eMeasure Title	Alcohol Use Screening (SUB-1)		
eMeasure Identifier (Measure Authoring Tool)	570	eMeasure Version number	0.0.018
NQF Number	None	GUID	dd210e96-1d9e-4afa-a522-63597af05f34
Measurement Period	January 1, 20XX through December 31, 20XX		
Measure Steward	The Joint Commission		
Measure Developer	Mathematica Policy Research		
Measure Developer	Office of the Assistant Secretary for Planning and Evaluation (ASPE)		
Measure Developer	RTI International		
Endorsed By	None		
Description	This measure assesses the proportion of hospitalized adult patients who were screened for unhealthy alcohol use via a validated screening tool (or refused screening) within three days before admission through one day after admission.		
Copyright	Measure specifications are in the Public Domain LOINC(R) is a registered trademark of the Regenstrief Institute This material contains SNOMED Clinical Terms(R) (SNOMED CT © copyright 2004–2017 International Health Terminology Standards Development Organisation. All rights reserved. ICD-10 copyright 2017 World Health Organization. All Rights Reserved		
Disclaimer	These performance measures are not clinical guidelines and do not establish a standard of medical care, and have not been tested for all potential applications. The measures and specifications are provided without warranty.		
Measure Scoring	Proportion		
Measure Type	Process		
Measure Item Count	Encounter, Performed: Encounter Inpatient		
Stratification	None		
Risk Adjustment	None		
Rate Aggregation	None		

eMeasure Title	Alcohol Use Screening (SUB-1)
Rationale	Excessive use of alcohol and drugs has a substantial harmful impact on health and society in the United States. It is a drain on the economy and a source of enormous personal tragedy (The National Quality Forum 2007). In 1998, the economic costs to society were $185 billion for alcohol misuse and $143 billion for drug misuse (Harwood 2000). Health care spending was $19 billion for alcohol problems and $14 billion for drug problems. Nearly one-quarter of $1 trillion in lost productivity was attributable to substance use. In 2000, more than 537,000 persons died as a consequence of alcohol, drug, and tobacco use, making the use of these substance the cause of more than one out of four deaths in the United States (Mokdad et al. 2004).
	An estimated 22.6 million adolescents and adults meet criteria for a substance use disorder, but addiction/dependence is not the most common type of problem. In a multistate study that screened 459,599 patients in general hospital and medical settings, 23 percent screened positive. Of these, 16 percent used alcohol or drugs above safe limits and an additional 3 percent were very heavy users, but only 4 percent had an addictive use pattern (Madras et al. 2009).
	Clinical trials have demonstrated that brief interventions, especially before the onset of addiction, significantly improve health and reduce costs, and similar benefits occur in those with addictive disorders who are referred to treatment (SAMHSA 2007; NIAAA 2005; Fleming et al. 2002).
	Patients with substance use problems have a greater risk for serious injury and more than 50 medical problems, including hypertension; gastrointestinal (GI) bleeding; depression; stroke; dementia; cirrhosis; multiple forms of cancer; dysrhythmias; and infections such as tuberculosis, hepatitis, endocarditis, and HIV (NIAAA 2005).
	Hospitalization provides a prime opportunity to address substance use; for many patients, controlling their other health problems requires addressing their substance use (Fleming et al. 2002).
Clinical Recommendation Statement	"The USPSTF recommends that clinicians screen adults aged 18 years or older for alcohol misuse and provide persons engaged in risky or hazardous drinking with brief behavioral counseling interventions to reduce alcohol misuse" (USPSTF 2013)
Improvement Notation	Improvement noted as an increase in rate
Reference	Fleming, M.F., M.P. Mundt, M.T. French, L.B. Manwell, E.A. Stauffacher, and K.L. Barry. "Brief Physician Advice for Problem Drinkers: Long-Term Efficacy and Benefit-Cost Analysis." Alcoholism, Clinical and Experimental Research, vol. 26, no. 1, Jan 2002, pp. 36–43.
Reference	Gentilello, L.M., B.E. Ebel, T.M. Wickizer, D.S. Salkever, and F.P. Rivara. "Alcohol Interventions for Trauma Patients Treated in Emergency Departments and Hospitals: A Cost Benefit Analysis." Annals of Surgery, vol. 241, no. 4, Apr 2005, pp. 541–550.
Reference	Harwood, H.J. "Updating Estimates of the Economic Costs of Alcohol Abuse in the United States." National Institute on Alcohol Abuse and Alcoholism, 2000. Available at: http://pubs.niaaa.nih.gov/publications/economic-2000/. Accessed June 23, 2016.
Reference	Madras, B.K., W.M. Compton, D. Avula, T. Stegbauer, J.B. Stein, and H.W. Clark. "Screening, Brief Interventions, Referral to Treatment (SBIRT) for Illicit Drug and Alcohol Use at Multiple Healthcare Sites: Comparison at Intake and 6 Months Later." Drug and Alcohol Dependence, vol. 99, nos. 1–3, Jan 1, 2009, pp. 280–95. Epub Oct 16, 2008.

eMeasure Title	Alcohol Use Screening (SUB-1)
Reference	Mokdad, A.H., J.S. Marks, D.S. Stroup, and J.L. Geberding. "Actual Causes of Death in the United States, 2000." Journal of the American Medical Association, vol. 291, 2004, pp. 1238–1245.
Reference	National Institute on Alcohol Abuse and Alcoholism (NIAAA). "Helping Patients Who Drink Too Much: A Clinician's Guide." 2005 Edition, Rockville, MD: NIAAA, 2005.
Reference	National Institute on Drug Abuse. Archives. "The Economic Costs of Drug Abuse in the United States: 1992–2002." Available at https://www.ncjrs.gov/ondcppubs/publications/pdf/economic_costs.pdf. Accessed June 23, 2016.
Reference	National Quality Forum (NQF). "National Voluntary Consensus Standards for the Treatment of Substance Use Conditions: Evidence-Based Treatment Practices; A Consensus Report." NQF, 2007.
Reference	Substance Abuse and Mental Health Services Administration (SAMHSA). "Results from the 2006 National Survey on Drug Use and Health: National Findings." NSDUH Series H-32, DHHS Publication No. SMA 07-4293. Rockville, MD: SAMHSA, Office of Applied Studies, 2007.
Reference	U.S. Preventive Services Task Force. "Final Recommendation Statement. Alcohol Misuse: Screening and Behavioral Counseling Interventions in Primary Care." May 2013. Available at: http://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/alcohol-misuse-screening-and-behavioral-counseling-interventions-in-primary-care. Accessed July 6, 2016.
Definition	None
Guidance	The logic that accounts for a time frame of 3 days prior to admission is intended as a timing approximation, primarily to account for events that may occur after hospital arrival but before inpatient admission (e.g., when the patient is in the emergency department or observation status). Events occurring before hospital arrival but within the 3-day timeframe are technically allowable for this logic construct (e.g., telephone screening for planned admissions). There is no expectation that the timing constraint would reframe the interpretation or otherwise adjust the inherent meaning of the Quality Data Model's (QDM) data types. For instance, there would be no expectation that a medication administered before hospital arrival would be captured. In order to provide flexibility in workflows and data capture, the denominator exclusions logic allows for various data sources to capture cognitive impairment. These include: * The result of a cognitive status assessment, potentially sourced from a nursing, neurological, or psychiatric assessment * Documentation of cognitive impairment as a reason not to perform an alcohol use screening assessment * A problem list or coded diagnosis indicative of impaired cognition Substance use may be identified through a positive clinical laboratory test indicating alcohol or drug intoxication within three days prior to admission or during the encounter.
Transmission Format	TBD
Initial Population	Patients ages 18 years and older discharged from inpatient care during the measurement period with a length of stay greater than 1 day and less than or equal to 120 days.
Denominator	All patients in the initial population

eMeasure Title	Alcohol Use Screening (SUB-1)
Denominator Exclusions	Patients with comfort measures documented within 3 days prior to or anytime during admission. A diagnosis indicative of impaired cognition that overlaps with the encounter. Patients with documentation of impaired cognition within 3 days prior through 1 day after admission, as evidenced by: * An assessment of the patient's cognitive status * Explicit documentation of impaired cognition as a reason not to perform an unhealthy alcohol use screening assessment
Numerator	Patients who were screened (or refused screening) for unhealthy alcohol use using a validated screening tool or had positive clinical laboratory test indicating alcohol or drug intoxication within 3 days before admission through 1 day after admission.
Numerator Exclusions	Not applicable
Denominator Exceptions	None
Supplemental Data Elements	For every patient evaluated by this measure also identify payer, race, ethnicity and sex.

Table of Contents

Population Criteria

- **Initial Population** =
  - ◦ AND: Age>= 18 year(s) at: Occurrence A of $EncounterInpatient
  - ◦ AND: Intersection of:
    - ▪ Occurrence A of $EncounterInpatient
    - ▪ "Encounter, Performed: Encounter Inpatient (length of stay > 1 day(s))"
- **Denominator** =
  - ◦ AND: Initial Population
- **Denominator Exclusions** =
  - ◦ OR: $InterventionComfortMeasures <= 3 day(s) starts before start of Occurrence A of $EncounterInpatient
  - ◦ OR: $InterventionComfortMeasures starts during Occurrence A of $EncounterInpatient
  - ◦ OR:
    - ▪ AND:
      - ▫ *# Choose one of the three definitions to identify patients that are cognitively impaired: Option 1: Impaired cognition sourced from the result of a cognitive status assessment*
      - ▫ OR: "Physical Exam, Performed: Cognitive Status" satisfies all:
        - – (result: Impaired Cognition)
        - – <= 1 day(s) starts after or concurrent with start of Occurrence A of $EncounterInpatient
      - ▫ *# Choose one of the three definitions to identify patients that are cognitively impaired: Option 2: Impaired cognition sourced from explicit documentation of a reason for not performing an alcohol screening assessment*

- OR: "Assessment, Performed not done: Impaired Cognition" for "Validated Screening Tool for Alcohol Use" <= 1 day(s) starts after or concurrent with start of Occurrence A of $EncounterInpatient
- *# Choose one of the three definitions to identify patients that are cognitively impaired: Option 3: Impaired cognition sourced from a documented diagnosis*
- OR: "Diagnosis: Cognitive and Psychiatric Disorders Indicative of Impaired Cognition" overlaps Occurrence A of $EncounterInpatient
- OR: Intersection of:
  - Occurrence A of $EncounterInpatient
  - "Encounter, Performed: Encounter Inpatient (diagnosis: Cognitive and Psychiatric Disorders Indicative of Impaired Cognition)"
  - AND NOT:
    - OR: "Laboratory Test, Performed: BH Blood alcohol test" satisfies any:
      - (result: Alcohol Intoxication) <= 3 day(s) starts before start of Occurrence A of $EncounterInpatient
      - (result: Alcohol Intoxication) starts during Occurrence A of $EncounterInpatient
    - OR: "Laboratory Test, Performed: Drug and Alcohol Test" satisfies any:
      - (result: Drug Intoxication) <= 3 day(s) starts before start of Occurrence A of $EncounterInpatient
      - (result: Drug Intoxication) starts during Occurrence A of $EncounterInpatient
      - (result: Alcohol Intoxication) <= 3 day(s) starts before start of Occurrence A of $EncounterInpatient
      - (result: Alcohol Intoxication) starts during Occurrence A of $EncounterInpatient

- **Numerator** =
  - AND:
    - *# Alcohol Use Screening Completed Using a Validated Tool*
    - OR: "Assessment, Performed: Validated Screening Tool for Alcohol Use" satisfies all:
      - (result)
      - satisfies any:
        - <= 3 day(s) starts before start of Occurrence A of $EncounterInpatient
        - <= 1 day(s) starts after or concurrent with start of Occurrence A of $EncounterInpatient
    - *# Alcohol Use Screening Completed Using a SASQ for patients with no/low alcohol use risk*
    - OR: "Assessment, Performed: SASQ for Alcohol Use LOINC Value Set" satisfies all:
      - (result: Never had 6 drinks or more on one occasion)
      - satisfies any:
        - <= 3 day(s) starts before start of Occurrence A of $EncounterInpatient
        - <= 1 day(s) starts after or concurrent with start of Occurrence A of $EncounterInpatient
    - *# Alcohol Use Screening Completed Through a Blood Test*
    - OR: "Laboratory Test, Performed: BH Blood alcohol test" satisfies any:
      - (result: Alcohol Intoxication) <= 3 day(s) starts before start of Occurrence A of $EncounterInpatient
      - (result: Alcohol Intoxication) starts during Occurrence A of $EncounterInpatient
    - *# Alcohol Use Screening Completed Through a Drug or Alcohol Test*
    - OR: "Laboratory Test, Performed: Drug and Alcohol Test" satisfies any:
      - (result: Drug Intoxication) <= 3 day(s) starts before start of Occurrence A of $EncounterInpatient
      - (result: Drug Intoxication) starts during Occurrence A of $EncounterInpatient
      - (result: Alcohol Intoxication) <= 3 day(s) starts before start of Occurrence A of $EncounterInpatient
      - (result: Alcohol Intoxication) starts during Occurrence A of $EncounterInpatient
    - *# Patient Refusal of Alcohol Use Screening*
    - OR: "Assessment, Performed not done: Patient Refusal" for "Validated Screening Tool for Alcohol Use" <= 3 day(s) starts before start of Occurrence A of $EncounterInpatient
    - OR: "Assessment, Performed not done: Patient Refusal" for "Validated Screening Tool for Alcohol Use" <= 1 day(s) starts after or concurrent with start of Occurrence A of $EncounterInpatient
- **Numerator Exclusions** =
  - None

- **Denominator Exceptions** =
  - None
- **Stratification** =
  - None

Data Criteria (QDM Variables)

- **$InterventionComfortMeasures** =
  - Union of:
    - "Intervention, Order: Comfort Measures"
    - "Intervention, Performed: Comfort Measures"
- **$EncounterInpatient** =
  - "Encounter, Performed: Encounter Inpatient" satisfies all:
    - (length of stay <= 120 day(s))
    - ends during "Measurement Period"

Data Criteria (QDM Data Elements)

- "Assessment, Performed: SASQ for Alcohol Use LOINC Value Set" using "SASQ for Alcohol Use LOINC Value Set LOINC Value Set (2.16.840.1.113762.1.4.1145.2)"
- "Assessment, Performed: Validated Screening Tool for Alcohol Use" using "Validated Screening Tool for Alcohol Use LOINC Value Set (2.16.840.1.113762.1.4.1145.1)"
- "Assessment, Performed not done: Impaired Cognition" using "Impaired Cognition Grouping Value Set (2.16.840.1.113762.1.4.1046.89)"
- "Assessment, Performed not done: Patient Refusal" using "Patient Refusal SNOMEDCT Value Set (2.16.840.1.113883.3.117.1.7.1.93)"
- "Diagnosis: Cognitive and Psychiatric Disorders Indicative of Impaired Cognition" using "Cognitive and Psychiatric Disorders Indicative of Impaired Cognition Grouping Value Set (2.16.840.1.113762.1.4.1111.120)"
- "Encounter, Performed: Encounter Inpatient" using "Encounter Inpatient SNOMEDCT Value Set (2.16.840.1.113883.3.666.5.307)"
- "Intervention, Order: Comfort Measures" using "Comfort Measures SNOMEDCT Value Set (1.3.6.1.4.1.33895.1.3.0.45)"
- "Intervention, Performed: Comfort Measures" using "Comfort Measures SNOMEDCT Value Set (1.3.6.1.4.1.33895.1.3.0.45)"
- "Laboratory Test, Performed: BH Blood alcohol test" using "BH Blood alcohol test Grouping Value Set (2.16.840.1.113883.3.1257.1.1602)"
- "Laboratory Test, Performed: Drug and Alcohol Test" using "Drug and Alcohol Test LOINC Value Set (2.16.840.1.113762.1.4.1145.3)"
- "Physical Exam, Performed: Cognitive Status" using "Cognitive Status LOINC Value Set (2.16.840.1.113762.1.4.1046.91)"
- Attribute: "Result: Drug Intoxication" using "Drug Intoxication SNOMEDCT Value Set (2.16.840.1.113762.1.4.1145.5)"
- Attribute: "Result: Never had 6 drinks or more on one occasion" using "Never had 6 drinks or more on one occasion LOINC Value Set (2.16.840.1.113762.1.4.1145.7)"
- Attribute: "Result: Alcohol Intoxication" using "Alcohol Intoxication SNOMEDCT Value Set (2.16.840.1.113762.1.4.1145.4)"
- Attribute: "Result: Impaired Cognition" using "Impaired Cognition Grouping Value Set (2.16.840.1.113762.1.4.1046.89)"
- Attribute: "Diagnosis: Cognitive and Psychiatric Disorders Indicative of Impaired Cognition" using "Cognitive and Psychiatric Disorders Indicative of Impaired Cognition Grouping Value Set (2.16.840.1.113762.1.4.1111.120)"

Supplemental Data Elements

- "Patient Characteristic Ethnicity: Ethnicity" using "Ethnicity CDCREC Value Set (2.16.840.1.114222.4.11.837)"
- "Patient Characteristic Payer: Payer" using "Payer SOP Value Set (2.16.840.1.114222.4.11.3591)"
- "Patient Characteristic Race: Race" using "Race CDCREC Value Set (2.16.840.1.114222.4.11.836)"
- "Patient Characteristic Sex: ONC Administrative Sex" using "ONC Administrative Sex AdministrativeGender Value Set (2.16.840.1.113762.1.4.1)"

Risk Adjustment Variables

- None

Measure Set	Substance Use measure set