Prepared for:

The Office of the National Coordinator for Health Information Technology (ONC) and The Substance Abuse and Mental Health Services Administration (SAMHSA)

ONC-SAMHSA Behavioral Health Clinical Quality Measure Initiative

Technical Expert Panel Results for Behavioral Health Domain – *Drug Use*

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by The MITRE Corporation

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Executive Summary

Background

The Office of the National Coordinator for Health Information Technology (ONC) and the Substance Abuse and Mental Health Services Administration (SAMHSA) engaged The MITRE Corporation to support the development of a portfolio of Behavioral Health (BH) Clinical Quality Measures (CQMs). This portfolio of BH CQMs are under consideration for future stages of the Centers for Medicare & Medicaid Services (CMS) Incentive Program for the Meaningful Use of Health Information Technology ("Meaningful Use"), which is part of the Health Information Technology for Economic and Clinical Health (HITECH) Act of 2009. This engagement was comprised of two phases:

1. Electronic specification (eSpecification) of prioritized BH CQMs under consideration for future stages of the Meaningful Use (MU) program
2. Development and facilitation of a Technical Expert Panel (TEP) of public and private BH specialists for the purpose of identifying and prioritizing recommendations for future development of BH related CQMs

This report presents results of the BH CQM Project Phase 2, in addition to the Technical Expert Panel (TEP) Phase 1 and Phase 2 efforts for the Drug Use BH domain.

Process

A TEP composed of public and private sector BH experts, representing the clinical domains of Alcohol Use, Autism, Depression, Drug Use, Suicide, and Trauma, was recruited, assembled, and facilitated over a 4-month period named "TEP Phase 1" from April through July 2012. Through the course of deliberations, the TEP was briefed on the MU program requirements and informed of the CQM development process, including clinical research, measure logic development, National Quality Forum (NQF) endorsement, and eSpecification creation. In a three-meeting weekly rotating cycle, each clinical domain was evaluated for the existence of CQMs included in the MU Stage 1 Final Rule, the MU Stage 2 Notice of Proposed Rulemaking (NPRM) and MU Stage 2 Final Rule, and those eSpecified as part of Project Phase 1. Additionally, the TEP reviewed results of environmental scans for the existence of measures not endorsed by the NQF and clinical literature searches for evidence warranting new measure development.

A "TEP Phase 2" focused for an additional three months from July through September 2012 on the topics of Depression Trended Outcome measurement and Drug Use/Prescription Drug Misuse measures.

Results

Table 1 provides an overview of the ONC-SAMHSA BH TEP's research activities and recommendations related to developing BH CQMs for the Drug Use domain.

Table 1. Behavioral Health Domain: *Drug Use*

Review	Result
Domain specific NQF endorsed measures	Two measures prioritized from Phase 1 of BH CQM project
Meaningful Use Stage 1—Final Rule	One measure related to this clinical domain
Meaningful Use Stage 2 —Final Rule	Two measures related to this clinical domain
NQF endorsed measures – future consideration	Two measures related to this clinical domain
Non-endorsed Measures (Agency for Healthcare Research and Quality [AHRQ] Database)	11 measures related to this clinical domain were reviewed by the TEP, one was recommended
Clinical Evidence	82 articles* covering 10 broad areas: • Review Studies • Guidelines • Drug Use Screening Tools • Drug Use Screening/Intervention/Treatment Outcomes • Treatment Outcomes—Motivational Interviewing • Drug Use Screening/Intervention/Treatment—Adolescent • Drug Use Screening/Intervention/Treatment—American Indian/Alaska Native • Drug Use Screening/Intervention/Treatment—Patients with Psychiatric Disorder • Physician Training • Drug Use and Electronic Health Records

* Citations were repeated when findings applied to more than one topic area.

Recommendations

Based on the TEP findings, the Drug Use subgroup recommends:

- Adoption of NQF Measures—eSpecified but not in Meaningful Use Stage 2 NPRM
  - NQF 1406—Risky Behavior Assessment or Counseling by Age 13 Years
  - NQF 1507—Risky Behavior Assessment or Counseling by Age 18 Years
- Further investigation for endorsement and eSpecification of measures form the AHRQ database identified by their National Quality Measures Clearinghouse (NQMC) numbers and measure stewards below:
  - NQMC 004208 (APA/NCQA/PCPI) Substance use disorders: percentage of patients aged 18 years and older with a diagnosis of current opioid addiction who were counseled regarding psychosocial AND pharmacologic treatment options for opioid addiction within the 12 month reporting period
- Additional Research
- On screening and follow up in the primary care setting that links screening to treatment outcomes
- On high risk populations including youth, justice involved comorbid HIV and elderly
- On self-administered screening and assessment tools
- Development of a composite measure for screening and brief counseling for tobacco, alcohol, and drug use/prescription drug misuse

The following report provides details concerning the ONC-SAMHSA BH TEP activities and recommendations for the Drug Use BH clinical domain.

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1 Background

Through the American Recovery and Reinvestment Act of 2009 (ARRA) Health Information Technology for Economic and Clinical Health (HITECH) Act, the Centers for Medicare & Medicaid Services (CMS) is authorized to provide reimbursement incentives for eligible professionals and hospitals for the Meaningful Use (MU) of certified Electronic Health Record (EHR) technology. The Office of the National Coordinator for Health Information Technology (ONC), through an agreement with CMS, has been tasked with developing a portfolio of Clinical Quality Measures (CQM) that capitalizes on the clinical data captured through EHRs for inclusion in the CMS EHR MU Incentive Program.

The Behavioral Health Coordinating Committee at the U.S. Department of Health and Human Services (DHHS), with support from the Office of National Drug Control Policy (ONDCP) Demand Reduction Interagency Workgroup EHR subcommittee, submitted consensus recommendations to the ONC, for behavioral health-relevant clinical quality measures to be included in Stage 2 of the MU incentive program. In July 2011, the ONC Federal Advisory Health Information Technology Policy Committee (HITPC) recommended to ONC that these measures be further developed.

SAMHSA and ONC jointly sponsored this project to follow up on these recommendations by developing and electronically specifying (eSpecification) BH CQMs to be added to the current EHR CQM portfolio of measures. The principal audience for these measures is primary care MU Eligible Professionals and Eligible Hospitals, although they may also be applicable to a broader range of BH professionals. The scope of the resulting BH eMeasure (BHeM) effort included strategic, technical, facilitation, coordination, clinical, and project management support for the development of a portfolio of electronically specified BH CQMs for potential inclusion in future stages of the CMS EHR MU Incentive Program.

BH CQMs for this project are focused in the clinical domains of:

- Alcohol Use
- Autism
- Depression
- Drug Use
- Suicide
- Trauma

This report presents results of the BH CQM Project Phase 2, including Technical Expert Panel (TEP) Phase 1 and Phase 2 efforts for the Drug Use BH domain.

2 Project Overview

The ONC and SAMHSA engaged The MITRE Corporation to support the development of a portfolio of BH CQMs proposed for inclusion in future stages of the CMS Incentive Program for the Meaningful Use of Health Information Technology (“Meaningful Use”), which is part of the Health Information Technology for Economic and Clinical Health (HITECH) Act of 2009. This engagement included two phases:

Phase 1- eSpecification of BH CQMs suitable for future stages of the MU program. Ten BH CQMs were eSpecified through this project and include:

- National Committee for Quality Assurance (NCQA)
  1. NQF # 0576, Follow-Up After Hospitalization for Mental Illness
  2. NQF #1401, Maternal Depression Screening
  3. NQF # 1406, Risky Behavior Assessment or Counseling by Age 13
  4. NQF # 1507, Risky Behavior Assessment or Counseling by Age 18
- The Joint Commission (TJC):
  5. NQF # 1661, SUB-1 Alcohol Use Screening
  6. NQF # 1663, SUB-2 Alcohol Use Brief Intervention Provided
- Center for Quality Assessment and Improvement in Mental Health (CQAIMH):
  7. NQF # 0109, Bipolar Disorder and Major Depression: Assessment for Manic or Hypomanic Behaviors
  8. NQF # 0110, Bipolar Disorder and Major Depression: Appraisal for Alcohol or Chemical Substance Use
  9. NQF #0111, Bipolar Disorder: Appraisal for Risk of Suicide
- Resolution Health, Inc. (RHI)
  10. NQF # 0580, Bipolar Antimanic Agent

Note: CQMs NQF #0110 and #1401 were included in MU Stage 2 Final Rule

Phase 2 - Development and facilitation of a TEP of public and private BH specialists for the purpose of identifying and prioritizing recommendations for potential new measures for future development.

2.1 Technical Expert Panel

A TEP composed of public and private sector BH experts, representing the clinical domains of Alcohol Use, Autism, Depression, Drug Use, Suicide, and Trauma, was recruited, assembled, and facilitated over a 4-month period named "TEP Phase 1" from April through July 2012. Through the course of deliberations, the TEP was briefed on the MU program requirements and informed of the CQM development process, including clinical research, measure logic development, National Quality Forum (NQF) endorsement, and eSpecification creation. In a three-meeting weekly rotating cycle, each clinical domain was evaluated for the existence of CQMs included in the MU Stage 1 Final Rule, the MU Stage 2 Notice of Proposed Rulemaking (NPRM), MU Stage 2 and those eSpecified as part of Project Phase 1. Additionally, the TEP reviewed results of environmental scans for the existence of measures not endorsed by the NQF and clinical literature searches for evidence warranting measure development.

A "TEP Phase 2" will focus for an additional three months of July through September 2012, on the topics of Depression Trended Outcome and Drug Use/Prescription Drug Misuse measures.

A list of all TEP members is included in Appendix A.

2.2 Purpose and Activities of the TEP

The purpose of the ONC-SAMHSA BH TEP was to:

- Recommend BH clinical quality measures for widespread adoption and use in future stages of the EHR Meaningful Use Incentive Program
- Recommend future measure development needs by evaluating available clinical research
- Provide private sector input regarding the feasibility of measure implementation

Over the course of the project the TEP completed a comprehensive review of existing BH-relevant CQMs including measures that are NQF endorsed, community measures in the AHRQ measure clearinghouse, and measures that were under development through similar federal initiatives. In addition, for each domain, the TEP reviewed the clinical literature to evaluate the state of the field of measure development and to make recommendations on the next steps for measure development.

A list of all scheduled meetings and topics is included in Appendix B.

Copies of the environmental scans are included in Appendix C.

SAMHSA is currently developing a National Behavioral Health Quality Framework. The framework is aligned with the National Quality Strategy and will prioritize six goals; (1) evidence-based prevention, treatment and recovery, (2) person and family-centered care, (3) coordination of behavioral health and other health care, (4) health living, (5) safe care, and (6) accessible and affordable care. The recommendations from the Technical Expert Panel are focused on measure recommendations for the Meaningful Use EHR incentive program and are primarily applicable to primary care and general hospital settings. These recommendations will be considered in the broad portfolio of SAMHSA quality work, including development of the framework and future measure development activities.

2.3 Common Themes in CQM Development for Behavioral Health

Many common themes emerged in the TEP discussions across the six domains. The United States (US) healthcare system is evolving rapidly. The widespread use of standardized data captured in EHRs has profound potential to improve quality measurement in both healthcare and research contexts. Our discussions highlighted some principals related to BH quality measures development for consideration in efforts to realize this potential.

Standardized, Validated Screening and Assessment Tools

Significant discussion focused on the use of valid tools for screening, assessment, and outcome monitoring for BH diagnoses. Many standardized assessment tools exist for any given BH condition. There is often no ‘gold standard’ assessment tool for a given purpose. As a result, measure developers often specify the use of ‘a valid instrument’. This can create complications for the e-specification of the measure and for data comparison across sites. However, while standards may be useful for exchanging data, mandating the use of a specific instrument may limit a provider’s ability to select tools that they prefer, or develop new, innovative approaches to screening and assessment. Development of standards for the endorsement of validated tools, as well as standard processes for calibrating tools to a standard scale would be incredibly

valuable for improving the quality and interoperability of data while allowing the field to evolve with the state of the science.

Comprehensive Measure Sets

For each of the six domains TEP members discussed the long range goal of developing measure sets that support evidence based practices across the full continuum of care. For most BH disorders addressed in primary care settings this includes prevention, screening, follow up assessments, screening for co-morbid conditions, primary care based intervention, referral management, care coordination, and outcome tracking. For many of the domains addressed in this project the state of the research does not yet support the development of CQMs for each of these purposes. However, it was useful to consider the current state of measure development within this context to make recommendations for the next stages of measure development.

Implementation in Real World Settings

TEP discussions also highlighted the need to consider measure development in the context of real world healthcare settings. Our national healthcare system is rapidly evolving and health reform is putting significant pressure on primary care providers. The efficacy of primary care based interventions for behavioral disorders is highly dependent on implementation which can be influenced by acceptability to providers, ability to integrate best practices into their workflow, provider attitudes and comfort level with the intervention, etc. The TEP highlighted the need for additional research to address the implementation barriers that exist in busy practices, including technologies that reduce patient and provider burden, to identify methods for addressing patients with multiple behavioral health co-morbidities, and to determine how clinical decision support can be tied to CQMs in EHR systems.

3 Domain-Specific Results: *Drug Use*

3.1 Environmental Scan Results

MITRE engaged The Cloudburst Group as subcontractor for the clinical literature review process due to their expertise in completing and analyzing clinical literature research in the six key domains of Alcohol, Substance Abuse, Depression, Suicide, Trauma and Autism. The Cloudburst Group deliverables were aligned with the goals of each TEP meeting (see Table 2).

Table 2. TEP Goals and Literature Reviews

TEP Phase 1 – Goal (All 6 Domains)	Literature Review Deliverables
Meeting 1 - Orientation and Familiarity with Current Measures	TEP participation and orientation if available
Meeting 2 - Non-Endorsed Measures Recommendations/Lit Search Question Formation	Delivery of Phase 1 environmental scan literature review domain-specific search questions for all 6 domains and participation in weekly TEPs
Meeting 3 - Select Promising Clinical Research	Delivery of final results from Phase 1 environmental scan of all 6 domains and participation in weekly TEPs

The Cloudburst Group provided literature search questions for review with the TEP at each Phase 1, Meeting 2 discussion. These questions were based on a preliminary review of ongoing research that could inform the development or retooling of each proposed measure or the creation of new measures. The answers to these questions and additional comments from the TEP members in the Meeting 2 discussions were used to generate the search criteria for the environmental scans. The results of these scans were then summarized and presented to each TEP in an executive summary (Table 3). The most appropriate articles were then collated for each domain and presented in a literature matrix (see Appendix C).

Recommended Search Terms for Drug Use Literature Scan:

- Drug Use Screening Tools
- Drug Use Primary Care screening
- Drug Use Screening Adolescents
- Drug Use treatment outcomes
- Drug Use treatment motivational interviewing
- Drug Use screening EHR
- Drug Use SBIRT, SBI
- Drug Use Screening American Indians/Native Alaskans
- Drug Use Screening Guidelines, Protocols

Below is a high-level summary of the 82 total results divided under 10 broad areas – 5 highlighted below. The full matrix including summaries of each of the citations is available in Appendix C of this paper.

Table 3. Literature Search Results and Findings

Topics/Search Focus Area	Summary of Findings
Studies and Guidelines	• 2008 US Preventive Services Task Force did not find sufficient evidence to recommend universal drug use screening in primary care settings • SBIRT for drug use more complicated to implement and evaluate than for alcohol use • American Pediatrics Association (APA) referral guidelines(2012) recommend use of validated Car, Relax, Alone, Forget Friends and Trouble (CRAFFT) screening tool integrated into a two-step adolescent SBIRT for all adolescents • 2012 NIDA guidelines for adult drug use screening propose two-step use of the validated single question, NIDA Quick Screen and a NIDA-modified Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) screen for “Yes” answer
Drug Use Screening Tools	• Single screening question tool validated as 100% sensitive and 73.5% specific for drug use disorder in primary care • NIDA expert panel recommends universal single question population-based screen followed by 10-question Drug Abuse Screening Test (DAST-10) • Short Inventory of Problems—Alcohol and Drugs modified for Drug Use (SIP-DU) validated by DAST-10 as more sensitive screening for drug use consequences • National Institute on Alcohol Abuse and Alcoholism (NIAAA) daily limit 1-item screen effective in addiction-related diagnosis

Topics/Search Focus Area	Summary of Findings
Drug Use Screening / Intervention / Treatment Outcomes	• In primary care settings, not yet enough substantiated evidence for the use of SBIRT and drug misuse • Economic analyses suggest that SBI interventions are cost-effective, as even small reductions of drug or alcohol use are substantial over the long-term • Research underway to focus on advancing understanding of wider implementation of brief intervention
Drug Use Screening / Intervention / Treatment - Adolescents	• SBIRT found effective for managing adolescent substance use in primary care settings • Brief intervention found to reduce drug and alcohol use in high risk adolescents • When positive, motivational interviewing, referral to treatment and family engagement should be incorporated
Physician Training	• SBIRT training is effective educational tool that increased MD knowledge, confidence, and sense of responsibility • Obstacles/barriers include brief office visit, time to administer, referral wait lists or denial by various third party payers

3.2 Measure Recommendations

Tables 4 and 5 provide an overview of current regulatory measures, the ONC-SAMHSA BH TEP's research activities and recommendations related to developing a BH CQM for the Drug Use domain.

Table 4. Behavioral Health Domain: Drug Use - CURRENT POLICY

Review	Result
Meaningful Use Stage 1—Final Rule	One measure related to this clinical domain • NQF 0004—Initiation and Engagement of Alcohol and Other Drug Dependence Treatment: (a) Initiation, (b) Engagement
Meaningful Use Stage 2 —Final Rule	Two measures related to this clinical domain • NQF 0004—Initiation and Engagement of Alcohol and Other Drug Dependence Treatment: (a) Initiation, (b) Engagement • NQF 0110—Bipolar Disorder and Major Depression: Appraisal for Alcohol or Chemical Substance Use

Table 5. Behavioral Health Domain: Drug Use – FUTURE RECOMMENDATIONS

Review	Result
NQF endorsed measures – future consideration	Two measures related to this clinical domain • NQF 1406—Risky Behavior Assessment or Counseling by Age 13 Years • NQF 1507—Risky Behavior Assessment or Counseling by Age 18 Years
Non-endorsed Measures (AHRQ Database)	One measures related to this clinical domain • NQMC 004208 (APA/NCQA/PCPI)- Substance use disorders: percentage of patients aged 18 years and older with a diagnosis of current opioid addiction who were counseled regarding psychosocial AND pharmacologic treatment options for opioid addiction within the 12 month reporting period
Clinical Evidence	Recommendations for additional research focused on: • On screening and follow up in the primary care setting that links screening to treatment outcomes • On high risk populations including youth, justice involved, HIV and elderly • On self-administered screening and assessment tools • Development of a composite measure for screening and brief counseling for tobacco, alcohol, and drug use/prescription drug misuse

* Citations were repeated when findings applied to more than one topic area.

In addition to the recommendations shared in this table, several TEP discussions should be highlighted:

In 2008, the US Preventive Services Task Force (USPSTF) concluded that the current evidence was insufficient to recommend universal screening for illicit drug use in adolescents or adults. They highlighted the need for more studies focused on non-treatment seeking populations within primary care based settings as well as research linking primary care based screening to improved outcomes. While some additional research evidence has accumulated since 2008 that supports primary care based screening and brief counseling or intervention there was not consensus from the TEP on whether it would be sufficient to warrant recommendation of population based screening in the primary care environment.

However, there was a sense of urgency amongst the TEP members on the growing public health epidemic related to drug use and prescription drug misuse. Drug use among teens is rising and there has been a dramatic increase in prescription drug misuse leading to a sharp rise in overdose deaths. Deaths from drug overdose and abuse now exceed deaths from motor vehicle accidents in the U.S.

There are two drug use measures included in MU Stage 2 including NQF 0004—Initiation and Engagement of Alcohol and Other Drug Dependence Treatment: (a) Initiation, (b) Engagement and NQF 0110—Bipolar Disorder and Major Depression: Appraisal for Alcohol or Chemical Substance Use. The TEP also expressed strong support for inclusion of two additional NQF-endorsed measures, NQF 1406 and 1507 for Risky Behavior Assessment or Counseling tobacco, alcohol and drug use and risky sexual behavioral by Ages 13 and 18 Years, respectively in future stages of MU. These preventive counseling measures target substance use in vulnerable periods in adolescence and comorbid subpopulations. The TEP highlighted the importance of prevention and early intervention strategies in addressing drug abuse.

In addition, the TEP expressed support for measures of medication assisted treatment (MAT) such as NQMC 004208 (APA/NCQA/PCPI) - Substance use disorders: percentage of patients

aged 18 years and older with a diagnosis of current opioid addiction who were counseled regarding psychosocial AND pharmacologic treatment options for opioid addiction within the 12 month reporting period. MAT has been shown to improve outcomes but it is currently underutilized and therefore an important target for quality improvement.

The TEP also discussed measure gaps, highlighting that the long range goals for measure development is to develop a portfolio of CQMs to address the full continuum of care for drug abuse including; prevention, screening and brief counseling, referral to treatment in specialty care, MAT, outcome measurement, and recovery support. The highest priority measure gap identified is the need for development of additional measures for screening and brief counseling or intervention including SBIRT (Screening Brief Intervention and Referral to Treatment). As the current state of the evidence may not support population based screening the TEP recommended development of additional measures similar to NQF 0110 (Bipolar Disorder and Major Depression: Appraisal for Alcohol or Chemical Substance Use) targeting additional high risk groups such as patients who screen positive for alcohol misuse, criminal justice involved, patients with HIV, and elderly etc.

The TEP members also expressed support for composite measures that would include screening and brief counseling for alcohol, tobacco, illicit drug use and prescription drug misuse. The TEP evaluated the feasibility of building a composite measure or suite of measures for this domain during the second phase of this project. Specific recommendations are highlighted in Section 6 below.

4 Future Recommendations

Though the focus of this project was to recommend CQMs for the HITECH MU program, the TEP was also asked to highlight any additional research that is needed to advance measure development within this field.

As highlighted by the USPSTF, the TEP supported the need for additional research focused on linking SBIRT of Drugs to treatment outcomes. In addition, more research targeted to high risk populations including youth, justice involved, HIV and elderly is needed. These studies should include randomized pragmatic trials in real world settings to address challenges to implementation within busy primary care and emergency settings. The TEP also highlighted the need for additional research in applying chronic care model for substance abuse treatment including metrics to assess progress while in treatment as well as long term outcomes for recovery.

The TEP also suggested that there may be existing data sources that could be analyzed for these purposes including healthcare organizations and grantees of SAMHSA or the NIH that have implemented SBIRT programs.

Finally, the TEP also recommended additional investigation of the validity and process for capturing and storing patient self-administered screening and assessment tools in an electronic medical record. Clinical evidence exists for the effectiveness of patient self-administered alcohol screening tools as a way to reduce the provider burden in busy primary care and emergency department settings. The TEP supported further development and validation of self-administered screening and assessment tools for drug use.

5 TEP Phase I Conclusion

The ONC-SAMHSA Behavioral Health CQM TEP, Drug Use domain subgroup, identified two existing NQF-endorsed CQMs and recommended them for the HITECH Meaningful Use of Health IT Incentive program. In addition, the TEP recommended further development of CQMs for MAT and screening and primary care based intervention for substance abuse. The TEP also highlighted the need for additional research to establish the benefit of SBIRT (and related models) in general medical care setting to improved patient outcomes.

6 TEP Phase II – Drug Use/Prescription Drug Misuse Measure

6.1 Goals/Outcomes for Phase II

On February 16, 2012, the BH CQM Project Core Team met to review requests for additional TEP activity in the specific focus topics of Depression Screening Trended Outcomes and Drug Use/Prescription Drug Misuse. The Core Team agreed that a "TEP Phase 2" for these two areas would follow completion of TEP Phase 1 activities for all domains.

6.2 TEP Phase 2 Process and Decision

On August 9, 2012, an in-person meeting of the TEP was held at the HHS Headquarters, Hubert H. Humphrey Building in Washington, D.C. Two breakout sessions were devoted to the discussion and consensus-building of a future-state Drug Use/Prescription Drug Misuse measure. There were significant discussion surrounding the priorities for measure development is in this domain. Discussions centered on development of primary care and emergency department based measures for screening and brief counseling or SBIRT. The consensus of the TEP was to recommend development of a new outpatient composite measure for substance use screening and counseling modeled after the AMA/PCPI unhealthy alcohol use measure.

The TEP recommended this composite measure as the highest priority because all substance use issues including tobacco, alcohol, and drugs abuse/prescription drug misuse are high public health priorities. Composite measures not only to reduce providers' burden but also provide valuable information on whether or not a patient has received all recommended components of care, and assess overall quality for substance use screening. In addition, there are policy efforts to reduce the number of measures required of providers. Screening for tobacco, alcohol and drug use are public health priorities highlighted in the National Quality Strategy. The proposed single measure aims to address all three.

6.3 Description of Proposed Measure

The TEP reached consensus on the following proposed measure:

Title: "Substance Abuse Screen and Counseling"

Description: Percentage of patients aged 18 years and older who were screened for tobacco use, unhealthy alcohol use, illegal drug use and prescription drug misuse AND who received brief counseling if identified as a "risky" user.

Numerator Statement: Ambulatory patients aged 18 years and older who were screened for tobacco use, unhealthy alcohol use, illegal drug use and prescription drug misuse at least once during the 2-year measurement period using a systematic screening method AND who received brief counseling if identified as a "risky" user.

Denominator Statement: All ambulatory patients aged 18 years and older who were seen twice for any visits or who had at least one preventive care visit during the two-year measurement period.

Exclusions: Denominator Exclusion – Documentation of medical reasons for not screening for these conditions (e.g. limited life expectancy)

6.4 Technical Assessment

The TEP leadership reviewed the measure options with the MITRE project team, including a systems engineer with clinical quality eMeasure expertise and determined that while engineering obstacles exist with the measure calculations, they should not hinder the recommendation to pursue development of these measures. Comments regarding the proposed Drug Use measure include:

- This proposed measure is very similar to The Joint Commission (TJC) measures for alcohol screening and follow up in inpatient settings (SUB-1, and SUB-2). These measures have been eSpecified under the Behavioral Health eMeasures project and may serve as appropriate models for developing the technical specifications of the proposed composite measure.
- Exceptions: Exceptions such as "Patient refusal," are very difficult to implement in an electronic measure.
- To develop e-specifications there will be a need to define the assessment tool options and get appropriate LOINC codes for them. Suggested we limit the # to make the complexity manageable.
- Composite measures increase the complexity of the measure specification. The technical experts recommended exploration of an inverse logic model in which the measure defines the undesirable clinical process (e.g., patients who screen positive for any risky substance use that do not receive brief counseling).

6.5 Clinical Support

The Cloudburst Group performed an environmental scan focused on supporting the parameters of the proposed measure. Table 6 below highlights particular evidence in support of the proposed measure numerator concepts outlined in Section 6.3. A detailed matrix of all potential supporting clinical evidence is attached in Appendix C.5.

Table 6. Proposed Substance Abuse Screen and Counseling Measure – Relevant Clinical Citations

General Numerator Concept	Specific Numerator Concept	Relevant Citations
Ambulatory patients aged18 years and older who were screened using a systematic screening method AND who received brief counseling if identified as "risky" user	Tobacco Use	• Refer to evidence used to endorse NQF measures 0028a Tobacco Use Assessment, and NQF 0028b Tobacco Cessation Intervention (Meaningful Use Stage 1 Final Rule).
	Unhealthy Alcohol Use	• Gryczynski, J., Mitchell, S.G., et al. (2011). The relationship between services delivered and substance use outcomes in New Mexico's Screening, Brief Intervention, Referral and Treatment (SBIRT) Initiative. Drug and Alcohol Dependence, 118(2–3):152-157. • Kaner, E.F.S., Dickinson, H.O., Beyer, F., Pienaar, E., Schlesinger, C., Campbell, F., et al. (2009). The effectiveness of brief alcohol interventions in primary care settings: A systematic review. Drug and Alcohol Review, 28(3), 301-323. (Note: Article is a systematic review) • Kypri, K. et al. (2009) Randomized Controlled Trial of Proactive Web-Based Alcohol Screening and Brief Intervention for University Students. Arch Intern Med. 169(16): 1508-1514. • Madras, B. K., Compton, W.M., et al. (2009). 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, 99(1–3): 280-295.
	Illegal Drug Use	• Gryczynski, J., Mitchell, S.G., et al. (2011). The relationship between services delivered and substance use outcomes in New Mexico's Screening, Brief Intervention, Referral and Treatment (SBIRT) Initiative. Drug and Alcohol Dependence, 118(2–3): 152-157. • D'Onofrio, G., Degutis, L.C. (2010). Integrating Project Alcohol and Substance Abuse Services, Education, and Referral to Treatment (ASSERT): A screening, intervention, and referral to treatment program for unhealthy alcohol and drug use into an urban emergency department. Acad Emerg Med.,17:903–911. • Schonfeld, L. et al. (2010). Screening and Brief Intervention for Substance Misuse Among Older Adults: The Florida BRITE Project. Research and Practice, 100(1). • Madras, B.K., Compton, W.M., et al. (2009). 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, 99(1–3): 280-295. • Bernstein, E., Edwards, E., Dorfman, D., Heeren ,T., Bliss ,C., Bernstein, J. (2009). Screening and brief intervention to reduce marijuana use among youth and young adults in a pediatric emergency department. Acad Emerg Med.,16:1174–1185.
	Illegal Drug Use (con't)	• Humeniuk, R., Dennington, V., Ali, R., and WORLD Health Organization (WHO) ASSIST Phase III Study Group (2008). The effectiveness of a brief intervention for illicit drugs linked to the ASSIST screening test in primary health care settings: A technical report of phase III findings of the WHO ASSIST Randomized Controlled Trial (Draft). Geneva, Switzerland. • Bernstein, J., Bernstein, E. et al. (2005). Brief motivational intervention at a clinic visit reduces cocaine and heroin use. Drug Alcohol Dependence, 77(1): 49-59.
	Prescription Drug Misuse	• Gryczynski, J., Mitchell, S.G., et al. (2011). The relationship between services delivered and substance use outcomes in New Mexico's Screening, Brief Intervention, Referral and Treatment (SBIRT) Initiative. Drug and Alcohol Dependence, 118(2–3): 152-157.

General Numerator Concept	Specific Numerator Concept	Relevant Citations
		• Schonfeld, L. et al. (2010). Screening and brief intervention for substance misuse among older adults: The Florida BRITE Project. Research and Practice, 100(1). • Smith, P.C., Schmidt, S.M., Allensworth-Davies, D., et al. (2010). A single-question screening test for drug use in primary care. Arch Internal Med, 170:1155–1160. (Note: Article shows strong evidence for utility of a single item screen, but does not include an intervention component)
Promising Evidence of self-administered, single-item screening question for unhealthy drug use	Illegal Drug Use	• Boston Medical Center Corporation. (2012). Validation of Self-administered Single-item screening Question (SISQ) for unhealthy drug use. (Unpublished report, Principal Investigator: Richard Saitz, MD).

6.6 TEP Phase 2 Conclusion

The TEP finds that the initial clinical evidence and technical feasibility review supports further development of a Composite Substance Abuse Screening and Counseling measure instrument for tobacco, alcohol, and drug use/prescription drug misuse. Support needs may include identification of an appropriate clinical quality measure developer, electronic specification development, and additional TEP activity.

Appendix A TEP Member List

COMMUNITY MEMBERS

Gavin Bart*, MD FACP FASAM, Director, Division of Addiction Medicine, Hennepin County Medical Center

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Appendix B Meeting Schedule

BH CQM TEP Schedule and Topics – Revised 7/6/12		
Week #	**Week of:**	**Topic**
1	4/9-4/13	KICK-OFF – OPTION 1: 4/9: 1:00P-3:00P OPTION 2: 4/12: 12:30P–2:30P
2	4/16 3-4:30pm Eastern	Suicide/Trauma – Week 1
3	4/23 3-4:30pm Eastern	Autism – Week 1
4	4/30 3-4:30pm Eastern	Depression – Week 1
5	5/7 3-4:30pm Eastern	Drugs/Alcohol – Week 1
6	5/14 3-4:30pm Eastern	Suicide/Trauma – Week 2
7	5/21 3-4:30pm Eastern	Autism – Week 2
8	5/29 3-4:30pm Eastern	Depression – Week 2
9	6/4 3-4:30pm Eastern	Drugs/Alcohol – Week 2
10	6/11 3-4:30pm Eastern	Suicide/Trauma – Week 3
11	6/22 3-4:30pm Eastern	Autism – Week 3
12	6/25 3-4:30pm Eastern	Depression – Week 3
13	7/2 3-4:30pm Eastern	CANCELLED
14	7/9 3-4:30pm Eastern	Drugs/Alcohol – Week 3
TEP PHASE II		
15	7/16 3-4:30pm Eastern	Depression – Week 1
16	7/23 3-4:30pm Eastern	Drug Use/PDM – Week 1
17	7/30 3-4:30pm Eastern	Depression – Week 2 *
18	8/6 3-4:30pm Eastern	Drug Use/PDM – Week 2 *
ADDED	**8/9 All day event**	**In person and Webinar**
19	8/13 3-4:30pm Eastern	Depression – Week 3 *
20	8/20 3-4:30pm Eastern	Drug Use/PDM – Week 3 *
21	8/27 3-4:30pm Eastern	Depression – Week 4 *
22	9/3 3-4:30pm Eastern	Drug Use/PDM – Week 4 *
23	9/10 3-4:30pm Eastern	Depression – Week 5 *
24	9/17 3-4:30pm Eastern	Drug Use/PDM – Week 5 *
		*if needed

Appendix C Environmental Scans

C.1 NQF-Endorsed Measures

C.2 AHRQ Measures (Non-NQF-Endorsed)

C.3 Clinical Literature Search Matrix

C.4 Clinical Literature Search Summary

C.5 Proposed Measure Supporting Evidence Matrix

High Priority DRUG USE Clinical Quality Measures for Meaningful Use (Federal Subgroup – 12/15/11)

NQF #	Measure Title	Measure Description	Numerator Statement	Denominator Statement	Measure Steward	Link to NQF website
NQF# 1406	Risky Behavior Assessment or Counseling by Age 13 Years	Percentage of children with documentation of a risk assessment or counseling for risky behaviors by the age of 13 Years. Four rates are reported: Risk Assessment or Counseling for Alcohol Use, Risk Assessment or Counseling for Tobacco Use, Risk Assessment or Counseling for Other Substance Abuse, Risk Assessment or Counseling for Sexual Activity	Children with documentation of a risk assessment or counseling for risky behaviors by the age of 13 Years	Children who turned 13 in measurement year.	National Committee for Quality Assurance (NCQA) Recommend this measure be redefined for adults and endorsed	http://www.qualityforum.org/MeasureDetails.aspx?actid=0&SubmissionId=1406#k=1406&e=1&st=&sd=&mt=&cs=&ss=&s=n&so=a&p=1
NQF# 1507	Risky Behavior Assessment or Counseling by Age 18 Years	Percentage of children with documentation of assessment or counseling for risky behavior. Four rates are reported: assessment or counseling for alcohol use, tobacco use, other substance use, and sexual activity.	Children who had documentation in the medical record of a Risky Behavior Assessment or Counseling By Age 18 Years	Children with a visit who turned 18 years of age in the measurement year	National Committee for Quality Assurance (NCQA) Recommend this measure be redefined for adults and endorsed	http://www.qualityforum.org/MeasureDetails.aspx?actid=0&SubmissionId=1507#k=1507&e=1&st=&sd=&mt=&cs=&ss=&s=n&so=a&p=1

Domain: Substance Use (Keyword: Substance Abuse) – Environmental Scan

Search Criteria: Substance Abuse and Ambulatory

- 45 results initially identified
  - 13 removed (NQF endorsed)
- Final pool = 32 results for review

Full List of Original Results*

(*includes NQF endorsed measures)

Click Here

Search Criteria: Substance Abuse and Hospitals

- 29 results initially identified
  - 6 removed (NQF endorsed)
- Final pool = 19 results for review

Full List of Original Results*

(*includes NQF endorsed measures)

Click Here

Domain: Substance Use (Keyword: Substance Abuse, Ambulatory) – Top Results

	Measure Review (M = Maybe, X = No Y = Yes)	Prioritized Result Summary
1	X	Mental health/substance abuse: mean of patients' change scores on the "Substance Abuse" subscale of the BASIS-24® survey. 2004 Oct. NQMC:002660. Eisen, Susan V., PhD - Independent Author(s).
2	X	Mental health/substance abuse: mean of patients' overall change scores on the BASIS-24® survey. 2004 Oct. NQMC:002656. Eisen, Susan V., PhD - Independent Author(s).
3	X	Mental health/substance abuse: mean of patients' change scores on the "Depression/Functioning" subscale of the BASIS-24® survey. 2004 Oct. NQMC:002657. Eisen, Susan V., PhD - Independent Author(s).
4	M	Substance use disorders: percentage of patients aged 18 years and older with a diagnosis of current alcohol dependence who were counseled regarding psychosocial AND pharmacologic treatment options for alcohol dependence within the 12 month reporting period. 2008 Jul. NQMC:004007. American Psychiatric Association - Medical Specialty Society; National Committee for Quality Assurance - Health Care Accreditation Organization; Physician Consortium for Performance Improvement® - Clinical Specialty Collaboration.
5	Y	Substance use disorders: percentage of patients aged 18 years and older with a diagnosis of current substance abuse or dependence who were screened for depression within the 12 month reporting period. 2008 Jul. NQMC:004006. American Psychiatric Association - Medical Specialty Society; National Committee for Quality Assurance - Health Care Accreditation Organization; Physician Consortium for Performance Improvement® - Clinical Specialty Collaboration.
6	Y	Substance use disorders: percentage of patients aged 18 years and older with a diagnosis of current opioid addiction who were counseled regarding psychosocial AND pharmacologic treatment options for opioid addiction within the 12 month reporting period. 2008 Jul. NQMC:004208 .American Psychiatric Association - Medical Specialty Society; National Committee for Quality Assurance - Health Care Accreditation Organization; Physician Consortium for Performance Improvement® - Clinical Specialty Collaboration.

Domain: Substance Use (Keyword: Substance Abuse, Hospitals) – Top Results

	Measure Review (M = Maybe X = No Y = yes)	Prioritized Result Summary
1	Y	Hospital-based inpatient psychiatric services: the percentage of patients admitted to a hospital-based inpatient psychiatric setting who are screened within the first three days of admission for all of the following: risk of violence to self or others, substance use, psychological trauma history and patient strengths. 2010 Dec. **[NQMC Update Pending]** NQMC:006322 . The Joint Commission - Health Care Accreditation Organization.
2	X	Mental health/substance abuse: mean of patients' change scores on the "Substance Abuse" subscale of the BASIS-24® survey. 2004 Oct. NQMC:002660. Eisen, Susan V., PhD - Independent Author(s).
3	X	Mental health/substance abuse: mean of patients' overall change scores on the BASIS-24® survey. 2004 Oct. NQMC:002656. Eisen, Susan V., PhD - Independent Author(s).
4	X	Mental health/substance abuse: mean of patients' change scores on the "Depression/Functioning" subscale of the BASIS-24® survey. 2004 Oct. NQMC:002657. Eisen, Susan V., PhD - Independent Author(s).

Domain: Substance Use (Keyword: Prescription Drug Misuse) – Environmental Scan

Search Criteria: Prescription Drug Misuse

- 6 results initially identified
  - 5 removed (NQF endorsed)
- Final pool = 1 result for review

Full List of Original Results*

(*includes NQF endorsed measures)

Click Here

Domain: Substance Use (Keyword: Prescription Drug Misuse) – Top Result

	Measure Review (M = Maybe X = No Y = yes)	Prioritized Result Summary
1	Y	**Substance use disorders: percentage of patients aged 18 years and older with a diagnosis of current opioid addiction who were counseled regarding psychosocial AND pharmacologic treatment options for opioid addiction within the 12 month reporting period.** 2008 Jul. NQMC:004208 American Psychiatric Association - Medical Specialty Society; National Committee for Quality Assurance - Health Care Accreditation Organization; Physician Consortium for Performance Improvement® - Clinical Specialty Collaboration.

	Journal / Publication Title (citation)	Year of Pub.	Type / Topic	Target Population/Subpopulati		Study Setting	Screening Tools/ Measures	Results / Summary Notes	Findings / Implications for Primary Care Settings	Weighted Relevance		
				Age Range	Risk Group					High	Med	Low
	Drug Misuse - Risk Assessment											
	Review Studies											
1	Screening in Primary Care Settings for Illicit Drug Use: Staged Systematic Review for the United States Preventive Services Task Force	2008	Systematic review to update 1996 USPSTF recommendation on screening for drug misuse in primary care.			Primary Care Settings		Majority of trials conducted among treatment-seeking populations, thus the relevance of outcomes from such studies is of uncertain applicability to asymptomatic primary care populations that could be screened for drug misuse.	Found no evidence addressing the effects on health outcomes of screening in primary care settings to identify and treat drug misuse among asymptomatic individuals.	H1		
2	Lanier, D. and S. (2008). Screening in Primary Care Settings for Illicit Drug Use: Assessment of Screening Instruments A Supplemental Evidence Update for the U.S. Preventive Services Task Force. 540 Gaither Road, Rockville, MD 20850, U.S. Department of Health and Human Services	2008	Supplemental Evidence to identify standardized instruments for detecting use/abuse of illicit drugs; and to rate instruments short enough to use in busy primary care practice setting			Primary Care Settings	CRAFFT, ASSIST, CAGE-AID, DAST-20	CRAFFT instrument was adequately validated for screening adolescents for drug use/misuse. Three instruments of various lengths (ASSIST, CAGE-AID, and DAST-20) were validated for screening adults.	Standardized questionnaires short enough to be useful in practice settings,acceptable accuracy and reliability in screening for drug use/misuse. CRAFFT validated for screening adolescents for drug use/misuse and the ASSIST, CAGE-AID, and DAST-20 validated for screening adults. Greatest gap in the evidence was lack of studies that shed light on the feasibility/usefulness of screening instruments in a busy practice.	H1		
3	Humphreys, K. and A. T. McLellan (2011). "A policy-oriented review of strategies for improving the outcomes of services for substance use disorder patients*." Addiction 106(12): 2058-2066.	2011	Review of policies which may improve care for individuals with substance use disorders(US and UK)					Public policy makers can use a range of strategies to improve the outcomes of substance use disorder treat-ment. Many are poorly developed at this point, and/or have weak empirical support, or both. Incentives for particular clinical practices can definitely change what systems do, but less clear which of those system changes translate into better patient outcomes.	Evidence clear that process-focused quality improvement strategies can change what providers do and how treatment programs work, but such changes have thus far demonstrated only minimal impact on patient outcomes. Patient-focused strategies face challenges including treatment providers avoiding hard-to-treat patients or spending inordinate time relocating patients after treatment to assess outcome.		M2	
4	Pilowsky, D.J. & Wu, L. Screening for alcohol and drug use disorders among adults in primary care: a review 2012	2012	Review: prevalence of alcohol and drug use disorders (abuse or dependence) in primary care and emergency departments, as well as current screening tools and brief interventions.					Review supports usefulness of screening for AUDs in primary care settings. AUDIT / CAGE, perform better than other methods (eg, asking about the frequency and quantity of alcohol use); role of biomarkers and of advanced technologies in screening deserves further study; Brief interventions have been shown to be effective to cut drinking- exception is those who are already alcohol-dependent.	Screening should be used only in settings where an intervention can be delivered immediately or shortly after screening is done; Lack of funding has been an impediment to screening for substance abuse. Funding likely to become available when Affordable Care Act is fully implemented. Having enough treatment facilities for those screening positive and referred for treatment will be a challenge once screening is widely implemented	H1		

	Journal / Publication Title (citation)	Year of Pub.	Type / Topic	Target Population/Subpopulati		Study Setting	Screening Tools/ Measures	Results / Summary Notes	Findings / Implications for Primary Care Settings	Weighted Relevance		
				Age Range	Risk Group					High	Med	Low
5	Saitz, R., D. P. Alford, et al. (2010). "Screening and brief intervention for unhealthy drug use in primary care settings: randomized clinical trials are needed." J Addict Med 4(3): 123-130.	2010	Article discusses rationale/potential for drug SBI to improve drug-use outcomes			Primary Care Settings	Conceptual Framework of SBIRT: Brief intervention includes clear directive advice, focus is primarily on increasing patient insight/awareness regarding substance use and encouraging behavioral change through motivational interviewing and self-management	These author's caution that SBI has proven efficacy for nondependent unhealthy alcohol and drug use in some health care settings, benefit may not translate to drug users identified by screening in primary care. BI for drug use in a general health setting likely to be more complicated than BI for alcohol use and likely to involve a greater proportion of patients with dependence than BI for screen-identified unhealthy alcohol use. Also, DAST and ASSIST cannot be considered brief and not likely to be widely distributed.	Scarcity of evidence from controlled clinical trials in the primary care setting has prevented the inclusion of drug SBI in preventive service recommendations. Absence of randomized trial evidence for drug SBI among adults in the primary care setting is a major concern. The WHO study, only RCT study to date, is not generalizable to US primary care settings. No major professional organizations recommend universal drug SBI in primary care settings. Existing studies insufficient to justify changes in clinical practice. Need for large-scale RCT's.	H1		
6	Bernstein, E., J. A. Bernstein, et al. (2009). "SBIRT in Emergency Care Settings: Are We Ready to Take it to Scale?" Academic Emergency Medicine 16(11): 1072-1077.	2009	Panel discussion addressed SBIRT research, andt translation; SBIRT grant program's progress to date; lessons learned; limitations of evidence for universal alcohol and drug ED screening and BI			ED		"We do not know the efficacy of BI for unhealthy alcohol or drug use that is identified by screening in EDs. We do not know the efficacy for alcohol or drug dependence or adolescents or the effects of BI on morbidity and mortality in any setting" Richard Saitz, MD,	SBI for drug use is more complicated than alcohol SBI: there are numerous drugs, severity is greater, and brief tools do not exist to efficiently identify illicit and nonmedical prescription drug use. Clearly, additional trials are needed before universal drug SBI is ready for practice		M2	
7	Young, M., A. Stevens, et al. (2012). "Effectiveness of brief interventions as part of the screening, brief intervention and referral to treatment (SBIRT) model for reducing the nonmedical use of psychoactive substances: a systematic review protocol." Systematic Reviews 1(1): 22.	2012	Article describes protocol for future Canadian systematic review to determine effects of BIs, SBIRT protocol, on reducing substance use in adolescents/adults					TBD	Review will provide evidence on the effectiveness of brief interventions as part of the Screening, Brief Intervention, and Referral to Treatment protocol aimed at the non-medical use of psychoactive substances and may provide guidance as to where future research might be most beneficial..			L3
8	Substance Abuse and Mental Health ServicesAdministration, Results from the 2010 National Survey on Drug Use and Health: Summary of NationalFindings, NSDUH Series H-41, HHS Publication No. (SMA) 11-4658. Rockville, MD: Substance Abuse andMental Health Services Administration, 2011	2011	NSDUH survey - showing rise in illicit drug use 2008 - 2010					Continuing rise in the rate of current illicit drug use among young adults aged 18 to 25 -- from 19.6-percent in 2008 to 21.2-percent in 2009 and 21.5-percent in 2010.	22.6 million Americans 12 or older (8.9-percent of the population) were current illicit drug users. According to the survey, 23.1 million Americans aged 12 or older (9.1-percent) needed specialized treatment for a substance abuse problem, but only 2.6 million (or roughly 11.2 percent of them) received it.	H3		
	Guidelines											

	Journal / Publication Title (citation)	Year of Pub.	Type / Topic	Target Population/Subpopulati		Study Setting	Screening Tools/ Measures	Results / Summary Notes	Findings / Implications for Primary Care Settings	Weighted Relevance		
				Age Range	Risk Group					High	Med	Low
9	Substance Use Screening, Brief Intervention, and Referral to Treatment for Pediatricians. Pediatrics 128(5): e1330-e1340.	2011	Guideline review of APA Policy statement - recommended referral guidelines based on established patient-treatment–matching criteria and the risk level for substance abuse.	Children and Adolescents		Primary Care	CRAFFT tool effectively integrated into an adolescent SBIRT algorithm and toolkit - two step process: First step = three questions. Answers determine which screens are indicated in CRAFFT / SBIRT tool	Addresses practitioner challenges posed by the spectrum of pediatric substance use. Presents an algorithm-based approach to augment pediatrician's confidence and abilities related to SBIRT in primary care settings. Adolescents with addictions should be managed collaboratively (or comanaged) with child and adolescent mental health or addiction specialists	AAP recommends that pediatricians: -- Become knowledgeable about all aspects of SBIRT through training or continuing med.education. --Screen all adolescent patients for tobacco, alcohol, and drug use with a formal, validated screening tool, such as CRAFFT screen --Respond to screening results with the appropriate brief intervention. --Augment patient care with motivational-interviewing techniques	H3		
10	National Quality Forum. (2007) "National Voluntary Consensus Standards for the Treatment of Substance Use Conditions: Evidence Based Treatment Practices: A Consensus Report	2007	Guideline for patients with substance use conditions, focusing on practices for which the evidence is strongest and most accepted— and likely to have significant impact on improving care.					1) ID of Substance Use Conditions= Screening and Case Finding, Diagnosis and Assessment 2) Initiation and Engagement in Treatment= Brief Interventions, Promoting Engagement in Treatment, Withdrawal Management 3) Therapeutic Interventions to Treat= Psychosocial Interventions, Pharmacotherapy 4) Continuing Care Management			M3	
11	NIDA (2012). Screening for Drug Use in General Medical Settings: A Resource Guide for Providers, National Institute for Drug Addiction.	2012	Resource Guide for clinicians serving adults in general medical settings with screening tools, procedures to conduct SBI and/or treatment referral for patients at risk of developing a substance use disorder.			Medical settings - outpatient	NIDA Quick Screen	Guide designed to assist clinicians serving adult patients in screening for drug use using the NIDA Quick Screen and NIDA-modified ASSIST. Quick screen adapted from the single-question screen for drug use in primary care by Smith et al. 2010	NIDA resource guide efficiently presents screening tools, step-by-step how to and references that justify and promote the use of the single-question and modified-Assist screening tools.	H3		
12	Schulden, J.D. et al. Clinical Implications of Drug Abuse Epidemiology.	2012	Review: etiology of drug use disorders, helping to disentangle complex interrelationship of developmental, genetic, and environmental risk and protective factors					Trends show Illicit drug use/drug use disorders relatively common with initial use typically starting in mid to late adolescence; elevated prevalence of misuse of prescription drugs, along with elevated rates for the problems associated with their misuse, including (non)fatal overdose; large-scale epidemiologic studies show high comorbidity of substance use disorders with other psychiatric disorders	SBIRT programs for drug use should be an integral part of routine clinical care in a range of clinical settings, including primary care, psychiatric, and emergency department settings.	H1		
	Drug Use Screening Tools											

	Journal / Publication Title (citation)	Year of Pub.	Type / Topic	Target Population/Subpopulati		Study Setting	Screening Tools/ Measures	Results / Summary Notes	Findings / Implications for Primary Care Settings	Weighted Relevance		
				Age Range	Risk Group					High	Med	Low
13	Smith PC, Schmidt SM, Allensworth-Davies D, et al. A single-question screening test for drug use in primary care.Arch Internal Med.2010;170:1155–1160.	2012		Adult patients recruited from primary care waiting rooms		Primary Care	Single screening question to detect drug use, "How many times in the past year have you used an illegal drug or used a prescription medication for non-medical reasons?"	All patients asked the single screening question, response of at least 1 time was considered positive for drug use. They were also asked the 10-item Drug Abuse Screening Test (DAST-10) to validate single screening question. The single screening question was 100% sensitive and 73.5% specific for detection of a drug use disorder.	The single screening question accurately identified drug use in this sample of primary care patients, validating its use in primary care settings.	H2		
14	Ghitza, U. E., R. E. Gore-Langton, et al. (2012). "Common data elements for substance use disorders in electronic health records: the NIDA Clinical Trials Network experience." Addiction: no-no.	2012	NIDA convened panel of drug addiction, primary care, research experts to develop clinical decision support tool for SUD SBIRT, two-stage screening / brief assessment process.	Adults		Medical settings - outpatient	Single-question screener - "How many times in the past year have you used an illegal drug or used a prescription medication for non-medical reasons?" (Smith et al) and DAST-10	Review presented validated single-question screener. EHR allows for better quality of care for SUD in high-risk patients through a standardized, expert-guided clinical decision support for SBIRT to: (i) provide evidence-based brief interventions, (ii) facilitate linkages to SUD specialty treatment and (iii) provide or refer for dual-diagnoses treatment of co-occurring psychiatric disorders and SUD.	Expert panel recommends universal population-based screening with use of a validated, single-question screening followed by assessment using 10-question Drug Abuse Screening Test (DAST-10)	H3		
15	Allensworth-Davies, D., D. M. Cheng, et al. (2012). "The Short Inventory of Problems—Modified for Drug Use (SIP-DU): Validity in a Primary Care Sample." The American Journal on Addictions 21(3): 257-262.	2012	Study evaluated the validity of the Short Inventory of Problems—Alcohol and Drugs modified for Drug Use (SIP-DU) among subjects recruited from a primary care clinic	22-74 yrs		Primary Care	SIP has been adapted to measure consequences of alcohol and drug use combined. Study to observed use of instrument for drug use alone in primary care.	The total SIP-DU score had moderate-to-strong correlation with a conceptually related instrument, the DAST-10 (Spearman'sρ=.71), demonstrating convergent validity. Observed correlationof the SIP-DU with theDAST-10 sufficiently high enough to suggest that the SIP-DU is measuring an independent construct of drug use consequences.	Study supports potential usefulness of SIP-DU in primary care settings with drug-using patients. Having the ability to attribute consequences to alcohol and drugs separately may help clinicians and patients considering treatment options to prioritize and individualize interventions to mitigate the negative consequences experienced by the patient. Study provides evidence that original SIP can be successfully modified to separately assess consequences of drug use/alcohol use.		M2	
16	Mdege, N. D. and J. Lang (2011). "Screening instruments for detecting illicit drug use/abuse that could be useful in general hospital wards: A systematic review." Addictive Behaviors 36(12): 1111-1119.	2011	Meta-Analysis to identify and describe screening instruments for detecting illicit drug use/abuse that are appropriate for use in general hospital wards and review evidence for reliability, validity, feasibility and acceptability.				ASSIST, CAGE-AID, DAST, DHQ/PDHQ, DUDIT, DUS, NMASSIST, SIP-AD, SDS, SMAST- AID, SSI-SA, TICS and UNCOPE	Evidence on validity, reliability, acceptability and feasibility of instruments in adult patients not known to have a substance abuse problem was scarce. The sensitivity and specificity scores of the ASSIST, CAGE-AID,DAST-20 and SMAST generally indicate the need for improvement.Those for the DAST-28, DAST-10, TICS and UNCOPE were optimal(~80%). . No study was identified comparing two or more of the included instruments.	CAGE-AID, DAST, SMAST-AID and SSI-SA do not distinguish between active and inactive illicit drug.use. The TICS and UNCOPE cannot distinguish between abuse and dependence. This might be problematic where the interventions and/or treatment pathways of the different levels of abuse are different.		M1	

	Journal / Publication Title (citation)	Year of Pub.	Type / Topic	Target Population/Subpopulati		Study Setting	Screening Tools/ Measures	Results / Summary Notes	Findings / Implications for Primary Care Settings	Weighted Relevance		
				Age Range	Risk Group					High	Med	Low
17	Donovan, D. M., G. E. Bigelow, et al. (2012). "Primary outcome indices in illicit drug dependence treatment research: systematic approach to selection and measurement of drug use end-points in clinical trials." Addiction 107(4): 694-708.	2012	Paper summarizes NIDA panel of substance abuse treatment and research experts, recommndations to consider feasibility of a common outcome measure for drug dependence treatment trials.					• An outcome measure that combines information from both self-report and objective toxicology testing is often preferable to either alone. • There is no single outcome measure recommended as the standard index for incorporation into most clinical trials.	A key consideration is that the reliability and validity of substance users' self-reports are not fixed properties of the reports themselves or the data collection instruments; rather, these vary with sample, method and context of collection		M2	
18	Pilowsky, D.J. & Wu, L. Screening for alcohol and drug use disorders among adults in primary care: a review 2012	2012	Review: prevalence of alcohol and drug use disorders (abuse or dependence) in primary care and emergency departments, as well as current screening tools and brief interventions.	Adults		Primary Care		Evidence supports usefulness of screening for AUDs in primary care. AUDIT and CAGE, generally perform better than other methods (eg, asking about the frequency and quantity of alcohol use); role of biomarkers and of advanced technologies in screening deserves further study; Lack of funding has been an impediment to screening for substance abuse.	Screening should be used only in settings where an intervention can be delivered immediately or shortly after screening is done; brief interventions have been shown to be effective to cut drinking- exception is those who are already alcohol-dependent. Having enough treatment facilities for those screening positive and referred for treatment will be a challenge once screening is widely implemented.	H!		
19	Wooley, C. N., R. Rogers, et al. (2012). "The Effectiveness of Substance Use Measures in the Detection of Full and Partial Denial of Drug Use Assessment.	2012	Study examines effects of complete and partial denial on the Drug Abuse Screening Test–20, Substance Abuse Subtle Screening Inventory–3, and Drug Use Screening Inventory–Revised.				Sample recruited from Timberlawn's Dual Diagnosis Program, which provides comprehensive mental health services to inpatients with addictive and other mental disorders.	Substance users often misreport their substance use due to social and criminal sanctions. Many clients in professional settings are willing to disclose their substance abuse when their confidentiality is assured. In these instances, the use of clinical inquiries or a simple screen such as the DAST appear to be highly effective. The addition of more elaborate measures, such as the SASSI-3, appears unwarranted when substance abuse is openly disclosed.	The DAST combined with a brief interview appears to be appropriate for self-disclosing substance abusers.	H2		
20	Lee, J.D. et al. (2011). "Substance Use Prevalence and Screening Instrument Comparisons in Urban Primary Care." Subst Abus. 32(3):128-34.	2011	Single Study: compared the ASSIST version 3.0, TICS, NIAAA daily limit single item, and EMR			Primary Care	Alcohol, Smoking, and Substance Involvement Screening Test (ASSIST version 3.0), Two-Item Conjoint Screen (TICS), National Institute on Alcohol Abuse and Alcoholism (NIAAA) daily limit single item, and electronic medical record (EMR)	There was poor agreement between ASSIST and briefer screening instruments regarding prevalence estimates of substance use disorders. Compared to the ASSIST, the 2-itemTICS and an EMR audit for addiction-related diagnoses on participants' problem lists were relatively insensitive. The NIAAA 1-item question, however, performed favorably, with good concordance with ASSIST alcohol scores indicating moderate- or high-risk drinking.	The NIAAA single item correlated closely with alcohol ASSIST and substance use. TICS and EMR were less sensitive for any nontobacco substance use. As posttest scoring is required,the NIDA-Modified ASSIST is emphasized as a Web-based interactive tool. Refining such potentially effective and streamlined screening strategies for identifying substance abuse in primary care settings using EMRs is an important area of innovation	H2		
	Drug Use Screening/Intervention/Treatment Outcomes											

	Journal / Publication Title (citation)	Year of Pub.	Type / Topic	Target Population/Subpopulati		Study Setting	Screening Tools/ Measures	Results / Summary Notes	Findings / Implications for Primary Care Settings	Weighted Relevance		
				Age Range	Risk Group					High	Med	Low
21	Bernstein, J., E. Bernstein, et al. (2005). "Brief motivational intervention at a clinic visit reduces cocaine and heroin use." Drug Alcohol Depend 77(1): 49-59.	2005	Seminal study - RCT tested impact of a single, structured encounter targeting cessation of drug use, cocaine and heroin users screened in context of routine medical visits.					Intervention group more likely to be abstinent than the control group for cocaine alone (22.3% versus 16.9%), heroin alone (40.2% versus 30.6%), and both drugs (17.4% versus 12.8%). BI was associated with a 5–9% increase in abstinence.	Brief motivational intervention may help patients achieve abstinence from heroin and cocaine	H2		
22	Bernstein, E., D. Topp, et al. (2009). "A preliminary report of knowledge translation: lessons from taking screening and brief intervention techniques from the research setting into regional systems of care." Acad Emerg Med 16(11): 1225-1233.	2009	Article describing limited statewide dissemination of SBIRT and evaluation of the effects on emergency department systems of care			ED	Twelve health promotion advocates (HPAs) were hired, trained, and integrated into seven ED teams.	Over 18-months, HPAs screened 15,383 patients; 4,899 positive for high risk or dependent drinking and/or drug use. Among positive screens, 4,035 (82%) received a brief intervention, 57% of all positives referred to the substance abuse treatment system and other community resources.	Successful implementation of the ED-SBIRT HPA model depends on 1) external funding for start-up; 2) local ED staff acting as champions, promote cultural shift to prevention; 3) sustainability planning from beginning involving admin, billing technology depts, medical record coders, community providers, gov't agencies; 4) creation, maintenance robust referral network for patient acceptance/access to sub,abuse services.		M2	
23	Estee, S., T. Wickizer, et al. (2010). "Evaluation of the Washington state screening, brief intervention, and referral to treatment project: cost outcomes for Medicaid patients screened in hospital emergency departments." Med Care 48(1): 18-24.	2010	Study evaluated SBIRT program in 9 hospital emergency departments (ED) in Washington State.		Working-age, disabled Medicaid patients who were screened and received a BI	ED		SBIRT program was associated with an estimated reduction in Medicaid costs per member per month of $366 (P = 0.05) for all patients, including patients who received a referral for chemical dependency (CD) treatment. For patients who received a BI only and had no CD treatment in the year before or the year after the ED visit, the estimated reduction in Medicaid per member per month costs was $542	Results found WASBIRT to be associated with a decrease in Medicaid costs of $366 per patient per month. Relative cost decreases were greater for injured patients and for patients having a BI but no CD treatment. Consistent with these findings, WASBIRT was associated with significant reductions in hospital inpatient days for patients admitted through the ED.	H2		
24	Babor, T. F., B. G. McRee, et al. (2007). "Screening, Brief Intervention, and Referral to Treatment (SBIRT): toward a public health approach to the management of substance abuse." Subst Abus 28(3): 7-30.	2007	Review of the latest research on substance abuse screening and brief intervention, its effectiveness, cost-effectiveness, and challenges in studying these practices					Conclusions about various components of SBIRT: • Self-report screening tests are reliable and valid under most clinical conditions, but use of screening tests depends on provider and patient characteristics. • Self-report response bias can be predicted, detected and minimized. BI can reduce alcohol use in non-dependent heavy drinkers and is effective persons dependent on alcohol, mari-juana or other drugs.	Approach is acceptable to both genders and to adolescents and adults. Review findings are clear that population-wide measures to implement the various SBIRT components could have a significant effect on reducing the burden of illness associated with substance use disorders.		M1	

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				Age Range	Risk Group					High	Med	Low
25	Winstanley, E. L., S. K. Bolon, et al. (2010). Treatment Outcomes for Addictive Disorders. Addictive Disorders in Medical Populations, Wiley-Blackwell: 575-601.	2010	Book Chapter presents empirical evidence on the outcomes of alcohol and/or drug treatment and cost analysis of respective treatments.				For outcome measures, authors against using unidimensional measure of abstinence alone; instead, assess drug use, symptoms, functional impairment, quality of life, and patient satisfaction	Treatment effectiveness is demonstrated not only by reductions in direct measures of drug use and primary symptoms of addiction, but also by reductions in co-occurring physical and mental health problems, and improvement in functional domains.	Effective interventions in primary care settings include: screeni ng and brief interventions, relapse prevention, and coordination of multiple specialty services. Given the stigma associated with addiction, primary care facilities may provide a more discrete opportunity for patients to seek addiction services		M2	
26	Humeniuk, R.; Dennington, V.; Ali, R.; and WHO ASSIST Phase III Study Group. The Effectiveness of a Brief Intervention for Illicit Drugs Linked to the ASSIST Screening Test in Primary Health Care Settings: A Technical Report of Phase III Findings of the WHO ASSIST Randomized Controlled Trial (Draft). Geneva, Switzerland, 2008	2008	WHO study - International random controlled trial (RCT) evaluating the Brief Intervention for illicit drugs (cannabis, cocaine, ATS & op ioids) as linked to ASSIST			Primary Care Settings	ASSIST	Participants recruited from PHC settings in four countries (Australia, Brazil, India, US) and randomly allocated to an intervention or control, followed up three months later. With the exception of the USA site, all countries demonstrated that the BI participants had significantly lower Total Illicit Substance Involvement scores at follow-up compared with the Control subjects. Evidence of success incorporating motivational interviewing techniques into the ASSIST-linked BI	These findings indicate that the brief intervention was effective compared with no intervention in getting participants to reduce their substance use and risk, as determined by the ASSIST questionnaire. Despite differences between USA and other sites with respect to the inferential analysis issues around IRB requirement for increased consent process, lenght of time waiting for treatment, different interviewer at follow-up, 80% o USA participants who received the BI also reported attempting to cut down.	H2		
27	Davoudi, M. and R. A. Rawson (2010). "Screening, brief intervention, and referral to treatment (SBIRT) initiatives in California: notable trends, challenges, and recommendations." J Psychoactive Drugs Suppl 6: 239-248.	2010	Review of selected SBIRT initiatives in California					Positive trends: involvement of healthcare settings in substance use prevention; increase in providers trained in substance use screening; greater use of standardized screening tools; indications of reduced substance use by individuals receiving SBIRT; establishment state policy initiatives. YET SBIRT projects continue to face challenges related to leadership support, staff resources, integration into ongoing protocols, screening, client retention, client confidentiality, and data collection.	State and local authorities can benefit from (a) promoting SBIRT among healthcare leaders, (b) identifying and sharing successful SBIRT "models", (c) providing tailored trainings and ongoing technical assistance, (d) educating providers about patient confidentiality and reimbursement laws and regulations, and (e) creating benchmark measures and data collection protocols.	H2		
28	Madras, B. K., W. M. Compton, et al. (2009). "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 99(1–3): 280-295.	2009	Review of SBIRT services across 6 states, compared illicit drug use at baseline and 6 mos follow-up	459,599 patients screened	22.7% screened for risky abuse/ addiction,	Multiple types of healthcare sites	Data on 459,599 patients screened at various medical settings in six states. Almost 23 percent had drinking or drug problems or a high risk of developing them. 15.9% received BI, 3.2% brief treatment, 3.7% specialty care.	Results showed 68% reduction in illicit drug use over a 6-month period among people who had received SBIRT services. Among all recommended for brief intervention, 67% had lower rates of illicit drug use, and 38.6% lower heavy alcohol use, Results consist across age, race, gender and across all specific substances.	Results consistent with WHO study(2008) findings for decrease in illicit drug use as measured by ASSIST scale. SBIRT provides a opportunistic teaching moment for primary care or emergency service providers to take proactive measures for their patients who may be engaged in risky use of substances, but are not currently seeking assistance and are not in need of specialty treatment.	H2		

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29	Davoudi, M. and R. A. Rawson (2010). "Screening, brief intervention, and referral to treatment (SBIRT) initiatives in California: notable trends, challenges, and recommendations." J Psychoactive Drugs Suppl 6: 239-248.	2010	Review of selected SBIRT initiatives in California					Positive trends: involvement of healthcare settings in substance use prevention; increase in providers trained in substance use screening; greater use of standardized screening tools; indications of reduced substance use by individuals receiving SBIRT; establishment state policy initiatives. YET SBIRT projects continue to face challenges related to leadership support, staff resources, integration into ongoing protocols, screening, client retention, client confidentiality, and data collection.	State and local authorities can benefit from (a) promoting SBIRT among healthcare leaders, (b) identifying and sharing successful SBIRT "models", (c) providing tailored trainings and ongoing technical assistance, (d) educating providers about patient confidentiality and reimbursement laws and regulations, and (e) creating benchmark measures and data collection protocols.	H2		
30	Strang, J., T. Babor, et al. "Drug policy and the public good: evidence for effective interventions." The Lancet 379(9810): 71-83.	2012	Review relevant evidence and outline the likely effects of fuller implementation of existing interventions.					Screening and brief intervention programmes have, on average, only small effects, but can be widely applied and are probably cost-effective	Economic analyses suggest that SBI interventions are cost-effective because the lifetime benefits of even slightly lower rates of early drug or alcohol use are substantial.	H1		
31	Kaner, E. F. S., N. Brown, et al. (2011). "A systematic review of the impact of brief interventions on substance use and co-morbid physical and mental health conditions." Mental Health and Substance Use 4(1): 38-61.	2011	Review- summarizes the relevant published evidence on the health and behavioural impact of brief interventions in individuals with recognised co-morbidity					Majority of research focused on substance use and mental health problems; remaining trials focused on substance use and physical health problems, and dual substance use *generally positive outcomes of brief intervention targeting substance use and co-morbid physical health conditions	Evidence of positive brief intervention effects in patients with substance use and mental health problems or dual substance use was less convincing		M1	
32	Harris, A. H. S., K. Humphreys, et al. (2009). "Measuring the quality of substance use disorder treatment: Evaluating the validity of the Department of Veterans Affairs continuity of care performance measure." Journal of Substance Abuse Treatment 36(3): 294-305.	2009	Single Study: examines the patient- and facility-level associations between the continuity of care performance measure adopted by the VA and improvements in self-administered ASI composites and other indicators of problematic substance use.		VA patients		Addiction Severity Index (ASI)	Meeting the continuity of care performance measure was not associated with patient-level improvements in the ASI alcohol or drug composites, days of alcohol intoxication, or days of substance-related problems	Facility-level rates of continuity of care were negatively associated with improvements in ASI alcohol and drug composites *continuity of care performance measure derived from prior patient-level evidence did not discriminate facility-level performance as predicted.		M2	

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				Age Range	Risk Group					High	Med	Low
33	Harris, A. H., T. Bowe, et al. (2009). "HEDIS initiation and engagement quality measures of substance use disorder care: impact of setting and health care specialty." Popul Health Manag 12(4): 191-196.	2009	Single Study: describing the clinical setting characteristics associated with meeting the initiation and engagement criteria		VA patients	VA	Initiation Measure: % of patients diagnosed with SUD with (a)60-day SUD service-free period, and (b) either an inpatient admission/SUD diagnosis, or both an initial SUD outpatient visit and an additional SUD visit in 14 days. Engagement Measure: % of outpatients with diagnosed SUDs that (a) meet the initiation criteria, and (b) receive 2 additional SUD-related visits within 30 days after initiation	* VA patients who have contact with SUD specialty treatment have higher rates of advancing to initiation, and from initiation to engagement, compared to SUD-diagnosed patients in psychiatric or other medical locations. * a substantial portion of initiation and engagement occurs outside of SUD specialty units.	Quality measures should be considered measures of facility performance rather than measures of the quality of SUD specialty care. The usual combining of inpatient and outpatient performance on these measures into overall facility scores clouds measurement and interpretation.		M2	
34	Ahmadi, H. and S. L. Green (2011). "Screening, brief intervention, and referral to treatment for military spouses experiencing alcohol and substance use disorders: a literature review." J Clin Psychol Med Settings 18(2): 129-136.	2011	Review		Military Spouses			Methods in addition to SBIRT to identify and address substance use related issues among military personnel include the inclusion of: suggest integrating a brief negotiated interview (BNI) as the intervention piece within the use of SBIRT to increase the effectiveness of the referral process and the inclusion of an experimental screening instrument Stages of Change Readiness and Treatment Eagerness Scale, SOCRATES, to detect ‘‘readiness to change’	Given its success in civilian treatment settings in primary care and emergency departments, SBIRT may be an intervention model that can transfer to Miltary treatment facilities and replicate success with spouses and active duty service members. Integrating SBIRT into primary care practice and implementing the model as a preventive measure for this population may be an option.		M1	
35	Shepard, M. (2012) Every Contact Counts: A review of evidence.	2012	Review: Assessment of the likely success of a programme of brief interventions to secure behaviour change leading to population health improvement			Wales, Great Britain		Evidence suggests brief interventions lasting up to half an hour can have an impact on health behaviour, particularly drinking and smoking. Evidence for other public health goals such as physical activity, diet and sexual health is less clear. Where it has been tested, brief interventions are shown to be cost effective; however a good many primary care professionals feel insecure about undertaking brief interventions	Essential that health and social care workers who undertake brief interventions with patients are properly trained to do so; need for further research in this area, particularly on the role of non-professional staff in providing health advice		M1	

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36	Kelly, T.M. et al. (2012). Treatment of substance abusing patients with comorbid psychiatric disorder. Addictive Behaviors 37(1). 11-24	2012	Review: update clinicians on the latest in evidence-based treatments for SUD and non-substance use disorders among adults					Clozapine appears to be the most effective for reducing alcohol, cocaine and cannabis abuse among patients with schizophrenia; motivational interviewing has robust support as a highly effective psychotherapy; highly structured therapy programs that integrate intensive outpatient treatments, case management services and behavioral therapies such as CM are most effective for treatment of severe comorbid conditions	Creative combinations of psychotherapies, behavioral and pharmacological interventions offer the most effective treatment for comorbidity. Intensity of treatment must be increased for severe comorbid conditions such as the schizophrenia/cannabis dependence comorbidity due to the limitations of pharmacological treatments.	H1		
37	Krupski A., et al. (2010). Impact of brief interventions and brief treatment on admissions to chemical dependency treatment. Drug and Alcohol Dependence 110 126–136	2009	Study examined whether individuals with possible substance use disorders more likely to recieve chemical dep.(CD) treatment or be admitted to specialized CD treatment after a BI than similar individuals who received no BI.			ED		Individuals with a likely substance use disorder who received a BI were significantly more likely to enter specialized CD treatment or admission into CD treatment than similar individuals with no BI.	Results suggest that SBIRT programs could serve an important role in increasing entry to specialized treatment for individuals with substance use disorders.	H2		
38	Dutra, L. e al. (2008). A Meta-Analytic Review of Psychosocial Interventions for Substance Use Disorders. Am J Psychiatry 165:179-187	2008	Meta-Analysis: provide effect sizes for various types of psychosocial treatments, as well as abstinence and treatment-retention rates for cannabis, cocaine, opiate, and polysubstance abuse and dependence treatment trials					Overall, controlled trial data suggest that psychosocial treatments provide benefits reflecting a moderate effect size; most efficacious for cannabis use and least efficacious for polysubstance use. The strongest effect was found for contingency management interventions. Approximately one-third of participants across all psychosocial treatments dropped out before treatment completion compared to 44.6% for the control conditions	Effect sizes for psychosocial treatments for illicit drugs ranged from the low-moderate to high-moderate range, depending on the substance disorder and treatment under study. Given the long-term social, emotional, and cognitive impairments associated with substance use disorders, these effect sizes are noteworthy and comparable to those for other efficacious treatments in psychiatry.		M1	
	Treatment Outcomes - Motivational Interviewing											
39	Glasner-Edwards, S. (2011). Motivational Interventions for Substance Abusers with Psychiatric Illness. Handbook of Motivational Counseling, John Wiley & Sons, Ltd: 329-348.	2011	Review: incentive and motivational approaches to treating psychiatrically ill substance users, including contingency management and MI		Co-occurring Disorder Populations		Systematic motivational counseling (SMC) intervention - measures “adaptive” motivation, Identifying and remediating maladaptive aspects of motivational structure	Combining techniques of motivational interventions and behavioral activation treatment, intervention helps individuals develop nondrug goal pursuits and daily activities while increasing motivation for abstinence. Extension of this intervention to dually diagnosed individuals has great promise in targeting motivational processes that contribute to both depression and addiction.	Results are promising and suggest that motivational interviewing, contingency management, and systematic motivational counseling may be effective techniques for engaging, retaining, restructuring the motivational nexus of individuals with co-occurring disorders.		M1	

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				Age Range	Risk Group					High	Med	Low
40	Rapp, R.C. et al. (2008). Improving linkage with substance abuse treatment using brief case management and motivational interviewing. Drug and Alcohol Dependence 94. 172–182	2008	Single Study				Linkage effect of two BI's with the referral standard of care at a centralized intake unit. BI interventions included five sessions of strengths-based case management (SBCM) or one session of motivational interviewing (MI).	SBCM was effective in improving linkage compared to standard care; SBCM improved linkage more than MI; MI was not significantly more effective in improving linkage than the standard of care	Supports the effectiveness of case management in improving linkage with treatment. The role of motivational interviewing in improving linkage was not supported		M2	
41	Moyers, T.B. & Houck, J. (2011). Combining Motivational Interviewing With Cognitive-Behavioral Treatments for Substance Abuse: Lessons From the COMBINE Research Project. Cognitive and Behavioral Practice Volume 18, Issue 1,Pages 38–45	2011	Review: examine the Combined Behavioral Intervention (CBI), which integrated MI and cognitive-behavioral strategies as well as several other approaches. The intervention is described and conceptual issues regarding the integration of MI with other treatments is explored					Combining MI with other therapeutic interventions requires frequent on-the-fly decisions on the part of the therapist about which elements of the mixture will prevail at any given time	When choice points occur, the therapist must be clear about what guiding principles will be most important if treatments are not harmonious. Alternatively, decision rules could be identified and priorities established that would allow therapists to proceed with confidence without having to reconsider a theoretical perspective at each choice point.			L1
42	Macgowan, M.J. & Engle, B. (2010) Evidence for Optimism: Behavior Therapies and Motivational Interviewing in Adolescent Substance Abuse Treatment. Child and Adolescent Psychiatric Clinics of North America 19(3) 527-545	2010	Review: BTs and MIs, including therapies that combine BT and MI, or uses one or the other in conjunction with another psychosocial therapy	Youth/Adolescents	Alcohol and Other Drug problems (AOD)			Most of the BTs demonstrated significant changes from pretest through follow-ups; For MI interventions, all had significant reductions in at least one AOD indicator through follow-up; combined BT plus other psychosocial interventions.	Most Behavioral Therapies and MI therapies demonstrated significant changes in AOD use from pretest through follow-ups		M1	
43	Stein, M.D. et al. (2009). A motivational intervention trial to reduce cocaine use. Journal of Substance Abuse Treatment Volume 36, Issue 1, Pages 118–125	2009	Single Study: test if a motivational intervention would reduce cocaine use				Randomly assigned to a four-session motivational intervention or an assessment control group. Performed an intent-to-treat analysis of past 30-day self-reported cocaine use at 6 months	No significant intervention effects on mean change in cocaine use days, past 30-day abstinence, or >50% reduction in cocaine use days from baseline. However, among those using cocaine on 15 or more of the 30 days prior to baseline, motivational interviewing participants had a significantly larger mean reduction in cocaine use days; also no significant group differences in days of employment, quality of life, or substance abuse treatment entry	Motivational intervention was more effective than assessment alone at reducing cocaine days among the heaviest community-based users. Both study conditions induced positive effects on cocaine use	H2		

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				Age Range	Risk Group					High	Med	Low
44	Conrod PJ, Castellanos-Ryan N, Strang J. Brief, personality-targeted coping skills interventions and survival as a non-drug user over a 2-year period during adolescence. Arch Gen Psychiatry2010; 67:85–93.	2010	Single Study: investigate the efficacy of targeted cop- ing skills interventions on illicit drug use in adolescents with personality risk factors for substance misuse	Adolescents		Secondary schools	Substance Use Risk Profile Scale; Reckless Behavior Questionnaire	intervention group showed a significant decrease in drug use frequency scores and number of drugs used from baseline to 6 and 24 months; control group showed no change in the frequency of drug use and significant increases in the number of drugs tried from baseline to 12, 18 and 24 months; intervention was associated with reduced odds of taking up the use of marijuana, cocaine, and other drugs over the 24-month period.	Brief, personality-targeted interventions can prevent the onset and escalation of substance misuse in high-risk adolescents	H2		
45	McCambridge J, Hunt C, Jenkins RJ, Strang J. Cluster randomized trial of the effectiveness of motivational interviewing for universal prevention. Drug Alcohol Depend2011; 114:177–84	2011	Single Study:test the effectiveness of adaptation of MI for universal prevention purposes,	16-19 yrs old			Prevalence, initiation and cessation rates for the 3 target behaviours of cigarette smoking, alcohol consumption and cannabis use; reductions in use and harm indicators	No statistically significant differences between control group and MI group intention-to-treat for either cigarette smoking or alcohol consumption outcomes. There were also no statistically significant between-group differences when the analyses were restricted to those who were already users of these substances upon entry to the study; Unexpected lower levels of cannabis initiation and prevalence were found in the Drug Awareness control condition	No evidence supporting the use of MI for universal prevention was obtained--includes a lack of effect on reduced initiation of substance use, and there is also an absence of secondary prevention effects, as would be expected on the basis of prior studies, particularly on alcohol consumption	H2		
46	Smedslund, G., R. C. Berg, et al. (2011). "Motivational interviewing for substance abuse." Cochrane Database Syst Rev 11(5).	2011	Review to assess the effectiveness of motivational interviewing for substance abuse on drug use, retention in treatment, readiness to change, and number of repeat convictions				Short follow-up 1-6 mo.; Medium follow-up 7-12 mo. Long follow up: avg. 12 mo.	* Compared to no treatment control MI showed a significant effect on substance use which was strongest at post-intervention and weaker at short and medium follow-up *For long follow-up, the effect was not significant *no significant differences between MI and treatment as usual *MI did better than assessment and feedback for medium follow-up * no significant effect for short follow-up * for other active intervention there were no significant effects * not enough data to conclude about effects of MI on the secondary outcomes.	MI can reduce the extent of substance abuse compared to no intervention. The evidence is mostly of low quality, so further research is very likely to have an important impact on our confidence in the estimate of effect and is likely to change the estimate.		M1	
	Drug Use Screening/Intervention/Treatment - Adolescents											

	Journal / Publication Title (citation)	Year of Pub.	Type / Topic	Target Population/Subpopulati		Study Setting	Screening Tools/ Measures	Results / Summary Notes	Findings / Implications for Primary Care Settings	Weighted Relevance		
				Age Range	Risk Group					High	Med	Low
47	Feinstein, E. C., L. Richter, et al. (2012). "Addressing the Critical Health Problem of Adolescent Substance Use Through Health Care, Research, and Public Policy." Journal of Adolescent Health 50(5): 431-436.	2012	Reviuew of evidence-based prevention and treatment strategies for addressing use of addictive substances in teens	Adolescents		All		CASA Columbia recommends the following changes in health care practice: 1)Recognize addiction as a disease with origins in adolescence 2)Identify the problem and intervene early 3)Expand the number of providers trained to effectively prevent, screen, diagnose, and treat adolescent substance use and addiction 4)Increase access to effective prevention and treatment services for adolescents 5)Expand research on effective prevention and treatment services	Substance use screenings can be administered to adolescents in primary care, emergency/ trauma care, and mental health care settings; schools; foster care and other social service programs; and the juvenile justice system. When use is identified, evidence-based interventions (e.g., motivational interviewing) should be applied immediately		M1	
48	S. Levy, J.R. Knight Screening, brief intervention, and referral to treatment for adols J Addict Med, 2 (2008), pp. 215–221	2008	Review to translate results into framework that addresses the educational deficiencies and perceived barriers including substance abuse screening and interventions in routine health maintenance for adolescents.	Adolescents		Multiple settings		On Brief Advice: Giving advice may be more useful than motivational interviewing for low-risk adolescents. Motivational interviewing is based on ex-ploring an individual's negative feelings and ambivalence towards unhealthful behaviors, but teens who do not perceive that they have problems associated with their use may not have developed this ambivalence, leaving little for the inter-viewer to explore.	SBIRT is a practical strategy for managing adolescent substance use in the primary care setting. Screening tools and intervention strategies must be brief, easy to administer, developmentally appropriate, and effective with adolescents.Overall, results of these studies support the use of brief interventions to reduce drug and alcohol use by adolescents who are at high risk but do not meet criteria for substance use disorder. A variety of counseling styles shown to be effective in different settings.		M1	
49	D'Amico, E. J., J. N. Miles, et al. (2008). "Brief motivational interviewing for teens at risk of substance use consequences: a randomized pilot study in a primary care clinic." J Subst Abuse Treat 35(1): 53-61.	2008	Study examined the impact of a brief MI intervention on alcohol consumption and drug use for high-risk teens in a primary care clinic	Adolescents	High-risk teens	Primary Care	Brief motivational interviewing (MI) intervention -Project CHAT	At the 3-month follow-up, Project CHAT teens reported less marijuana use, lower perceived prevalence of marijuana use fewer friends who used marijuana, and lower intentions to use marijuana in the next 6 months, as compared to teens assigned to usual care	Providing this type of brief intervention is a viable approach to working with high-risk teens to decrease substance use.	H2		

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				Age Range	Risk Group					High	Med	Low
50	Mason, M., P. Pate, et al. (2011). "Motivational interviewing integrated with social network counseling for female adolescents: a randomized pilot study in urban primary care." J Subst Abuse Treat 41(2): 148-155.	2011	Study tested the efficacy of a brief preventive intervention for substance use and associated risk behaviors among female adolescent patients of an urban primary care health clinic	14-18 years	Females - 82% African American and 18% mixed race, with 32% living below the U.S. poverty line		Integrated an evidenced-based motivational interviewing (MI) approach with a social network component to develop a 20-minute session, a social network intervention. Discuss concept of social network influence on health. Teen's network assessed and reviewed.	Small study, 28 teens enrolled, 14 complete treatment. At 1-month follow-up, teens in the treatment condition reported less trouble due to alcohol use, less substance use before sexual intercourse, less social stress, less offers for marijuana use, and increased readiness to start counseling compared with the teens in the control condition	Results provide preliminary support for socially based brief interventions with at-risk ethnic teens. Study provides evidence to further examine socially based brief interventions for urban teens within primary care. Given the at-risk nature of many low-resource urban youth, providing effective evidence-based intervention within a welcoming context of their home health care setting is an important contribution of this study.	H2		
51	Wu, L.-T., D. G. Blazer, et al. (2011). "Treatment use and barriers among adolescents with prescription opioid use disorders." Addictive Behaviors 36(12): 1233-1239. .	2011	Study examined national trends, patterns, correlates, and barriers to substanceabuse treatment use by adolescents who met at least one of the past-year criteria for prescription opioid abuse or dependence	Adolescents	41,260 teens from 2005–2008 NationalSurveys of Drug Use and Health (NSDUH).			About 17% of adolescents with opioid dependence (n = 434) and 16% of those with opioid abuse (n = 355) used any substanceabuse treatment in the past year. Self-help groups and outpatient rehabilitation were the most commonly used sources of treatment. Few black adolescents used treatment (medical settings, 3.3%; self-help groups, 1.7%) or reported a need for treatment (1.8%).	Adolescents with prescription opioid use disorders markedly underutilize treatment. Non-financial barriers are pervasive, including stigma and a lack of perceived treatment need. Barriers to treatment use included “wasn't ready to stop substance use,” “didn't want others to find out,” and “could handle the problem without treatment.”	H2		
52	Gryczynski, J., S. G. Mitchell, et al. (2011). "The relationship between services delivered and substance use outcomes in New Mexico's Screening, Brief Intervention, Referral and Treatment (SBIRT) Initiative." Drug and Alcohol Dependence 118(2–3): 152-157.	2012	Study examined New Mexico SBIRT project conducted over 5 years,part of SAMHSA initiative. Changes in self-reported frequency of illicit drug use, alcohol use, and alcohol intoxication as a function of service level (BI vs. brief treatment/referral–BT/RT) and number of service sessions	Adults	53,238 adults screened for alcohol and/or drug use in ambulatory settings, 12.2% positive.			Participants reported decreased frequency of illicit drug use, alcohol use, and alcohol intoxication 6 months after receipt of SBIRT services. Compared to those who received BI, participants who received BT/RT had sharper reductions in frequency of drinking (IRR = .78; p < .05) and alcohol intoxication (IRR = .75; p < .05).	BI impacts on reducing illlicit drug use were indicated in findings but reductions in illicit drug use, while substantial, did not differ significantly based on service variables. Future studies should identify the preferred service mix in the SBIRT model as it continues to expand.	H2		

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				Age Range	Risk Group					High	Med	Low
53	Fischer, B., M. Dawe, et al. "Feasibility and impact of brief interventions for frequent cannabis users in Canada." Journal of Substance Abuse Treatment(2012).	2012	Study to assess BI for cannabis users	University students	134 young high-frequency cannabis users		Students randomized to either an oral (C-O; n = 25) or a written experimental cannabis BI (C-W; n = 47) intervention group, or to either an oral (H-O; n = 25) or written health BI (H-W; n = 37) control group	Three-month follow-up assessments based on repeated measures analysis of variance techniques found a decrease in the mean number of cannabis use days in the total sample , reduced deep inhalation/breathholding use in the C-O group, reduced driving after cannabis use in the C-W group, and a significant reduction in deep exhalation/ breathholding in the C-O group compared with controls	Feasibility and short-term impact of the BIs were demonstrated, yet more research is needed.		M2	
64	Newton, A. S., R. Gokiert, et al. (2011). "Instruments to Detect Alcohol and Other Drug Misuse in the Emergency Department: A Systematic Review." Pediatrics 128(1): e180-e192.	2011	Review: summarize evidence on screening instruments that can assist emergency care clinicians in identifying AOD misuse in pediatric patients	Youth		ED		Instruments based on diagnostic criteria for AOD disorders were effective in detecting alcohol abuse and dependence (sensitivity: 0.88; specificity: 0.90) and cannabis use disorder (sensitivity: 0.96; specificity: 0.86)	Recommend that emergency care clinicians use a 2-question instrument for detecting youth alcohol misuse and a 1-question instrument for detecting cannabis misuse. Additional research is required to definitively answer whether these tools should be used as targeted or universal screening approaches in the ED	H1		
55	Cummings, J. R., H. Wen, et al. (2011). "Racial/Ethnic Differences in Treatment for Substance Use Disorders Among U.S. Adolescents." Journal of the American Academy of Child & Adolescent Psychiatry 50(12): 1265-1274.	2011	Single Study = Eight years of cross-sectional data (2001–2008) were pooled from the National Survey on Drug Use and Health to derive a nationally representative sample of 144,197 adolescents ;	12–17 years	Differences in treatment rates for SUD among adolescents white, black, Hispanic, Asian, Native American race/ethnicity			After adjusting for demographics and health status, blacks and Hispanics were significantly less likely to receive SUD treatment than whites. These differences were exacerbated after adjusting for family income and insurance status. Lower treatment rates for black and Hispanic adolescents persisted when examining SUD treatment rates in medical settings and self-help programs. reatment rates for other racial/ethnic groups did not generally differ from whites.	Results highlight exceptionally low treatment rates for SUD among all adolescents, with blacks and Hispanics experiencing the lowest treatment rates across all racial/ethnic groups.	H2		
56	Goti, J. et al. (2010). Brief intervention in substance-use among adolescent psychiatric patients: a randomized controlled trial. European Child and Adolescent Psychiatry 19(6): 503-511.	2010	Single Study: assess the efficacy of a brief motivational enhancement intervention in adolescents referred to psychiatric treatment who reported substance use.	Adolescents		Psychiatry dept.	Structured questionnaires assessing knowledge, problems, perception of risks and intention of use of psychoactive substances	Experimental group received a brief intervention aimed at increasing their awareness of the risks of substance-use; all subjects received standard treatment according to the primary diagnosis; significant increase across time in overall knowledge about drugs and perception of risk in the experimental group; no differences were observed for other variables such as intention of use or perception of risk.	Implementation of specific targeted programs among adolescent psychiatric patients is an urgent need, since standard care programs seem to not succeed in significantly changing attitudes towards substance-use in adolescents, particularly among those already showing substance-use problems. Brief interventions have an effect, although a minor one, and probably need to be more intense or qualitatively different in this specific population.		M2	
	Drug Use Screening/Intervention/Treatment - AmericanIndian/Alaskan Native											

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				Age Range	Risk Group					High	Med	Low
57	Novins, D. K., G. A. Aarons, et al. (2011). "Use of the evidence base in substance abuse treatment programs for American Indians and Alaska Natives: pursuing quality in the crucible of practice and policy." Implement Sci 6: 63.	2011	Prevalence of problem substance use has not appreciably changed in some AI/AN populations, great discomfort with Euro-American approach to SA treatment in their communities		AI/AN			Advisory Board concluded that though emerging models for cultural adaption of interventions may be useful for programs serving AI/AN communities, we concluded core characteristics of EBTs themselves present major challenges for their use in programs serving AI/AN communities.	We believe that the vast majority of these factors - particularly those that are internal to these substance abuse programs - are likely limiting the dissemination of EBTs to substance abuse programs serving AI/AN communities.		M1	
58	Gone, J. P. and J. E. Trimble (2012). "American Indian and Alaska Native Mental Health: Diverse Perspectives on Enduring Disparities." Annual Review of Clinical Psychology 8(1): 131-160.	2012		All	AI/AN			Authors compiled diagnostic findings for AI/AN populations, found rates of psychiatric distress are disportionately high for AI/AN respondents.	Need for cultural adaptation of evidence-based treatments is critical for AI/AN populations. Motivational interviewing one foundation for systematic consultation/ adaptation with AI/AN communities. Need to further assess traditional vs. clinic-based treatements and tailor EBP's to AI/ANs.		M3	
	Drug Use Screening Tools / Intervention / Treatment - Patients with Psychiatric Disorders											
59	Tiet, Q.Q. et al. (2008). "Screening psychiatric patients for illicit drug use disorders and problems. Clinical Psychology Review 28: 578–591	2008	Review: reviews the need for a valid, practical screening instrument for detecting drug problems and disorders among psychiatric patients, and describes the appropriateness of existing screening instruments for this purpose.		Psychiatric patients			All existing instruments lack one or more of the following characteristics: brief and easy to administer, demonstrated validity for male and female psychiatric patients, measuring illicit drug use problems without confounding with alcohol use problems, and assessing drug problems over an optimal timeframe for screening (e.g., past 12 months).	Current instruments are not appropriate for routine drug screening of psychiatric patients. A brief, easy to use drug screen should be developed and validated on male and female psychiatric patients for routine screening of drug disorders and problems.	H1		
60	Mueser, K.T. et al. (2009). Family intervention for co-occurring substance use and severe psychiatric disorders: Participant characteristics and correlates of initial engagement and more extended exposure in a randomized controlled trial. Addictive Behaviors 34(10): 867–877	2009	Single Study: trial comparing a comprehensive, behaviorally-based family intervention for dual disorders program (FIDD) to a shorter-term family psychoeducational program (FPE)					Initial engagement rates were moderately high for both programs (88% and 84%), but rates of longer term retention and exposure to the core elements of each treatment model were lower (61% and 55%). Characteristics of the relatives were the strongest predictors of successful initial engagement in the family programs with the most important predictor being relatives who reported higher levels of benefit related to the relationship with the client. Subsequent successful exposure to the family treatment models was more strongly associated with client factors, including less severity of drug abuse	Suggest that attention to issues of motivating relatives to participate in family intervention, and more focused efforts to address the disruptive effects of drug abuse on the family could improve rates of engagement and retention in family programs for dual disorders		M2	

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				Age Range	Risk Group					High	Med	Low
61	Assanangkornchai, S. & Guy, E.J. (2012). Clinical and epidemiological assessment of substance misuse and psychiatric comorbidity. Current Opinion in Psychiatry. 25(3): 187–193	2012	Review: summarize and express opinions on a range of research studies published in 2011 on the clinical assessment, screening and monitoring of patients with substance use and psychiatric comorbidity, together with epidemiological and other relevant studies					Research review on different populations in different treatment settings, including an alcohol and drug treatment centre, an emergency medical department, a community mental health centre, a methadone maintenance programme and inpatient unit, and in the community. Several structured or semi-structured interviews and self-administered instruments were used for the assessments of psychiatric disorders, substance use disorders and related problems.	Most studies support a high prevalence of substance misuse among individuals with psychiatric disorders and vice versa.		M1	
62	Taylor, R.D. et al. (2012). Incremental Validity of Stressful Life Experiences in Predicting Psychiatric Comorbidity Among Women in Substance Abuse Treatment. Journal of Social Service Research 38(3).	2012	Single Study: tested incremental validity of stressful lie experiences related to psychiatric comorbidity		Young women	Substance abuse tx facility	Addiction Severity Index (ASI), DSM-IV-TR, and Stressful Life Experience (SLE) Screen	Demonstrated support for incremental validity of SLE uniquely accounting for 6.5% of variance in ASI psychiatric scores.	Support for future use of SLE in clinical settings for assessment and intervention purposes. Need for more research on SLE and screening tools.		M2	
63	Salo, R. et al. (2011). Psychiatric comorbidity in methamphetamine dependence. Psychiatry Research 186(2–3): 356–361	2011	Single Study: assess the prevalence of psychiatric comorbidity in a large sample of methamphetamine (MA)-dependent subjects, and whether prevalence of comorbidities varied by gender		MA dependent		Structured clinical interviews (SCIDs)	28.6% had primary psychotic disorders, 23.8% of which were substance-induced; 13.2% had MA-induced delusional disorders and 11.1% had MA-induced hallucinations. 32.3% lifetime mood disorders that were not substance-induced , whereas 14.8% had mood disorders induced by substances, and 10.6% had mood disorders induced by amphetamines. Of all participants, 26.5% had anxiety disorders and 3.7% had a substance-induced anxiety disorder, all of which were induced by MA. Male subjects reported a higher percentage of MA-induced delusions compared to female abusers.	Results indicate that a high level of clinical alertness for the presence/recurrence of independent mood and anxiety disorders is warranted in the MA-dependent population. Failure to do so may result in poorer treatment response, both for the MA dependence and for the co-occurring other psychiatric disorder. Similarly, the high % of lifetime but not current dependence on other substances suggests that addressing the potential for relapse with other substances should be a component of treatment for MA dependence. Furthermore, careful characterization of substance-induced vs. primary may serve to inform and guide maintenance care and subsequent treatment.		M2	

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				Age Range	Risk Group					High	Med	Low
64	Thomasius, R. et al. (2010) DSM-IV Axis-I comorbidity among illicit drug users seeking treatment for substance use disorders: results from the Multi-centre Study of Psychiatric Comorbidity in Drug Addicts (MUPCDA). Mental Health and Substance Use 3(3)	2010	Single Study: capture DSM-IV Axis I comorbidity amongst in-treatment substance use disorders patients	15-55			Mini-DIPS (German version of the Anxiety Disorders Interview Schedule)	Diagnoses for opioid dependence were given to 86%; polydrug dependence to 75% of the patients. Socio-demographic data revealed high unemployment, indebtedness and crime rates. Most frequent diagnoses of comorbidity were: generalized anxiety disorder and dysthymia. Women were more likely to be dually diagnosed and to report lifetime substance-induced visual hallucinations relative to men. Prevalence of comorbid disorders (67% in this sample) may be higher than in other samples because of an increased prevalence of multiple substance use disorders.	Psychosocial interventions should supplement psychiatric care. Due to required diagnostic expertise, integrated treatment with high-quality clinical supervision should become the standard.		M2	
65	Malat, J. & Kahn, DA (2011). Clinical barriers to effective pharmacotherapy in co-occurring psychiatric and substance use disorders. J Psychiatr Pract.17(5): 360-7.	2011	Case Report: illustrates some common, rapidly shifting responses to both medication and clinician					Common reactions include: an idealized, passive relation to the medication followed by disappointment in its weakness, minimizing the danger of medication through idiosyncratic and potentially dangerous overuse to replicate effects of the addictive substance, or experiencing the medication as harmful, leading to phobic avoidance and underutilization.	Recommendations: avoid these polarizations and engage with the patient's suffering and dangerous behavior by 1) taking reasonable pharmacological risks, 2) establishing provisions for safe use and frequent monitoring, 3) conveying tolerance for idiosyncratic use within safe limits, 4) regular exploration of the meaning of the medication with links to both the addiction history and the treatment relationship, and 5) frequent psychoeducation		M3	
66	Santucci, K. (2012) Psychiatric disease and drug abuse. Curr Opin Pediatr. 24(2): 233-7.	2012	Review: identify the magnitude of dual diagnosis in pediatric population and strengthen awareness among pediatric healthcare professionals who may provide prevention/early intervention	Pediatric				Four hypotheses for cause of dual diagnosis: common factors (risk factors common to both disorders), secondary mental disorder (substance use precipitates mental disorder), secondary substance use ('self-medication hypothesis') and bidirectional (presence of either mental illness or SUD can contribute to the development of the other).	Those with the presence of this dual diagnosis are more likely to be nonadherent to treatment and may well have poorer outcomes. Integrated care for the maladies rather than split or isolated care is recommended. Psychosocial therapy holds promise for treating patients with dual diagnosis.		M1	
67	Horsfall, J. et al. (2009). Psychosocial Treatments for People with Co-occurring Severe Mental Illnesses and Substance Use Disorders (Dual Diagnosis): A Review of Empirical Evidence. Harv Rev Psychiatry.17(1):24-34.	2009	Review		Severe Mental Illnesses and SUDs			Treatments available: motivational interviewing, cognitive-behavioral therapy, contingency management, relapse prevention, case management, skills training; should be well coordinated,	Take a team approach, be multidisciplinary, have specialist-trained personnel (including 24-hour access), include a range of program types, and provide for long-term follow-up.		M1	

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				Age Range	Risk Group					High	Med	Low
68	Moller, T. & Linaker, O.M. (2010). Using brief self-reports and clinician scales to screen for substance use disorders in psychotic patients. Nord J Psychiatry.	2010	Single Study: examine evidence for the concurrent validity of two self-report measures and two staff-report measures measuring alcohol and drug problems in seriously mentally ill people and to examine if psychotic patients under-report their alcohol and drug problems in an early intervention clinic		Mentally-ill patients		Staff-report measures: Clinical Alcohol Use Scale (AUS), Clinical Drug Use Scale (DUS); self-report measures Short Michigan Alcohol Screening Test (SMAST-13), Drug Abuse Screening Test (DAST-20); current ICD-10 diagnostic criteria as the gold-standard for alcohol and drug problems	Concurrent validity compared with ICD-10 diagnoses was moderate for both the staff-report measures AUS and DUS and for the self-report measures SMAST-13 and DAST-20. Three out of seven patients under-report alcohol problems and one patient out of seven under-report drug use problems according to consensus ICD-10 substance abuse diagnoses	SMAST-13 and DAST-20 in combination with the AUS and DUS, which are easy and quick to perform, are helpful in establishing a common understanding of the patient's alcohol and drug problems in an early intervention clinic		M2	
69	Nesvag, R. et al. (2010). The use of screening instruments for detecting alcohol and other drug use disorders in first-episode psychosis. 177: 228-234	2010	Single Study: nvestigate prevalence of drug use disorders and psychometric properties of the Alcohol Use Disorder Identification Test (AUDIT) and the Drug Use Disorder Identification Test (DUDIT) in irst-episode psychosis patients		Psychosis patients		AUDIT; DUDIT; current DSM-IV diagnosis of abuse or dependence of alcohol or other drugs	15% of the men and 11% of the women had a DSM-IV diagnosis of alcohol use disorders while 33% of the men and 16% of the women had non-alcohol drug use disorders. The instruments were reliable and valid; Suitable cut-off scores (sensitivity N0.80 and specificity N0.70) were 10 for men and 8 for women on AUDIT and 3 for men and 1 for women on DUDIT	Suggest that AUDIT and DUDIT are powerful screening instruments for detecting alcohol and other drug use disorders in patients with first-episode psychosis.		M2	
70	Voluse, A.C. et al. (2012). Psychometric properties of the Drug Use Disorders Identification Test (DUDIT) with substance abusers in outpatient and residential treatment. Addictive Behaviors 37: 36–41	2012	Single Study: evaluate Drug Use Disorders Identification Test (DUDIT), 11-item self-report questionnaire developed to screen individuals for drug problems, with less severe substance abusers or with clinical populations		Less severe substance abusers or with clinical populations		DUDIT	DUDIT was found to have a high convergent validity (r=.85) when compared with the Drug Abuse Screening Test (DAST-10); a single component accounted for 64.91% of total variance, and the DUDIT had sensitivity and specificity scores of .90 and .85, respectively, when using the optimal cut-off score of 8; showed good discriminant validity as it significantly differentiated drug from alcohol abusers	Support the DUDIT as a reliable and valid drug abuse screening instrument that measures a unidimensional construct		M2	
	Physician Training											

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				Age Range	Risk Group					High	Med	Low
71	Marshall, V. J., T. L. McLaurin-Jones, et al. (2012). "Screening, Brief Intervention, and Referral to Treatment: Public Health Training for Primary Care." Am J Public Health.	2012	Single Study: elucidate changes in attitudes, experiences, readiness, and confidence levels of medical residents to perform screening, brief intervention, and referral to treatment (SBIRT) and factors that moderate these changes.					In general, experience using all screening tools and the BNI-ART significantly increased from baseline to follow-up; the amount of experience in working with patients with alcohol and illicit drug problems significantly increased. In reference to experience using specific SBIRT skills, residents demonstrated a significant increase for both alcohol and illicit drug use; residents' confidence and readiness applying discrete SBIRT constructs to patients increased from baseline	Suggested that SBIRT training was an effective educational tool that increased residents' sense of responsibility		M2	
72	Hettema JE, Sorensen JL, Uy M, Jain S. Motivational enhancement therapy to increase resident physician engagement in substance abuse education.Subst Abus.2009;30:244-247.	2009	Single Study: examine if Motivational enhancement therapy (MET) may help physicians resolve ambivalence about intervening with alcohol and drug users					Intervention/educational seminar do look promising, with barriers to SBIRT, asking about drug, providing advice, referral and treatment, and professional satisfaction all showing small to moderate effect sizes. Perceived responsibility for engaging in S&BI and negative attitudes did not change significantly; confidence in engaging in SBIRT changed the most significantly and had an associated large effect size.	There is promise that MET can enhance standard educational opportunities and lead to changes in SBIRT behavior		M2	
73	Holland CL, Pringle J, Barbetti V. Identification of physician barriers to the application of screening and brief intervention for problem alcohol and drug use Alcohol Treat Q. 2009;27:174---183.	2009	Single Study: discusses the results of the focus groups and explores educational and other strategies that could be offered to physicians in order to increase their knowledge, capabilities, and motivation in the area of screening and the identification of problem AOD use.					Identified physician barriers: brief time periods during an office visit, time required to administer some clinical alcohol and drug screening tools, lack of an effective community treatment referral system, waiting lists or denial by various third-party payers, availability of appropriate reimbursement, inadequate to absent level of formal training	First strategy: educational approach to facilitate and support physician engagement with SBIRT activities; second strategy: obtaining reimbursement for the appli- cation of SBIRT services or activities; third strategy: providing the physicians, and their patients, with effective resources that facilitate patient AOD treatment and recovery support access.		M2	

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74	Madson, M.B. et al. (2008). "Training in motivational interviewing: A systematic review." Journal of Substance Abuse Treatment 36(1), 101-109	2008	Review provides a consolidated account of MI trainings outlining the populations receiving training, methods used, and training outcomes.					Most articles tended to focus on more general/introductory MI training; all trainings reviewed described providing information relating to Phase 1 of MI (building motivation for change), whereas none of them described training activities related to Phase 2 (strengthening commitment); training formats: most trainings described a seminar/workshop format- presentation of didactic information and experiential exercises; those involved in MI training are focused on facilitating effective transfer of MI from training to practice	Better reporting of MI training studies and explicit references to the stages addressed by a particular training program could provide further evidence for the eight stages model while assisting in its development. At this time, the eight stages model provides a logical framework for both researchers and trainers alike. However, further empirical assessment remains to be done before a clear understanding of this model can be achieved.		M2	
	Drug Use and EHR											
75	Tai, B. and A. T. McLellan (2012). "Integrating information on substance use disorders into electronic health record systems." Journal of Substance Abuse Treatment 43(1): 12-19.	2012	Review focuses upon efforts federal agencies to develop a common set of core questions to screen, diagnose, and initiate treatment for substance use disorders as part of national EHRS; discusses the background/rationale for these efforts and presents the work to identify the questions and to promote information sharing among health care providers					Overwhelming arguments favoring the inclusion of patients' substance use information into EHRS and favoring the integration of care for identified “medically harmful substance use” into general health care and health insurance. Yet, as the health care field increases the accessibility of patient information to achieve greater safety, quality, and efficiency, all patients—not just those with substance use disorders— are raising concerns over access and the control of that accessibility. To whom does a patient's health care record belong? Who has the right to access a patient's health care record—and who decides? Should there be limits on patients' control of their own health care records?	Done properly, integration SUDs into EHRS should produce much-needed improvements in patient safety and health outcomes, as well as important reductions in health care costs and public health threats. Important additional effects of properly implemented integrated substance abuse care are reductions in stigma and with it the engagement of more affected individuals into treatment; components of a good data segmentation model will have to offer acceptable balance across the concerns of patients, providers, Federal and State governments, institutions, and organizations such as health information organizations.	H1		

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76	Tai B., Wu L., et al. (2012). "Electronic health records: essential tools in integrating substance abuse treatment with primary care." Substance Abuse and Rehabilitation 3: 1-8.	2012	Review: recent evidence about routine screening and intervention for alcohol/drug use and related disorders in primary care			Primary care		Data from recent research demonstrate need for research to address issues related to SBIRT for drug use/disorders, including developing validated and brief screening instruments for detecting drug-related problems that are acceptable and adoptable to clinicians in a busy general practice setting and testing effectiveness of SBIRT. Specifically, while there are well-studied screening tools for alcohol use problems, fewer studies exist regarding brief screening tools that are sensitive to drug use problems and useful for clinical decision-making in primary care;	Studies are needed to identify and develop brief standardized questionnaires that demonstrate the clinical utility and feasibility for screening	H1		
77	Ghitza, U. E., R. E. Gore-Langton, et al. (2012). "Common data elements for substance use disorders in electronic health records: the NIDA Clinical Trials Network experience." Addiction: no-no.	2012	NIDA convened a panel of drug addiction, primary care, research experts to develop clinical decision support tool for SUD SBIRT, two-stage screening / brief assessment process.	Adults		Medical settings - outpatient	Single-question screener - "How many times in the past year have you used an illegal drug or used a prescription medication for non-medical reasons?" (Smith et al) and DAST-10	Review presented validated single-question screener and expert panel recommends universal population-based screening through use of a validated, single-question screening test followed by initial assessment using the 10-question Drug Abuse Screening Test (DAST-10)	EHR usage could also allow for better quality of care for SUD in high-risk patients through a standardized, expert-guided clinical decision support for SBIRT to: (i) provide evidence-based brief interventions, (ii) facilitate linkages to SUD specialty treatment and (iii) provide or refer for dual-diagnoses treatment of co-occurring psychiatric disorders and SUD.	H3		
78	Tai, B. et al. (2012) "Meaningful Use of Electronic Behavioral Health Data in Primary Health Care." Sci Transl Med 4(119)	2012	Report: discusses the meaningful use of behavioral health data for the treatment of mental health and substance abuse conditions and optimization of behavioral wellness by primary care. physicians			Primary care		To realize an integrated health care system-need to be attentive to an array of issues; the development of technologies that support the integration of behavioral health and primary care., the optimization of systems to promote behavior changes, minimization of the burden on the health care system while maximizing outcomes, the improvement of patient engagement, the protection of patient privacy, and ensuring that data collection supports both clinical care and biomedical research	Fair HIE practices must be guided by the principles: (i) Who needs what information and when? (ii) Who determines who needs what information and when? (iii) How should psychotherapy notes be treated as part of the patient record?		M3	

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				Age Range	Risk Group					High	Med	Low
79	Ghitza, U.E. et al. (2011). "Improving drug abuse treatment delivery through adoption of harmonized electronic health record systems. Subst Abuse Rehabil. 2011(2): 125–131	2011	Review: illuminate the urgent public health need to develop and implement at the national level harmonized EHR including data fields containing standardized vocabulary/terminologies relevant to SUD treatment					Development, implementation, and adoption of interoperable EHR containing standard vocabulary/terminologies and consensus-based common data elements is an essential means to achieve substantive national healthcare reform in the realm of SUD specialty treatment settings. Such HIT systems may not only reduce inefficient, duplicative, and/or uncoordinated healthcare service delivery but may also enable bridging the divide between specialized SUD treatment and mainstream medical care.	Meaningful use of interoperable EHR may benefit patients, payers, and providers by reducing costs, improving quality of medical decision making and care, aiding in guideline implementation, and aiding in billing, reimbursement, and other administrative processes in clinical care. An interoperable EHR is also key to accelerating the translation of promising treatments from the bench to bedside to community-based practice settings.		M3	
80	Hu, L. L. et al. (2011). "Privacy protection for patients with substance use problems. Substance Abuse and Rehabilitation 2011:2 227–233	2011	Review discusses major differences between two federal privacy laws associated with health care for substance use disorders, identifies health care problems created by privacy policies, and describes potential solutions to these problems through technology innovation and policy improvement.					The HIPAA has more flexible disclosure standards, but imposes stiffer penalties for violators, whereas 42 CFR Part 2 has more stringent disclosure standards, but imposes less severe penalties. 42 CFR Part 2 along with the HIPAA has provided a double layer of privacy protection for patients who seek care in substance abuse treatment programs. In addition, many states have their own privacy laws related to IIHI which cannot be overridden by federal laws.Therefore, the end result is that the most stringent law must be followed regarding disclosure of IIHI associated with substance use.	Federal and state governments must support innovations in health information technology and take action to amend privacy policies. A meaningful and practical privacy policy should provide good balance between the need for protecting patient privacy and the need for health care providers to access critical patient health information. The integration of primary care and substance abuse specialty care will not be feasible, meaningful, or sustainable until this balance is reached.		M3	
81	Kritz, et al. (2012). "Electronic medical record system at an opioid agonist treatment programme: study design, pre-implementation results and post-implementation trends" Journal of Evaluation in Clinical Practice	2012	Single Study: studied the implementation of an EMR in the domains of quality, productivity, satisfaction, risk management and financial performance utilizing a prospective pre- and post-implementation study design.			Outpatient opioid agonist treatment programme		For quality, there was a highly statistically significant improvement in timely performance of annual medical assessments and annual multidiscipline assessments; For risk management, the number of events was not sufficient to perform valid statistical analysis.	Based on preliminary findings and trends, we believe that implementation of an EMR at this treatment center (ARTC) will prove to be successful for all stakeholders, and will serve as a template for other agencies providing similar services to underserved populations. Our patients and all patients receiving addiction-related and other medical services deserve no less.		M2	

	Journal / Publication Title (citation)	Year of Pub.	Type / Topic	Target Population/Subpopulati		Study Setting	Screening Tools/ Measures	Results / Summary Notes	Findings / Implications for Primary Care Settings	Weighted Relevance		
				Age Range	Risk Group					High	Med	Low
82	Louie, B. et al. (2012). "Electronic health information system at an opioid treatment programme: roadblocks to implementation" Journal of Evaluation in Clinical Practice	2012	Single Study: describes experience in implementing an electronic health information system at a methadone maintenance programme that also provides primary medical care, HIV medical care and case management, substance abuse counselling and vocational services			Outpatient opioid agonist treatment programme		The one area where a totally new process was required was the training of all stakeholders in the electronic information system and basic computer competency. Various roadblocks arose: change management, hierarchy of corporate objectives, process mastering, training issues, information technology (IT) governance, electronic security, communication and collaboration.	Throughout the process of implementation, preparation was a key factor in the efficient/productive implementation of EHR. Stakeholder participation from all levels of the agency ensured a relatively smooth deployment and continues to be a large part of mproving the system. The biggest lesson learned through this process was the need to evaluate all processes in a critical, yet non-judgmental way to maximize efficiency and productivity, with the overall goal of improving the quality of services to patients.		M2	

Summary Comments: Drug Use Domain

The Drug Use literature focused on the following key terms for searches: Drug Use Screening Tools, Drug Use and Primary Care screening, Drug Use Screening Adolescents, Drug Use treatment outcomes, Drug Use treatment motivational interviewing, Drug Use screening EHR, Drug Use Outcomes and SBIRT, Drug Use Screening American Indians/Native Alaskans, Drug Use Screening Guidelines.

The Drug Use Domain Literature Scan falls into ten categories:

1. Review Studies
2. Guidelines
3. Drug Use Screening Tools
4. Drug Use Screening / Intervention / Treatment Outcomes
5. Treatment Outcomes – Motivational Interviewing
6. Drug Use Screening / Intervention / Treatment – Adolescent
7. Drug Use Screening / Intervention / Treatment – American Indian / Alaska Native
8. Drug Use Screening / Intervention / Treatment – Patients with Psychiatric Disorder
9. Physician Training
10. Drug Use and Electronic Health Records

Each citation was rated as having High, Medium or Low relevancy for the development of clinical behavioral health measures for primary care settings. Chart below defines each score level.

H1 – Highly relevant, systematic review of studies, provides current direction for measure development process	M1 - Moderately relevant review of studies in relation to measure development process	L1 – Low relevance review of studies but some guidance in relation to measure development process
H2 – Highly relevant, robust single study, provides current direction for measure development process	M2 - Moderately relevant single study in relation to measure development process (based on topic relevance or strength of study)	L2 - Low relevance study but some guidance in relation to measure development process (based on topic relevance or strength of study)
H3 – Highly relevant to the domain/field	M3 – Moderately relevant to domain/field	L3 – Low relevance but some guidance for domain/field

Summary – Drug Use Domain Phase I

<u>Review Studies</u>

- 2008 US Preventive Services Task Force did not find evidence to recommend universal drug use screening in primary care settings
- Brief Interventions typically delivered in short time span, average 10 – 15 minutes, covering six elements, FRAMES: Feedback on behavior and consequences; Responsibility to change; Advice; Menu of options to bring about change; Empathy; and Self-efficacy for change. SBIRT for drug use appears to be more complicated to implement and evaluate than SBIRT for alcohol use.

- Most current, 2010 – 2012, evidence shows support for validated single-question screener: "How many times in the past year have you used an illegal drug or used a prescription medication for non-medical reasons?"
- Evidence reviewed showing clear support for the use of EHR and SBIRT to improve quality of care for SUD in high-risk patients.

Guidelines

- Current 2012 guidelines provide support for use of SBIRT for drug use as an integral part of routine clinical care.
- American Pediatrics Association referral guidelines present the use of validated CRAFFT screening tool integrated into a two-step adolescent SBIRT for all adolescents.
- 2012 NIDA guidelines for screening adult drug use propose the two-step use of the validated single question, NIDA Quick Screen and a NIDA-modified ASSIST screen if patient says "Yes" for use of illegal or prescription drugs for nonmedical reasons.

Drug Use Screening Tools

- Single screening question tool was validated as 100% sensitive and 73.5% specific for detection of a drug use disorder (Smith 2010).
- Expert panel recommends universal population-based screening using single question screen followed by assessment using 10-question Drug Abuse Screening Test (DAST-10).
- Short Inventory of Problems—Alcohol and Drugs modified for Drug Use (SIP-DU) validated by DAST-10 but provides a more sensitive screening for the independent construct of drug use consequences.
- National Institute on Alcohol Abuse and Alcoholism (NIAAA) daily limit 1-item screen found to be effective in assessing addiction-related diagnoses.

Drug Use Screening / Intervention / Treatment Outcomes

- In primary care settings, substantial evidence of benefits of SBIRT to address alcohol misuse, not yet enough substantiated evidence for the use of SBIRT and drug misuse.
- Studies show that individuals who use more than one substance or use alcohol and other substances make administering and evaluating SBIRT more complicated than when addressing alcohol alone
- Some key studies documenting significant impacts on decreasing illicit drug use include a large cross-national brief intervention trial with drug users (Humeniuk 2008) which found significant reductions in drug use after one brief intervention in primary care settings and findings from a US-based six state study that compared SBIRT services and illicit drug use, where findings were consistent with the WHO study, showing significant decrease in illicit drug use as measured by ASSIST scale.
- Economic analyses also suggest that SBI interventions are cost-effective, as even small reductions of drug or alcohol use are substantial over the long-term.

- Research must focus on advancing understanding of wider implementation of BI in various settings and how different population groups can be reached.

Treatment Outcomes – Motivational Interviewing

- Majority of studies show motivational interviewing techniques effective for engaging, and restructuring motivational impacts of individuals with co-occurring disorders.
- In targeted studies, motivational intervention shown to be more effective than assessment alone at reducing cocaine use, and decreasing the escalation of substance misuse in high-risk adolescents.
- One review found not enough evidence to support the use of MI for universal prevention of tobacco or alcohol use, and another study determined there was not enough data on the effects of MI to determine impact

Drug Use Screening / Intervention / Treatment – Adolescents

- SBIRT found to be an effective strategy for managing adolescent substance use in primary care settings.
- Use of BI's found to reduce drug and alcohol use in high risk adolescents
- For urban, minority adolescents, low SUD treatment found among all adolescents; SBIRT found to be effective in targeted studies with Urban blacks and Hispanics.
- When substance use screenings identify substance use, motivational interviewing, referrals to treatment and family engagement should be incorporated into treatment framework.
- Adolescents with prescription opioid use disorders present multiple barriers to care and treatment, including stigma and a lack of perceived treatment need.

Drug Use Screening / Intervention / Treatment – American Indians / Alaska Natives

- Many evidence-based practice's found to be disconnected to behavioral treatment health needs of AI/AN populations. Critical need to examine and develop cultural adaptation of evidence-based treatments for AI/AN populations.
- Motivational interviewing found to be one foundation developed for adaptation with AI/AN communities.

Drug Use Screening / Intervention / Treatment – Patients with Psychiatric Disorder

- Focus on high prevalence of illicit drug use in patients with psychiatric disorders, current instruments found to be inappropriate for routine drug screening of psychiatric patients.
- Team approach supported for screening/intervention / treatment
- AUDIT and DUDIT found to be effective, brief screening instruments for detecting alcohol and other drug use disorders in patients with first-episode psychosis.

Physician Training

- In general, SBIRT (Screening, Brief Intervention, Referral to Treatment) training is an effective educational tool that increased residents' knowledge, confidence, and sense of responsibility
- Obstacles/barriers in the literature include brief time periods during an office visit, time required to administer some clinical alcohol and drug screening tools, lack of an effective community treatment referral system, waiting lists or denial by various third-party payers, availability of appropriate reimbursement, inadequate to absent level of formal training

Drug Use and EHR

- Generally literature supports using EHR for screening, diagnosing, initiating treatment for substance use
- EHR has been shown to be cost effective and allows for better quality of care for SUD in both the general and high risk population
- Problem of privacy and who has the right to access the data continues to be a key obstacle in implementing EHR
- Interoperability of EHR also key to accelerating translation of promising treatments

	Journal / Publication Title (citation)	Topic	Target Populations		Study Setting	Study Design	Findings / Implications for Primary Care	Quality of Evidence * (see table at end)		
			Age Range	Risk Group				High	Mod	Low
	Alcohol Use									
1	Gryczynski, J., S. G. Mitchell, et al. (2011). "The relationship between services delivered and substance use outcomes in New Mexico's Screening, Brief Intervention, Referral and Treatment (SBIRT) Initiative." Drug and Alcohol Dependence 118(2–3): 152-157.	Study examined New Mexico SBIRT project conducted over 5 years as a SAMHSA initiative. Changes in frequency of illicit drug use, alcohol use, as a function of service level	18-85 years	positive screen for risky alcohol or drug use	35 Rural Health care Sites	n= 53,238 adults screened for alcohol and/or drug use in ambulatory settings,1208 positive screened-received BI or more intensive level of service (brief treatment/ referral treatment BT/RT)	Decreased frequency of illicit drug use, alcohol use, and alcohol intoxication 6 mos. after SBIRT services. Compared to those who received BI, participants who received BT/RT had sharper reductions in frequency of drinking and alcohol intoxication.# service sessions associated with reduced alcohol use among those who received BI	High		
2	Pilowsky, D.J. & Wu, L. (2012) Screening for alcohol and drug use disorders among adults in primary care: a review	Review of prevalence of alcohol and drug use disorders in primary care and emergency depts, screening tools, brief interventions.	Adults	patients with alcohol and drug use disorders	Primary Care/ ER	MEDLINE searched using the following keywords: alcohol use, alcohol use disorder, drug use, drug use disorder, screening, primary care, and emergency departments	Review supports usefulness of screening for AUDs in primary care settings. AUDIT / CAGE, perform better than other methods; Brief interventions shown to be effective to cut drinking- except in those already alcohol-dependent. Screening should be in settings where an intervention can be delivered immediately or shortly after screening		Mod	
3	Substance Use Screening, Brief Intervention, and Referral to Treatment for Pediatricians.(2011) Pediatrics 128(5): e1330-e1340.	Guideline review of APA Policy statement - recommended referral guidelines based on established patient-treatment–matching criteria and the risk level for substance abuse.	Childrn and Adols	N/A	Primary Care	algorithm-based approach to augment pediatrician's use of SBIRT in primary care settings.	AAP recommends that pediatricians: Become knowledgeable about all aspects of SBIRT; Screen all adolescent patients for tobacco, alcohol, drug use with a formal, validated screening tool,(i.e. CRAFFT); Respond to screening with appropriate brief intervention; Augment care with motivational-interviewing techniques	High		

	Journal / Publication Title (citation)	Topic	Target Populations		Study Setting	Study Design	Findings / Implications for Primary Care	Quality of Evidence * (see table at end)		
			Age Range	Risk Group				High	Mod	Low
4	Madras, B. K., W. M. Compton, et al. (2009). "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 99(1–3): 280-295.	Review of SBIRT services across 6 states, compared illicit drug use at baseline and 6 mos follow-up	All	illicit substance and/or heavy alcohol use	Primary Care	n= 459,599 persons screened,104,505 screened positive for heavy alcohol use and/or illicit drug use; 70% recommended for BI, 14% for brief treatment, 16% referred to specialty treatment; follow up 6 months	Among those reporting baseline illicit drug use, rates of drug use at 6 month follow-up were 67.7% lower and heavy alcohol use was 38.6% lower; among persons recommended for brief treatment or referral to specialty treatment, self-reported improvements in general health, mental health, employment, housing status, and criminal behavior were found.	High		
5	Johnson JA, Lee A, Vinson D, Seale JP. Use of AUDIT-Based Measures to Identify Unhealthy Alcohol Use and Alcohol Dependence in Primary Care: A Validation Study. Alcohol Clin Exp Res. 2012 Jul 26.	Study primary care data from bi-ethnic southern U.S. pop. to examine ability of AUDIT-based approaches to id unhealthy alcohol use/dependence.	Adults	alcohol use	Primary Care	n = 625 female and male adult drinkers presenting to 5 southeastern primary care practices. Validity measures compared performance of AUDIT domains scores, with 30-day binge drinking measure	Optimal AUDIT scores for detecting unhealthy alcohol use were lower than current commonly used cutoffs (5 for men, 3 for women) Improved performance was obtained by combining AUDIT cutoffs of 6 for men and 4 for women with a 30-day binge drinking measure			Low
6	Sterling S., Kline-Simon A, Wibblemans C., (2012) Models of Integrated Care for Adolescent Alcohol and Drug Use in Pediatrics: Predictors and Implications for Practice and Policy	Longitudinal study of adolescent substance use (SU) treatment, a web survey of pediatric primary care providers (PCPs), and pilot study of a SBIRT)model of primary care-based adolescent care.	Adols	n/a	Pediatric Care	Pilot examined whether SBIRT versus usual care increased problem identification and specialty treatment rates, and the feasibility of SBIRT in Pediatrics.	SBIRT model of care tested in the pilot proved highly feasible. PCPs said that it improved care; more (77) teens were identified and referred for further assessment, and specialty treatment initiation increased from 8.73% to 12% (p<.0001).			Low
7	Frank, D., DeBenedetti, A. F., Volk, R. J., Williams, E. C., Kivlahan, D. R., & Bradley, K. A. (2008). Effectiveness of the AUDIT-C as a screening test for alcohol misuse in three race/ethnic groups. J Gen Intern Med, 23(6), 781-787.	Evaluate validity of the AUDIT-C among primary care patients from the predominant racial/ethnic subgroups within the US	Adults	n/a	Family Practice	1,292 outpatients from an academic family practice clinic in Texas (90% of randomly sampled	Areas under the receiver operating curve(AuROCs) evaluated overall AUDIT-C, performance of the AUDITC was excellent in all 3 racial/ethnic groups by high AuROCs.		Mod	

	Journal / Publication Title (citation)	Topic	Target Populations		Study Setting	Study Design	Findings / Implications for Primary Care	Quality of Evidence * (see table at end)		
			Age Range	Risk Group				High	Mod	Low
8	Kaner, E. F. S., Dickinson, H. O., Beyer, F., Pienaar, E., Schlesinger, C., Campbell, F., et al. (2009). The effectiveness of brief alcohol interventions in primary care settings: A systematic review. Drug and Alcohol Review, 28(3), 301-323.	Systematic review included randomised controlled trials (RCT) involving patients in primary care who were not seeking alcohol treatment and who received brief intervention	Adults	n/a	Primary Care	PC (24 trials), ED (5 trials)	At 1 year follow up, patients receiving BI had a significant reduction in alcohol consumption compared with controls [mean difference: −38 g week−1,: −54 to −23], although there was substantial heterogeneity between trials.	High		
9	Kypri, K. et al. (2009) Randomized Controlled Trial of Proactive Web-Based Alcohol Screening and Brief Intervention for University Students. Arch Intern Med. 169(16): 1508-1514	Single Study: tested efficacy of a proactive web-based alcohol screening and brief intervention program	17-24 years	web-based Alcohol Use Disorders Identification Test. scored in the	University	n=2435 randomized to intervention group- 10 min. of web=based motivational assessment and personalized feedback or control group- only	After 1 month, participants receiving intervention drank less often, smaller quantities per occasion, and less alcohol overall than did controls. Differences in alcohol-related harms were nonsignificant. At 6 months,		Mod	
10	Lee, J. D., Delbanco, B., Wu, E., & Gourevitch, M. N. (2011). Substance Use Prevalence and Screening Instrument Comparisons in Urban Primary Care. Substance Abuse, 32(3),	Substance use screening in a primary care setting compared the ASSIST, TICS, NIAAA single item, and electronic medical record (EMR).	Adults	n/a	Urban Primary Care	236 consecutive adults,	ASSIST moderate- to high-risk substance use prevalence was tobacco, 15.3%; alcohol, 8.5%; cannabis, 5.1%; cocaine, 2.5%; and opioids, 2.5%. Compared to ASSIST, a positive TICS was 45% (95% confidence interval [CI],		Mod	

Quality of Evidence	Criteria
High	Randomized controlled trials (RCTs); multiple target populations; meta-analysis; clinical guidelines
Moderate	RCT with single, limited pop.; Non-RCT's with control for confounders; limited target population
Low	Non-RCT's with no comparison groups, small sample size, imprecise estimate of effect

	Journal / Publication Title (citation)	Topic	Target Populations		Study Setting	Study Design	Findings / Implications for Primary Care	Quality of Evidence * (see table at end)		
			Age Range	Risk Group				High	Mod	Low
	Prescription Drug Misuse									
1	Smith PC, Schmidt SM, Allensworth-Davies D, et al. A single-question screening test for drug use in primary care.Arch Internal Med.2010;170:1155–1160.	study validated a single-question screening test for drug use and drug use disorders in primary care	21-86 years	primary care patients	Primary Care	n=394 patients recruited from primary care waiting rooms asked "How many times in the past year have you used an illegal drug or used a prescription medication for non-medical reasons?" also asked the DAST-10. Reference standard was the presence or absence of current (past year) drug use or a drug use disorder (abuse or dependence) as determined by a standardized diagnostic interview.	The single screening question was 100% sensitive and 73.5% specific for the detection of a drug use disorder. It was less sensitive for the detection of self-reported current drug use and drug use detected by oral fluid testing or self-report. Test characteristics affected very little by subject demographic characteristics.	High		
2	Schonfeld, L. et al. (2010). Screening and Brief Intervention for Substance Misuse Among Older Adults: The Florida BRITE Project. Research and Practice 100(1).	examine effectiveness of the Florida Brief Intervention and Treatment for Elders	Mean - 75 years	illicit substance users	Elders' Home; Senior Centers	n=3497 screened older adults on alcohol use, prescription medications, OTC medications, illicit drugs, depression and suicide risk; positive screens-brief intervention, brief treatment; follow up @ 1 or 3 months.	Prescription medication misuse was most prevalent substance use problem, followed by alcohol, over-the-counter medications, and illicit substances. Those who received the brief intervention had improvement in alcohol, medication misuse, and depression measures.	High		
3	Goti, J. et al. (2010). Brief intervention in substance-use among adolescent psychiatric patients: a randomized controlled trial. European Child and Adolescent Psychiatry 19(6): 503-511.	assess efficacy of brief intervention in adolescents referred to psychiatric treatment who reported substance use	12-17 years	substance use	Psychiatry Dept.	n= 237 patients consecutively admitted to dept, n= 143 identified as users; subjects randomly assigned to 1)experimental group:received brief intervention aimed at increasing awareness of risks of substance-use or 2) control group; assessed knowledge, problems, perception of risks and intention of use of psychoactive substances administered at baseline and 1 mo. follow up	Significant increase across time in overall knowledge about drugs and perception of risk in the experimental group; no differences were observed for other variables such as intention of use or perception of risk. Implementation of specific targeted programs among adolescent psychiatric patients is an urgent need. Brief interventions have an effect, although a minor one, and probably need to be more intense or qualitatively different in this specific population		Mod	

	Journal / Publication Title (citation)	Topic	Target Populations		Study Setting	Study Design	Findings / Implications for Primary Care	Quality of Evidence * (see table at end)		
			Age Range	Risk Group				High	Mod	Low
4	Zahradnik, A. et al. (2009). Randomized controlled trial of a brief intervention for problematic prescription drug use in non-treatment-seeking patients. Addiction, 104, 109–117	examine brief intervention delivered in general hospitals to promote decrease in prescription drug misuse.	18-69 years	regular use of prescription drugs(PD) or abuse of PD,	Gen./Univ. Hospital	n= 6042 patients admitted to a surgical, internal or gynecological ward screened with regard to alcohol, nicotine and PD use; positive screen=126; Subjects received two counselling sessions based on Motivational Interviewing plus an individualized written feedback (intervention group - IG) or a booklet on health behaviour (control group-CG)	After 3 months, more participants in the IG reduced their defined daily dosages compared to the participants in the CG (51.8% vs. 30%). In IG 17.9%, in the CG 8.6% discontinued use of PD. Brief intervention based on Motivational Interviewing is effective in reducing PD intake in non-treatment-seeking patients.	High		
5	Moore, T.M. et al. (2009). A comparison of common screening methods for predicting aberrant drug-related behavior among patients receiving opioids for chronic pain management. Pain Med 10(8):1426-33.	screening measures compared with each other predicting aberrant drug-related behavior and decrease opioid med misuse	Mean-43.9 years	opioid medication users	Pain Mgemnt Center	n=48 users attended a pain management center but were later discontinued from opioids for aberrant drug-related behavior; originally completed the SOAPP, ORT, and DIRE and semi-structured clinical interview prior to being approved to receive opioid analgesics for pain management	SOAPP performed best of the three written screening tools based on its length, behavioral specificity of items, and opaqueness			Low
6	Azbik, J. et al. (2006). Validation and clinical application of the Screener and Opioid Assessment for Patients with Pain (SOAPP). Journal of Pain and Symptom Management 32(3): 287-293	examine reliability/validity of SOAPP for risk of opioid abuse	Mean-52.55 years	patients taking opioids	Tertiary Hospital + VA	n= 396 patients taking opioids for noncancer pain; demographic data, SOAPP scores, urine toxicology screens examined; high risk group= score > 8, low risk = score < 8	Support for the clinical usability and predictive validity of the SOAPP among patients with chronic pain considered for opioid therapy. patients in the high-risk group were younger, more likely to be asked to give a urine screen, and had more abnormal urine screens compared with those in the low-risk group.		Mod	

	Journal / Publication Title (citation)	Topic	Target Populations		Study Setting	Study Design	Findings / Implications for Primary Care	Quality of Evidence * (see table at end)		
			Age Range	Risk Group				High	Mod	Low
7	Gryczynski, J., S. G. Mitchell, et al. (2011). "The relationship between services delivered and substance use outcomes in New Mexico's Screening, Brief Intervention, Referral and Treatment (SBIRT) Initiative." Drug and Alcohol Dependence 118(2–3): 152-157.	examined New Mexico SBIRT project, changes illicit drug use, alcohol use, as function of service level	18-85 years	positive screen for risky alcohol or drug use	35 Rural Health care Sites	n= 53,238 adults screened for alcohol and/or drug use in ambulatory settings, n=1208 positive screened-received BI or intensive level of service brief treatment referral treatment (BT or RT); number of days in the past 30 days that the patient (a) used illicit drugs (including non-medical use of prescription drugs); (b) consumed alcohol; and (c) consumed alcohol to intoxication	Participants reported decreased frequency of illicit drug use, alcohol use, and alcohol intoxication 6 months after SBIRT services. Compared to those who received BI, participants who received BT/RT had sharper reductions in frequency of drinking and alcohol intoxication. # service sessions associated with reduced frequency of alcohol use and intoxication, but only among those who received BI	High		

Quality of Evidence	Criteria
High	Randomized controlled trials (RCTs); multiple target populations; meta-analysis; clinical guidelines
Moderate	RCT with single, limited pop.; Non-RCT's with control for confounders; limited target population
Low	Non-RCT's with no comparison groups; small sample size; imprecise estimate of effect

	Journal / Publication Title (citation)	Topic	Target Populations		Study Setting	Study Design	Findings / Implications for Primary Care	Quality of Evidence * (see table at end)		
			Age Range	Risk Group				High	Mod	Low
	Illicit Drug Use									
1	Substance Use Screening, Brief Intervention, and Referral to Treatment for Pediatricians.(2011) Pediatrics 128(5): e1330-e1340.	Guideline review of APA Policy statement - referral guidelines, patient-treatment and risk level for substance abuse.	Children and Adolscnts	n/a	Primary Care	Guidelines for pediatrician related to SBIRT in primary care settings.	AAP recommends that pediatricians: -- Become knowledgeable about all aspects of SBIRT through training or continuing med.education; Screen all adolescent patients for tobacco, alcohol, and drug use with a formal, validated screening tool, such as CRAFFT screen; Respond to screening results with the appropriate brief intervention; Augment patient care with motivational-interviewing techniques		Mod	
2	Bernstein, J., E. Bernstein, et al. (2005). "Brief motivational intervention at a clinic visit reduces cocaine and heroin use." Drug Alcohol Depend 77(1): 49-59.	Study to test impact of a single, structured encounter targeting cessation of drug use, screened in the context of a routine medical visit	Mean- 38 years	cocaine and heroin users	Outpatnt Clinic	n=1175 patients with positive screen; follow up 3. 6 mo; randomly assigned to intervention group = motivational interview, referrals & handout, follow-up phone call, or control group = handout.	The intervention group was more likely to be abstinent than the control group for cocaine alone (22.3% versus 16.9%), heroin alone (40.2% versus 30.6%), and both drugs (17.4% versus 12.8%) Cocaine levels in hair were reduced by 29% for the intervention group and only 4% for the control group. Reductions in opiate levels were similar (29% versus 25%).	High		
3	Humeniuk, R.; Dennington, V.; Ali, R.; and WHO ASSIST Phase III Study Group. The Effectiveness of a Brief Intervention for Illicit Drugs Linked to the ASSIST Screening Test in Primary Health Care Settings: A Technical Report of Phase III Findings of the WHO ASSIST Randomized Controlled Trial (Draft). Geneva, Switzerland, 2008	WHO study - International random controlled trial (RCT) evaluating the Brief Intervention for illicit drugs (cannabis, cocaine, ATS & opioids) as linked to ASSIST	16-62 years	cannabis, cocaine, ATS, or opioids users	Primary Care	n=731 participants recruited from PHC settings in four countries (Australia, Brazil, India, US) and randomly allocated to BI or control, followed up 3 mos	With the exception of the USA site, all countries demonstrated that BI participants had significantly lower total Illicit substance Involvement scores at follow-up compared with control subjects. Evidence of success incorporating motivational interviewing techniques into the ASSIST-linked BI	High		

	Journal / Publication Title (citation)	Topic	Target Populations		Study Setting	Study Design	Findings / Implications for Primary Care	Quality of Evidence * (see table at end)		
			Age Range	Risk Group				High	Mod	Low
4	Madras, B. K., W. M. Compton, et al. (2009). "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 99(1–3): 280-295.	Review of SBIRT services across 6 states, compared illicit drug use at baseline and 6 mos follow-up	All	illicit substance and/or heavy alcohol use	Primary Care	n= 459,599 persons screened, 104,505 screened positive heavy alcohol use /illicit drug use; 70% recommended for a BI, 14% for brief treatment, 16% referred to specialty treatment;	Among those reporting baseline illicit drug use, rates of drug use at 6 month follow-up, were 67.7% lower and heavy alcohol use was 38.6% lower; among persons recommended for brief treatment or referral to specialty treatment, self-reported improvements in general health, mental health, employment, housing status, and criminal behavior were found.	High		
5	Kazemi, D.M. et al. (2012) Brief motivational intervention for high risk drinking and illicit drug use in mandated and voluntary freshmen. Journal of Substance Abuse	Single Study: compared the effectiveness of the Brief Motivational Intervention (BMI) in decreasing alcohol consumption and illicit drug use, as well as the associated negative consequences among mandated students and voluntary students	18-20 years	group 1: mandated because violated a campus alcohol policy; group 2: recruited	University	n= 147 mandated students, n= 437 voluntary students-receive BMI at baseline, 2 weeks after, and boosters at 3, 6 mo.	Alcohol and drug use in both groups decreased between baseline and 6 months, with drug use in the mandated group declining to 10% by 6 months. Alcohol consequences, decreased significantly for both groups at baseline and 3 months, plateaued at 6 months. BMI effective decreasing alcohol consumption, illegal drug use			Low

	Journal / Publication Title (citation)	Topic	Target Populations		Study Setting	Study Design	Findings / Implications for Primary Care	Quality of Evidence * (see table at end)		
			Age Range	Risk Group				High	Mod	Low
6	Fischer, B. et al. (2012). 12-month follow-up of an exploratory 'brief intervention' for high-frequency cannabis users among Canadian university students. Substance Abuse Treatment, Prevention, and Policy	Single Study: examined 12-month follow-up outcomes for BIs in a cohort of young Canadian high- frequency cannabis users where select short-term effects (3 months) had previously been assessed and demonstrated.	18-28 years	frequent cannabis users	University	n = 134 frequent cannabis users randomized to oral or a written cannabis BI, or an oral or a written general health BI (control) , assessed at3-months, 12-months;	Reductions for deep inhalation and driving after cannabis use was observed at 3 mo. follow up, maintained at 12 mo. follow-up. Results confirm findings from select other studies indicating the potential for longer-term and sustained risk reduction effects of BIs for cannabis use.		Mod	
7	Spear, S. et al. (2009). Another Way of Talking About Substance Abuse: Substance Abuse Screening and Brief Intervention in a Mental Health Clinic. J Hum Behav Soc Environ. 19(8): 959–977	Review: provides experiential evidence on the transportability of the Alcohol, Smoking, and Substance Involvement Screening Test (ASSIST) screening tool and brief intervention in a mental health clinic.	12-17 years	students at risk	University Counsel-ing Center	To investigate implementation of the ASSIST: information regarding procedures, SBI activities, and logistical barriers for clinicians; AUDIT-C universal pre-screen, administered ASSIST on positive results, BI administered	Multiple benefits to using the ASSIST: Conducting the ASSIST screen provides an opportunity for clinicians to start a discussion with their clients about their substance use. In addition, the ASSIST can help clinicians discern whether substance use may be contributing factor to the presenting mental health issue.			Low

	Journal / Publication Title (citation)	Topic	Target Populations		Study Setting	Study Design	Findings / Implications for Primary Care	Quality of Evidence * (see table at end)		
			Age Range	Risk Group				High	Mod	Low
8	Martin, G. & Copeland. (2008). The adolescent cannabis check-up: Randomized trial of a brief intervention for young cannabis users. Journal of Substance Abuse Treatment 34: 407–414	Study to evaluate efficacy of a brief motivational enhancement therapy in reducing cannabis use and cannabis	14-19 years	non-treatment-seeking adolescent cannabis users	General Community	n=40 users, randomly assigned to either a two-session brief intervention or a 3-month delayed-treatment control condition; reported changes in cannabis use/DSM-IV dependence symptoms	Significantly greater reductions on measures were found in the Adolescent Cannabis Check-up group at 3-month follow-up. Between-group effect sizes were moderate, indicating a brief motivational intervention with non-treatment-seeking adolescent cannabis users may be effective, even among young people currently dependent but not actively seeking treatment.		Mod	
9	Schonfeld, L. et al. (2010). Screening and Brief Intervention for Substance Misuse Among Older Adults: The Florida BRITE Project. Research and Practice 100(1).	Single Study: developed and examined the effectiveness of the Florida Brief Intervention and Treatment for Elders (BRITE) project, a 3-year, state-funded pilot program of screening and brief intervention for older adult	Mean- 75 years	illicit substance users	Elders' Home; Senior Centers	n=3497 screened older adults on alcohol use, prescription drug misuse, illicit drugs, depression, suicide risk; positive screens-brief intervention, brief treatment; follow up- 1 or 3 mo.	Prescription medication misuse was the most prevalent substance use problem, followed by alcohol, over-the-counter medications, and illicit substances. Depression was prevalent among those with alcohol and prescription medication problems. Those who received the brief intervention had improvement in alcohol, medication misuse, and depression measures.		Mod	
10	Lanier, D. and S. (2008). Screening in Primary Care Settings for Illicit Drug Use: Assessment of Screening Instruments A Supplemental Evidence Update for the U.S. Preventive Services Task Force. 540 Gaither Road, Rockville, MD 20850, U.S. Department of Health and Human Services	Supplemental Evidence to identify standardized instruments for detecting use/abuse of illicit drugs; and to rate instruments short enough to use in busy primary care practice setting	n/a	illicit substance users	Primary Care	CRAFFT instrument validated for screening adolescents for drug use/misuse. Three instruments (ASSIST, CAGE-AID, and DAST-20) were validated for screening adults.	CRAFFT validated for screening adolescents for drug use/misuse and the ASSIST, CAGE-AID, and DAST-20 validated for screening adults. Greatest gap in the evidence was lack of studies that shed light on the feasibility/usefulness of screening instruments in a busy practice.	High		

	Journal / Publication Title (citation)	Topic	Target Populations		Study Setting	Study Design	Findings / Implications for Primary Care	Quality of Evidence * (see table at end)		
			Age Range	Risk Group				High	Mod	Low
11	Goti, J. et al. (2010). Brief intervention in substance-use among adolescent psychiatric patients: a randomized controlled trial. European Child and Adolescent Psychiatry 19(6): 503-511.	Assessed efficacy of a brief motivational enhancement intervention in adolescents referred to psychiatric treatment who reported substance use.	12-17 years	referred to psychiatric treatment who reported substance use	Psych Dept.	n= 237 patients, 143 id' as users; randomly assigned to experimental group forBI to increase awareness of risks or control group; assessed knowledge, problems,risk perception, intention to use	significant increase across time in overall knowledge about drugs and perception of risk in the experimental group; no differences were observed for other variables such as intention of use or perception of risk. Implementation of specific targeted programs among adolescent psychiatric patients is an urgent need. Brief interventions have an effect, although a minor one, and probably need to be more intense or qualitatively different in this specific population.		Mod	
12	Gryczynski, J., S. G. Mitchell, et al. (2011). "The relationship between services delivered and substance use outcomes in New Mexico's Screening, Brief Intervention, Referral and Treatment (SBIRT) Initiative." Drug and Alcohol Dependence 118(2–3): 152-157.	Examined New Mexico SBIRT project, changes illicit drug use, alcohol use, as function of service level	18-85 years	positive screen for risky alcohol or drug use	35 Rural Health care Sites	n= 53,238 adults screened for alcohol and/or drug use in ambulatory settings, n=1208 positive screened-received BI or intensive level of service brief treatment referral treatment (BT or RT);	Participants reported decreased frequency of illicit drug use, alcohol use, and alcohol intoxication 6 months after SBIRT services. Compared to those who received BI, participants who received BT/RT had sharper reductions in frequency of drinking and alcohol intoxication. # service sessions associated with reduced frequency of alcohol use and intoxication, but only among those who received BI	High		

	Journal / Publication Title (citation)	Topic	Target Populations		Study Setting	Study Design	Findings / Implications for Primary Care	Quality of Evidence * (see table at end)		
			Age Range	Risk Group				High	Mod	Low
13	Smith PC, Schmidt SM, Allensworth-Davies D, et al. (2010)A single-question screening test for drug use in primary care.Arch Internal Med;170:1155–1160.	Study validated a single-question screening test for drug use and drug use disorders in primary care	21-86 years	primary care patients	Primary Care	n=394 patients recruited from primary care waiting rooms asked "How many times in the past year have you used an illegal drug or used a prescription medication for non-medical reasons?" also asked DAST-10.	The single screening question was 100% sensitive and 73.5% specific for the detection of a drug use disorder. It was less sensitive for the detection of self-reported current drug use and drug use detected by oral fluid testing or self-report. Test characteristics were similar to that of the DAST, and were affected very little by subject demographic characteristics.	High		
14	Pilowsky, D.J. & Wu, L. (2012) Screening for alcohol and drug use disorders among adults in primary care: a review	Review: prevalence of alcohol and drug use disorders (abuse or dependence) in primary care and emergency departments, as well as current screening tools and brief interventions.	Adults	patients with alcohol and drug use disorders	Primary Care/ ER	MEDLINE searched using keywords: alcohol use, alcohol use disorder, drug use, drug use disorder, screening, primary care, and emergency departments	Review supports usefulness of screening for AUDs in primary care settings. AUDIT / CAGE, perform better than other methods (eg, asking about the frequency and quantity of alcohol use); Brief interventions have been shown to be effective to cut drinking- exception is those who are already alcohol-dependent. Screening should be used only in settings where an intervention can be delivered immediately or shortly after screening is done			Low

Quality of Evidence	Criteria
High	Randomized controlled trials (RCTs); multiple target populations; meta-analysis; clinical guidelines
Moderate	RCT with single, limited pop.; Non-RCT's with control for confounders; limited target population
Low	Non-RCT's with no comparison groups, small sample size, imprecise estimate of effect

Acronyms

AHRQ	Agency for Healthcare Research and Quality
APA	American Pediatrics Association
ASPE	Assistant Secretary for Planning and Evaluation
ASSERT	Alcohol and Substance Abuse Services, Education, and Referral to Treatment
ASSIST	Alcohol, Smoking and Substance Involvement Screening Test
BH	Behavioral Health
BHeM	Behavioral Health eMeasures
CDC	Centers for Disease Control and Prevention
CEO	Chief Executive Officer
CQAIMH	Center for Quality Assessment and Improvement in Mental Health
CQM	Clinical Quality Measure
CMS	Centers for Medicare and Medicaid Services
CRAFFT	Car, Relax, Alone, Forget Friends and Trouble
DAST	Drug Abuse Screening Test
FACP	Fellow, American College of Physicians
FASAM	Fellow, American Society of Addiction Medicine
EDC	Education Development Center
EHR	Electronic Health Record
HITECH	Health Information Technology for Economic and Clinical Health Act of 2009
HITPC	Health Information Technology Policy Committee
HRSA	Health Resources and Services Administration
IHS	Indian Health Service
ICSI	Institute for Clinical Systems Improvement
IT	Information Technology
MD	Medical Doctor
MPH	Masters in Public Health
MSW	Masters in Social Work

MU	Meaningful Use
NCQA	National Committee for Quality Assurance
NIAAA	National Institute on Alcohol Abuse and Alcoholism
NICHD	National Institute of Child Health and Health Development
NIDA	National Institute on Drug Abuse
NIH	National Institutes of Health
NIMH	National Institute of Mental Health
NINR	National Institute of Nursing Research
NIST	National Institute of Standards and Technology
NCBDDD	National Center on Birth Defects and Developmental Disabilities
NORC	National Organization for Research at the University of Chicago
NQMC	National Quality Measures Clearinghouse
NPRM	Notice of Proposed Rulemaking
NQF	National Quality Forum
ONC	Office of the National Coordinator for Health Information Technology
ONDIEH	Office of Noncommunicable Disease, Injury and Environmental Health
PCPI	Physician Consortium for Performance Improvement
PhD	Doctorate of Philosophy
PHQ	Patient Health Questionnaire
PRO	Patient Recorded Outcome
PROMIS	Patient Reported Outcomes Measurement Information System
PsyD	Doctor of Psychology
RHI	Resolution Health, Inc.
SAMHSA	Substance Abuse and Mental Health Services Administration
SBI	Screening and Brief Interventions
SBIRT	Screening, Brief Interventions and Referral to Treatment
ScD	Doctor of Science
SIP-DU	Short Inventory of Problems—Alcohol and Drugs modified for Drug Use
TEP	Technical Evaluation Panel

TJC	The Joint Commission
US	United States of America
VA	Department of Veterans Affairs
VHA	Veterans Health Administration
VP	Vice President
WHO	World Health Organization