

SBIRT: A Population Health Approach to Perinatal Substance Use

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Objectives

- Briefly explore the rationale for integrating SBIRT in maternity care
- Describe SBIRT implementation at Dartmouth Hitchcock
- Explore unique issues associated with screening pregnant and parenting women

Impact of Untreated Substance Use Disorders During Pregnancy

For mother

Alcohol use: major preventable cause of birth defects

Lack of prenatal care:

- Poor nutrition, self care
- Increased complication rates

Injection drug use

- Deep vein thrombosis
- Endocarditis
- Acute/Chronic hepatitis
- Overdose

For baby

- Preterm Birth
- Low birth weight
- Fluctuating opioid concentrations → unstable fetal environment
 - Tobacco use disorder
 - Impact of maternal stress
- Higher rates of NICU admission
- Long term effects associated with polysubstance use
 - Attention Problems
 - Developmental delays

Substance Use Treatment Improves Outcomes

Journal of Perinatology (2008), 1–7
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www.nature.com/jp



ORIGINAL ARTICLE

Substance abuse treatment linked with prenatal visits improves perinatal outcomes: a new standard

NC Goler¹, MA Armstrong², CJ Taillac³ and VM Osejo³

| Study Group | Adjusted OR | | |
|----------------------------|-----------------|--------------------|---------------|
| | Untreated SUD | Treated SUD | No SUD |
| Low birth weight (<2,500g) | 1.8 (1.1-3.1) | 1.0 (<i>ref</i>) | 0.7 (0.6-0.9) |
| Preterm delivery | 2.1 (1.3-3.2) | 1.0 | 0.8 (0.7-1.0) |
| Placental abruption | 6.8 (3.0-15.5) | 1.0 | 1.1 (0.7-1.7) |
| Fetal demise | 16.2 (6.0-43.8) | 1.0 | 1.5 (0.7-3.3) |

(Goler, et al 2008)

National Recommendations for SBIRT in Prenatal Care

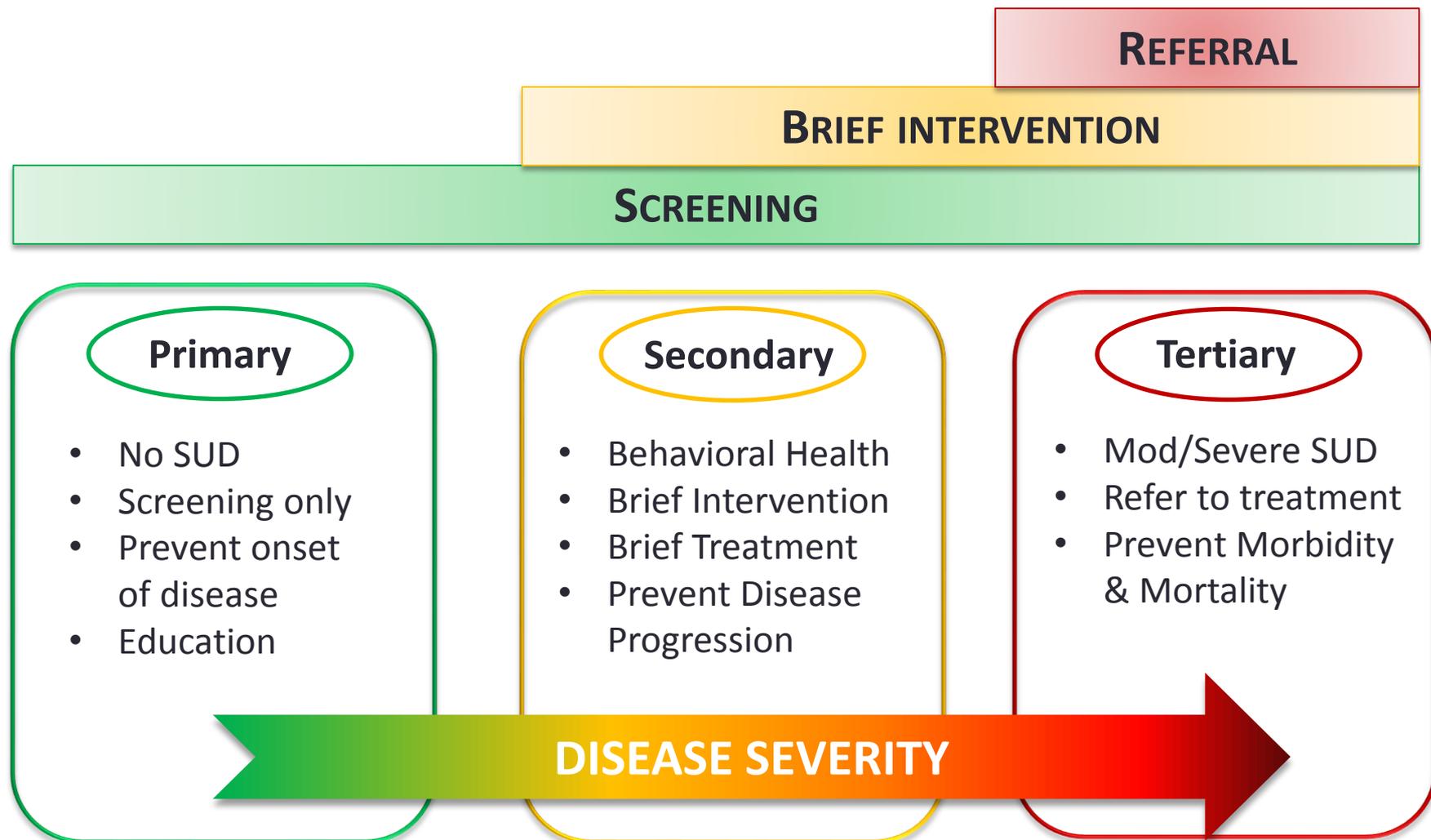
“Obstetrician-Gynecologists have an ethical obligation to learn and use techniques for universal screening questions, brief intervention, and referral to treatment.”

“Screening for substance abuse is a part of complete obstetric care and should be done in partnership with the pregnant woman.”

ACOG Committee Opinion Number 524 • (May 2012)

What does “partnership” mean?

Taking a Population Health Approach to Substance Use and Substance Use Disorders



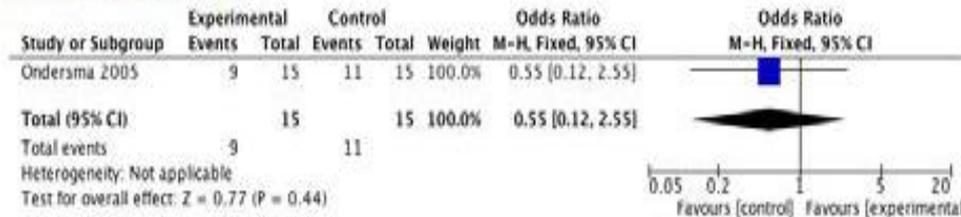
What is known about the effectiveness of SBIRT during pregnancy?

- Asking about alcohol and other substance use can result in behavior change during pregnancy too!
- Asking about details increases awareness of actual consumption level
- Brief intervention reduces the risks of alcohol-exposed pregnancy
 - Reduces number of drinks in past 4 weeks
 - Reduces the number of heavy drinking days during postpartu,
- Pregnant adolescents with substance use disorders reduce use after a single-session, standardized brief intervention
- **Concern about legal risk and child protective service involvement may limit disclosure**

(Goler, 2008; Klesges, 2001; Nilsen, 2009; Delrahim-Howlett, 2011; Floyd, 2007; Fleming 2008; Chang, 2005; Whicher , 2012' Roberts, 2010)

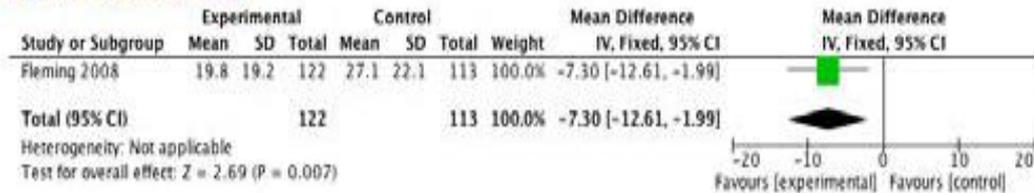
Is BI important during Pregnancy?

Figure 2 (Analysis 1.3)



Forest plot of comparison: 1 Screening and Brief Intervention vs Screening Alone, outcome: 1.3 Abstinence from drug use in the last 4 weeks - ITT analysis.

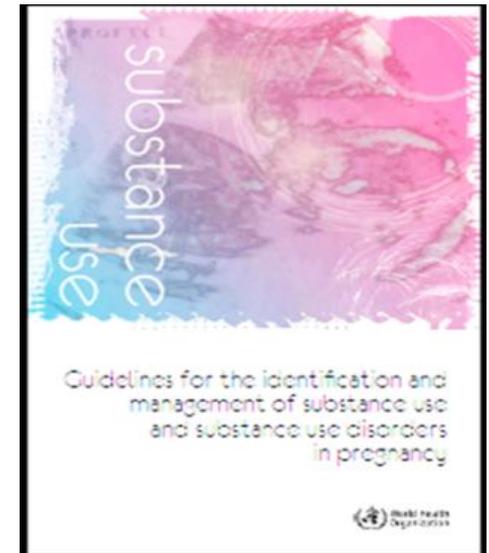
Figure 3 (Analysis 1.4)



Forest plot of comparison: 1 Screening and Brief Intervention vs Screening Alone, outcome: 1.4 Total number of drinks in the past 28 days.

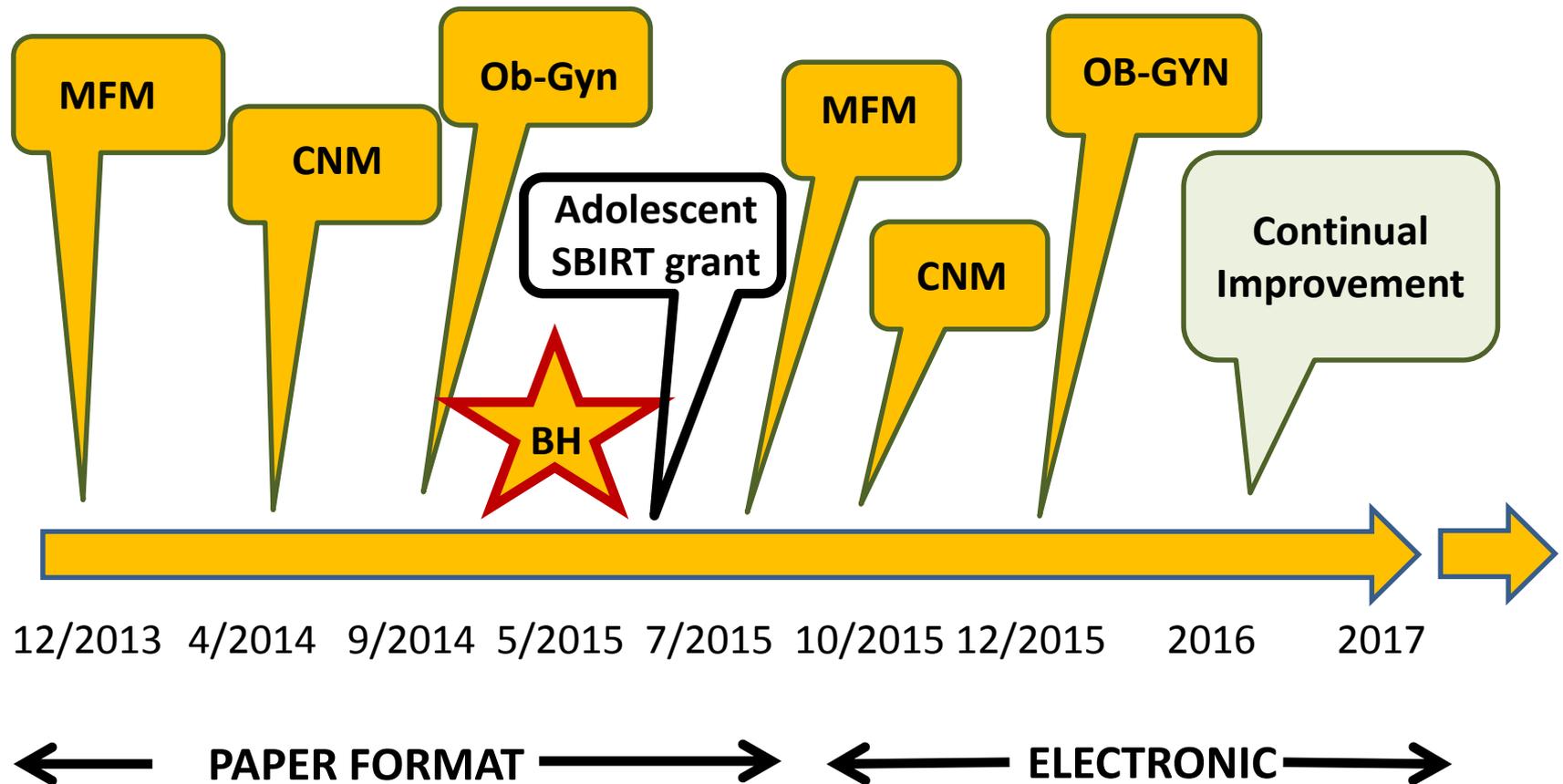
Comparison of SBI vs Screening alone during pregnancy:

- Nonsignificant difference in drug use in last 4 weeks
- Significant change in total number of drinks in past 28 days

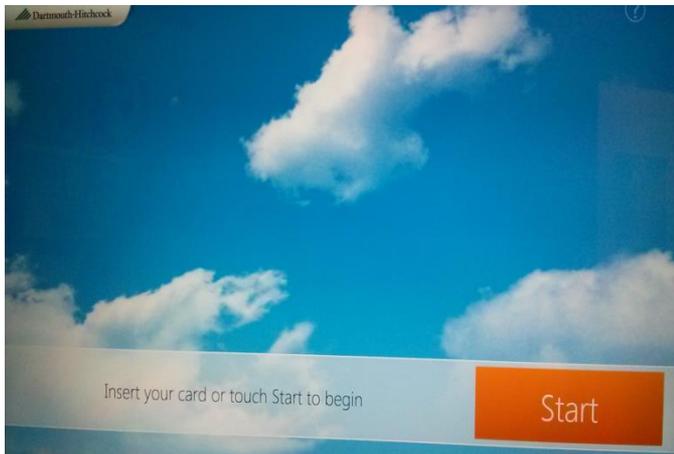


S*B*I*R*T in Obstetrics and Gynecology

Implementing Universal SBIRT in the D-H Ob/Gyn Clinic

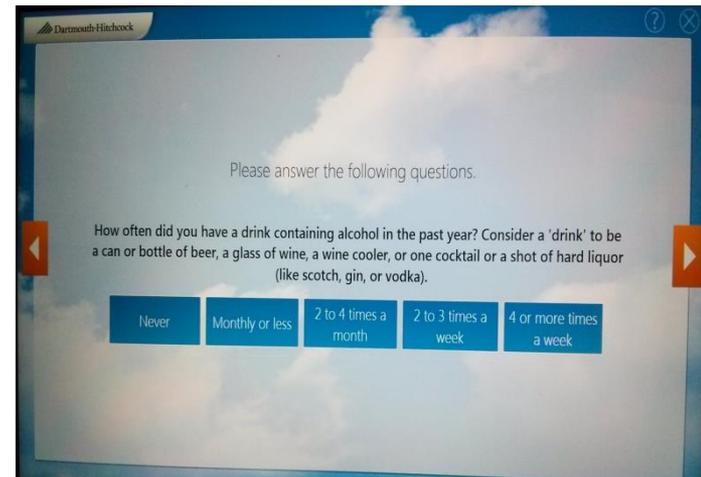


Tablet-based Screening

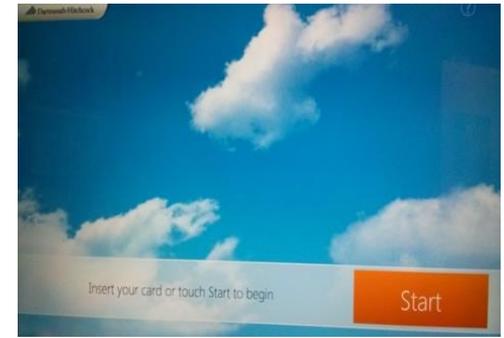


Welcome Screen

AUDIT-C



Two-step Screening Made Easy



Pre-screening: 4 questions about past year use

(AUDIT-C)

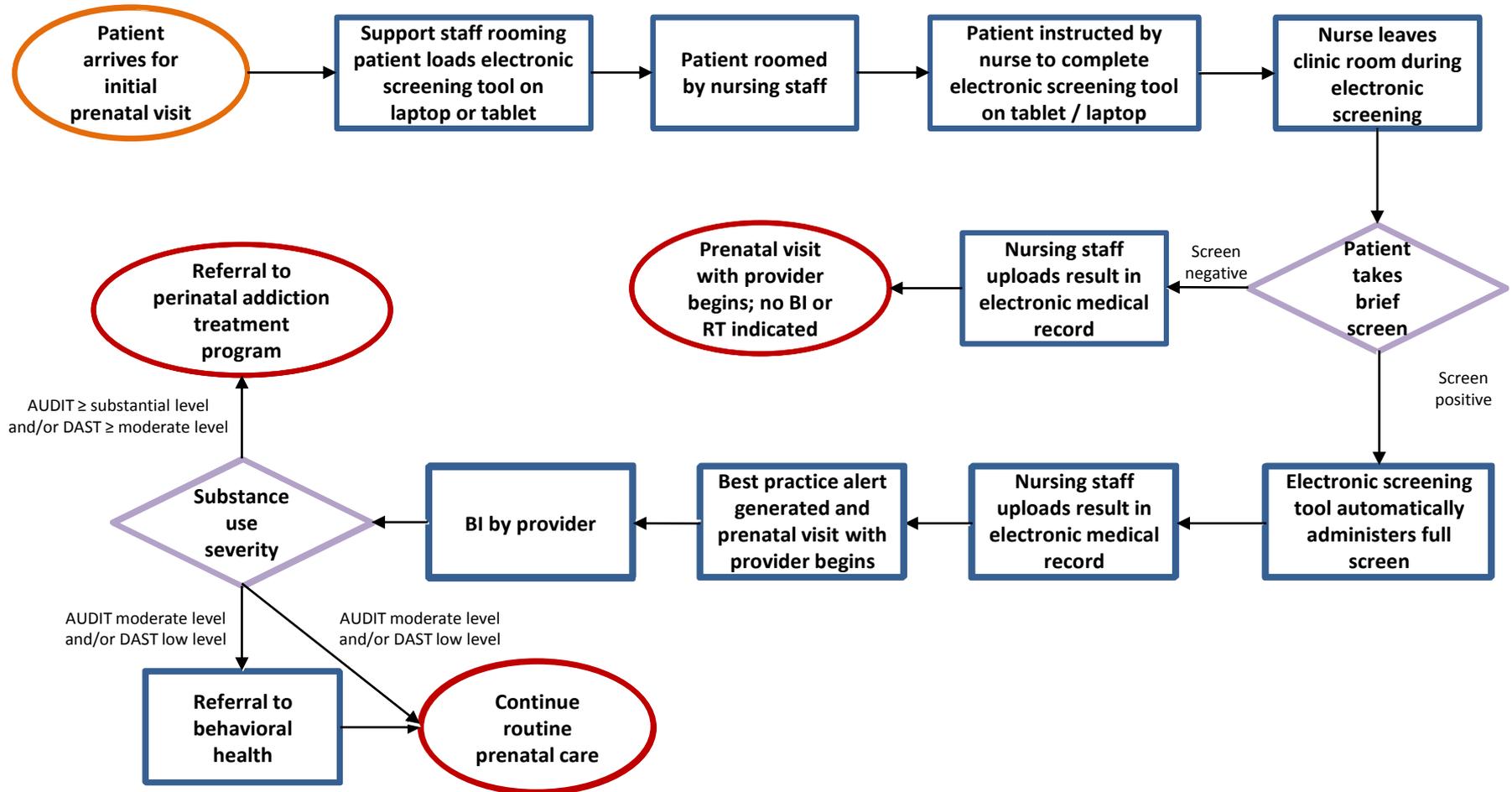
- How often did you have a drink containing alcohol in the past year?
- How many drinks did you have on a typical day when you were drinking in the past year?
- How often did you have 6 or more drinks on one occasion in the past year?

(NIDA)

- How many times in the past year have you used an illegal drug or used a prescription medication for nonmedical reasons?

Follow up: if positive, AUDIT and DAST provide additional questions populate about current use patterns

Process Map for SBIRT at Initial OB Visit



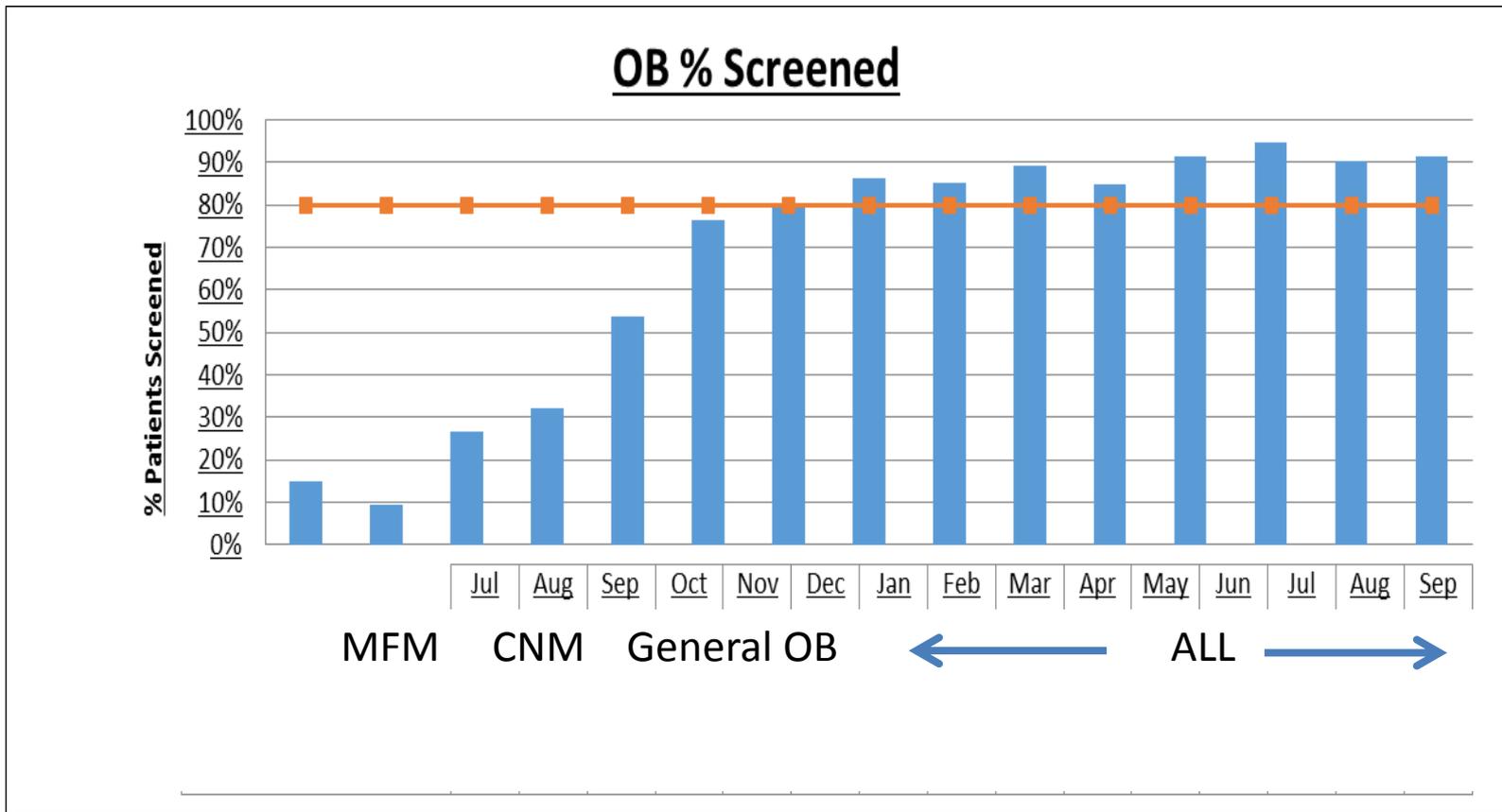
Electronic screening is integrated in the visit note

The screenshot displays the Epic EMR interface for a patient named Daisy J. Goodman. The main window shows a progress note titled "Progress Note (F3 to enlarge)" for a visit on 12/19/2015. The note contains a table of screening questions and answers, with the date 12/19/2015 highlighted in green. The table is as follows:

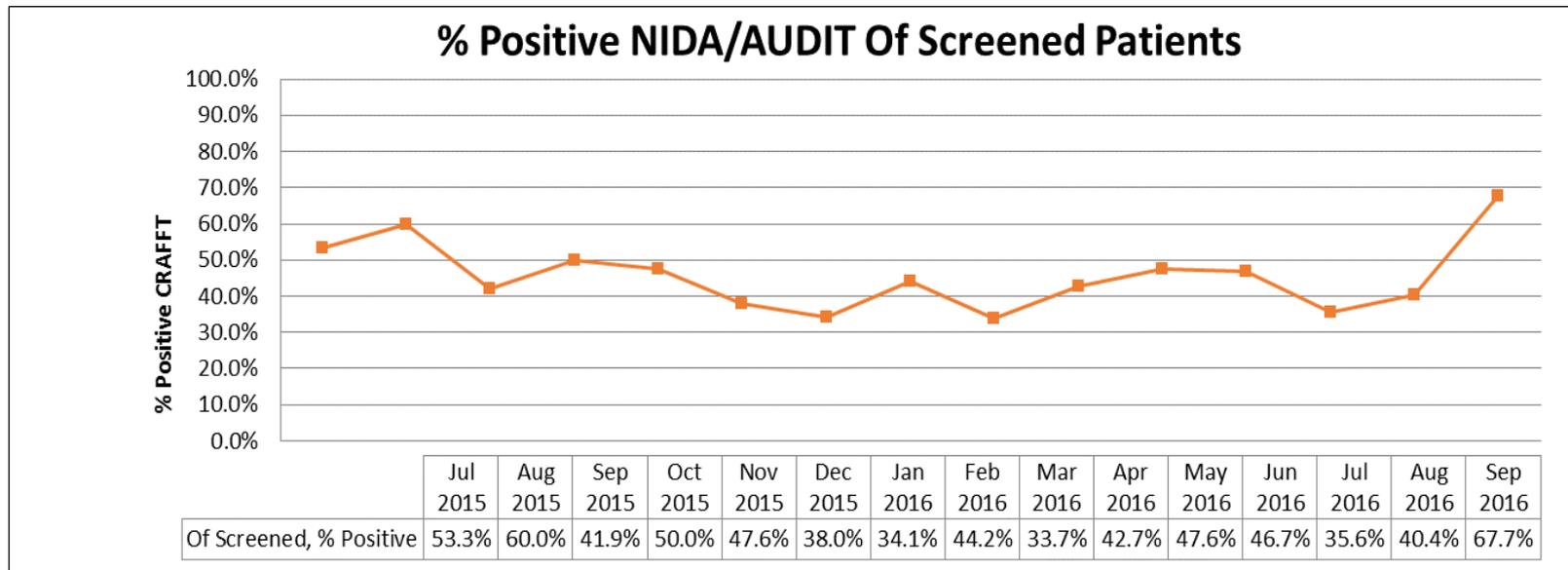
| Question | Answer |
|---|-------------------------------|
| Job Screener | 12/19/2015 |
| Drinking frequency | 2 to 3 times a week |
| Drinks per day | 10 or more drinks |
| Unable to stop, past year | Weekly |
| Failed to meet expectations, past year | Weekly |
| Drink in morning after heavy drinking, | Weekly |
| Guilt or remorse, past year | Daily or almost daily |
| Unable to remember, past year | Daily or almost daily |
| Injury due to drinking | Yes, but not in the last year |
| Concern from close people | Yes, during the last year |
| AUDIT Score | 34 (Probable Alcoholism) |
| NIDA | Daily or Almost Daily |
| Have you used drugs other than those required for medical reasons? | Yes |
| Have you abused prescription drugs? | Yes |
| Do you abuse more than one drug at a time? | Yes |
| Can you get through the week without using drugs (other than those required for medical | No |

The interface also shows a left-hand navigation menu with options like "Snapshot", "Chart Review", "Notes", "Order Entry", "Order Review", "Problem List", "Immunizations", "Results Review", "MAR", "Patient Labels", "Review Flowshe...", "Patient Station", and "Visit Navigator". The top of the screen displays patient information: "Test, Patient", "Male, 24 y.o., 01/16/1991", "MRN: 50728778-7, SR None", "OB Team: None", "Code: None", "Adv Dir: Yes", "HM: Health Maintenance", "Allergies: Sulfu (Sulfon...)", "myD-H: Code...", "BMI: 27.12 kg/m²", and "Wt: None". The bottom of the screen shows the Windows taskbar with various application icons and the system clock displaying "3:49 PM 12/19/2015".

Proportion of New OB Patients Screened after launching Tablet-based SBIRT



Proportion of New OB Patients Screening Positive for At-Risk Substance Use in Past Year



Challenges

Creation of additional work flow took time

Providers less confident about BI than screening

Additional cost in terms of staff time are minimal– but “brief” intervention can be time consuming!

- Need for ongoing staff training
- Need to streamline a plan for follow up
- Billing is difficult to operationalize

Ethical issues make screening for substance use more complicated during pregnancy



Can SBIRT Cause Harm?

Since Substance Use in Pregnancy Is So Bad: Why Not Do Drug Testing?

Not recommended as a screening approach by ACOG and WHO

Problems with accuracy:

- Does not detect alcohol
- Short detection window
- High false positive rates

Logistical problems:

- Easy to falsify unless observed
- Expensive if confirmation required

Limited scope of substances detected

Limits access to care

- 73% of women surveyed support drug testing for all pregnant women
- 86% support verbal screening
- **14% said this would be a deterrent to attending prenatal care**

(ACOG, 2012; WHO, 2013; Edmonds, 2016; Roberts, 2010; Stone, 2015)

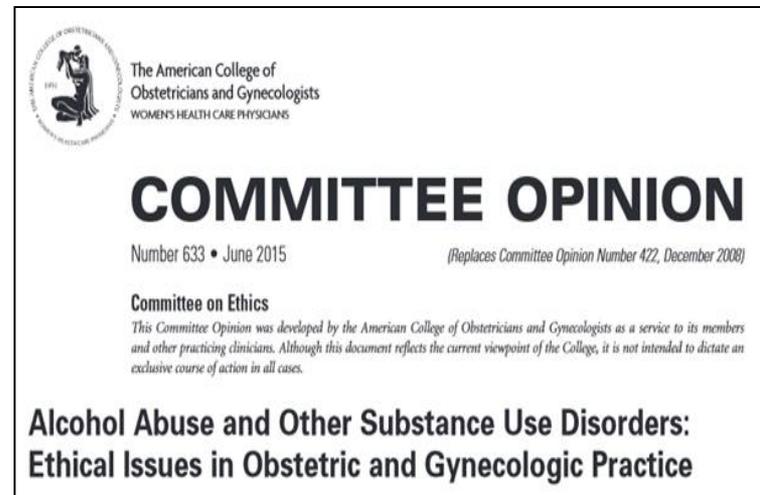
NH Senate Bill 515: (6/22/16)

- 169-C:12-e Rebuttable Presumption of Harm. **Evidence of a custodial parent's opioid drug abuse or opioid drug dependence, as defined in RSA 318-B:1, I or RSA 318-B:1, IX, shall create a rebuttable presumption that the child's health has suffered or is very likely to suffer serious impairment.** The presumption may be rebutted by evidence of the parent's compliance with treatment for such use or dependence.

Ethical Considerations in the Current National and State Context

Maternity care providers should:

- Protect patient autonomy, confidentiality, and the integrity of the patient-physician relationship to the extent allowable by laws
- Familiarize themselves with resources available through their local hospital, community, or state in order to effectively refer patients for treatment
- Be familiar with the legal requirements within their state or community



Summary

- All prenatal patients should be screened for harmful substance use at the first encounter and subsequent visits
- SBIRT is arguably the most therapeutic approach to screening for SUD during pregnancy
- More research is needed to determine sensitivity and specificity of different approaches to screening and BI during pregnancy
- Pregnant and parenting women deserve transparency about the possible impact of disclosing substance use

Questions?



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