



Rationale, Process & Data Elements

- Introduction & Rationale (Robert Lindblad)
 - SUD EHR Rationale
 - Meaningful Use
 - Federal and Other Initiatives

- Stakeholder Process & Data Elements (Robert Gore-Langton)
 - “Mind Map” and Process
 - Expert Recommendations
 - Domains and Core Questions
 - Interoperability and CDEs
 - Moving Forward
 - Conclusions



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International Network on
Brief Interventions for Alcohol
Problems.



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Goals of EHR

- Increase quality of health care
- Increase efficiency of health care
- Decrease cost of health care

HOW?



EHR

- Create EMRs
 - Use common data elements (CDEs)
 - Define information to be shared
 - Develop interoperability to share information
 - Maintain confidentiality



Sharing Information

- Combine data or combine providers?
 - VA system
 - FQHCs
 - Patient-centered medical homes



Electronic Health Record (EHR)

- Federal meaningful use criteria
 - Incentive through reimbursement
 - Incorporate concepts and data elements to qualify for meaningful use



Alcohol, Tobacco and Substance Use

- Alcohol and Tobacco
 - Single substance
 - Standardized quantities
 - More data for screening and intervention

- SUD
 - Multiple substances
 - No standard quantity
 - Less data regarding screening and SBIRT



Alcohol, Tobacco and Substance Use

- Short term goal
 - Address all three substances within EMR and meaningful use

- Long term goal
 - Combine all three areas into a single screener and treatment algorithm to build efficiency and decrease provider burden



Electronic Health Record (EHR)

- Federal “push” for universal adoption of EHRs by 2014
- Multiple vendors developing EMR
 - Hospital based systems
 - Individual practice based systems
 - Interoperability (EMRs → EHR)
- Content
 - Clinical care
 - Research



Electronic Health Record (EHR)

- ARRA 2009/Title XIII - HITECH Act*
- Federal Meaningful Use criteria
 - Incentive through reimbursement
 - Incorporate concepts and data elements to qualify for meaningful use
 - For example
 - Meaningful Use Stage 2 (proposed)
 - Screen for tobacco use in 80% of clinic population
 - Screen and brief intervention for alcohol use disorders
 - Screening question for illicit substance use in primary care

* American Recovery and Reinvestment Act - Health Information Technology for Economic and Clinical Health Act



Rationale to Include Substance Use Measures in “Meaningful Use”

- 1983-2004: 32-fold↑ in fatal medication errors at home related to alcohol and/or street drugs (Phillips DP et al. *Arch Intern Med* 208;168(14):1561-1566)
- 1991-2009: 3-fold ↑ in opioid analgesic Rx's
- 2005-2009: 2-fold ↑ in ER visits due to non-medical use of Rx opioids
 - Rx opioid overdose now 2nd leading cause of unintentional death in U.S.
(CDC says: “national epidemic”)
 - 2009: 5.25 million people in U.S. reported non-medical use of Rx painkillers



SUD EHR Perspective of “Meaningful” Use

- Serve goals of a Prescription Drug Monitoring Program (PDMP)* – reduce opioid overdose, Rx error rate and drug-drug interactions
 - (T. McLellan, personal communication)
 - *
 1. Dept. of Justice - \$7 million to help with state PDMPs
 2. HHS grant program – “National All Schedules Prescription Electronic Reporting Act – 2005 (NASPER) - \$2 million in 13 states
- Facilitate better treatment of co-occurring medical and psychiatric conditions by
 - improving medication adherence
 - identifying unsafe and/or unidentified drug-drug interactions
 - Identifying high-risk practices



The Joint Commission*

Eight final specifications for Tobacco and Substance Use Measures for screening, treatment or brief intervention submitted by the Joint Commission to the National Quality Forum (July 2011)

- * Renamed from Joint Commission on Accreditation of Healthcare Organizations or JCAHO



The Joint Commission Measures

- ❑ **TOB-1** Tobacco use screening
- ❑ **TOB-2** Tobacco use treatment provided or offered
- ❑ **TOB-3** Tobacco use treatment provide or offered at discharge
- ❑ **TOB-4** Tobacco use: assessing status after discharge
- ❑ **SUB-1** Alcohol use screening
- ❑ **SUB-2** Alcohol use brief intervention provided or offered
- ❑ **SUB-3** Alcohol & other drug use disorder treatment provided or offered at discharge
- ❑ **SUB-4** Alcohol & drug use: assessing status after discharge.



NIDA CTN

- Given this background, how does NIDA CTN make progress in this area?
 - Develop common data elements for SUD
 - Develop a work plan for screening in primary care
 - Interface with a myriad of federal agencies and other stakeholders



NLM
NIH OBSSR
CDC, IHS, VA

AAAP
ASAM
CPDD
SBM
APA

NASADAD
AHRQ

62 CTPs
+ HCPs

ONDCP
CMS

SUD EHR



SAMHSA
HRSA

NIDA CTN



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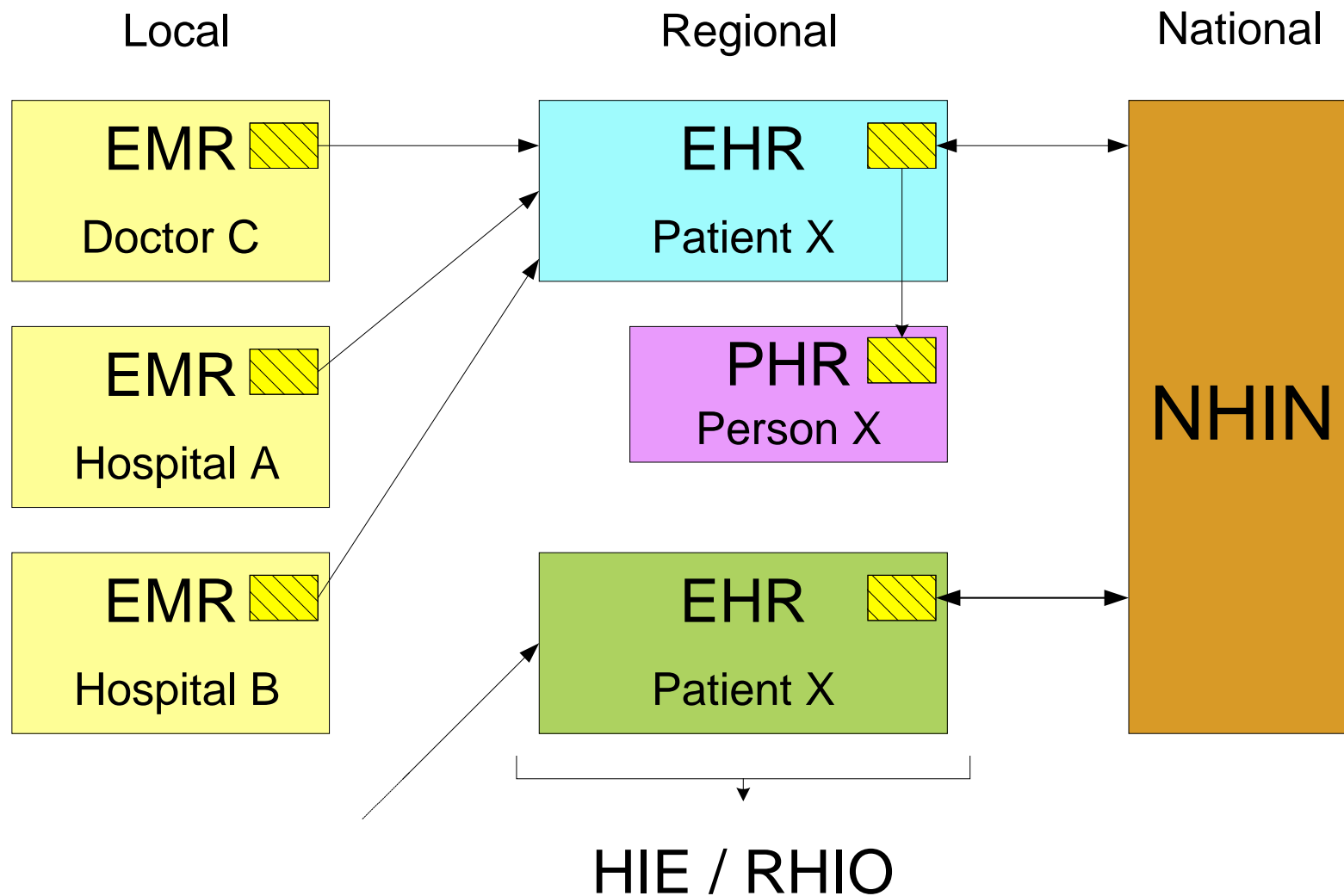
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EHR Role in a Nationwide Health Information Network

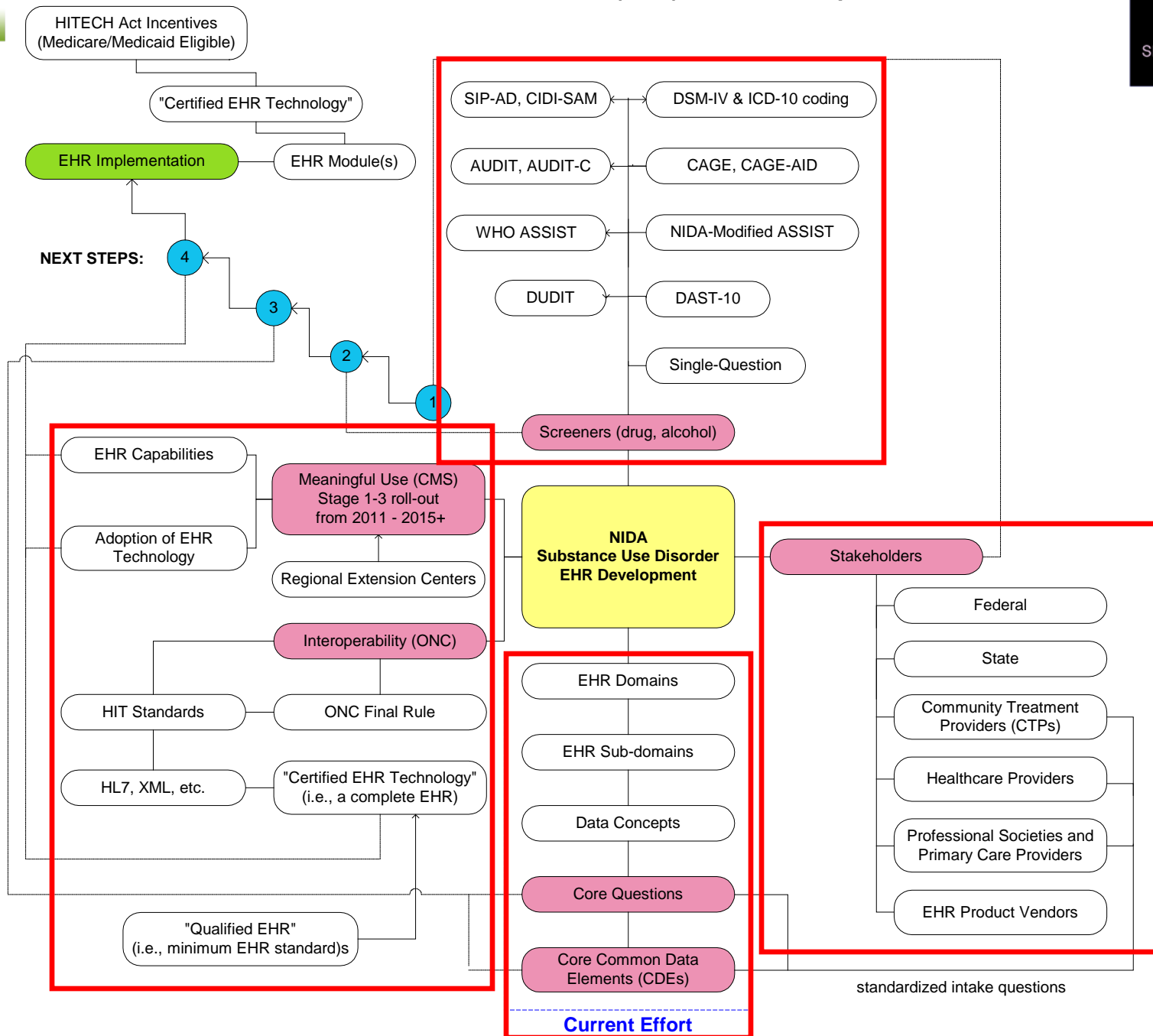




Substance Use Disorder (SUD) EHR Mind Map

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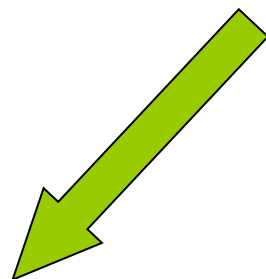
SEPT. 21-23 2011
BOSTON



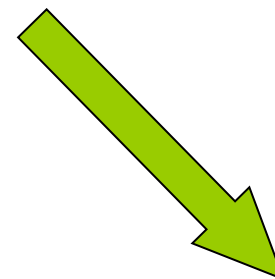


EHR Development

NIDA's Proposed SUD EHR



Small Core Set of
Questions for Primary
Care Setting



Enlarged Core Set of
Questions for SUD
Treatment Setting



Stakeholders Consulted

- Federal Government:
 - NIDA CTN (62 CTPs), ONC, CMS, HRSA, SAMHSA, FQHCs, CDC, AHRQ, IHS, NLM, ONDCP
- State Government:
 - NASADAD
- Professional Societies/Primary Care Providers:
 - AAAP, ASAM, SBM, CPDD, APA, Boston Medical Center ...
- SUD Treatment Providers
 - Kaiser Permanente, Phoenix House, Harvard Medical, Signal Behavioral Health, U.S. Department of Veterans Affairs (VA), Community Health Services (Alaska)



Key Workshops Held

- NIDA-sponsored 'Electronic Medical Records Workshop', September 24, 2010
- NIH/OBSSR- and SBM-sponsored workshop 'Identifying Core Behavioral and Psychosocial Data Elements for the Electronic Health Record', May 2-3, 2011
- Workshops/Symposia at annual meetings:
 - American Academy of Addiction Psychiatry
 - American Society of Addiction Medicine
 - American Psychological Association

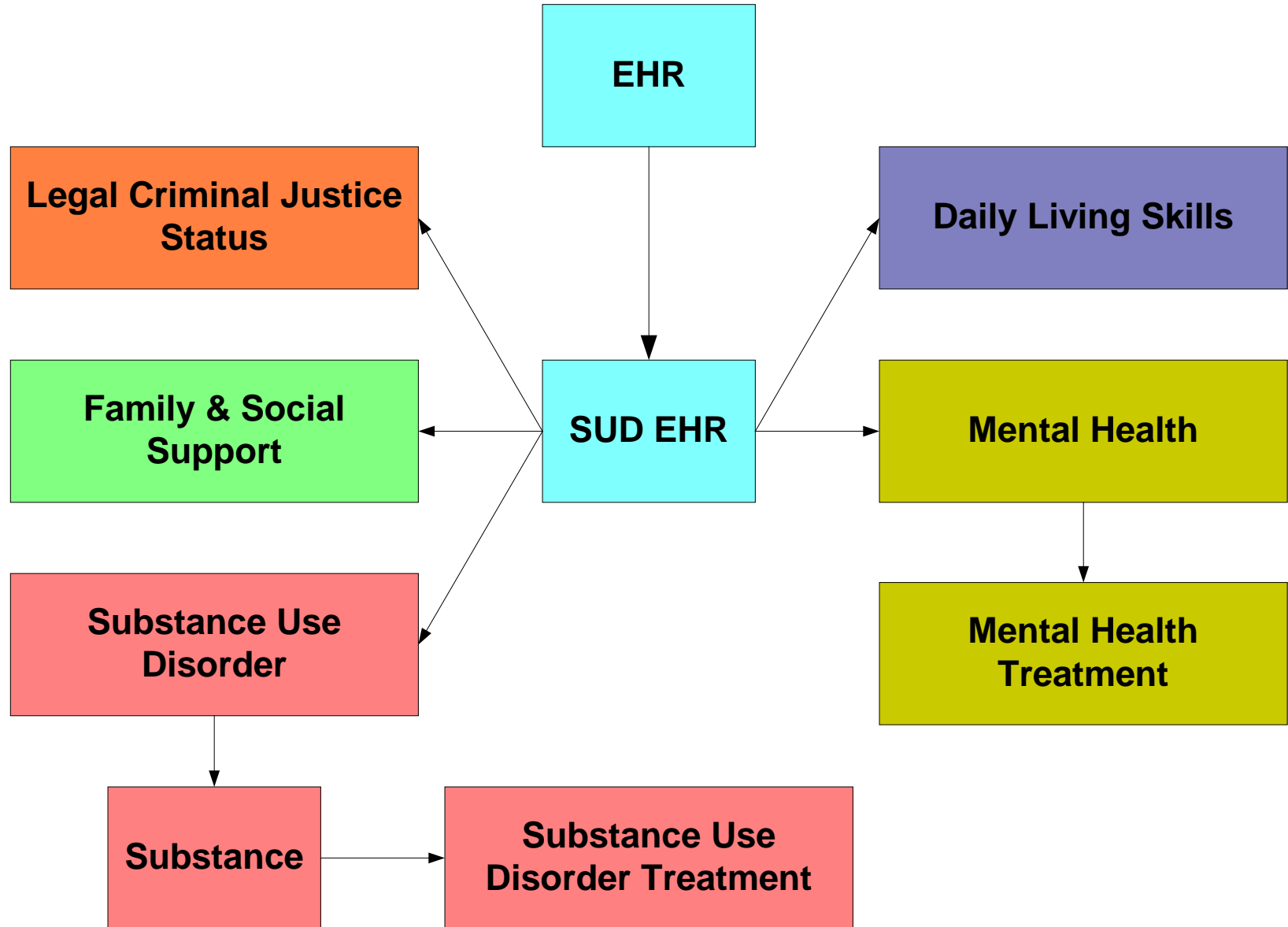


Expert Key Recommendations

- Combine screening of tobacco, alcohol and substance use in primary care
- Use validated screening questions above all other considerations
- Develop longitudinal questions with a standardized timeframe
- Use standardized questions or instruments for additional assessments
- Incorporate clinical decisions and evidence-based brief interventions
- Consider ASAM dimensions and The Joint Commission (TJC) standards



Domain Analysis Model





Domains/Sub-domains Identified for SUD Treatment and for Primary Care*

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Domain	Sub-Domain	*No. of Questions
Addiction History & Status	Substance Used	2
	Frequency & Route	2
	Addiction Severity	-
Addiction Treatment History & Status	Addiction Treatment Hx	2
	Recovery Goal or Vision	1
	Current Treatment Status	-
	Current Treatment Plan	2
Family and Social Support	Family, Marital and Interpersonal Relationships	2
	Housing/Homeless Status	2
	Social Support (Community, Cultural, Spiritual)	-
	Leisure & Recreation Status	-
Legal/Criminal Justice Status	Legal/Criminal Justice History	1
	Child Protective Services Status	-
Mental Health	Mental Psychiatric & Behavior Services Hx/Status	3



Primary Care

- Primary Care
 - How brief?
- Different Primary Care Settings:
 - Single physician office
 - Single physician office with ancillary staff
 - Multi-physician office single specialty
 - Multi-physician office multi-specialty
- Different Solutions:
 - Simple screen and refer
 - Simple screen, assessment and refer
 - Simple screen, assessment and treat and/or refer

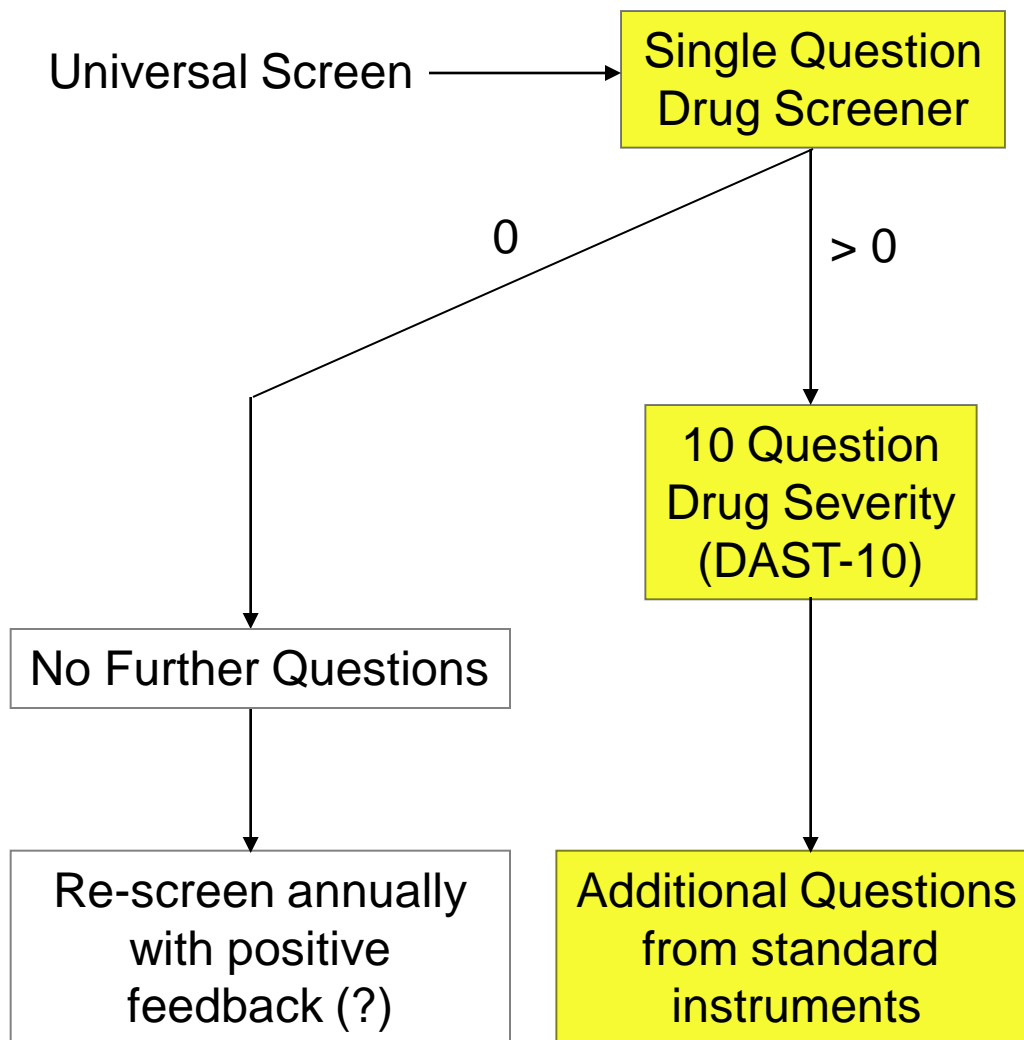


Feedback for Primary Care

- ❑ Need single question screener
- ❑ Brief assessment (3 questions better than 10)
- ❑ Actual question does not matter as much as making a decision and moving forward
- ❑ For EHR development – questions and assessments be validated



Core Questions for Primary Care





Validated Core Questions

- Single question drug screen
 - **“How many times in the past year have you used an illegal drug or used a prescription medication for non-medical reasons?”**

Reference: Smith PC, Schmidt SM, Allensworth-Davies D and Saitz R. A Single-Question Screening Test for Drug Use in Primary Care. *Arch Intern Med* 2010; 170(13): 1155-1160

- DAST-10
 1. Have you used drugs other than those required for medical reasons?
 2. Do you abuse more than one drug at a time?
 3. Are you always able to stop using drugs when you want to?
 4. Have you had “blackouts” or “flashbacks” as a result of drug use?
 5. Do you every feel bad or guilty about your drug use?
 6. Does your spouse (or parents) ever complain about your involvement with drugs?
 7. Have you neglected your family because of your use of drugs?
 8. Have you engaged in illegal activities in order to obtain drugs?
 9. Have you ever experienced withdrawal symptoms (felt sick) when you stopped taking drugs?
 10. Have you had medical problems as a result of your drug use (e.g., memory loss, hepatitis, convulsions, bleeding, etc.?)



SUD Single-Question Screeners Characteristics

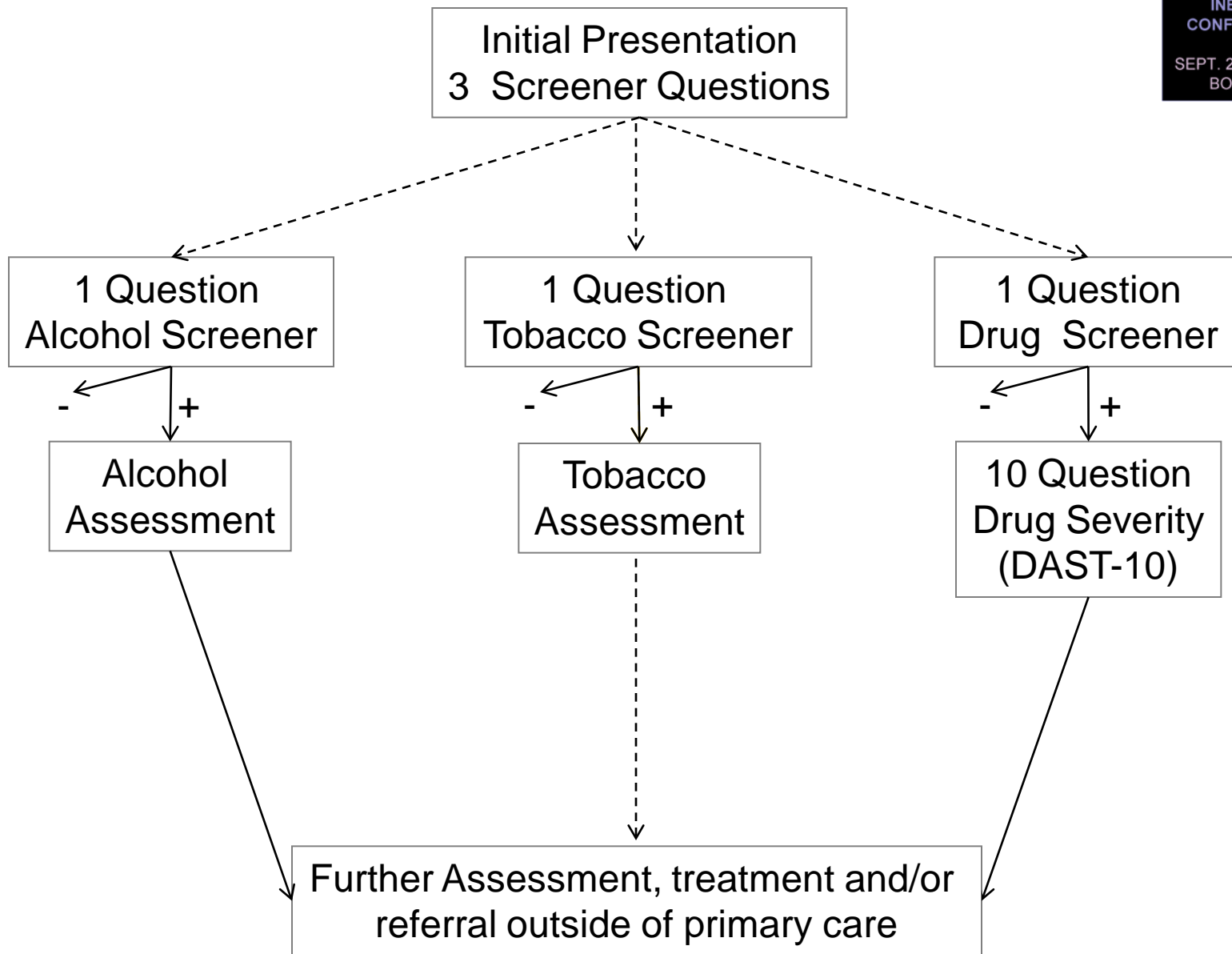
- For detection of current drug use disorder
 - 100% sensitive
 - 73.5% specific
 - For detection of current drug use
 - 92.9% sensitive*
 - 94.1% specific
- * Sensitivity was 84.7% when considering oral fluid test results for commonly abused drugs

Characteristics are similar to the DAST-10 Questionnaire.



Screening

- Recommendation to incorporate illicit drugs, alcohol and tobacco for primary care
 - Single screen for all three?
 - Three individual screens?





Principles Employed

- **Consensus:** input and agreement from stakeholders
- **Validity:** validated and/or standardized questions and instruments
- **Brevity:** single-question screeners and brief screener and assessment tools
- **Flexibility:**
 - More substance use identified, more questions asked
 - Questions asked by primary care capabilities
- **Standards:** implement as interoperable CDEs, per ONC vocabulary standards
- **Choice:** developers and vendors may choose any or all SUD core questions



What is Interoperability?

- Syntactic vs. Semantic Interoperability
 - **Syntactic or syntax** = communicate and exchange data (specifications such as XML, HL7, CDISC)
 - **Semantic** = meaningful interpretation of data
(data + metadata to provide unambiguous meaning: CDEs and standard vocabularies)



Pathways to Interoperability

- ❑ Domain Analysis Model and Common Data Elements (CDEs) – created in NCI caDSR
- ❑ eMeasure specification - coding concepts in standard vocabularies: SNOMED-CT, LOINC, RxNorm, etc.
- ❑ ONC - Certified EHR Technology
- ❑ Certification Commission for Health Information Technology (HITSP standards)
- ❑ NHIN specifications
- ❑ NQF Quality Data Model (QDM)



Moving Forward

- ❑ Obtain consensus on valid screening and assessment tools ✓
- ❑ Recommendations for CMS Meaningful Use ✓
(ONC Quality Measures Workgroup & HIT Policy Committee)
- ❑ Define Clinical Quality Measures (CQMs)
- ❑ Develop associated clinical decision support protocols (SBIRT) – in progress
- ❑ Provide/develop scientific evidence to support widespread adoption
- ❑ eMeasure specification (NQF Quality Data Model)
- ❑ NQF endorsement (9 steps)
- ❑ SUD screening in Health Risk Assessment for use in CMS Annual Wellness Visit



Conclusions

- Based on wide stakeholder input at workshops, symposia and other meetings, a consensus was reached on a SUD core set of screening and assessment questions for use in primary care. Common Data Elements (CDEs) have been developed.
- Other activities for adoption of specific CDEs into Meaningful Use, eMeasure specification, and incorporation into an SBIRT for pilot testing are underway.



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