unhealthy alcohol use; 2.) measure the proportion of patients in a health plan who were screened and received follow-up; and 3.) efficiently share clinical information across health systems for reporting to state, federal, national and stakeholder organizations.

Measure components (Table 3.2) are identified using data from the EHR, case management or registry systems or common coding terminologies, including International Classification of Diseases (ICD-10-CM), Current Procedural Terminology (CPT), Systematized Nomenclature of Medicine—Clinical Terms (SNOMED CT), Logical Observation Identifiers Names and Codes (LOINC), Healthcare Common Procedure Coding System (HCPCS) and Revenue Codes (UBREV). Table 3.2 details the coding terminologies allowed for each measure component.

**Table 3.2: Coding Terminology Allowed for the ASF Measure**

Measure Component	Terminology
<b>Exclusions</b>	ICD10, CPT <sup>®</sup> <sup>‡</sup> , SNOMED, UBREV
<b>Unhealthy Alcohol Use Screening Numerator (Rate 1)</b>	LOINC*
<b>Follow-Up Numerator (Rate 2)</b>	ICD10, CPT, SNOMED, HCPCS

\*LOINC and associated scores are **required** for Rate 1 of the ASF measure. Find additional information at the following website: <https://loinc.org/>.

The following list describes the data sources health plans can use to report the ASF measure:

<b>Claims</b>	Administrative claims include data from claims processing systems for all reported services.
<b>Electronic Health Records</b>	EHRs (also known as “electronic medical records”) store health information electronically. Screening is often captured as discrete data in a specific section for patient reported outcomes or questionnaire data (e.g., for the ASF measure AUDIT) or in another area of the record such as for social history or vital signs. <sup>15</sup> This format facilitates data and information sharing among authorized users in a specified network.
<b>Case management systems</b>	This is a shared database of member information collected through assessments, care coordination and monitoring of a member’s status and care experience.
<b>HIE or clinical registry</b>	HIEs and clinical registries are eligible for ECDS reporting and include state HIEs, immunization information systems, public health agency systems, regional HIEs, Patient-Centered Data Homes™ and other registries developed for research or to support quality improvement and patient safety initiatives.

‡ CPT® is trademarked and copyright 2019 by the American Medical Association. All rights reserved.

## C. Reporting Electronic Clinical Data Systems Measures



### **What is ECDS?**

Electronic Clinical Data Systems (ECDS) is a HEDIS reporting standard that encourages the use and sharing of electronic clinical data across health care systems. By expanding and standardizing the types of data permitted for HEDIS reporting, the ECDS reporting standard presents opportunities for measures that more specifically track the quality of care and decrease the burden associated with measures that require manual record abstraction. ECDS data may also support other activities such as evidence-based decision support and outcome reporting. Data systems that may be eligible for ECDS reporting include, but are not limited to, member eligibility files, EHRs, clinical registries, HIEs, administrative claims systems, electronic laboratory reports, electronic pharmacy systems, immunization information systems and disease/case management registries. ECDS data are structured to ensure that automated quality measurement queries can be consistently and reliably executed and provide results to the care team.

### **Why do we use ECDS for the ASF measure?**

The ASF measure requires data that cannot be found only in administrative claims. For example, claims may indicate whether unhealthy alcohol use screening was performed but do not indicate whether a screening tool specified in the measure was used or the patient's score. A positive score is necessary for the denominator of the Follow-Up rate. These data are difficult to obtain through traditional HEDIS reporting methods using claims data only. ECDS measure reporting improves data collection efficiency and facilitates care coordination by utilizing multiple data sources.

### **What are the challenges related to using ECDS reporting for behavioral health measures?**

Some health plans may experience challenges reporting behavioral health measures using ECDS, for example:

- Lack of data capture in structured fields.
- Difficulty accessing data from provider EHRs and HIEs.
- Privacy concerns sharing behavioral health data
- Resistance from stakeholders.

Solutions and strategies to overcome these challenges are available in [Chapter 7](#). For a real-world example of how a health plan in the Washington, DC, area is working to implement ECDS measures, visit the [NCQA blog website](#). Two short video clips can also be found at the following links:

- [How health plans can report electronic clinical quality measures.](#)
- [Why invest in electronic clinical data systems reporting for quality measures?](#)

Find additional ECDS resources at the following links:



- [ECDS Frequently Asked Questions](#)
- [The Future of HEDIS: ECDS Reporting](#)
- [Digital Measure & ECDS Webinar](#)

The Learning Collaborative was an initiative to address the challenges described in this chapter and expand successes, specifically as they relate to the ASF measure. Several participating health plans chose data collection/access as their first goal. The Change Package contains information on efforts health plans might take to access data for reporting the ASF measure.



As you navigate through this Change Package, you will notice this symbol, which identifies strategies and lessons learned from plans in the Learning Collaborative.

## 4. Introduction to Quality Improvement

### A. What is Quality Improvement?

Quality improvement (QI) is systematic, continuous action that leads to measurable improvement in health care services and the health status of targeted patient groups. There are several fundamental processes to improvement: [26](#)

1. Identify a “gap” in an organizational process that needs to be improved using a valid measure.
2. Identify a team of stakeholders with the ability to change the practice (implementation team).
3. Identify team activities and roles to address the gap.
4. Perform activities to address the gap.
5. Measure the change in performance by comparing the original measurement (step #1) with the new measure to see if the activity had the intended effect.
6. Repeat steps #3-5 until the gap is no longer present.

### B. Using a Learning Collaborative Framework for Quality Improvement

In the Learning Collaborative, participating health plans implemented QI activities and change strategies, aligned with the processes mentioned above, to improve performance on the *Unhealthy Alcohol Use Screening and Follow Up* (ASF) measure. The information and strategies contained in the following chapters are not intended to be prescriptive and health plans may choose one or more to assist with reporting the ASF measure.

Learning Collaboratives are not necessary to conduct QI work, but they do offer benefits, including cross-site learning and exchange of successful strategies and change ideas. Sites can also learn through communicating and sharing common goals, which can accelerate change.

### C. Stages of Quality Improvement

There are several stages of QI work, from engaging team members to sustainability. Table 4.1 provides an overview of the QI stages and topics that will be covered in the following chapters of this Change Package. Stages, along with suggested timeframes, are listed in the order in which plans implemented QI work in the Learning Collaborative. However, it is important to start thinking about all the stages of QI from the beginning with the goal in mind of spreading and sustaining your QI work long-term.

Table 4.1: Quality Improvement Chapters and Topics.

QI Chapters	Topics	Suggested Time Frame
<a href="#">Stage 1: Engaging Stakeholders for Quality Improvement</a>	<ul style="list-style-type: none"><li>• Engaging Leadership</li><li>• Creating Quality Improvement Teams</li><li>• Identifying Champions</li><li>• Enhancing Patient and Family Engagement</li><li>• Engaging with Providers</li></ul>	1 – 3 months

QI Chapters	Topics	Suggested Time Frame
<a href="#">Stage 2: Building Infrastructure to Support Change</a>	<ul style="list-style-type: none"> <li>• Achieving Staff Commitment and Efficiency</li> <li>• Leveraging Existing Resources to Conduct Screening and Follow-Up</li> <li>• Conducting Screening and Follow-Up</li> <li>• Capturing Screening and Follow-Up Data</li> <li>• Assessing Screening and Follow-Up Data</li> <li>• Help to Help Providers Build Infrastructure to Support Change</li> </ul>	1 – 6 months
<a href="#">Stage 3: Implementation</a>	<ul style="list-style-type: none"> <li>• Choosing a Quality Measurement</li> <li>• Creating a Model for Improvement</li> <li>• Using Plan-Do-Study-Act (PDSA) Cycles</li> <li>• Choosing a Quality Metric</li> <li>• Key Barriers, Facilitators and Success and Other Factors to Consider When Improving Unhealthy Alcohol Use Care</li> </ul>	6 – 18 months
<a href="#">Key Driver Diagrams</a> (part of Stage 3)	<ul style="list-style-type: none"> <li>• Data Access Goal</li> <li>• Screening Goal</li> <li>• Follow-Up Goal</li> </ul>	6 – 18 months
<a href="#">Stage 4: Sustainability, Spread and Scale-Up</a>	<ul style="list-style-type: none"> <li>• Linking Implementation to Spread &amp; Sustainability</li> <li>• Developing a Spread Plan and Scale-Up Plan</li> <li>• Scaling Up Successful Changes</li> </ul>	18 – 24 months

## D. QI Readiness Checklist

Below is a list of items health plans may want to assess before beginning QI work. This list can help focus efforts and resources on areas that might need improvement or change.

- Engagement:** We have a forum where we can engage patients and their families about potential changes.
- Feedback:** We have considered input from various stakeholders, including providers, champions, patients and families.
- Data:** We have reviewed, and we understand, our current data access capabilities.
- Measurements:** We have established key measurements to collect and monitor to see if our change results in improvement.
- Success:** We have reviewed previous efforts to implement unhealthy alcohol use screening and follow up and identified opportunities to scale and spread.
- Lessons Learned:** We have reviewed previous efforts and have identified and assessed areas that were unsuccessful.



## 5. QI Stage 1: Engaging Stakeholders for Quality Improvement

In this chapter you will find resources to:

- Engage leadership
- Create a QI team
- Identify champions and patient advisors
- Help your providers engage stakeholders

### A. Engaging Health Plan Leadership

Engaging health plan leadership and identifying champions are critical to the success of new interventions. Two types of leaders—senior leadership and executive sponsors—should be engaged in quality improvement (QI) work in your health plan. “Senior leadership” refers to the health plan leaders who provide the authority and influence necessary for successful change. “Executive sponsors” are often members of health plan leadership who can provide feedback and guidance about why change may be necessary.<sup>27</sup>

Leadership support will help prioritize target interventions, build organizational readiness and provide appropriate resources. Engaging leadership early can help remove roadblocks encountered by the QI team and pave the way toward successful testing and implementation of changes in the organization. Engaging leadership is critical during the planning stages for QI work and throughout the course of the work—from planning and testing, to implementation and widespread adoption.

#### Engaging senior health plan leadership and executive sponsors

- Engage leadership in the planning phase of the QI work and seek input on the project charter, tying the project’s goals to larger organizational priorities and initiatives and securing resources that will be needed to execute the work.
- Identify an “executive sponsor” in the organization who can champion the QI team’s work and help remove roadblocks to change.
- Provide regular updates to the project’s senior leadership through monthly/quarterly reports or a similar mechanism.
  - Consider developing a Communication and Engagement Plan to keep leadership and other stakeholders informed of the QI work and findings.
    - For example: [Communication and Engagement Plan](#) from NHS Education for the country of Scotland. The link includes a downloadable Stakeholder Mapping Template.
  - Refer to the Institute for Healthcare Improvement video: [How to Speak So Leaders Will Listen](#).

### B. Creating Quality Improvement Teams

To conduct QI and report the ASF HEDIS measure, it is necessary to form a team with staff in the health plan who are dedicated to QI, measure reporting and clinical care. Thoughtful identification of team members is crucial to the success of any change initiative. When identifying team members, consider the project goals and how team members can contribute to accomplishing the goals.

According to the Health Resources and Services Administration, QI team members should represent different specialties including relevant providers, QI technology experts, etc. as per Table 5.1 below.<sup>26</sup> Members should be willing to learn from each other, maintain open communication and assume individual responsibilities that contribute to the team’s success.






Although QI team size will vary by health plan and by improvement project, several important roles should be filled <sup>28</sup> and are detailed in Table 5.1.



There is no “one size fits all” approach to forming a QI team. Each organization is different.

*For example,*  
One plan in our Collaborative chose a QI specialist as the team lead. Another plan chose a physician who worked closely with patients and provided a clinical perspective.

**Table 5.1. Important Roles for an Effective Health Plan QI Team**

	<p><b>Senior Leadership</b> (Executive Sponsor)</p>	<ul style="list-style-type: none"> <li>Assume accountability for the project and have the authority to institute change and help staff overcome barriers and roadblocks.</li> <li>Ensure productive collaboration across the team and encourage or implement acceptance of initiatives throughout the organization.</li> </ul>
	<p><b>QI Professional</b> (Day-to-Day Leader)</p>	<ul style="list-style-type: none"> <li>Team lead who drives the project and understands the system and the effects of system change.</li> <li>Consider including <a href="#">practice coaches</a> (if applicable).</li> </ul>
	<p><b>Clinical and Technical Experts</b></p>	<ul style="list-style-type: none"> <li>QI process experts with in-depth understanding of the clinical processes of care and of collecting/displaying electronic data.</li> <li>Front-line clinicians (directly involved in patient care), staff and electronic health record (EHR) programmer/builders are important members of the team.</li> </ul>
	<p><b>Data Analysts</b></p>	<ul style="list-style-type: none"> <li>Facilitate and support data access, collection, and analysis.</li> <li>Set up systems for electronic data reporting.</li> </ul>
	<p><b>Patient Advisors</b></p>	<ul style="list-style-type: none"> <li>Provide lived experience and feedback about how a health system functions.</li> <li>Assist the health plan with development of educational materials for patients.</li> </ul>

Refer to [Science of Improvement: Forming the Team](#) on the IHI webpage for more information on *Change Teams*.

## Figure 5.1: Qualities of a Champion



### C. Identifying Champions

A champion is “interested in building capacity in the practice for ongoing improvement and implementing effective ‘processes’ that will enable improvement.”<sup>29</sup> Champions can aid with leading the QI work and moving team efforts forward. A champion believes in the mission and the added value of the work and can express support to other stakeholders in the project. Figure 5.1 highlights additional champion qualities. Without champions, QI teams can suffer from lack of direction, low morale and enthusiasm, and ultimately, an inability to implement QI activities.

#### What does a champion do?

- Contributes to the work on multiple levels of accountability (e.g., works with leadership on financial support; works with providers for on-the-ground implementation; works with patient advisors to support inclusion of patient and family voice).
- Vocalizes the value of the work and garners interest/support (both internally and externally).
- Connects the work to internal and external organizational initiatives, priorities and stakeholders.
- Maintains team enthusiasm and motivation.

#### *Losing a champion...*

A participating health plan lost its project champion during the implementation phase of the Learning Collaborative. Despite the team’s best efforts to continue the work, morale was low, and efforts began to slow.

Overall QI efforts suffered because the team was unable to maintain engagement with patients and providers. After a few months without the project champion, the health plan chose to withdraw from the Learning Collaborative.

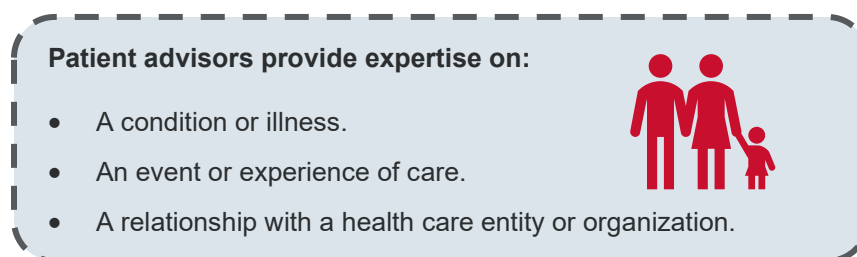
It is important to identify a champion early, so they can help spearhead QI efforts and provide feedback and guidance for the work. Champions are not limited to physicians—they can be anyone in the organization.

Champions can come from multiple levels (e.g., medical director, provider, care manager, data analyst) to help reinforce change efforts across the organization or system of care. They can also be anyone on the QI team. If a champion leaves the team, it is imperative to identify another individual to assume the role. Health plan QI teams may also consider having multiple champions. In the event of organizational turnover, other champions can step in to sustain the QI work.

## D. Enhancing Patient and Family Engagement

A patient advisor has lived unhealthy alcohol use experience or received care for unhealthy alcohol use. Patient advisors volunteer their time, perspective and expertise to help shape the way health care is delivered. They bring a wealth of knowledge to the QI process. Both patients and family members can fill the role on the QI team.

In the Learning Collaborative, each health plan QI team was required to have at least one patient advisor. Health plans in the Learning Collaborative expressed appreciation at having someone to consult on a patient's "real world" experience to help ensure that change initiatives led to patient-centered care.



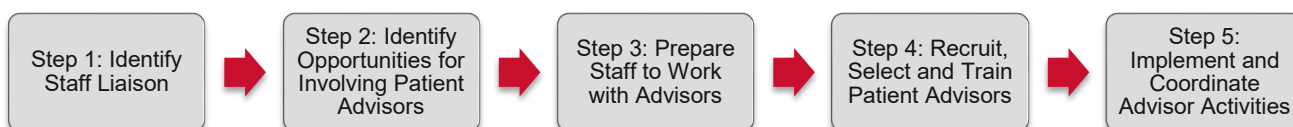
### D.1 Identifying Patient Advisors

During the Learning Collaborative, NCQA helped participating health plans recruit and train patient advisors. The health plans in the Learning Collaborative found certain qualities helpful in their Patient Advisors, including:

- Lived experience with unhealthy alcohol use and the health care system.
- Willing to share insights and personal experiences within the health care system in productive ways.
- Comfortable collaborating with health care teams on identifying solutions.
- Passionate about improving the health care experience.
- Represent a variety of backgrounds, cultures and age groups reflective of the target population.

Figure 5.2 includes steps for identifying Patient Advisors and has been condensed and adapted from AHRQ.<sup>30</sup> Tools and resources for these steps, including Patient Advisor recruitment materials, are listed on [AHRQ's website](#).

**Figure 5.2:** Steps for Identifying and Implementing Patient Advisors in QI work\*



\*Adapted from AHRQ's [Working with Patient and Families as Advisors Implementation Handbook](#).

## E. Engaging with Providers

It is important to work closely with providers to access data and ensure that screening and brief intervention are being conducted. The following section provides strategies used by health plans in the Learning Collaborative to engage providers.

## E.1 Identifying Practice Sites

Below is a list of ideas and strategies to consider when identifying practice sites to partner with during QI work. Sites can either form their own QI team or become an additional member of the health plan's QI team.

- Identify practices that:
  - Have the largest number of members in your network or the most room for improvement—they may have a greater interest in working on the measure.
  - Have an established relationship in your network (which may make partnership easier).
- **Develop and present the business case to help practices understand the value of improving performance on the measure.**
- Consider reaching out to a larger group of practices so change ideas can trickle down to individual practice sites.

## E.2 Engaging Provider Leadership

Many of these tips and suggestions may be applicable to your provider groups (creating a communication plan).

Health plans may also consider the following suggestions:



- Re-purpose materials used to engage health plan leadership and share with providers. It may promote alignment in overall strategy and organizational goals between the health plan and provider network.



- Highlight applicable performance incentives available to provider groups in your network.



- Keep in touch with provider groups throughout their leadership engagement process. Identify potential barriers and talk with providers about how to navigate and troubleshoot challenges.

## E.3 Identifying Key Personnel

QI work to implement unhealthy alcohol use screening and brief intervention can also take place at the provider level. Consider identifying individuals in each provider practice to fulfill the following roles:

- **QI Lead or Point of Contact.** This individual serves as the liaison between the health plan and provider group. While it is beneficial to have foundational knowledge about QI methods, several resources exist to help clinicians with various QI activities (i.e., Plan Do Study Act (PDSA) cycles, small tests of change).
- **Clinician Champion(s).** Identify at least one clinician in each practice to spearhead efforts to implement alcohol screening and follow up. The clinician champion may also bring in other members of the frontline staff who are involved in the implementation of screening and brief intervention (e.g. medical assistants, nurse managers).

### *Clinician Champions*

One plan worked directly with the chair of the Behavioral Health department at one of their practices. This chair's leadership was essential to getting other providers to use LOINC codes when documenting screening and follow-up services.

## 6. QI Stage 2: Building Infrastructure to Support Change

### In this chapter you will find resources to:

- Achieve staff commitment.
- Maximize limited health plan resources.
- Conduct unhealthy alcohol use screening and follow-up.
- Capture screening and follow-up data.
- Access necessary data for reporting the ASF measure.
- Assist providers in building proper infrastructure.

### A. Achieving Staff Commitment and Efficiency

Staff that are committed to the QI team and its efforts is key to implementing change. Discuss these objectives with the team to ensure that it is committed to project goals:

- The project's connection to the organization's goals/strategies.
- The project overview (e.g., goals, expectations, and timeline).
- Health plan QI staff roles and expectations about the project.
- The time commitment and level of effort needed.

Consider the following for effective collaboration across the health plan QI team:

- Train your QI team on the importance of screening and providing appropriate and timely follow-up care.
- Make sure everyone on the QI team understands their role and responsibilities, and those of the other team members.

#### Remember...

The team drives QI work. Without commitment or efficient processes, QI progress and productivity are hindered.

***Set yourself and your team up for success!***




- Meet with your QI team to create a clear communication protocol.
  - Discuss personal preferences in terms of communication (e.g., meetings, email communication).
  - Decide on the frequency and content of staff communication.
  - Schedule touchpoints throughout the QI work to discuss communication protocols, update when and if necessary.
- Brainstorm strategies/approaches and make decisions as a team.
- Provide feedback, discuss how to celebrate successes, debrief setbacks, and maintain enthusiasm.

## B. Leveraging Existing Resources to Conduct Screening and Follow-Up

As you begin thinking through the logistics of this work you may wonder how, given scarce resources, you can devote the time and staff necessary to implement meaningful change.

Consider the following questions:

- What existing staff roles or resources could be used? Can we expand some roles rather than bringing on new staff members?
- What infrastructure supports are available? For example, can alcohol screening assessments be added to the case management program, or can questions be added to intake forms for patients to answer while waiting for an appointment?
- Are there behavioral health resources to help patients and providers address unhealthy alcohol use?
- Are adequate referral networks in place for patients with alcohol use disorder?
- Do providers know how to conduct preventive brief intervention?



A health plan in the collaborative encouraged providers to add questions from approved alcohol screening tools to their intake form in addition to their existing depression screening tool.



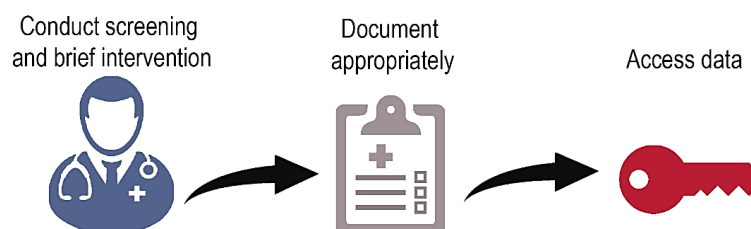
## C. Conducting Screening and Follow-Up

There are several ways in which unhealthy alcohol use screening and follow-up can be conducted:

- Ask questions on intake forms or routine health assessments for patients to fill out before their primary care appointment.
- Have staff at the provider level—including nurses and medical assistants—ask questions from validated screening tools during a routine appointment.
- Have staff at the health plan level—including health plan case managers—reach out to patients to screen and facilitate brief intervention, if necessary.

Figure 6.1 shows the necessary steps before data can be accessed. Find helpful tools and trainings for implementing screening and follow-up in the [Additional Resources](#) chapter of this Change Package. Refer to [Appendix 2](#) for the acceptable validated screening tools.

**Figure 6.1: Steps Required to Access Data**



## D. Capturing Screening and Follow-Up Data

After conducting screening and follow-up for unhealthy alcohol use, it is important for your network providers to appropriately document the encounter with the patient. Data extraction will be most successful and efficient when information is captured and documented by health plans and clinicians in structured fields. This can be accomplished in one of two ways.

- **Directly.**
  - Standardized terminology codes such as Logical Observation Identifiers Names and Codes (LOINC codes) can be directly linked to the three allowable screening tools in the electronic health record (EHR) system.
  - If LOINC codes are not built into the EHR, other structured data elements collected in the system with custom values can be directly mapped to standard terminology.
- **Indirectly.**
  - Identify words or sentences in the Notes field and search for specific phrases.
  - Providers may capture clinical data in unstructured data fields in the EHR (e.g. EHR notes). Unstructured data can contain a wealth of information; however, processing and analyzing this data can be complex and time consuming. Techniques such as parsing with specific syntax or natural language processing (NLP) can be useful to retrieving this data for care coordination and quality reporting. The NLP technology will enable the doctor's computer to identify key words from their freeform encounter notes and then convert those into structured datapoints

## E. Accessing Screening and Follow-Up Data

QI initiatives cannot be successful without data access. The following section will detail how you can assess your data access capabilities and generate change ideas to increase data access.



### E.1 Assessing Readiness for Data Access

It is important for health plans to understand their level of readiness for accessing electronic clinical data to report the ASF measure. Plans may be at one of the following levels of readiness for data access.

- **Data Readily Available.** The alcohol screening and follow-up data are collected in discrete fields (i.e. not in the open notes section) and can easily be extracted. Screening results from validated tools are captured using Logical Observation Identifiers Names and Codes (LOINC) codes and typically stored in provider EHRs, case management systems, HIEs or clinical registries. Brief intervention and follow-up are typically captured in administrative claims data systems. If plans have access to these data, they are ready to report the ASF measure. Integrated health plans may have more ready access to data compared with non-integrated plans, because most data are stored and shared within their network. Non-integrated plans, however, are ready when data access is established.
- **Plans with Established Practice/Vendor Relationships.** Established relationships with vendors and practice partners are facilitators of data access because they can share clinical data with health plans for measure reporting. If a practice can extract information related to screening but not follow-up, have discussions to understand the barriers to collecting the follow-up data. One barrier could be lack of provider education on how to document follow-up. Some providers depend on vendors to update their EHR before they can modify the workflow and report new measures. It can take time for the EHR system to become up to date. Health plans should be aware of potential limitations to establish feasible timelines for implementing change.
- **Plans without Practice/Vendor Relationships.** Non-integrated health plans without vendor or provider relationships may face the most barriers to accessing necessary data for ASF measure reporting. If this describes your organization, we recommend focusing your QI work on establishing such relationships and/or ensuring that your health plan's data collection system (e.g., case management, health risk assessment) is ready to capture the clinical data for ASF.

*Refer to [Section D of Chapter 7](#) for additional information related to data access barriers, solutions and lessons learned from work in the Learning Collaborative.*



## E.2 Strategies for Accessing Clinical Data

Although health plans already possess member claims data, information related to alcohol use will likely be found in clinical data sources. Plans can set up data sharing with their providers to access clinical data in their EHR systems, or use a strategy listed below, to access clinical data for reporting the ASF measure.

- **LOINC codes sent as part of the administrative claim's attachment:**
  - Although no billing codes indicate the specific screening tool, LOINC codes can be included as supporting documentation to a claim. Health plans can encourage their providers to bill for screening and brief intervention services and to send tool specific LOINC codes and scores with the billing claims.
- **Leverage HIE/clinical registry:**
  - Health plan organizations can leverage HIE data to improve quality measures and care management and address gaps in care. HIEs facilitate secure electronic transfer of patient information between provider EHRs, registries and different entities. Currently, 92% of the U.S. population is served by HIEs<sup>31</sup> and every state has at least one. However, many systems lack the necessary communication infrastructure and substance use data can be fragmented or nonexistent in these systems, due to misconceptions about the confidentiality of the information. To lessen fragmentation, health plans can engage with and support HIEs.
- **Access alcohol data from the case management systems:**
  - Some health plans provide case management services directly to coordinate substance use and behavioral health care. Health plans can use alcohol use data documented in their case management system if an NCQA-Certified auditor verifies that the information can be accessed by all health care providers responsible for managing the member's condition (NCQA does not specify how providers access the information, nor how frequently).

## F. How to Help Providers Build Infrastructure to Support Change

Providers also need to ensure that they have the resources, staffing and commitment required to implement change within their practices. Smaller primary care practices may not have robust internal QI expertise and might need external assistance to help develop their QI capacity. Health plans can do the following to help providers build their QI infrastructure:

### 1. Identify potential areas for improvement in providing unhealthy alcohol use care.

Providers can implement QI activities around known areas for improvement and do an initial assessment of their current data access and clinical workflow. They might consider the following measurements when identifying gaps in care:

#### *Status of Current Clinical Workflow*

- The percentage of visits where eligible patients were screened.
- The percentage of patients who were screened using standardized tools.
- The percentage of patients who received brief intervention after a positive screen.


#### *Status of Current Data Capture*

- Are unhealthy alcohol screening and follow-up encounters documented using LOINC codes and stored in structured fields in the EHR?
- Can unhealthy alcohol screening and follow-up data be extracted efficiently and accurately and be shared with health plans?

## 2. Use Driver Diagrams.

Once providers understand their status, they can establish milestones for desired outcomes (e.g., “increase the rate of follow-up by 5 percent in a year”). Providers can identify key drivers (discussed in [Chapter 8](#)) that may impact their goal, understand potential challenges and brainstorm change ideas. You can help providers identify challenges by asking:

- What is your role in providing unhealthy alcohol use care?
- How confident are you in your ability to conduct unhealthy alcohol use screening and follow-up?
- What challenges might practices face in delivering screening and brief interventions (e.g., limited time per visit, follow-up services not readily accessible)?



One plan in the collaborative has created a Physician Pocket Reference for providers that explains the measure, the tool, scoring and action steps.



## 3. Provide training in QI.

- Providers may need training on how to conduct QI. Health plans can help providers understand what QI is, how to conduct QI work (i.e. PDSA cycles) and how to measure the impact of their work.

## 4. Share resources and examples.


- Health plans can develop resources for providers to better understand the importance of alcohol screening and follow-up and capturing information in the EHR.
- Health plans may also assist providers in developing scripts for screening and brief intervention to increase providers’ confidence and alleviate potential resistance from the patients in discussing alcohol use. For example, the script could say “We conduct alcohol use screening on all our patients”.
- Additional resources can be found in [Chapter 7](#).

## 5. Facilitate shared learning of best practices.

- It is important for providers to share their successes and challenges with other providers to help improve efficiency across the practice. The health plan can help providers communicate their QI achievements with other providers.

## 6. Provide feedback (regular monitoring of practice performance).

- Collecting regular feedback from providers about their processes is an important part of process improvement—as is ensuring that collect feedback from patients and front desk staff.
- Monitor provider performance.  
Practices can evaluate the number of patients seen by each provider in a year and evaluate which providers screen for unhealthy alcohol use and which providers do not—and why.
- If providers are not screening regularly, health plans can share resources for how to begin a conversation about unhealthy alcohol use or can provide a guide on appropriate screening tools.



A health plan in the Learning Collaborative working with a clinical practice site faced challenges with engagement from its point of contact. After a conversation that covered the topics in this list, it became clear to the QI team that the clinical director did not understand the role—and, in fact, had not realized they were part of the Collaborative. Having a “touch base” meeting with the point of contact allowed the health plan to clarify roles and move forward with its QI work.

**This story outlines the importance of communicating with all staff involved in your work to be clear about roles and responsibilities.**

# 7. QI Stage 3: Implementation

## In this chapter you will find resources to:

- Create a Model for Improvement.
- Use Plan Do Study Act (PDSA) cycles.
- Choose quality metrics to track progress.
- Prepare for potential barriers to success.

## A. Creating a Model for Improvement

The Model for Improvement, developed by Associates in Process Improvement, focuses on accelerating change through “thinking” and “doing” perspectives.<sup>32</sup> The “thinking” perspective involves answering three fundamental questions that focus improvement efforts:



### 1. **Aim: What are we trying to accomplish?**

Every QI initiative requires a clearly defined “aim” that will drive improvement. The purpose of the aim statement is to help reach one of three goals outlined in the Key Driver Diagrams (which will be discussed further in [Chapter 8](#)). The Learning Collaborative’s overall aims were to document and/or impact alcohol consumption.

### 2. **Measurement: How will we know that a change is an improvement?**

Measurement is a critical part of the improvement process. It helps teams identify if changes are leading to improvement and if the team is moving closer to the goal.



#### **Outcome measures**

Outcomes measures can identify the effects of health care on patients; for example, reduced symptoms, morbidity and mortality, overall improvement in health.



#### **Process measures**

Process measures can assess how the system and processes are working; for example, plans use the ASF process measure and must be able to access measure data for reporting.



#### **Balancing measures**

Balancing measures can track to ensure that an improvement in one area does not negatively affect another area (e.g., duration of an office visit when screening is performed).

### 3. **Changes: What changes will result in improvement?**

Change is a fundamental element to improvement, but not all changes result in improvement. For this reason, it is crucial for teams to identify changes that will most likely result in improvement. Change ideas can come from many places: observing current processes and systems, reviewing scientific and best-practices literature (addressed in the driver diagram section in [Chapter 8](#)) and talking to clinical or front-line staff.

The Model for Improvement is an effective QI method because it offers flexibility and allows initiation of change with minimal risk. Staff can build quickly on successful results, accelerate improvement and achieve organizational buy-in. Refer to [How to Improve](#) on the Institute for Healthcare Improvement (IHI) website for more information on process improvement initiatives and the methodology.

By understanding goals and processes, we can brainstorm new change ideas. This Change Package outlines change ideas through [key driver diagrams](#)—visual depictions of how different aspects of a process and program can lead to meeting goals. Refer to Table 7.1.

**Table 7.1: Example of a Health Plan’s Model for Improvement**

Aim	Measure	Changes
Work with our internal teams to modify the Health Assessment used for the Medicaid/Medicare/commercial lines of business to include the one-question screener.	<ol style="list-style-type: none"> <li>Does our Health Assessment currently assess for alcohol use?</li> <li>Do we have the capacity to modify the Health Assessment to include the one-question screener?</li> </ol>	<ol style="list-style-type: none"> <li>We will learn if our assessments currently use an alcohol screening tool.</li> <li>We will learn the process for modifying the Health Assessment.</li> </ol>

## B. Using Plan-Do-Study-Act (PDSA) Cycles

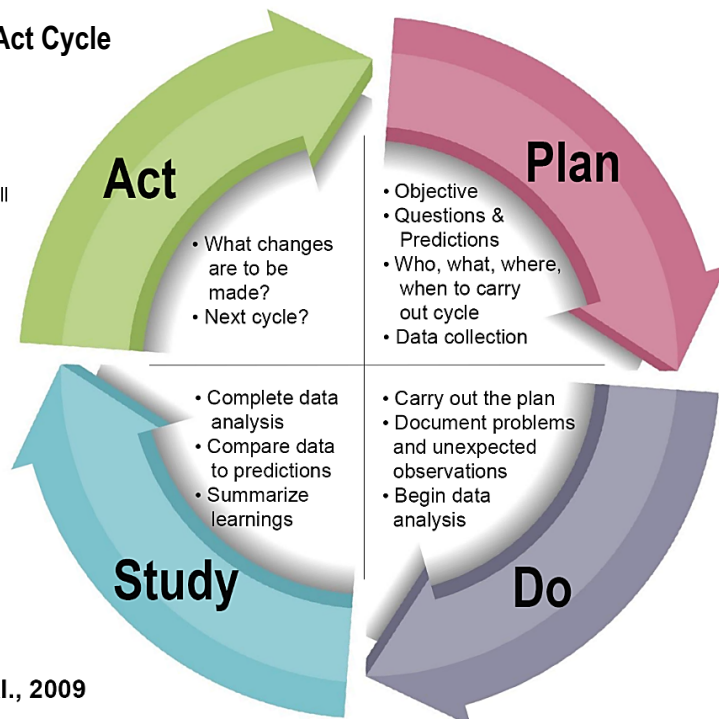
### How to generate change ideas to test in PDSA cycles

The “doing” perspective of the Model for Improvement involves testing small, sequential and iterative changes. Each change idea should go through a PDSA cycle—rapid QI activities that break down changes into smaller components (Figure 7.1). This approach encourages a team to test changes on a small scale before full implementation and identify undesirable effects of change, and helps teams understand the effectiveness of change initiatives.<sup>32</sup>

**Figure 7.1: Plan-Do-Study-Act Cycle**

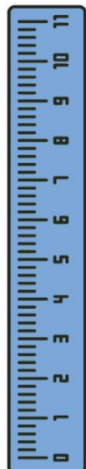
**Three fundamental questions:**

1. What are we trying to accomplish?
2. How will we know that a change is an improvement?
3. What changes can we make that will result in improvement?



Adapted from: Langley et al., 2009

## C. Choosing a Quality Measurement



Learning Collaborative participants collected the minimum amount of data needed to indicate that PDSA cycles were leading to improvement, so participants could move to the next step in the change process. The change process not only required understanding current workflow processes and systems needed to report the measure, but also creative thinking and challenging “how we have always done it.”

Because organizations can get bogged down in measurement and delay making a change until they collect enough data to note significant differences over time, measurement and data collection should be incorporated into an organization’s daily routines. Sites may need to alter workflow to capture electronic data and/or delegate data collection to a specific person. During this process, consider quantitative and qualitative data, to understand the process and its impact. This can include interviewing staff who implement the measure, for their perceptions of the process and changed workflows, or asking patients and families about how changes in workflow affect their experiences.

## D. Key Barriers, Facilitators of Success and Other Factors to Consider When Improving Unhealthy Alcohol Use Care

Implementing QI in unhealthy alcohol use care can be challenging but knowing potential barriers and facilitators is essential to making progress. When developing new change ideas, consider the following barriers and facilitators that were experienced by health plans in the Learning Collaborative regarding data access, workflow, stigma, privacy and provider reporting, and maintaining enthusiasm.



### Data Access

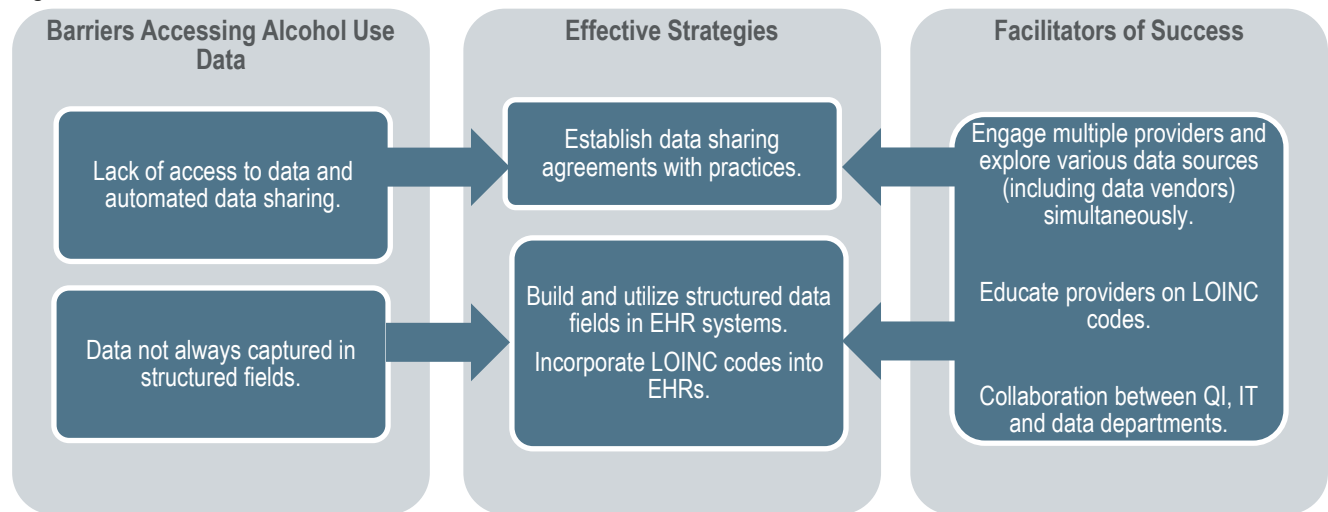
The Alcohol Learning Collaborative plans had limited access to alcohol screening data for most of their membership at the beginning of their work (see Figure 7.2). Even when plans had access to screening information, they found this was not always in structured fields and LOINC codes were not widely used. However, they made progress by implementing various strategies such as establishing data sharing agreements with practices. They assisted providers to build structured data fields and incorporate the LOINC codes into their EHR systems.

### D1. Data Access Barriers and Solutions

The ASF measure requires documentation of the specific screening tool that was used *and* assessment results. Screening results are identified using LOINC codes, which typically reside in EHRs, registries or case management systems.

Key facilitators of success during the Learning Collaborative were engaging large provider groups and exploring data sources, educating providers on the importance and use of LOINC codes and effective collaboration between QI, IT and analysis departments. Refer to the callout box and to Figure 7.2 for additional information.

**Figure 7.2: Data Access Barriers and Solutions**



## **D2. Screening and Follow-Up Clinical Workflow Challenges**

The Learning Collaborative plans experienced barriers in helping providers implement alcohol screening and follow-up into the clinical workflow. Concerns included:

- Providers may not be screening for unhealthy alcohol use.
- If providers are screening, they may be using unvalidated screening tools.
- Providers may have difficulty getting patients to return for brief intervention after a positive screen.

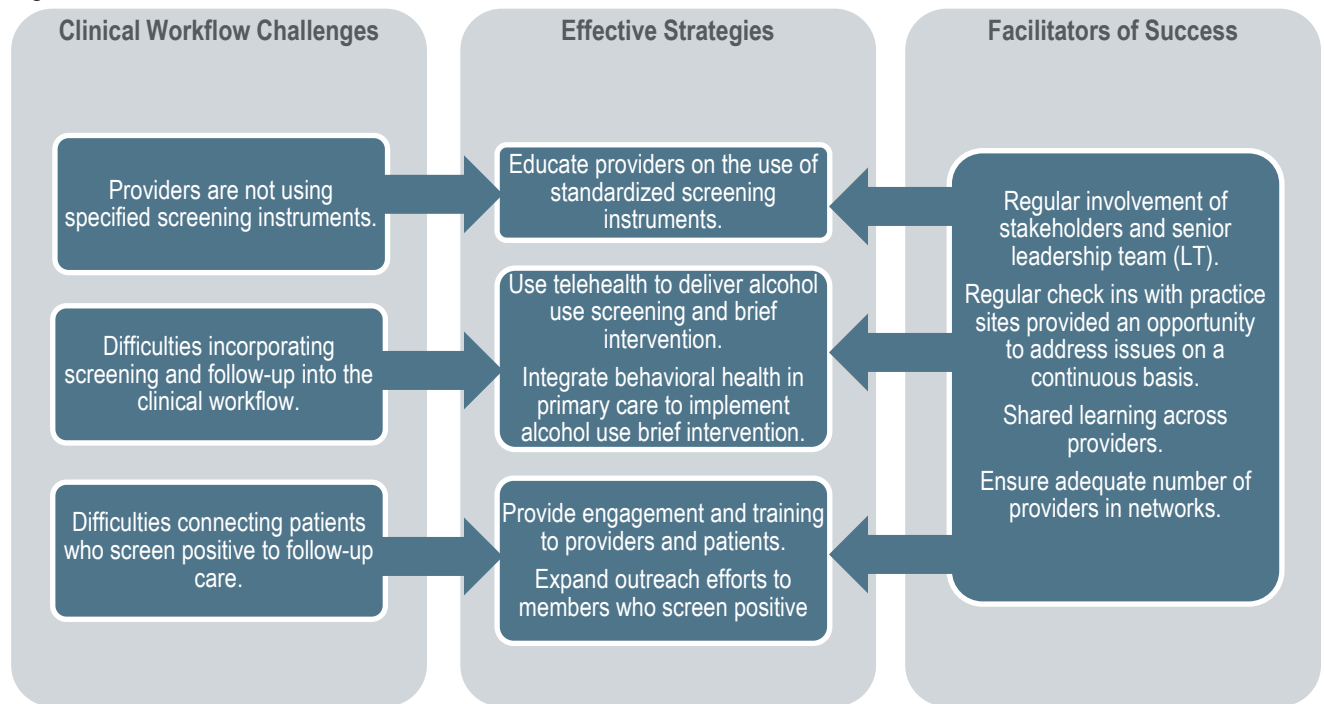
Data access barriers also impacted clinical workflow. Limited access to clinical data impeded providers' ability to coordinate care. Information was not being shared with other providers or HIEs; for example, behavioral health providers screened patients but did not share the information with the PCP or send it to the HIE.

Successful strategies used by health plans to overcome these barriers included:

- Educating providers on the use of standardized screening tools (see [Appendix 2](#)).
- Using telemedicine to conduct alcohol screening and brief intervention.
- Integrating behavioral health into primary care and expanding outreach to members who screened positive.
- Ensuring a continuous feedback loop to provide relevant data back to clinicians (e.g., provider portal)

Key facilitators of success for Learning Collaborative health plans were consistent stakeholder and senior leadership involvement, sharing knowledge across providers to increase buy-in and ensuring that networks have an adequate number of providers. Regular check-ins with practice sites also provided an opportunity to address issues on a continuous basis (Figure 7.3).

**Figure 7.3: Clinical Workflow Barriers and Solutions**



### D3. Addressing Concerns about Stigma Related to Unhealthy Alcohol Use

Some people hear “unhealthy alcohol use” and immediately think of the severe end of the spectrum: having a disorder or being labeled an “alcoholic.” The stigma associated with labels often prevents people from seeking care and is likely to prevent providers from offering care, regardless of where a patient falls on the spectrum.<sup>33</sup> Most people do not have an AUD, but people at both ends of the spectrum need appropriate care.

People look to their clinicians and other health care providers for understanding and answers. If a member of the healthcare team is uncomfortable discussing a topic, the patient will likely become uncomfortable. How can health plans help clinicians and other health care providers feel more at ease when asking patients about unhealthy alcohol use?

*The answer is two-fold:*

#### 1. Education

Educate clinicians about the unhealthy alcohol use spectrum, the low probability of identifying patients with AUD and the types of follow-up care to consider (e.g., brief intervention, counseling, treatment). Refer to [Chapter 10](#) for clinician education resources.

**Provider Education...**

A health plan in the Learning Collaborative informally found that many providers were unsure about the prevalence of AUD vs. risky drinking.

To address misconceptions, the health plan developed and distributed educational materials on unhealthy alcohol use for providers and health care workers.

## 2. Workflow

Consider appropriate follow-up care. Organizations can create protocols that outline the follow-up process, and provide resources, such as active case management, to clinicians, who can link at-risk individuals with appropriate follow-up care.

Clinicians must also have the appropriate infrastructure in place to be successful with unhealthy alcohol use screening and follow-up. The USPSTF recommends that all primary care providers use a standardized screening tool. Recommended screening tools for the ASF measure are the Alcohol Use Disorder Identification Test (AUDIT), the Alcohol Use Disorders Identification Test-Concise (AUDIT-C) and the Single Question Screen for Unhealthy Alcohol Use ([Appendix 2](#)). Providing scripts to clinicians and care teams allows them to follow a protocol and ask specific screening questions. Scripts can include language that informs the patient and increases their comfort level with screening questions.

### Examples

*“I am going to ask you a few questions related to your drinking habits. I ask all my patients these questions so I can provide the most appropriate counseling or care.”*

*“Our organization wants to protect your health. I am going to ask several questions related to your alcohol consumption, so that we can offer you the best care.”*

*“When a doctor says something about my health, I listen. It’s impactful.”*

~ Learning Collaborative  
Patient Advisor



### Words Matter.

[Reducing Stigma: Terms to Use and Avoid When Talking About Addiction](#)

This resource provides a list of stigmatizing words and phrases to avoid and words and phrases to use instead.

Clinicians’ words can affect patients—positively and negatively. Unhealthy alcohol use screening and follow-up should be presented as “standard care” and protocols should be in place to support that care.

## D4. Addressing Privacy and Clinician Reporting

The federal government regulates sharing of sensitive patient information through laws such as the Health Insurance Portability and Accountability Act (HIPAA). Another regulation, 42 CFR Part 2, is specific to protecting confidentiality of information about alcohol and other drug use reported in patient records. Some Learning Collaborative plans experienced challenges in accessing data from provider EHRs and state HIE/registries for reporting the ASF measure. For one plan, data sharing limitations were due to providers’ concerns about violating the 42 CFR Part 2 regulation. Due to these concerns, providers were initially:

- Unwilling to include alcohol use care data in data feeds to state HIEs/registries.
- Hesitant to document complete alcohol use data, such as screening results, in EHRs.
- Unlikely to share alcohol use data with other providers and interdisciplinary care teams.



Overall, there are varied interpretations of confidentiality of behavioral health information and a general misunderstanding about what information is protected. In fact, most clinicians that provide unhealthy alcohol use screening and follow-up services are not impacted by 42 CFR Part 2 because it does not apply to screening and follow-up care conducted in primary care settings. Click the link in the first bullet in the box below to go to an NCQA webinar where Cicatelli Associates Inc. and the Legal Action Center clarified the regulation's language for Learning Collaborative health plans. Below is additional information as well as links to helpful resources clarifying how the regulation should be applied. To address concerns, NCQA invited Cicatelli Associates Inc (CAI) and Legal Action Center (LAC) to speak about 42 CFR Part 2 and clarify the language in the regulation for health plans in the Learning Collaborative. The link to the webinar and additional resources are in the blue box below.

### What information is protected under the 42 CFR Part 2 regulation?

- Any information related to a patient's substance abuse (e.g., patient identity, treatment records, diagnosis).
- Education, prevention and/or, treatment provided for substance use disorder (SUD).
- Data related to SUD research.

### When and where is the regulation applicable?

- Federally assisted SUD treatment programs and facilities.
- DOES NOT APPLY to screening and follow up care conducted in primary care settings.

**Additional resources can be found at the following links:**



- [42 CFR Part 2 Webinar - CAI and LAC](#)
- [SAMHSA Fact Sheets about 42 CFR Part 2](#)
- [FEI System's Consent2Share platform](#)

## D5. Maintaining Enthusiasm

Throughout your QI implementation, enthusiasm will cycle between highs and lows. This is to be expected. Sometimes there will be successes, sometimes there will be setbacks. It is important to maintain the team's enthusiasm throughout, especially after setbacks. The level of enthusiasm maintained can make or break your efforts.

### How do you maintain enthusiasm?

**At the high points:** Try to capitalize on the successes and when enthusiasm is high. Fostering enthusiasm at these points will help sustain it at the low points. Spread positive stories among your QI team, particularly about patients who have been helped.



**At the low points:** Focus on previous successes to date. Fostering enthusiasm at the low point, nurtures a positive attitude while the team continues to work on project goals. Take failures as a learning opportunity. What are the failures that occurred, and the lessons learned?

**The following article has helpful tips for sustaining team momentum:**

[10 Ways to Keep Your Quality Improvement Team Motivated](#)

## 8. Key Driver Diagrams

This chapter describes key drivers to affecting change throughout the QI process, especially during the implementation phase. “Driver diagrams” show actionable pathways to improvement. Health plans can use driver diagrams to plan their QI projects. Driver diagrams are high-level, hierarchical matrices that provide a visual representation of the outcome and the primary drivers (direct contributors to achieving goals) and secondary drivers (actions, interventions, other components) to success. Secondary drivers can be influenced by change ideas and interventions.

Findings from *Unhealthy Alcohol Use Screening and Follow-Up* (ASF) [measure testing](#) demonstrated gaps in care for unhealthy alcohol use screening and follow-up services. Findings also suggested that structured fields would facilitate quality reporting and improvement: allowing for more interoperability but not requiring of an overabundance of data elements.<sup>25</sup> We used these findings to identify three goals (listed below) for driver diagrams focused on unhealthy alcohol use care. Each health plan developed its own SMART (Specific, Measurable, Attainable, Relevant, Timely) goals in these areas, established on baseline performance.

### How to navigate key driver diagrams and charts

Health plans might look at each primary driver to decide which fit with established goals. After determining the focus, health plans should study the (more specific) secondary drivers to select those that can help achieve goals. The driver diagrams below can help health plans see actionable change ideas and associated resources, once the direction of the QI work is clear. Although many change ideas are for practice-level implementation, health plans can use these examples to help them develop targeted QI programs that include the most effective strategies for their networks. These goals were specified for health plans in the Learning Collaborative.

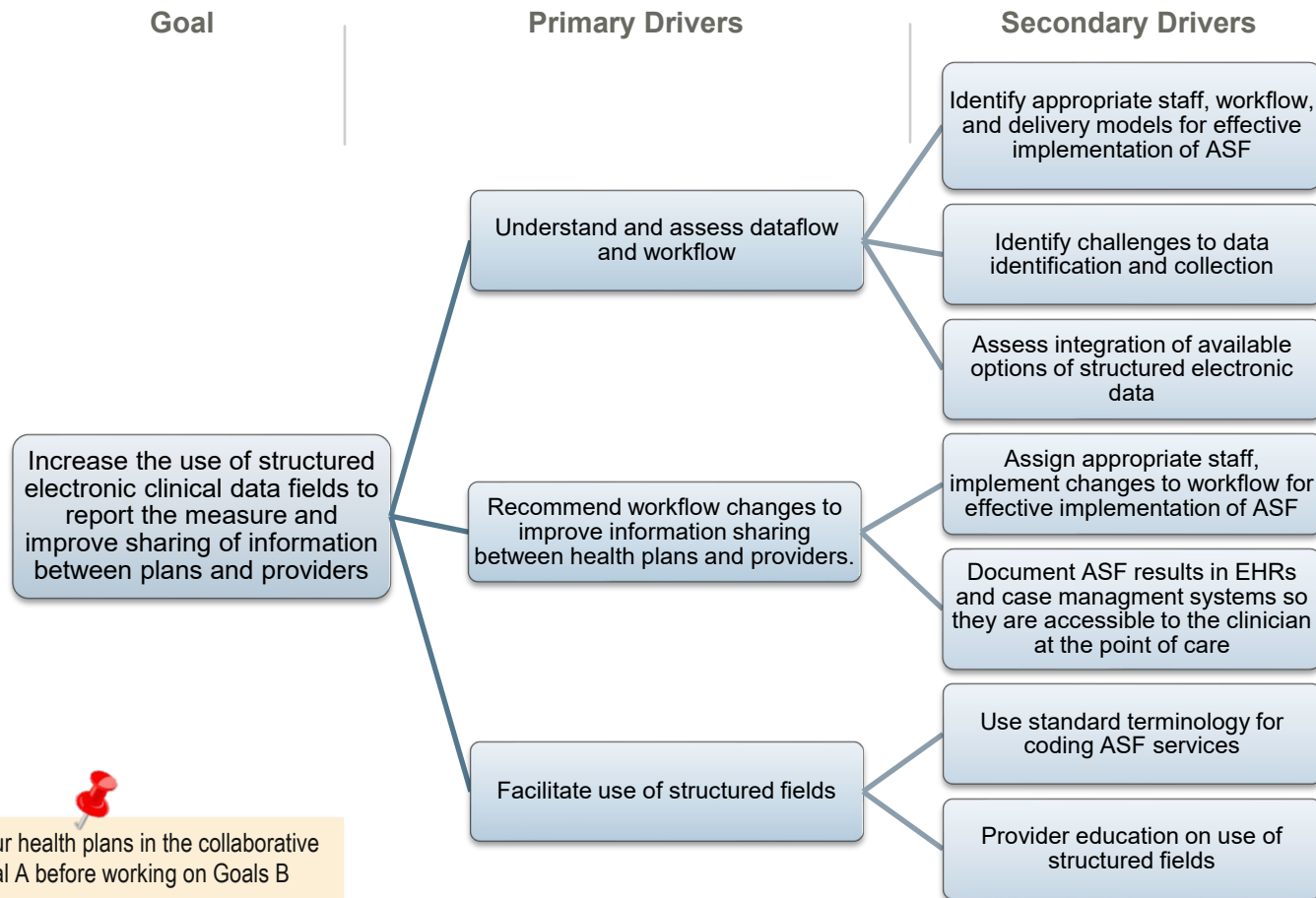
- A. **[Data Access Goal](#)**: Increase the use of structured electronic clinical data fields to facilitate sharing information between plans and providers and improve measure reporting from A% at baseline in year XXXX to B% at final data reporting in year XXXX.
- B. **[Screening Goal](#)**: Increase the rate of screening from C% at baseline in year XXXX to D% at final data reporting in year XXXX.
- C. **[Follow-Up Goal](#)**: Increase the rate of follow-up for positive screens from M% at baseline in year XXXX to N% at final data reporting in year XXXX.



*Reminder: This symbol identifies strategies and lessons learned from plans in the Learning Collaborative.*

## A. Data Access Goal



Increase the use of structured electronic clinical data fields to facilitate sharing of information between plans and providers and improve measure reporting from A% at baseline in year XXXX to B% at final data reporting in year XXXX.








Three of the four health plans in the collaborative focused on Goal A before working on Goals B and C.

The fourth health plan was integrated (serves as payer and provider for members) and focused on Goals B and C (below).

**DATA ACCESS—Primary Driver: Understand and assess dataflow and workflow (Plan Level)**

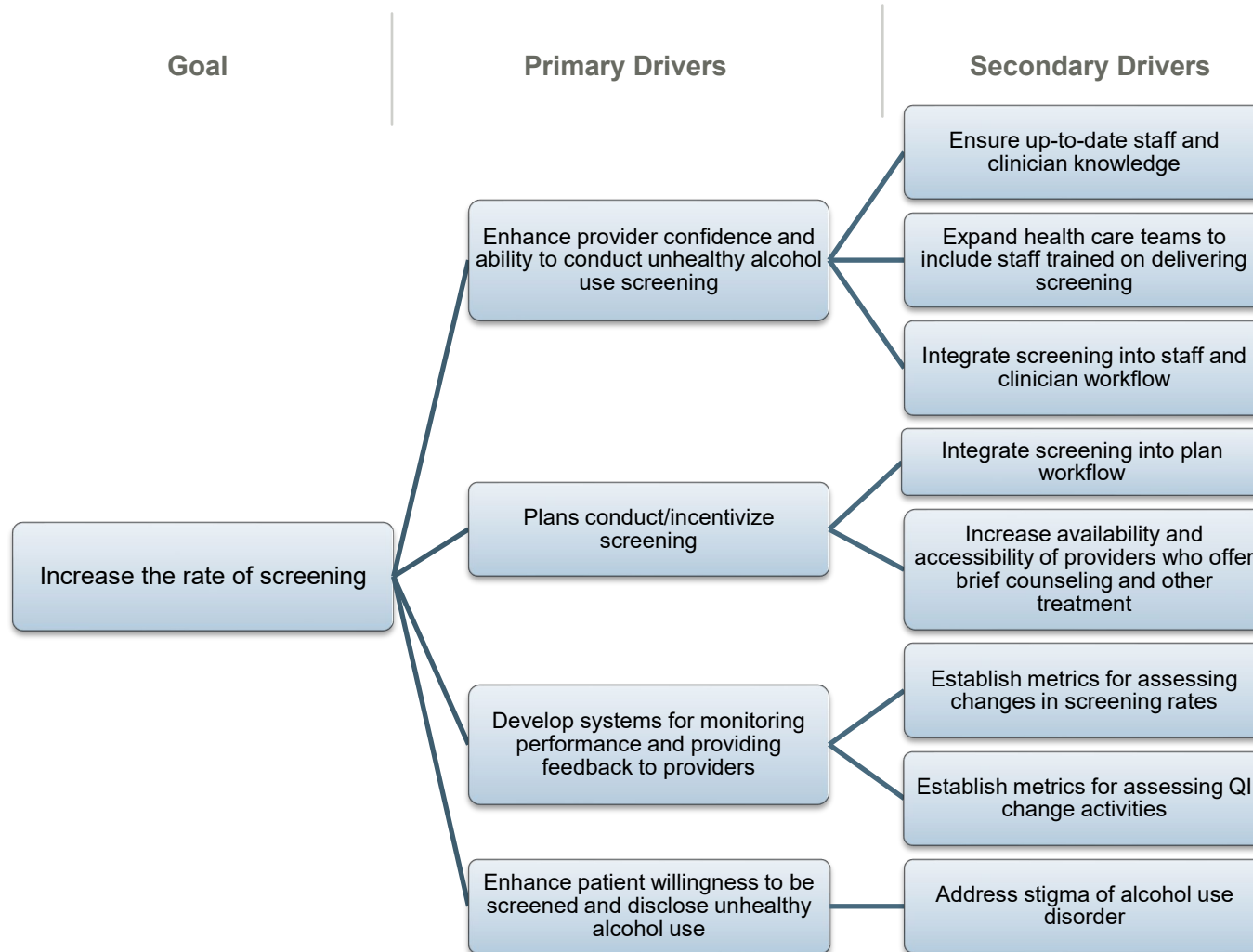
Secondary Driver	Change Ideas and Resources
Identify appropriate staff, workflow and delivery models for effective implementation of ASF	<ul style="list-style-type: none"> <li>● Begin by engaging leadership and strategy.                             <ul style="list-style-type: none"> <li>– Align your quality strategy to your business goals.</li> <li>– Build a team of multidisciplinary experts and thought leaders.</li> <li>– Create an overview of all your programmatic and regulatory requirements.</li> <li>– Develop a coherent approach that minimizes rework, mapping and validation.</li> <li>– Automate, test and retest each change.</li> </ul> </li> <li>● Do a workflow analysis: <a href="#">Clinical Quality and Policy: A Deep Dive Before an Aerial View (2017)</a></li> </ul>
Identify challenges to data identification, collection and reporting.	<ul style="list-style-type: none"> <li>● Before implementing activities to improve EHR data quality, consider these steps:                             <ul style="list-style-type: none"> <li>– Assess the current status of EHR implementation within the community and individual practices.</li> <li>– Review the availability of necessary resources to perform EHR data quality improvement work.                                     <ul style="list-style-type: none"> <li> All health plans in the Learning Collaborative conducted a baseline assessment before starting implementation, to identify the status of data collection and how it related to the ASF measure.</li> </ul> </li> <li>– <a href="#">Capturing High Quality Electronic Health Records Data to Support Performance Improvement: A Learning Guide</a></li> <li>– Consider ways to modify the EHR for implementing, sustaining and improving ASF performance: <a href="#">Play 10: Electronic Health Record Modification</a>.</li> </ul> </li> <li>● Identify challenges to data identification, collection and reporting:                             <ul style="list-style-type: none"> <li>– <i>Unstructured data</i>: Data that either does not have a predefined data model or is not organized in a predefined manner (<i>TechRepublic</i>).</li> <li>– <i>Data latency</i>: The measure of time delay that describes how long it takes for data to move from one designated point to another in each system (<i>Tech Target, SearchCIO</i>).</li> <li>– <i>Discordant data</i>: Attributes of the same data element are inconsistent across datasets (<i>NCQA</i>).</li> <li>– <a href="#">Clinical Quality and Policy: A Deep Dive Before an Aerial View (2017)</a>.</li> </ul> </li> </ul>
Assess integration of available options of structured electronic data	<ul style="list-style-type: none"> <li>● Consider options for use of structured data:                             <ul style="list-style-type: none"> <li>– Time and place of documentation: Before visit or during intake.</li> <li>– Use of smart text for documentation of follow-up services.                                     <ul style="list-style-type: none"> <li> A health plan used smart phrases to capture follow-up documented in unstructured fields.</li> </ul> </li> </ul> </li> <li>● Designate a standard location for documenting alcohol screening in the EHR.</li> <li>● Include multiple levels of staff in assessment of work and data flow processes.                             <ul style="list-style-type: none"> <li>– <a href="#">Evaluation of a Pilot Implementation to Integrate Alcohol-Related Care within Primary Care (2017)</a>.</li> </ul> </li> </ul>

<b>DATA ACCESS—Primary Driver: Recommend workflow changes to improve information sharing between health plans and providers (Plan/Provider Level)</b>	
<b>Secondary Driver</b>	<b>Change Ideas and Resources</b>
Assign appropriate staff and use an effective workflow for implementation of ASF	<ul style="list-style-type: none"> <li>• Incorporate data exchange with practices into value-based payment arrangements</li> <li>• Train medical assistants and health technicians to conduct and document screening in the EHR.</li> <li>• Build site-specific referral networks for behavioral health clinicians/social workers to aid in brief alcohol counseling. <ul style="list-style-type: none"> <li> A health plan used peer specialists to schedule follow-up appointments for patients who screened positive.</li> </ul> </li> <li>• Identify staff who can assist with treatment referrals for patients with AUD.</li> <li>• <a href="#">Evaluation of a Pilot Implementation to Integrate Alcohol-Related Care within Primary Care (2017).</a></li> </ul>
Document ASF results in EHRs or case management system so they are accessible to the clinician at the point of care	<ul style="list-style-type: none"> <li>• Health plans can use case management data systems to document screening and brief counseling services and make data available to the provider.</li> <li>• Configure EHRs and decision support software to align with ASF workflow. <ul style="list-style-type: none"> <li>– Add screening questions to the EHR. Consider incorporating follow-up and brief intervention. <ul style="list-style-type: none"> <li> A health plan added questions about unhealthy alcohol use to its existing depression screening tool.</li> </ul> </li> <li>– Integrate ASF data into EHR. <ul style="list-style-type: none"> <li> A health plan piloted a telehealth platform that sends screening results to provider EHRs.</li> </ul> </li> <li>– Develop communication protocols between health plans and providers about ASF records.</li> </ul> </li> <li>• <a href="#">Implementing Care for Alcohol &amp; Other Drug Use in Medical Settings: An Extension of SBIRT (2018).</a></li> </ul>





<b>DATA ACCESS – Primary Driver: Facilitate use of structured fields (Provider Level)</b>	
<b>Secondary Driver</b>	<b>Change Ideas and Resources</b>
Use standard coding terminology for ASF services	<ul style="list-style-type: none"> <li>• Encourage providers to use the correct codes to document screening tools and results. <ul style="list-style-type: none"> <li> All health plans encouraged and educated providers on using LOINC codes.</li> </ul> </li> <li>• Encourage providers to bill for ASF services: <a href="#">Reimbursement for SBIRT.</a></li> </ul>
Provider education on use of structured fields	<ul style="list-style-type: none"> <li>• Discuss with providers the challenges with using structured data.</li> <li>• Educate providers on the benefits of structured data. <ul style="list-style-type: none"> <li> A health plan provided education material for providers on how to code ASF data in their EHR.</li> </ul> </li> <li>• Train staff on electronic clinical data management.</li> </ul>

## B. Screening Goal


Increase the rate of screening from C% at baseline in year XXXX to D% by month X of year XXXX.





**SCREENING—Primary Driver: Enhance provider confidence and ability to conduct unhealthy alcohol use screening. (Plan/Provider Level)**

<b>Secondary Driver</b>	<b>Change Ideas and Resources</b>
Ensure staff and clinician knowledge is up to date	<ul style="list-style-type: none"> <li>• Educate health care system leaders and staff about risky alcohol use and its consequences.                             <ul style="list-style-type: none"> <li> A health plan developed educational materials for its practice partners on the benefits of unhealthy alcohol use screening and follow-up.</li> </ul> </li> <li>• Train health care staff about the use of standardized screening tools.</li> <li>• Ensure health care system leaders and staff are informed about impact of alcohol consumption on other conditions. Consider using parts of this Change Package when making the case to leadership and staff.                             <ul style="list-style-type: none"> <li>— Medications, symptoms, other diagnoses, adherence to treatments for other conditions.</li> </ul> </li> <li>• Address staff and clinician attitudes/beliefs about their responsibility in unhealthy alcohol use care and their views of patients who engage in unhealthy alcohol use.</li> </ul>
Expand the capacity of health care teams to include staff trained on screening	<ul style="list-style-type: none"> <li>• Include trained and supported health educators (i.e., medical assistant, case workers and other staff to conduct screening) in your team.                             <ul style="list-style-type: none"> <li> A health plan used case management staff to screen patients rather than relying on physicians to screen.</li> </ul> </li> <li>• Expand capacity for telehealth and/or train staff to provide telehealth.</li> <li>• Provide access to referral networks or providers who specialize in alcohol treatment.</li> </ul>
Integrate screening into staff and clinician workflow	<ul style="list-style-type: none"> <li>• Identify the visit types to target for screening (e.g., routine primary care visits, annual visits, urgent care, etc.).</li> <li>• Determine the optimal frequency for screening (once per year is typically recommended).</li> <li>• Select and implement the most appropriate tool for the population and/or workflow (AUDIT, AUDIT-C, Single Question).                             <ul style="list-style-type: none"> <li> Most health plans chose the single question screener because it is shorter, but one health plan chose the AUDIT-C because providers were already using it.</li> </ul> </li> <li>• Implement computerized reminders to alert clinicians to screen patients.</li> <li>• Combine with assessment of risky behaviors/lifestyles (e.g., smoking, diet) and other behavioral health assessments.</li> <li>• <a href="#">Implementing Care for Alcohol &amp; Other Drug Use in Medical Settings: An Extension of SBIRT (2018)</a>.</li> <li>• Train health care staff on brief counseling and other treatment for positive screens.</li> </ul>
	<ul style="list-style-type: none"> <li>• Align incentives to offer screening.                             <ul style="list-style-type: none"> <li> A health plan added ASF to its pay-for-performance measures, giving providers an incentive to implement alcohol screening into the workflow.</li> </ul> </li> <li>• <a href="#">Quality Improvement with Pay-for-Performance Incentives in Integrated Behavioral Health Care (2012)</a>.</li> </ul>

**SCREENING—Primary Driver: Health plan conducts/incentivizes screening. (Plan Level)**



<b>Secondary Driver</b>	<b>Change Ideas and Resources</b>
Integrate screening into health plan workflow	<ul style="list-style-type: none"> <li>• Add screening in health risk assessment.                             <ul style="list-style-type: none"> <li>— <a href="#">Reducing Risky Alcohol Use: What Health Care Systems Can Do (2016)</a>.</li> </ul> </li> <li>• Conduct screening via online patient portal.                             <ul style="list-style-type: none"> <li> A health plan added unhealthy alcohol use screening to its existing online patient portal. Members receive an email instructing them to log into the portal, where they see a message from their provider and a link to the screening tool. Providers are notified if patients screen positive for unhealthy alcohol use.</li> </ul> </li> <li>• Implement a computer-assisted screening tool for unhealthy alcohol use.</li> <li>• Develop a communication protocol between health plans and providers about screening and results.</li> </ul>
Increase availability and accessibility of providers who offer brief counseling and other treatment	<ul style="list-style-type: none"> <li>• Health plan ensures network adequacy of providers who offer care for unhealthy alcohol use in the primary care setting</li> <li>• Health plan pays for alcohol screening, brief counseling and treatment services.</li> <li>• Health plan pays for telehealth services for alcohol screening, brief counseling and treatment (videoconference, telephone visit, online assessment).</li> </ul>

**SCREENING—Primary Driver: Develop systems for monitoring improvement in screening and provide feedback to providers. (Plan Level)**

<b>Secondary Driver</b>	<b>Change Ideas and Resources</b>
Establish expectations of measurement improvement	<ul style="list-style-type: none"> <li>• Have system in place to provide feedback to participants.</li> <li>• <a href="#">Report card of provider performance on ASF and other measures</a>.</li> </ul>
Establish measurements for assessing changes in screening rates	<ul style="list-style-type: none"> <li>• Establish baseline data.                             <ul style="list-style-type: none"> <li> All health plans submitted baseline ASF measure data before the start of QI work. This was compared to subsequent data reporting periods to determine the effectiveness of QI activities.</li> </ul> </li> <li>• Collect repeated measurement over time and review results with clinical team. Use data to inform QI activities.</li> <li>• Determine a target rate (benchmark) for alcohol screening for the general adult population.</li> <li>• Calculate the proportion of patients with screening results documented.</li> </ul>
Establish measurements for assessing QI change activities	<ul style="list-style-type: none"> <li>• Continuous assessment of gaps in alcohol screening—consider if intermediate measurements might be useful in this QI effort.                             <ul style="list-style-type: none"> <li> Consider establishing smaller measurements of success based on QI efforts. A health plan in the Collaborative did this; some examples of their measurements are listed below:                                     <ul style="list-style-type: none"> <li>• Number of calls made for follow-up visits.</li> <li>• Number of follow-up visits scheduled.</li> <li>• Number of providers who attended educational trainings.</li> </ul> </li> </ul> </li> <li>• Meet regularly with local implementation teams to discuss change ideas and progress.</li> </ul>

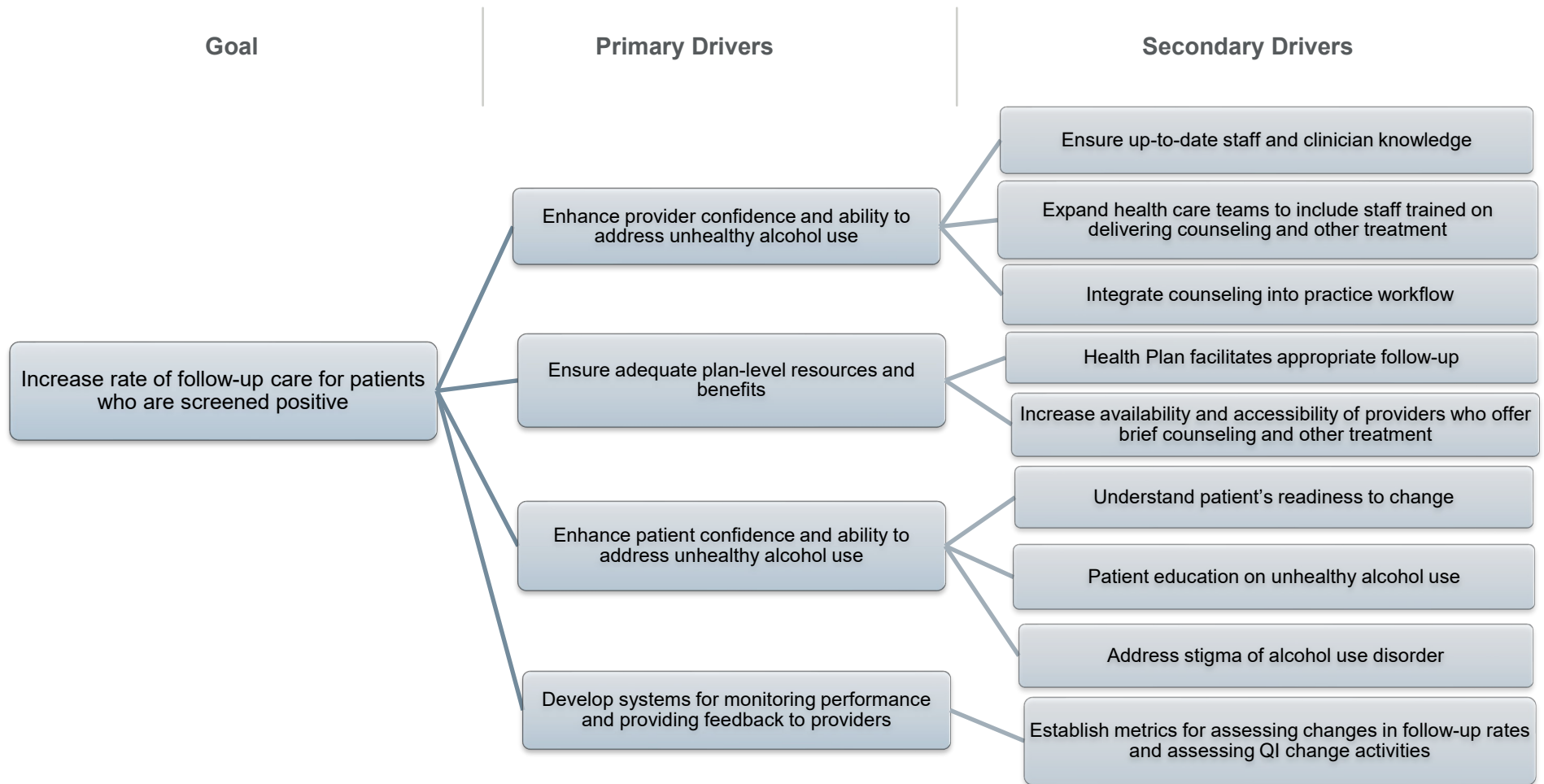


**SCREENING—Primary Driver: Enhance patient willingness to be screened and disclose unhealthy alcohol use. (Plan/Provider Level)**



<b>Secondary Driver</b>	<b>Change Ideas and Resources</b>
Address stigma of unhealthy alcohol use	<ul style="list-style-type: none"> <li>• Avoid <a href="#">common expressions</a> of alcohol-related stigma:                             <ul style="list-style-type: none"> <li>– Perceptions of character flaw (e.g., laziness).</li> <li>– Perceptions regarding control of and culpability for disease (e.g., beliefs that patients choose their condition and can quit if they are willing to do the work).</li> <li>– Role incongruence (e.g., someone else should care for this condition).</li> <li>– Labelling language (e.g., “those people” and “alcoholics”).</li> </ul> </li> <li>• Disseminate helpful resources and materials to patients (e.g., <a href="#">A ReThink of the Way We Drink</a> video, a collaboration between Dr. Mike Evans and Dr. Katharine Bradley).</li> <li>• Use posters or mailed letters to inform patients that ‘you ask everyone’ about alcohol use.</li> <li>• Adopt patient self-administered screening. Patient self-administered screening tools can reduce demands on clinical staff and help patients feel more comfortable reporting unhealthy alcohol use. This improves the quality of screening and helps break down barriers to identifying patients who could benefit from intervention.</li> <li>• Educate patients about privacy protections for information collected in the EHR.</li> <li>• <a href="#">Stigma and the Toll of Addiction (2020)—Nora Volkow, MD.</a></li> <li>• <a href="#">Rethinking alcohol interventions in health care: A thematic meeting of the International Network on Brief Interventions for Alcohol &amp; Other Drugs (INEBRIA) (2017).</a></li> </ul> <p> A health plan worked with its patient advisor to address screening and follow up language and concerns about data privacy.</p>
Cultural appropriateness	<ul style="list-style-type: none"> <li>• Ensure that screening is appropriate for diverse populations.                             <ul style="list-style-type: none"> <li>– For patients whose first language is not English, use an adapted version of the screening tool that is translated into their native language</li> </ul> </li> </ul> <p> A health plan included an English and Spanish version of the AUDIT screening tool in its EMR system.</p> <ul style="list-style-type: none"> <li>– Consider using a translation service.</li> <li>• Be mindful and respectful of diverse health beliefs and practices.</li> <li>• Print informational materials in multiple languages for your members.</li> <li>• <a href="#">Adapting Screening, Brief Intervention and Referral to Treatment (SBIRT) for Alcohol and Drugs to Culturally Diverse Clinical Populations (2015).</a></li> </ul>

### C. Follow-Up Goal


Increase the rate of follow-up care for patients screened positive from N% at baseline in year XXXX to M% in year XXXX. **Note:** Primary and secondary drivers overlap with drivers for Goal B.





**FOLLOW-UP—Primary Driver: Enhance provider confidence and ability to address unhealthy alcohol use (Plan/Provider Level)**

<b>Secondary Driver</b>	<b>Change Ideas and Resources</b>
Ensure staff and clinician knowledge is up to date	<ul style="list-style-type: none"> <li>• Educate health care system leaders and staff about unhealthy alcohol use and its consequences.</li> <li>• Train health care staff on brief counseling and other treatment, including medications for AUD.                             <ul style="list-style-type: none"> <li> Many health plans invited practice partners to learning sessions and presentations given by experts. Including practices let health plans start a dialogue around unhealthy alcohol use and instilled provider confidence to conduct screening and brief interventions.</li> </ul> </li> <li>• Share positive stories from patients who have been helped.</li> </ul>
Expand the capacity of primary health care teams to include staff trained on counseling and other treatment	<ul style="list-style-type: none"> <li>• <a href="#">A Team Approach to Systematic Behavioral Screening and Intervention (2015)</a>.</li> <li>• Close the referral loop for unhealthy alcohol use treatment.</li> <li>• Enter into contractual agreements with unhealthy alcohol use treatment providers.</li> </ul>
Integrate counseling into practice workflow	<ul style="list-style-type: none"> <li>• Enter results in the EHR before the clinician sees a patient, so need for follow-up is known at the point of care.                             <ul style="list-style-type: none"> <li>– Clip a patient handout to the chart or enter a template into the EHR to prompt brief counseling.</li> <li>– Implement computerized reminders to alert clinicians to positive screens that need follow-up.</li> <li>– <a href="#">Implementing Care for Alcohol &amp; Other Drug Use in Medical Settings: An Extension of SBIRT (2018)</a>.</li> <li> A health plan sends the screening tool to patients through their electronic platform before a scheduled visit so they can discuss their results and provide follow-up during the visit, if necessary.</li> </ul> </li> <li>• Align incentives to offer counseling.                             <ul style="list-style-type: none"> <li>– <a href="#">Quality Improvement with Pay-for-Performance Incentives in Integrated Behavioral Health Care (2012)</a>.</li> </ul> </li> <li>• Implement a computer-assisted counseling tool for unhealthy alcohol use in the EHR to guide clinicians.</li> <li>• Encourage providers to bill for ASF services.</li> <li>• Assess severity after a positive screen to guide treatment (e.g., AUDIT for risk stratification, DSM-5 checklist to diagnose AUD).</li> </ul>


**FOLLOW-UP—Primary Driver: Ensure adequate health plan-level resources and benefits (Plan Level)**

<b>Secondary Driver</b>	<b>Change Ideas and Resources</b>
Health plan facilitates appropriate follow-up	<ul style="list-style-type: none"> <li>• Develop follow-up communication protocols between health plans and providers.</li> <li>• Increase availability and accessibility of providers who offer brief counseling and other treatment, specifically, primary care staff such as social workers and behavioral health care providers who can assist with brief intervention and treatment referrals.</li> <li>• Pay for brief counseling and/or services for alcohol treatment.</li> <li>• Include the measure in value-based payment models and contracts with providers.</li> </ul> <p> A health plan uses case managers to follow up with patients who screen positive for unhealthy alcohol use on their health assessment.</p>
Increase availability and accessibility of providers who offer brief counseling and other treatment	*Same Change Actions as Goal B/Primary Driver 2.

**FOLLOW-UP—Primary Driver: Enhance patient confidence and ability to address unhealthy alcohol use (Plan/Provider Level)**

<b>Secondary Driver</b>	<b>Change Ideas and Resources</b>
Understand patient's readiness to change	<ul style="list-style-type: none"> <li>• Use tools to assess patient's readiness and confidence in their ability to reduce/abstain from alcohol use.</li> <li>• Conduct Severity Assessment after positive screen.</li> </ul>
Patient education on unhealthy alcohol use	<ul style="list-style-type: none"> <li>• Provide patient education handouts/videos about ASF.</li> </ul> <p> A health plan developed a video to educate patients about unhealthy alcohol use and inform them about the intent and scope of the survey.</p> <p> A health plan increased its follow-up rate by using peer-to-peer outreach to schedule follow-up appointments.</p>
Train providers to address the stigma of AUD	<ul style="list-style-type: none"> <li>• Use empathy and build therapeutic alliance with patients. <ul style="list-style-type: none"> <li>— <a href="#">Overcoming Stigma, Ending Discrimination: Resource Guide</a>.</li> </ul> </li> <li>• <a href="#">Stigma and the Toll of Addiction (2020) - Nora Volkow, MD</a>.</li> <li>• Avoid common expressions of alcohol-related stigma: <ul style="list-style-type: none"> <li>— Perceptions of character flaw (e.g., laziness).</li> <li>— Perceptions regarding control of and culpability for disease (e.g., beliefs that patients are choosing their condition and can quit if they are willing to do the work).</li> <li>— Role incongruence (e.g., someone else should care for this condition).</li> <li>— Labelling language (e.g., “those people” and “alcoholics”).</li> <li>— <a href="#">Rethinking alcohol interventions in health care: a thematic meeting of the International Network on Brief Interventions for Alcohol &amp; Other Drugs (INEBRIA) (2017)</a>.</li> </ul> </li> </ul>

**FOLLOW-UP—Primary Driver: Develop systems for monitoring performance and providing feedback to providers (Plan Level)**

<b>Secondary Driver</b>	<b>Change Ideas and Resources</b>
Establish measurements for assessing changes in follow-up rates	<ul style="list-style-type: none"> <li>• Among patients with positive screens for alcohol and/or other drug use, the proportion who have brief counseling or other follow-up documented.</li> </ul> <p>— <a href="#">Implementing Care for Alcohol &amp; Other Drug Use in Medical Settings: An Extension of SBIRT (2018)</a>.</p>
Establish measurements for assessing QI change activities	<ul style="list-style-type: none"> <li>• Ongoing assessment of training and work force development needs to address follow-up.</li> <li>• Continuous assessment of gaps in alcohol follow-up; consider if intermediate measurements might be useful in this QI effort.</li> <li>• Changes are prioritized and piloted in the early phase and implemented and sustained beyond the Collaborative.</li> <li>• Meet regularly with local implementation teams to discuss change ideas and progress.</li> </ul> <p>— <a href="#">Implementing Care for Alcohol &amp; Other Drug Use in Medical Settings: An Extension of SBIRT (2018)</a>.</p> <p> A health plan developed measurements to assess ASF measure rates before and after implementing its intervention.</p>

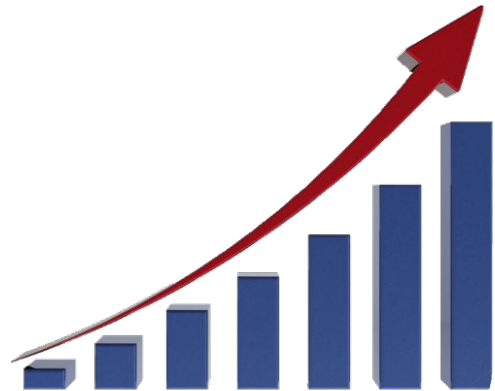
## 9. QI Stage 4: Sustainability, Spread and Scale-Up

### In this chapter you will find resources to:

- Ensure your QI successes are sustainable.
- Develop a spread plan.
- Develop a scale-up plan.
- Remove system-level and infrastructure barriers to scale up successful strategies.

### A. Sustaining Successful Improvements

The goal of quality improvement (QI) projects is to sustain systems-level changes that were tested and successful to create change that is maintained over time and maintained with changes in the system's infrastructure. The new process becomes the "new norm" for the way things are done within an organization, and the old process that existed before stays in the past. To sustain successful changes for long term improvement after testing and completing multiple PDSA cycles, it is important to understand a few QI terms, which are the processes used to achieve the outcome of sustainability. See the list below and Figure 9.1 for additional details.



---

**Testing**

The process of learning what works in a system. During this phase, QI teams should adapt new changes to the system on a small scale.

---

**Implementation**

The process of making the changes part of the routine operations of the system.

---

**Spread**

Replicating a successful change and implementing it at other sites.

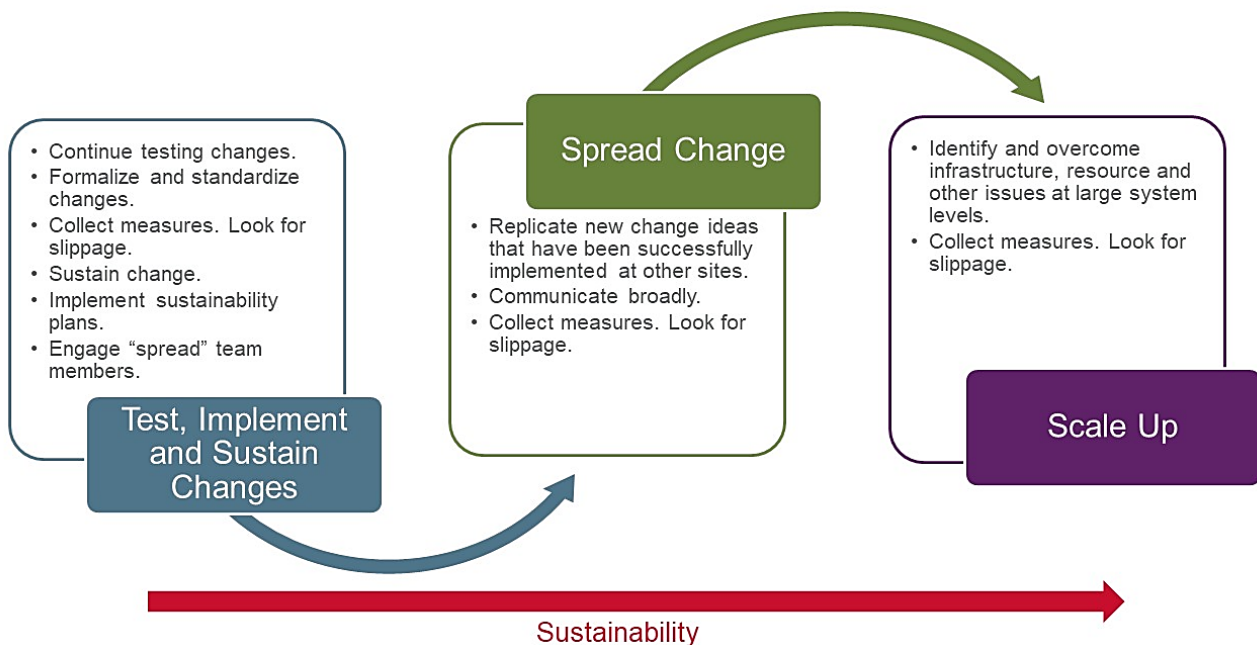
---

**Scale-Up**

After a successful change is spread to additional sites, start scaling up the change—overcome system and infrastructure issues that arose during implementation.

*During each QI step, remember to collect data and look for potential areas of slippage in improvements. Spread and scale-up will be discussed in more detail below.*

**Figure 9.1: Testing, Implementation, Spread and Scale-Up of Changes**



Consider the following free tool, developed by the Center for Public Health Systems Science, to assess readiness and capacity for sustainability: [Program Sustainability Assessment Tool \(PSAT\)](#).

**Additional resources related to Sustainability are outlined below:**

- [Improvement Leaders’ Guide: Sustainability](#)
  - Describes the sustainability model developed by the United Kingdom National Health Service.
- [Planning for the Future: Developing a Sustainability Plan](#)
  - Provides tips and resources for sustaining integration of behavioral health.
- [How-to Guide: Sustainability and Spread](#)
  - Identifies and describes evidence-based approaches for spread and sustainability.

## **B. Developing a Spread Plan**

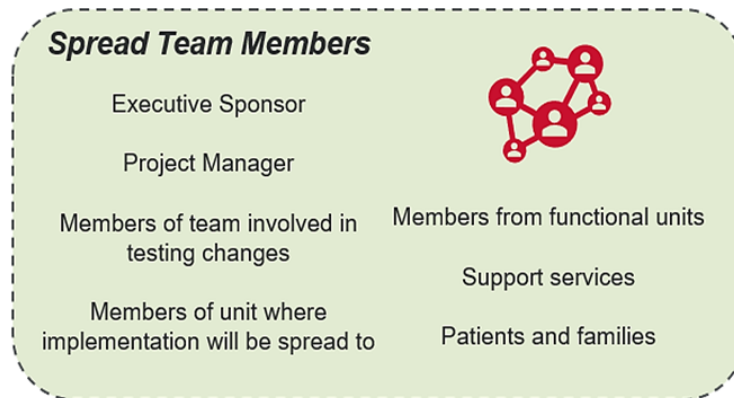
This section outlines how to develop a spread plan and includes links and examples from the Learning Collaborative. See [Appendix 5](#) for an example of a Spread Plan.



## 1. Identify the Spread Team

The Spread Team should include individuals who represent a mix of the expertise required for the spread plan. See the callout box.

- What roles will the current QI team members play in spreading change(s)?
- Who should be added to the spread team and in what role?



## 2. Develop a Spread Aim

Create an explicit statement that defines specific goals for spread. The aim statement then becomes a blueprint for action items included in the spread plan.

Consider the following when developing an aim statement:

- What tested and effective strategy or process do you intend to spread?  
*Start with a general vision statement and add details to specify the improvements in care you want to make.*
  - **Example:** Use virtual provider education sessions about data capture methods to ensure that unhealthy alcohol use screening is documented in a standardized format in the provider EHR system.
- What is the rationale for selecting this strategy to spread?  
*How did you prioritize this strategy over others? What results/evidence helped you select this strategy?*
  - **Example:** This strategy was effective with other provider groups at increasing the use of LOINC codes and improving clinical workflow efficiency. Results were more readily available at the point of care for providers to conduct brief intervention if needed.
- Who is your target population and how are they defined?  
*Include the number and location of the practices, providers or departments you intend to reach. How might this population rate the perceived attributes of the tool/strategy?*
  - **Example:** We will expand this intervention to the 10 providers who are currently using screening, brief intervention and referral to treatment (SBIRT) billing codes. We are targeting these practices first because they are already conducting SBIRT with their patients.



- What is your timeframe?  
*The time frame can be short-term (6-12 months), intermediate (1-2 years) or long-term (3-5 years).*
  - **Example:** We would like to see all providers in the target population using the LOINC codes by July 2022.



### 3. Identify Spread Plan Measurements

Collecting and using process and outcomes data to better monitor and help guide target units are central roles for the Spread Team. Identify what measurements you will track to assess progress towards implementing a tested strategy. Consider measurements that will be helpful to share with leadership and target units.

- What measures will help evaluate results compared to prediction?
- What data will you collect?
- What data source will you use to collect the data?
- How will you collect the data?



### 4. Spread Plan Checklist

The IHI Framework for Spread identifies seven components to consider when developing and executing a spread plan for a topic area or set of improvements:

- Leadership
- Organizational “set-up” to support spread
- Description of the new/better ideas
- Methods of communication
- Nurturing the social system
- Measurement and feedback systems
- Knowledge management

## When can you shift from implementation to spread and scale up?

The Spread Team is larger during this stage, so it will not be unusual to see increased reactions and awareness to changes from the organization. During this stage, it is important for the Spread Team to work with the Pilot Team and leadership to build the infrastructure and workflow processes needed to ensure that spread is successful.<sup>34</sup>

The change to spread should be near the final stage of development. The Pilot Team should make sure that the change has been tested in different conditions in the organization (e.g., with different staff, on different days, using different communication methods). If testing has been effective, there should be no factors that alter or prevent expected improvements.

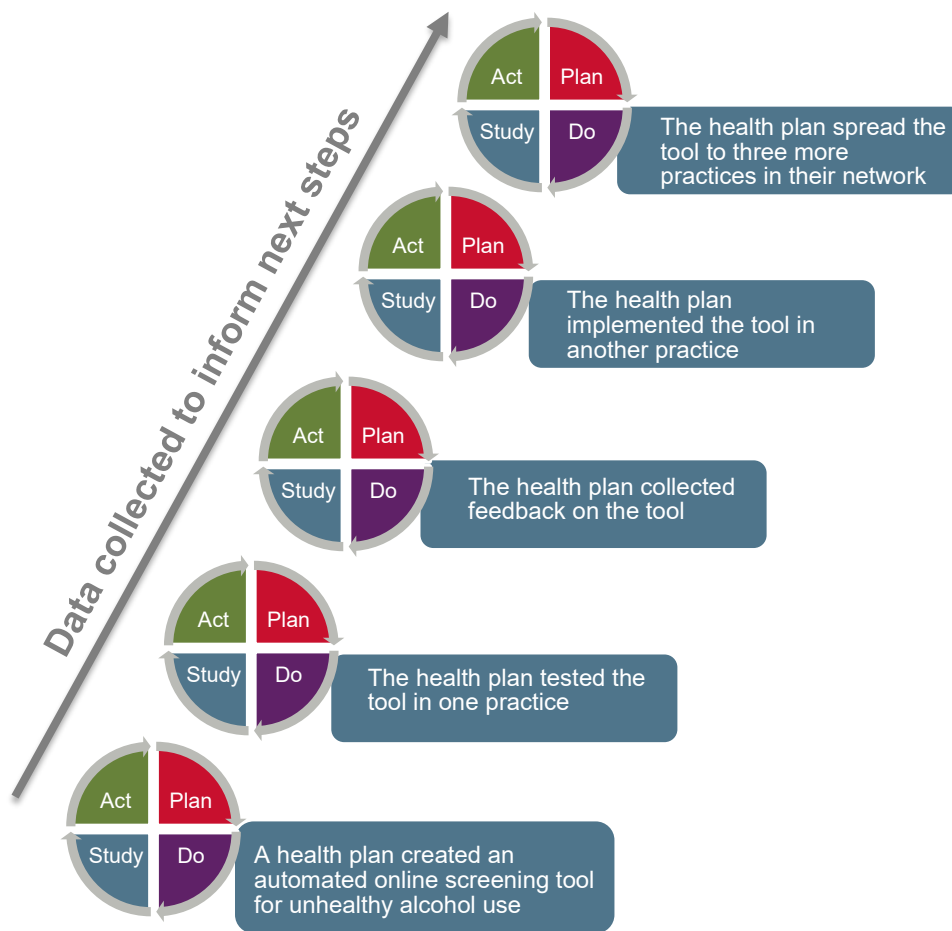
Leadership and decision makers should have access to data that show results over time. A change targeted for spread or scale up should have achieved consistently high levels of improved performance over time.<sup>35</sup>

It might take longer to spread and scale up a change than it took to test and implement. The Spread Team will need to work with leadership to build systems to monitor performance over time (including performance measurement and reporting) and schedule time to review progress and provide coaching to staff affected by the change.<sup>32, 35, 36</sup>

While a change is being spread and scaled up, the Pilot Team and practice should continue to monitor, evaluate and improve care processes—even after the initial quality goals have been achieved.<sup>34, 36, 37</sup> If major issues arise after a successful change has been sustained, the Pilot team and Spread Team will need to work together to conduct a new PDSA cycle to resolve the issues to facilitate continuous improvement.

Figure 9.2 shows an example of a PDSA cycle during the spread phase for one of the Learning Collaborative health plans. The automated screening tool the plan developed was successful at identifying unhealthy alcohol use. The plan spread the tool to additional network practices and tested its effectiveness.

**Figure 9.2: Example of a PDSA Cycle During the Spread Phase**



### C. Developing a Scale-Up Plan

To scale up a successful change, think about how to hardwire improvements into an organization's ongoing operations (e.g., staff training, staff roles and responsibilities, job descriptions, organizational policies and procedures, leveraging the vision of champions). There are several steps to scale-up:

1. **Engage new decision makers.** The Pilot Team may need to involve new stakeholders who were not involved in the initial QI planning process or spread efforts. These new stakeholders should be organization leaders who can make decisions and remove barriers. Additionally, consider who will own the work and develop a long-term support plan.



**Learning Collaborative Example:** A Pilot Team, which included a QI manager, data analyst and clinical lead, conducted PDSAs to understand how provider education and training improved ASF measure reporting and performance. This team conducted PDSA cycles, collected data and spread provider training to additional sites. The team then engaged the medical director and created a new full-time position to manage provider education in the long term.

2. **Develop an action plan.** To ensure scale-up efforts are successful, develop an action plan with a step-by-step process for roll-out, including indicators and targets. Identify additional stakeholders to consult and help ensure operations are successful.



**Learning Collaborative Example:** The Pilot Team plans to scale-up provider education by requiring annual training for all network providers. The team worked with the medical director to develop an action plan, which included consultations with general counsel to review and update contracts, as needed. Next, the team developed an online training course, reusing content from earlier stages of the QI process. The team also developed a system to send training reminders to providers once a year and track compliance data.

3. **Develop and implement communication strategy.** Before scaling up a successful change, develop and implement a strong communication plan that addresses the following questions:

- What is changing in our current process?
- Why are we changing the status quo?
- How are we changing and who is affected?
- When will the change take place?
- How will we measure and evaluate the change?
- What are key indicators of the change?
- What are the process and outcome targets that we are trying to reach with the change?



**Learning Collaborative Example:** The Pilot Team worked with a medical director and communications staff to ensure the provider network is informed about annual training requirements. The team developed a fact sheet and distributed it to network providers via email and posted it on their website. The fact sheet informed all network providers that annual required training would begin in six months. It highlighted the importance of provider education and how improved education will lead to better health care. The fact sheet also included a “frequently asked questions” section to address anticipated questions, such as content and duration.

*As you scale up successful changes, it is important to update your metrics and collect data. A sample worksheet on scaling up successful changes is included in [Appendix 6](#).*

## D. Facilitators and Barriers in Spread and Scale-Up

Based on health plans' experiences in the Learning Collaborative, we compiled the major facilitators and barriers to spreading and scaling up meaningful change (Table 9.2).

**Table 9.2: Barriers and Facilitators in Spread and Scale-Up**

<u>Facilitators</u>	<u>Barriers</u>
<ul style="list-style-type: none"><li>• Regular communication with network providers.</li><li>• Sharing experiences from pilot sites with additional sites.</li><li>• Change strategy is clear and easy to understand.</li></ul>	<ul style="list-style-type: none"><li>• Resistance by organization leadership and staff.</li><li>• Competing organizational and clinical priorities.</li><li>• Changes viewed as increased workflow and burden for providers.</li><li>• Insufficient provider training and skill development.</li></ul>

Learning Collaborative health plans stated that leadership buy-in was important throughout the QI process. Below are resources to assist with obtaining buy-in from organizational leadership.

- [AHRQ Module: Obtaining Organizational Buy-in and Support](#)
  - Outlines tools for developing a business case and obtaining buy-in and support from organizational leadership.
- [IHI Video: How to Speak So Leaders Will Listen](#)
  - Podcast from the Institute for Healthcare Improvement.
- [Harvard Business Review: 4 Tips for Managing Organizational Change](#)
  - Describes how to empower others to drive change in an organization.

## 10. Additional Resources

### A. Quality Improvement

#### General QI

- The [Institute for Healthcare Improvement \(IHI\) website](#) has many free resources to guide your health plan in quality improvement efforts.  
*Note: Requires registration to access some resources. There is no charge to register.*
- [IHI Plan Do Study Act \(PDSA\) Worksheet](#).

#### Patient and Family Engagement

- [Advancing the practice of patient- and family-centered care in primary care and other ambulatory settings \(2016\)](#).
- [Roadmap Guides Patient and Family Engagement in Healthcare \(2015\)](#).
- [Patient Engagement in Redesigning Care Toolkit, Version 2.0 \(2017\)](#).
- [Working with Patients and Families as Advisors: Implementation Handbook \(2017\)](#).

### B. Alcohol Screening, Brief Intervention, and Referral to Treatment (SBIRT)

- [Training for clinicians on the importance of screening and brief intervention](#)
- [Planning and Implementing Screening and Brief Intervention for Risky Alcohol Use: A Step-by-Step Guide for Primary Care Practices \(2014\)](#).
- [Addressing Alcohol Use Practice Manual: An Alcohol Screening and Brief Intervention Program](#).
- [Implementing Care for Alcohol & Other Drug Use in Medical Settings \(2018\)](#).
- [SAMHSA-HRSA Center of Excellence for Integrated Health Solutions](#)

### C. NCQA Resources

- [NCQA website](#).
- [Brief description](#) of the *Unhealthy Alcohol Use Screening and Follow Up* (ASF) HEDIS measure and associated Learning Collaborative. To access the specification for the ASF measure, follow this [link to purchase HEDIS® Volume 2](#).
- Additional information about NCQA's [Electronic Clinical Data Systems \(ECDS\) measures](#).
- [Frequently Asked Questions](#) about ECDS.

## 11. Appendices

### [Appendix 1: Unhealthy Alcohol Use Spectrum](#)

### [Appendix 2: Allowed Screening Tools for the ASF Measure](#)

Includes background and language of the three tools (AUDIT, AUDIT-C, NIAAA single-question screener) allowed for ASF measure reporting.

### [Appendix 3: Plan for Improvement](#)

Identifies the aim statement for the project team, the team's improvement work, where the team will focus its work, anticipated strengths, weaknesses and challenges and key stakeholders to engage. Helps organize the team and outlines how tasks are accomplished.

### [Appendix 4: Example PDSA Cycle Worksheet](#)

Helps the team plan and document tests of change. The team will test several changes; each may go through several PDSA cycles. File and save PDSA Worksheets with the Plan for Improvement.

### [Appendix 5: Example Spread Plan Worksheet](#)

### [Appendix 6: Example Scale-Up Worksheet](#)

### [Appendix 7: References](#)

## Appendix 1. Unhealthy Alcohol Use Spectrum

### Definitions of the Spectrum of Unhealthy Alcohol Use<sup>§§</sup>

Term	Definition
<b>Risky use</b>	<ul style="list-style-type: none"> <li>• Consumption of alcohol above recommended daily, weekly, or per-occasion amounts.</li> <li>• No alcohol-related consequences but risk of harms increases with level of consumption.</li> </ul>
<b>Problem drinking</b>	Consumption of alcohol accompanied by related consequences (but does not meet DSM 5 criteria for alcohol use disorder).
<b>AUD</b>	<p>Alcohol use disorder. The presence of at least two of the following symptoms indicates an AUD:</p> <ul style="list-style-type: none"> <li>• Alcohol used in larger amounts or over a longer period than intended.</li> <li>• Persistent desire or unsuccessful attempts to cut down or control alcohol use.</li> <li>• Significant time spent obtaining, using, and recovering from the effects of alcohol.</li> <li>• Craving to use alcohol</li> <li>• Recurrent alcohol use leads to failure to fulfill major role obligations at work, school or home.</li> <li>• Recurrent alcohol use, despite persistent or recurring social or interpersonal problems caused or worsened by alcohol.</li> <li>• Recurrent alcohol use, despite persistent or recurring physical or psychological problems caused or worsened by alcohol.</li> <li>• Giving up or missing important social, occupational or recreational activities due to alcohol use.</li> <li>• Recurrent alcohol use in hazardous situations.</li> <li>• Tolerance: Markedly increased amounts of alcohol are needed to achieve intoxication or the desired effect or continued use of the same amount of alcohol achieves a markedly diminished effect.</li> <li>• Withdrawal: Characteristic alcohol withdrawal syndrome, or alcohol is taken to relieve or avoid withdrawal symptoms.</li> </ul> <p>Severity is specified based on the number of criteria met:</p> <ul style="list-style-type: none"> <li>• Mild: 2-3 criteria met</li> <li>• Moderate: 4-5 criteria met</li> <li>• Severe: 6 or more criteria met</li> </ul>

<sup>§§</sup> Adapted from: U.S. Preventive Services Task Force. (2013). *Final Recommendation Statement: Alcohol Misuse: Screening and Behavioral Counseling Interventions in Primary Care*. Retrieved from <https://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/alcohol-misuse-screening-and-behavioral-counseling-interventions-in-primary-care>

## Appendix 2. Allowed Screening Tools for the ASF Measure

### Alcohol Use Disorders Identification Test (AUDIT)

The AUDIT, developed in 1982 by the World Health Organization, is a simple way to screen and identify people at risk of alcohol problems. The AUDIT gathers information about alcohol use in the past year.

1. How often do you have a drink containing alcohol?
  - (0) Never (Skip to questions 9-10)
  - (1) Monthly or less
  - (2) 2 to 4 times a month
  - (3) 2 to 3 times a week
  - (4) 4 or more times a week
  
2. How many drinks containing alcohol do you have on a typical day when you are drinking?
  - (0) 1 or 2
  - (1) 3 or 4
  - (2) 5 or 6
  - (3) 7, 8, or 9
  - (4) 10 or more
  
3. How often do you have six or more drinks on one occasion?
  - (0) Never
  - (1) Less than monthly
  - (2) Monthly
  - (3) Weekly
  - (4) Daily or almost daily
  
4. How often during the last year have you found that you were not able to stop drinking once you had started?
  - (0) Never
  - (1) Less than monthly
  - (2) Monthly
  - (3) Weekly
  - (4) Daily or almost daily
  
5. How often during the last year have you failed to do what was normally expected from you because of drinking?
  - (0) Never
  - (1) Less than monthly
  - (2) Monthly
  - (3) Weekly
  - (4) Daily or almost daily
  
6. How often during the last year have you been unable to remember what happened the night before because you had been drinking?
  - (0) Never
  - (1) Less than monthly
  - (2) Monthly
  - (3) Weekly
  - (4) Daily or almost daily
  
7. How often during the last year have you needed an alcoholic drink first thing in the morning to get yourself going after a night of heavy drinking?
  - (0) Never
  - (1) Less than monthly
  - (2) Monthly
  - (3) Weekly
  - (4) Daily or almost daily
  
8. How often during the last year have you had a feeling of guilt or remorse after drinking?
  - (0) Never



- (1) Less than monthly
- (2) Monthly
- (3) Weekly
- (4) Daily or almost daily

9. Have you or someone else been injured as a result of your drinking?

- (0) No
- (2) Yes, but not in the last year
- (4) Yes, during the last year

10. Has a relative, friend, doctor, or another health professional expressed concern about your drinking or suggested you cut down?

- (0) No
- (2) Yes, but not in the last year
- (4) Yes, during the last year

**Scoring:** Add up the points associated with answers. A total score of 8 or more points indicates harmful drinking behavior.

### Alcohol Use Disorders Identification Test-Consumption (AUDIT-C)

The AUDIT-C is a 3-item alcohol screen that can help identify persons who are hazardous drinkers or have active alcohol use disorders (including alcohol abuse or dependence). The AUDIT-C is a modified version of the 10 question AUDIT instrument consisting of only the items assessing alcohol consumption (the first 3 items of the AUDIT). Like the AUDIT, it asks about alcohol use in the past year.

1. How often do you have a drink containing alcohol?

- (0) Never
- (1) Monthly or less
- (2) 2 to 4 times a month
- (3) 2 to 3 times a week
- (4) 4 or more times a week

2. How many standard drinks containing alcohol do you have on a typical day?

- (0) 1 or 2
- (1) 3 or 4
- (2) 5 or 6
- (3) 7, 8, or 9
- (4) 10 or more

3. How often do you have six or more drinks on one occasion?

- (0) Never
- (1) Less than monthly
- (2) Monthly
- (3) Weekly
- (4) Daily or almost daily

**Scoring:** Add up the points associated with each answer.

- **Men:** a score of 4 or more is considered positive.
- **Women:** a score of 3 or more is considered positive.

### Single Question Screener for Unhealthy Alcohol Use

The National Institute on Alcohol Abuse and Alcoholism (NIAAA) developed the single question screener, which allows clinicians to obtain unhealthy alcohol use information from patients with only one question.

- **For men:** How many times in the past year have you had 5 or more drinks in a day?
- **For women:** How many times in the past year have you had 4 or more drinks in a day?

**Scoring:** A response of 1 or more is considered positive.

## Appendix 3. Plan for Improvement

A work plan that guides the team in reaching goals. Identifies the aim statement for improvement; the project team; the focus of the work; anticipated strengths, weaknesses and challenges; key stakeholders to engage. Plans for improvement help organize the team and outline how to get things done, saving time, energy and resources. Add PDSA worksheets to this plan as they are developed and tested.

### Plan Components:

- **Aim Statement.** A broad, overarching statement that directs improvement efforts in the targeted area and is measurable and time sensitive.
- **Project Team.** Identifies team members by name, job title and role, including project leader and primary contact for data reporting.
- **Drivers.** Driver or drivers on which you will focus QI efforts.
- **Strengths.** Demonstrated team/organization strengths (current processes, best practices, leadership, organizational culture) that can support progress on drivers and continuous QI.
- **Weaknesses.** Team/organization weaknesses/limitations (resources, time, organizational culture, current processes) that could hinder progress on drivers or impact continuous QI.
- **Anticipated Challenges.** Issues related to current processes, organizational culture, other concerns that could hinder/delay work, and potential mitigation strategies.
- **Engagement.** All staff, providers, consumers and collaborating organizations that will be engaged in the work.

### Organization or Clinical Site:

### Aim Statement:

--

**Project Team Members**

Name/Credentials	Title	Team Role

**Key Drivers**

<i>Which driver(s) has your team prioritized?</i>

**Facilitators**

<i>What demonstrated individual or organizational facilitators or subject matter expertise can your team use to make progress on this driver?</i>

**Barriers**

<i>What barriers can you identify that may hinder progress on this driver?</i>

**Anticipated challenges**

<i>What could go wrong?</i>	<i>How/when will you know?</i>	<i>How might you react?</i>

**Engagement**

<i>Whom will you need to engage?</i>	<i>What strategies will you use to engage this stakeholder?</i>	<i>When will you engage them?</i>
Staff		
Consumers		
Providers		
Others		

## Appendix 4. Example PDSA Cycle Worksheet

Team: \_\_\_\_\_

Date: \_\_\_\_\_

PDSA CYCLE # \_\_\_\_\_

### Purpose of Test of Change:

*How much time does it take for a clinician to administer an alcohol use screening tool?*

### Describe this test of change:

[HEALTH PLAN] has not used a standardized screening tool for alcohol use. Several clinicians have expressed concerns about the amount of time it will take for the screening tool to be administered. This test of change will explore how much time it takes for clinicians to implement the AUDIT-C with their patients.

This test of change will be tested in Drs. A and M's clinics during the second week in July with all patients. The survey will be tested on paper forms. The focus of the test of change will not focus on documentation of screening rates; only on the time it will take to implement.

### Plan:

List the tasks needed to set up this test of change	Person Responsible	When to be done	Where to be done
Clinicians will be trained on how to use AUDIT-C	Diana	6/22/2018	Drs. A and M's Clinics
Develop a data collection tool	Tom	6/15/2018	Data Analytics
Nurses will be training on how to track time for clinician to administer AUDIT-C	Nancy	6/22/2018	Drs. A and M's Clinics
Clinicians will be trained on how to use AUDIT-C	Diana	6/22/2018	Drs. A and M's Clinics

### Describe how patients and families will be involved in this test of change:

We are considering doing a survey with patients following the clinic visit where screening occurs to get feedback. We want to include one question. We also plan to talk with our patient and family advisory panel on 6/15 to solicit feedback on potential questions.

### What do you predict will happen?

1. The amount of time to administer the screening tool will decrease as clinicians screen more patients and become more comfortable with completing the tool and implementing the screening and brief intervention into their workflow.
  - a. Based on data from other quality improvement work of implementing screening tools, we anticipate the average time to administer screening will stabilize after a clinician has used it with 5 patients.
2. The time to administer the screening will not increase the average length of time for the clinic visit.

What measures will help evaluate results compared to prediction?	What data will you collect?	Where will you collect the data?	How will you collect the data?
1. Time added to appointment  We will also track average time for appointment for patients under Dr. C who is not participating in the test of change to get a better understanding of time added.	Time to administer AUDIT-C	During the clinic visit	Nurse will track time it takes clinician to administer.

**Do:** Describe what happened when you ran the test.

Over one week:

- Dr. A administered the screening tool to 85 patients and Dr. M administered the screening tool to 68 patients.
- On average, the screening added about 2-3 minutes to the visits to Dr. A and Dr. M in comparison to Dr. C.

Informal interviews were conducted with Dr. A and Dr. M and the nurses recording the time:

- Dr. M reported that the first couple of times he administered the AUDIT-C that he felt it added substantial time with the tool but once he got more comfortable with using the tool and explaining why it was being administered that it felt like it added very little time to the appointment. He also mentioned in passing that the first couple of days he would sometimes forget to administer the tool, so he asked the nurse to remind him.
- Dr. A reported similar experiences as Dr. M in administering the tool in terms of added time. He noted that he felt that any follow-up required based on the results of the screening could add substantial time.

During the check-out process, patients were randomly selected and asked if they felt this appointment was longer than their previous, most patients reported they saw no change in the length of time.

**Study:** Describe the measured results and how they compared to the predictions and what you learned from the cycle.

1. *Prediction: The amount of time to administer the screening tool will decrease as clinicians screen more patients.* Result: Both clinicians noted that they did see a decreased amount of time as they administered the screening tool to more patients. Clinicians felt more comfortable conducting the screening and brief intervention and incorporating the service into their workflow.
2. *Prediction: The time to administer the screening will not increase the average length of time for the clinic visit.* Result: On average, there was a 2-3-minute increase in time based on the comparison group.

**Act:** Describe modifications for the next cycle based on what you learned.

Since the test appears to be having a positive effect (i.e., minimal time added), the team will continue to test it in the current clinic and collect data for the rest of the month.

An additional outreach intervention will be to understand how much time could be added in terms of education or follow-up needed based on screening results.

## Appendix 5. Example Spread Plan Worksheet

### Develop a Spread Aim

Each organization should create an explicit statement that clearly defines the specific goals for spread that the organization intends to achieve. The aim statement for spread then becomes a blueprint for specific action items, which are included in the spread plan.

Use this template to develop an aim statement for your organization to use in planning and carrying out the spread of a successful intervention.

<p><b>What do you intend to spread?</b>  <i>Start with a general vision statement of what you want to accomplish, and then add detail to specify exactly what improvements in care for patients you want to make.</i></p>	<p>We will aim to improve unhealthy alcohol use screening and follow-up care for our adult members. To do this, we plan to spread virtual provider education sessions about data capture methods so that unhealthy alcohol use screening is documented in a standardized format in the provider EHR systems.</p>
<p><b>Rationale for selecting this strategy to spread</b>  <i>How did you prioritize this strategy over other strategies? What results/evidence did you use to help you select this strategy?</i></p>	<p>We worked with the Northside Practice to hold virtual education sessions with their providers on the appropriate LOINC codes to use to document the use of screening tools and results. This intervention also improved efficiency of the clinical workflow since results were more readily available at the point of care for providers to provide follow-up if needed.</p>
<p><b>What is your target level of performance (i.e. target goals)?</b>  <i>You may consider outcome or process measure goals related to the improvements that you intend to spread.</i></p>	<p>We aim to see an increase in using the LOINC codes to document screening among providers in the target population. Also, we would like to see an increase in the rates of screening and follow-up for the HEDIS measure across our plan membership.</p>
<p><b>Who is your target population (i.e., to whom will you spread the improvements)?</b>  <i>Include the number and location of the practices, providers or departments you intend to reach. How might this target population rate the perceived attributes of this tool/strategy?</i></p>	<p>We will expand this educational intervention to the 10 providers who are currently using the SBIRT billing codes. We are targeting these practices because they are already conducting screening and brief intervention with their patients. This education will help them better share this data for quality reporting and more efficiently use this information in clinical care. They may find it challenging to incorporate the codes into their EHR systems.</p>
<p><b>What is your timeframe?</b>  <i>If you wish, you may identify a short-term (6 to 12 months), intermediate (1 to 2 years) and long-term (3 to 5 years) timeframe.</i></p>	<p>We would like to see all providers in the target population using the LOINC codes by July 2020. We would like to meet our target goals for the performance rate by the next HEDIS 2021 submission.</p>

### Spread Plan Measurements

What measures will help evaluate results compared to prediction?	What data will you collect?	Where will you collect the data?	How will you collect the data?
How many providers per practice attend the virtual education session?	List of attendees per session	Information collected through webinar registrations and post-webinar surveys	Information collected through webinar registrations and post-webinar surveys
Out of members with an SBIRT claim, how many also had a LOINC code for screening?	<ul style="list-style-type: none"> <li>number of members with SBIRT claim</li> <li>number of members with a LOINC code documented for the screening</li> </ul>	Target practices will calculate the results and share with us monthly	Data shared from practices will be compiled in a spreadsheet to track progress

## Appendix 6. Example Scale-Up Worksheet

Use this template to think about your plan for scaling up successful strategies and how you will measure progress.

<b>Rationale</b> <i>What is your rationale for scaling up?</i> <i>What improvements do you need to see before scaling up?</i> <i>Include data from your metrics, if available.</i>	<ul style="list-style-type: none"> <li>Potential to screen more members with the automated tool.</li> <li>Saves provider time and is cost effective</li> <li>Potential to get more accurate responses from members</li> <li>More broad data sources (include different sites/locations to include diverse population)</li> </ul>
<b>Aim Statement</b> <i>What would you like to achieve through scaling up?</i>	By end of calendar year 2021, finish pilot and start soft regionwide rollout, if not a full rollout
<b>Leadership and Key Stakeholders</b> <i>Who will you need to engage as new team members, stakeholders or leadership?</i> <i>Who will own the new scale up work moving forward? How will this person be onboarded? How were they involved with the QI work previously?</i> <i>How will you train and support the owner(s) in the long term?</i>	Alcohol Champions/Stakeholders at rollout sites Same team will own the new scale up work moving forward Ongoing meetings with new members
<b>Action Plan</b> <i>How will you scale up? Provide an action plan to accomplish the aim statement.</i> <i>How will you ensure that the change is standardized?</i>	<ul style="list-style-type: none"> <li>Obtain regional support and leadership buy-in.</li> <li>Work with e-visit development group to integrate automated tool into e-visits.</li> </ul>
<b>Communication Plan</b> <i>How will you communicate the need to scale up and the scale up plan?</i> <i>How will you communicate progress to others in the organization and what will be communicated (e.g., x, y, z metrics monthly via email update)?</i>	<ul style="list-style-type: none"> <li>Hold a road show to showcase automated screening tool.</li> <li>For communication: Mass emails might be best.</li> </ul>

### Scale Up Metrics

Collecting and using data about process and outcomes to better monitor and help guide the target units is a central role for the spread team. In the table below, identify what metrics you will track to assess progress. Consider metrics that will be helpful to share with your leadership and back to the spread sites.

What measures will help evaluate results compared to aim?	What data will you collect?	Where will you collect the data?	How will you collect the data?	How will you use the data?
Screening rates for automated tool implementation sites vs. non-implemented sites	Number of sites who implement automated tool as part of workflow Number screened Number eligible for screening	Electronic Medical Records.	Electronically	Use as part of presentation to leadership, road show, show screening effectiveness, identify areas for improvement
Do members respond better to automated screening tool vs. in-person, office visit?	Screening completed by members/member response rate. In-person screening rate.	Member feedback.	Survey tool	Member outcomes/follow-up

## Appendix 7. References

- <sup>1</sup> Esser, M.B., Sherk, A., Liu, Y., Naimi, T.S., Stockwell, T., Stahre, M., Kanny, D., Landen, M., Saitz, R., Brewer, R.D. (2020). Deaths and years of potential life lost from excessive alcohol use—United States, 2011-2015. *Morbidity and Mortality Weekly Report*, 69 (30), 981-987.
- <sup>2</sup> Grant BF, Chou SP, Saha TD, Pickering RP, Kerridge BT, Ruan WJ, Huang B, Jung J, Zhang H, Hasin DS. (2017). Prevalence of 12-month alcohol use, high-risk drinking, and DSM-IV alcohol use disorder in the United States, 2001-2002 to 20012-2013: Results from the National Epidemiologic Survey on Alcohol and Related Conditions. *JAMA Psychiatry*, 74(9), 911-923. doi:10.1001/jamapsychiatry.2017.2161.
- <sup>3</sup> National Institute on Alcohol Abuse and Alcoholism (NIAAA). (2018). *Alcohol Facts and Statistics*. Retrieved from <https://pubs.niaaa.nih.gov/publications/AlcoholFacts&Stats/AlcoholFacts&Stats.pdf>
- <sup>4</sup> American Psychiatric Association. (2013). *Diagnostic and Statistical Manual of Mental Disorders* (5 ed.). Arlington, VA: American Psychiatric Publishing.
- <sup>5</sup> O'Connor EA, Perdue LA, Senger CA, Rushkin M, Patnode CD, Bean SI, & Jonas DE. (2018). Screening and behavioral counseling interventions to reduce unhealthy alcohol use in adolescents and adults: Updated evidence report and systematic review for the US Preventive Services Task Force. *JAMA*, 320 (18), 1910-1928. doi:10.1001/jama.2018.12086.
- <sup>6</sup> Saitz, R. (2005). Unhealthy Alcohol Use. *New England Journal of Medicine*, 352(6), 596-607.
- <sup>7</sup> U.S. Preventive Services Task Force (2018). *Final Recommendation Statement: Unhealthy Alcohol Use in Adolescents and Adults: Screening and Behavioral Counseling Interventions*. Retrieved from <https://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/unhealthy-alcohol-use-in-adolescents-and-adults-screening-and-behavioral-counseling-interventions>
- <sup>8</sup> U.S. Preventive Services Task Force. (2013). *Final Recommendation Statement: Alcohol Misuse: Screening and Behavioral Counseling Interventions in Primary Care*. Retrieved from <https://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/alcohol-misuse-screening-and-behavioral-counseling-interventions-in-primary-care>
- <sup>9</sup> McKnight-Eily, L.R., Okoro, C.A., Turay, K., Acero, C., & Hungerford, D. (2020). Screening for alcohol use and brief counseling of adults—13 states and the District of Columbia, 2017. *Morbidity and Mortality Weekly Report*, 69(10), 265-270.
- <sup>10</sup> Glass, J., Bohnert, K., & Brown, R. (2016). Alcohol Screening and Intervention Among United States Adults Who Attend Ambulatory Healthcare. *Journal of General Internal Medicine*, 31(7), 739-745.
- <sup>11</sup> O'Donnell A, Anderson P, Newbury-Birch D, Schulte B, Schmidt C, Reimer J, et al. The impact of brief alcohol interventions in primary healthcare: a systematic review of reviews. *Alcohol and alcoholism*. 2014;49(1):66-78.
- <sup>12</sup> Ludman, E., & Curry, S. (2015). Perspectives in Implementing a Primary Care-Based Intervention to Reduce Alcohol Misuse. *American Journal of Preventive Medicine*, 49(3), S194-S199.
- <sup>13</sup> American Public Health Association and Education Development Center, Inc. (2008). *Alcohol screening and brief intervention: A guide for public health practitioners*. Washington DC: National Highway Traffic Safety Administration, U.S. Department of Transportation.
- <sup>14</sup> Ernst, D., Miller, W., & Rollnick, S. (2007). Treating substance abuse in primary care: A demonstration project. *International Journal of Integrated Care*, 7(4).
- <sup>15</sup> Mertens, J., Chi, F., Weisner, C., Satre, D., Ross, T., Allen, S., & ... & Sterling, S. (2015). Physician versus non-physician delivery of alcohol screening, brief intervention and referral to treatment in adult primary care: The ADVISE cluster randomized controlled implementation trial. *Addiction Science & Clinical Practice*, 10(1), 26.
- <sup>16</sup> Tan, C., Hungerford, D., Denny, C., & McKnight-Eily, L. (2018). Screening for Alcohol Misuse: Practices among US Primary Care Providers, Docstyles 2016. *American Journal of Preventive Medicine*, 54(2), 173-180.
- <sup>17</sup> Bobb JF, Lee AK, Lapham GT, Oliver M, Ludman E, Achtmeyer C, Parrish R, Caldeiro RM, Lozano P, Richards JE, & Bradley KA. (2017). Evaluation of a pilot implementation to integrate alcohol-related care within primary care. *International Journal of Environmental Research and Public Health*, 14, 1030. doi:10.3390/ijerph14091030.
- <sup>18</sup> Smith, P., Cheng, D., Allensworth-Davies, D., Winter, M., & Saitz, R. (2014). Use of a single alcohol screening question to identify other drug use. *Drug & Alcohol Dependence*, 139, 178-180.
- <sup>19</sup> Bradley KA, Lapham GT, Hawkins EJ, Achtmeyer CE, Williams EC, Thomas RM, et al. Quality concerns with routine alcohol screening in VA clinical settings. *J Gen Intern Med*. 2011;26(3):299-306.
- <sup>20</sup> Williams EC, Achtmeyer CE, Rittmueller SE, Lapham GT, Chavez LJ, Thomas RM, et al. Factors underlying quality problems with alcohol screening in routine care. *Addiction science & clinical practice*. 2013;8(Suppl 1): A85-A.
- <sup>21</sup> Sacks JJ, Gonzales KR, Bouchery EE, Tomedi LE, Brewer RD. (2015). 2010 National and state costs of excessive alcohol consumption. *American Journal of Preventive Medicine*, 49(5), e73-e79. doi: 10.1016/j.amepre.2015.05.031.



- 
- <sup>22</sup> Barbosa C, Cowell A, Bray J, Aldridge A. The Cost-effectiveness of Alcohol Screening, Brief Intervention, and Referral to Treatment (SBIRT) in Emergency and Outpatient Medical Settings. *J Subst Abuse Treat.* 2015 Jun; 53:1-8. doi:10.1016/j.jsat.2015.01.003. Epub 2015 Jan 15. PubMed PMID: 25648375.
- <sup>23</sup> Cowell, A., Dowd, W., Mills, M., Hinde, J., & Bray, J. (2017). Sustaining SBIRT in the wild: Simulating revenues and costs for screening, brief intervention and referral to treatment programs. *Addiction*, 112(2), 101-109. doi:10.1111/add.13650.
- <sup>24</sup> Barbosa C, Cowell AJ, Landwehr J, Dowd W, Bray JW. Cost of Screening, Brief Intervention, and Referral to Treatment in Health Care Settings. *J Subst Abuse Treat.* 2016 Jan;60:54-61. doi: 10.1016/j.jsat.2015.06.005. Epub 2015 Jun 18. PubMed PMID: 26160162.
- <sup>25</sup> Liu, J., McCree, F., Kanovsky, D., Santora, P., Ahmed, K., Bhatt, C., & Scholle, S. H. (2019). Low screening and follow-up for unhealthy alcohol use among health plan beneficiaries. *The American Journal of Managed Care*, 25(10), e316-e319.
- <sup>26</sup> U.S. Department of Health and Human Services. (2011, Apr). *Quality Improvement*. Retrieved from <https://www.hrsa.gov/sites/default/files/quality/toolbox/508pdfs/qualityimprovement.pdf>
- <sup>27</sup> Prosci. (2018). *Executive Sponsor's Importance and Role*. Retrieved from <https://www.prosci.com/resources/articles/importance-and-role-of-executive-sponsor>
- <sup>28</sup> Institute for Healthcare Improvement (IHI). (2008) *Science of Improvement: Forming the Team*. Retrieved from <http://www.ihl.org/resources/Pages/HowtoImprove/ScienceofImprovementFormingtheTeam.aspx>
- <sup>29</sup> Agency for Healthcare Research and Quality. *Module 14. Creating Quality Improvement Teams and QI Plans*. Content last reviewed May 2013. Agency for Healthcare Research and Quality, Rockville, MD. <https://www.ahrq.gov/ncepcr/tools/pf-handbook/mod14.html>
- <sup>30</sup> Agency for Healthcare Research and Quality. (2008). *Working with Patient and Families as Advisors: Implementation Handbook*. Retrieved from [https://www.ahrq.gov/sites/default/files/wysiwyg/professionals/systems/hospital/engagingfamilies/strategy1/Strat1\\_Implement\\_Hndbook\\_508\\_v2.pdf](https://www.ahrq.gov/sites/default/files/wysiwyg/professionals/systems/hospital/engagingfamilies/strategy1/Strat1_Implement_Hndbook_508_v2.pdf)
- <sup>31</sup> Strategic Health Information Exchange Collaborative. (2019). First survey of the strategic health information exchange collaborative (SHIEC) shows health information exchanges (HIEs) provide critical national infrastructure. Retrieved 28 February, 2020 from <https://strategichie.com/first-survey-of-the-strategic-health-information-exchange-collaborative-shiec-shows-health-information-exchanges-hies-provide-critical-national-infrastructure/>
- <sup>32</sup> Langley, G., Moen, R., Nolan, K., Norman, C., & Provost, L. (2009). *The Improvement Guide: A Practical Approach to Enhancing Organizational Performance*. 2<sup>nd</sup> ed. San Francisco, CA: Jossey-Bass.
- <sup>33</sup> Keyes, K., Hatzenbuehler, M., McLaughlin, K., Link, B., Offson, M., Grant, B., & Hasin, D. (2010). Stigma and treatment for alcohol disorders in the United States. *American Journal of Epidemiology*, 172(12), 1364-1372. doi: 10.1093/aje/kwq304
- <sup>34</sup> Rakhmanova, N., & Bouchet, B. (2017). *Quality improvement handbook: a guide for enhancing the performance of health care systems*. Retrieved from <https://www.fhi360.org/sites/default/files/media/documents/resource-quality-improvement-handbook-health-systems.pdf>.
- <sup>35</sup> Agency for Healthcare Research and Quality. (2012). *Sustaining and Spreading Quality Improvement*. Retrieved from <https://innovations.ahrq.gov/perspectives/sustaining-and-spreading-quality-improvement>.
- <sup>36</sup> Massoud, M., Nielsen, G., Nolan, K., Schall, M., & Sevin, C. (2006). *A Framework for Spread: From Local Improvements to System-Wide Change*. IHI Innovation Series white paper. Cambridge, MA: Institute for Healthcare Improvement.
- <sup>37</sup> Silver, S. A., McQuillan, R., Harel, Z., Weizman, A. V., Thomas, A., Nesrallah, G., ... & Chertow, G. M. (2016). How to sustain change and support continuous quality improvement. *Clinical Journal of the American Society of Nephrology*, 11(5), 916-924.