



# **SBIRT in Pediatric Primary Care**

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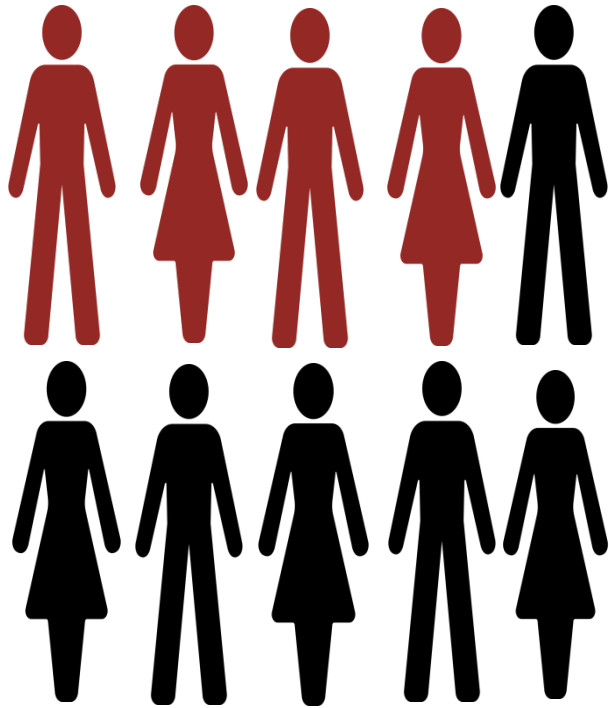
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Boston Children's Hospital*

# Disclosures

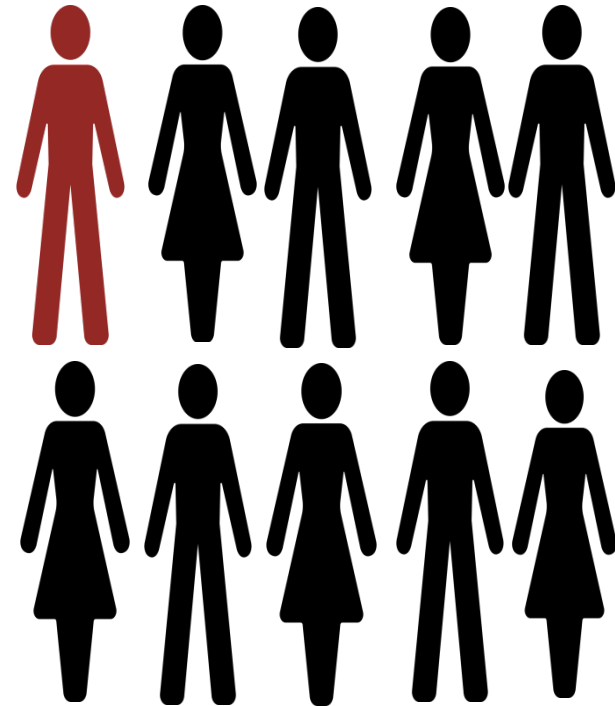
I, Sharon Levy, have no relevant financial or commercial relationships to disclose.



# Routine health care is an opportunity to talk about **substance use health risks**



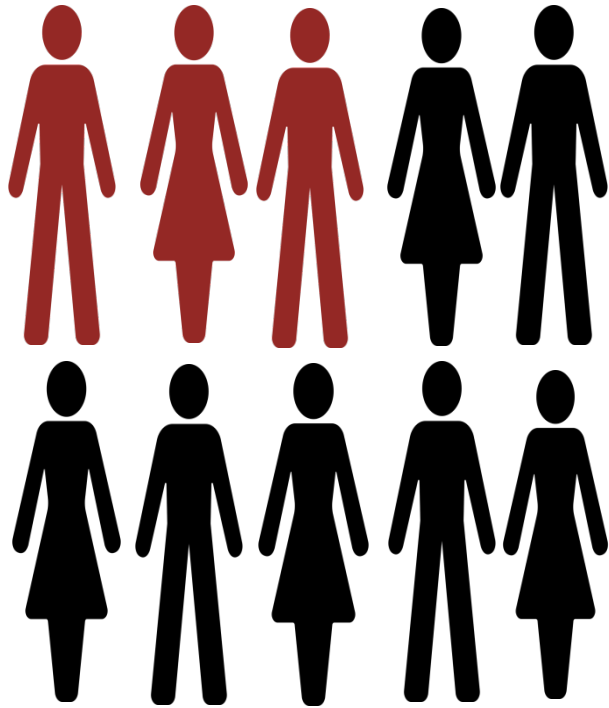
4 in 10 high school aged reported past-year alcohol use



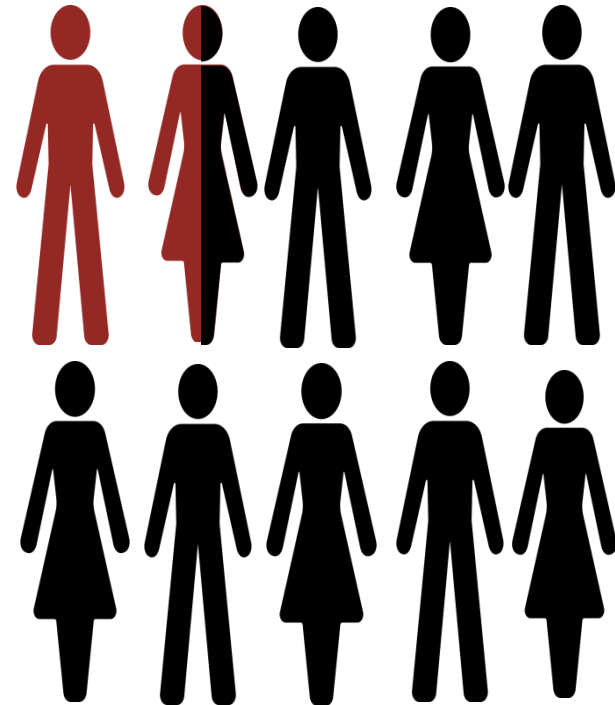
10% reported a binge in the last 3 months



# Routine health care is an opportunity to talk about **substance use health risks**



3 in 10 report past-year marijuana use



About 1.5 in 10 report using marijuana monthly or more



- Black outs



- Hallucinations and Delusions
- Hyperemesis syndrome
- Withdrawal symptoms

# Formal screening tools are **critical**

## Comparison of Provider Impressions with Diagnostic Interview

	Medical Provider Impressions	
	Sensitivity	Specificity
Any use	.63 (.58, .69 CI)	.81 (.76, .85 CI)
Any problem	.14 (.10, .20 CI)	1.0 (.99, 1.0 CI)
Any disorder	.10 (.04, .17 CI)	1.0 (.99, 1.0 CI)
Dependence	0.0	1.0

**There are no visible signs of substance use or even early problems.**



*Practicing physician*

“if [patients] are drinking, it's like stupid high school kids who go out and have a couple beers on a weekend here and there...it's not like chronic alcohol problems”.

Did I mention that I was  
suspended because I  
showed up drunk to a  
team dinner?





# Adults don't use the same code ...



**Occasionally** = once  
or twice a year





**Occasionally =**  
Only Fridays and  
Saturdays



# How you ask matters

## Official GOP Presidential Job Performance Poll

1. How would you rate President Trump's job performance so far?

Great

Good

Okay

Other

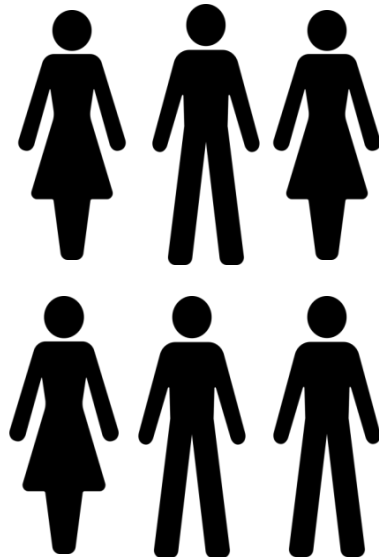
Screen	Question	Answer Choices	Percent reported any use
CIDI-SAM (criterion standard)	<u>Have you had</u> a drink containing alcohol in the past 12 months?	Yes No	42%
S2BI	In the past year, <u>how many times</u> have you used alcohol?	Never Once or twice Monthly Weekly	52%



# Screening is associated with counseling

“Alcohol use is not healthy”

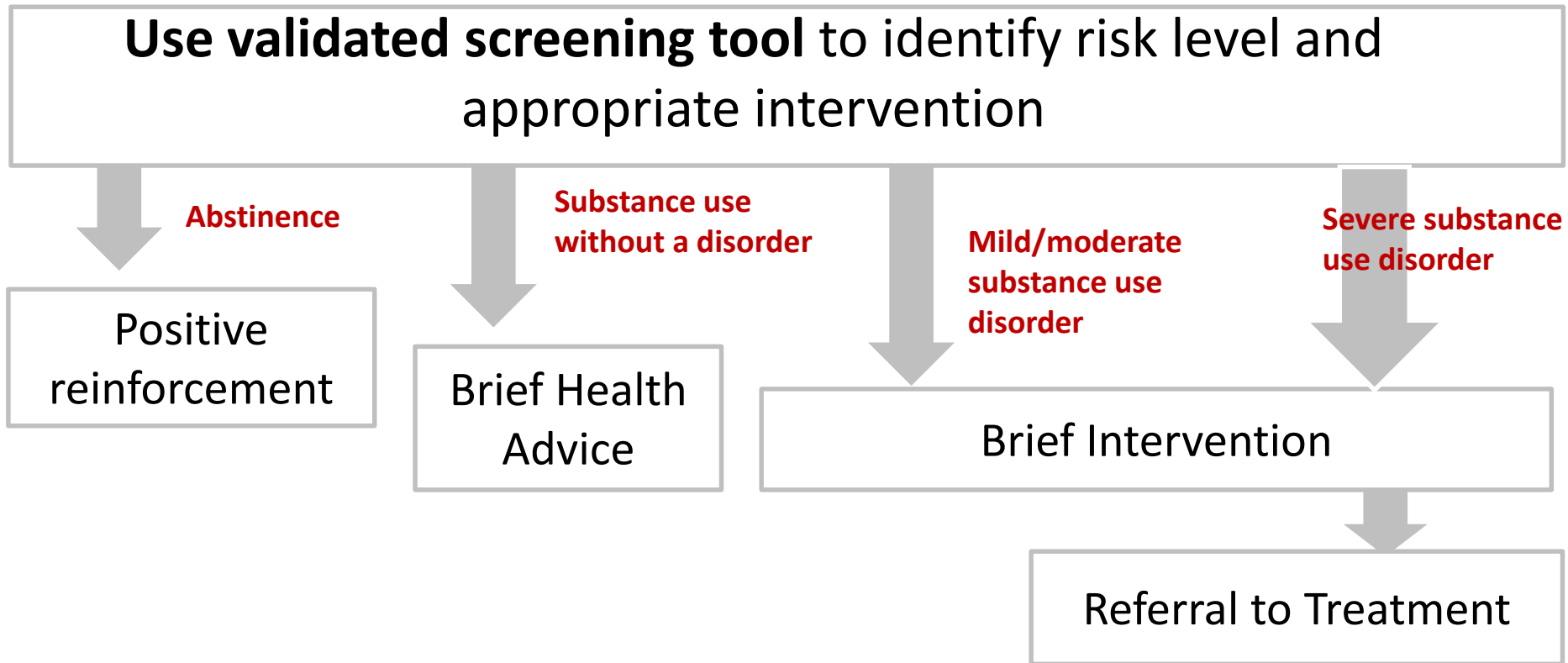
Screened



Not  
screened

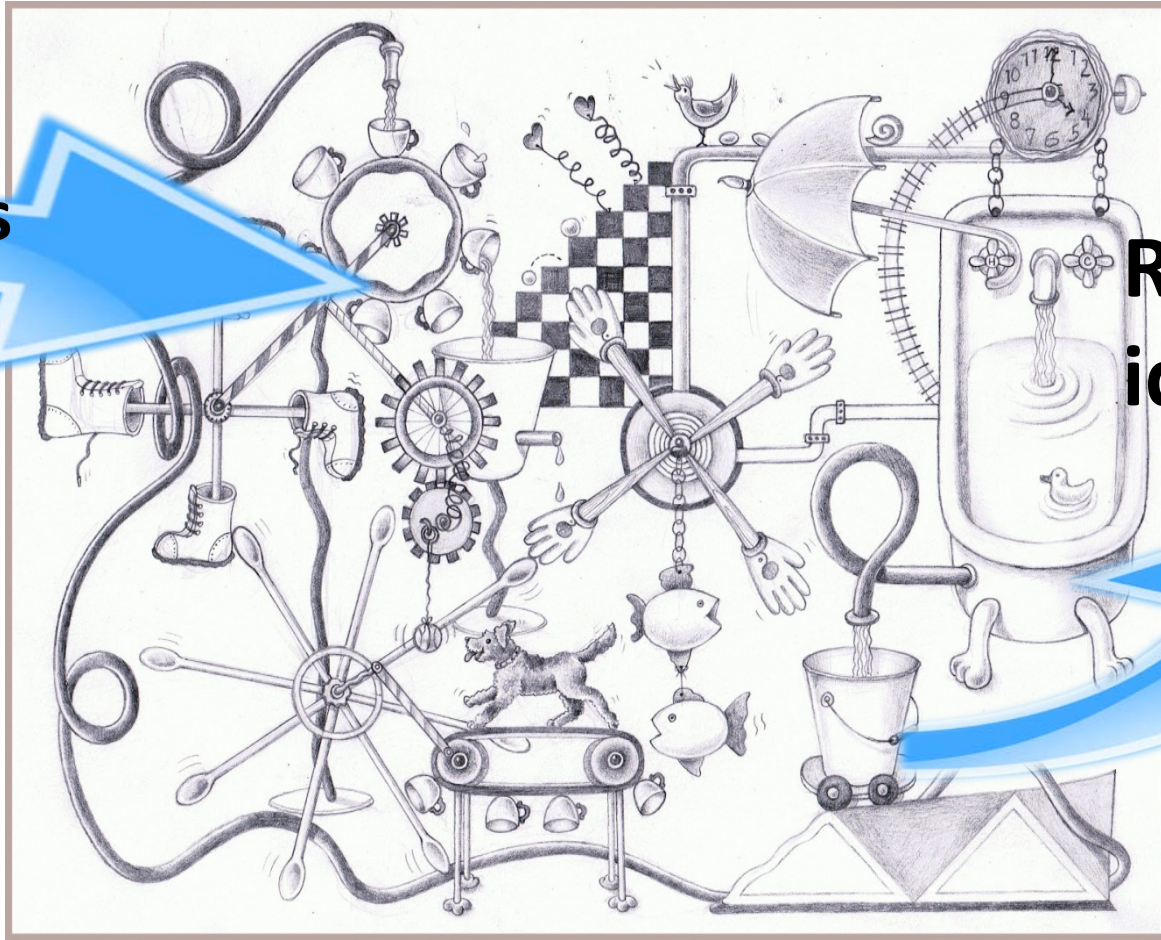


# AAP SBIRT Guidelines



# The Screen-Machine

Insert  
Screening  
Questions



Risk level  
identified!

**Figure. Adolescent Screen and Brief Assessment Tool Questions**

Screening Questions (Asked of All Participants):	Response Items
<p>In the past year, how many times have you used [X]?</p> <ul style="list-style-type: none"> <li>Tobacco products</li> <li>Alcohol</li> <li>Marijuana</li> <li>Illegal drugs (such as cocaine or Ecstasy)</li> <li>Prescription drugs that were not prescribed for you (such as pain medication or Adderall)</li> <li>Over-the-counter medications (such as cough medicine) for nonmedical reasons</li> <li>Inhalants (such as nitrous oxide)</li> <li>Herbs or synthetic drugs (such as salvia, K2, or bath salts)</li> </ul>	<ul style="list-style-type: none"> <li>Never</li> <li>Once or twice</li> <li>Monthly</li> <li>Weekly</li> <li>Daily</li> <li>Almost daily</li> </ul>
<p><b>Brief assessment questions (Asked of participants who answered "yes" to screening questions, contingent on frequency):</b></p>	<p><b>Yes/No:</b></p>
<p><b>RAFFT (For any past-year alcohol, marijuana, or other drug use)</b></p> <ul style="list-style-type: none"> <li>Do you ever use alcohol or drugs to relax, feel better about yourself, or fit in?</li> <li>Do you ever use alcohol or drugs while you are by yourself, alone?</li> <li>Do you ever forget things you did while using alcohol or drugs?</li> <li>Do your family or friends ever tell you that you should cut down on your drinking or drug use?</li> <li>Have you ever gotten into trouble while you were using alcohol or drugs?</li> </ul>	
<p><b>Alcohol (If once or more):</b></p> <ul style="list-style-type: none"> <li>Have you had X or more drinks on one occasion on 3 or more days?</li> <li>Had an alcoholic "blackout" (periods that you could not remember due to drinking), "passed out," or had an emergency department visit due to substance use?</li> <li>Had 10 or more drinks on one occasion?</li> <li>Combined any of the following: alcohol, sedatives such as barbiturates (such as phenobarbital or pentobarbital), benzodiazepines (such as Klonopin, Ativan, or Xanax), opiates, or a prescription pain medication?</li> </ul> <p><b>If weekly or monthly:</b></p> <ul style="list-style-type: none"> <li>Have you used alcohol 5 or more days per week for 2 or more weeks?</li> </ul>	
<p><b>Marijuana (If weekly or monthly):</b></p> <ul style="list-style-type: none"> <li>Have you used marijuana one or more times per day for 2 or more weeks?</li> </ul>	
<p><b>Tobacco products (If weekly or monthly):</b></p> <ul style="list-style-type: none"> <li>Have you used tobacco one or more times per day for 2 or more weeks?</li> </ul>	
<p><b>Other substances (If once or more):</b></p> <ul style="list-style-type: none"> <li>Have you used [X] in the past 30 days?</li> <li>Prescription medications (not prescribed for you)</li> <li>Over-the-counter medications (not for medical purposes)</li> <li>Inhalants</li> <li>Herbal supplements</li> <li>Synthetic drugs</li> </ul>	



## S2BI

In the past year, how many times  
have you used

- Tobacco?
- Alcohol?
- Marijuana?

Never

Once or twice

Monthly

Weekly

## S2BI

In the past year, how many times have you used

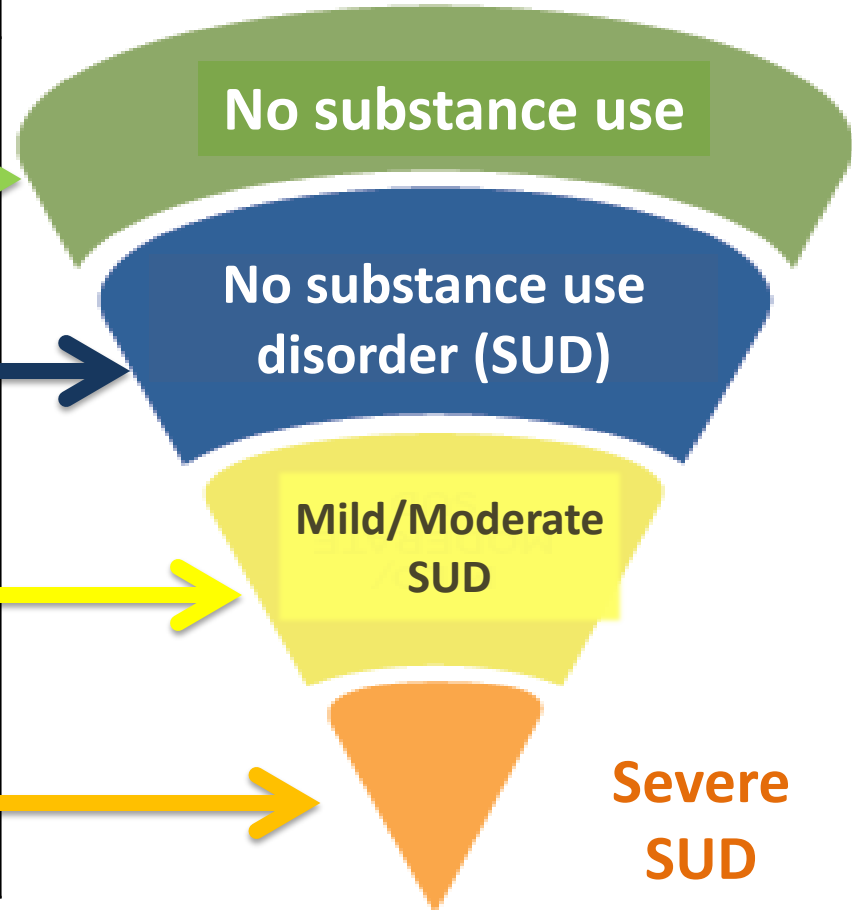
- Tobacco?
- Alcohol?
- Marijuana?

Never

Once or twice

Monthly

Weekly



# Sensitivity/Specificity of S2BI

CIDI-SAM interview vs screen frequency item for detecting a substance use disorder.

Criterion Standard Dx	Screen Frequency	Prevalence N (%)	Sensitivity (95% CI)	Specificity (95% CI)
Any Use	$\geq 1$ Past year Use	90 (42.3)	1 [Reference]	84 (76-89)
Mild/Moderate SUD	$\geq$ Monthly use	41 (19.2)	90 (77, 96)	94 (89, 96)
Severe SUD	$\geq$ Weekly use	19 (8.9)	100 (na)	94 (90, 96)

# The difference between **theory** ...



American Academy  
of Pediatrics  
DEDICATED TO THE HEALTH OF ALL CHILDREN™



Organizational Principles to Guide and Define the Child  
Health Care System and/or Improve the Health of all Children

POLICY STATEMENT

Substance Use Screening, Brief Intervention, and  
Referral to Treatment for Pediatricians



.... And **practice** ...



...is greater in **practice** than in **theory**



...is greater in **practice** than in **theory**



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of Pediatrics  
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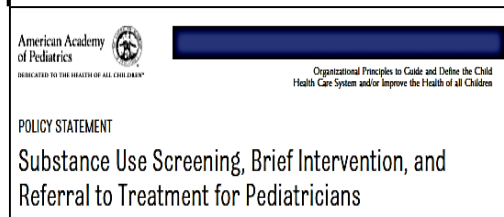
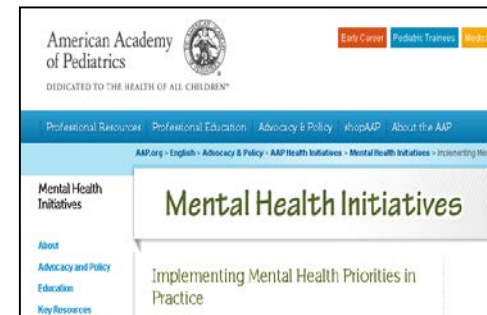
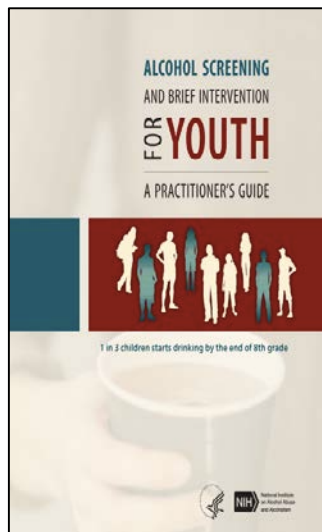
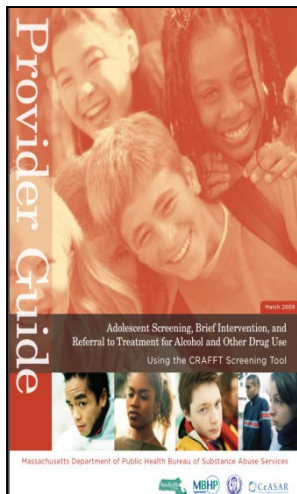
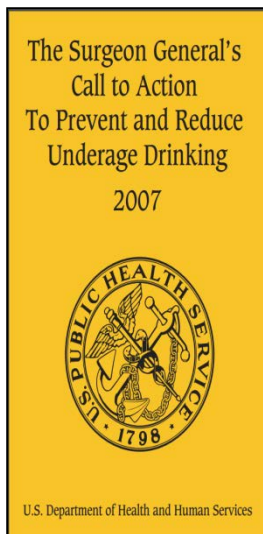


Organizational Principles to Guide and Define the Child  
Health Care System and/or Improve the Health of all Children

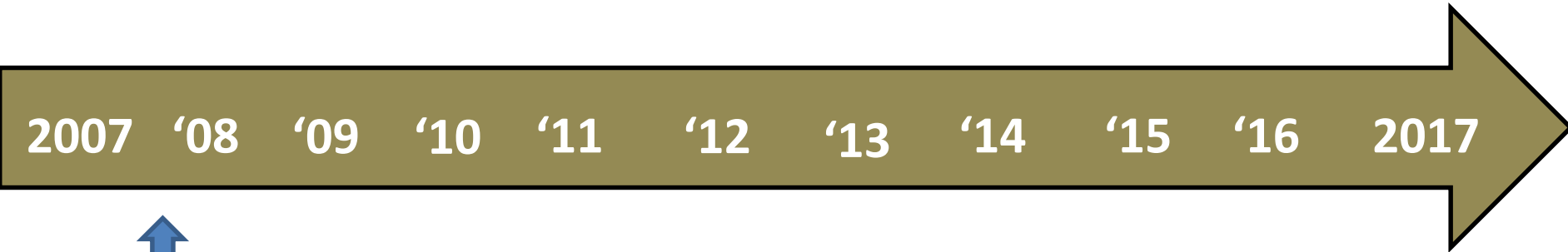
POLICY STATEMENT

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# Adolescent SBIRT Guidelines







2007

'08

'09

'10

'11

'12

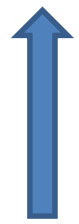
'13

'14

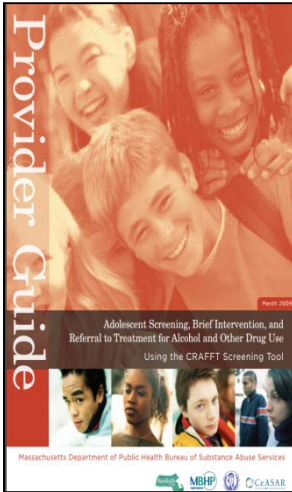
'15

'16

2017



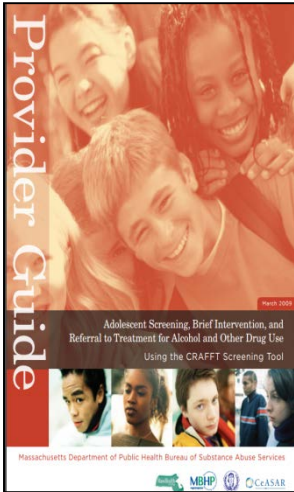
First survey  
administered



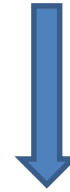
2007 '08 '09 '10 '11 '12 '13 '14 '15 '16 2017



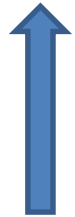
First survey administered



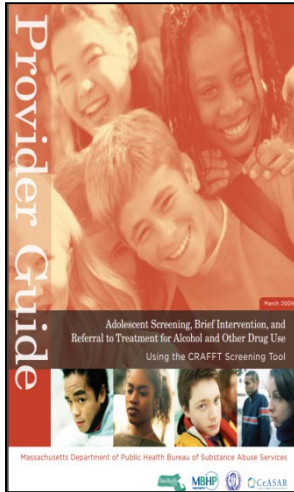
Second survey administered



2007 '08 '09 '10 '11 '12 '13 '14 '15 '16 2017



First survey administered



Second survey administered

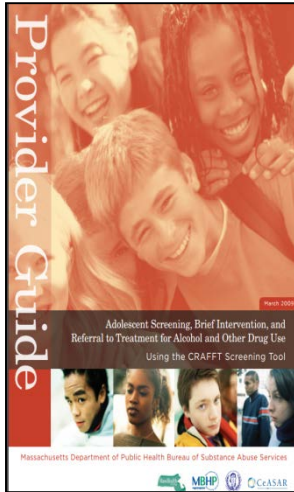


2007 '08 '09 '10 '11 '12 '13 '14 '15 '16 2017



First survey administered





Second survey administered

Third survey administered



2007 '08 '09 '10 '11 '12 '13 '14 '15 '16 2017

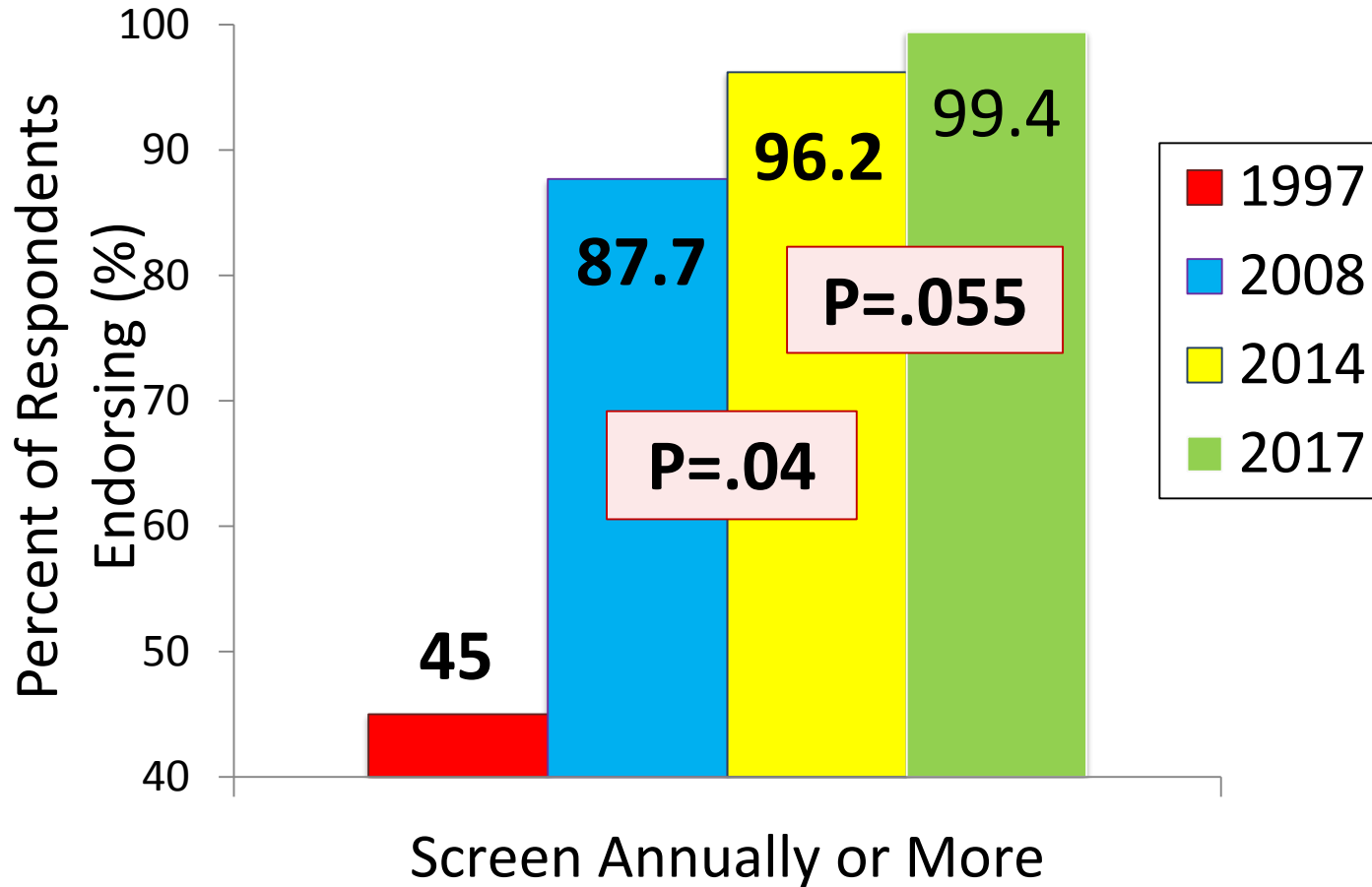


First survey administered



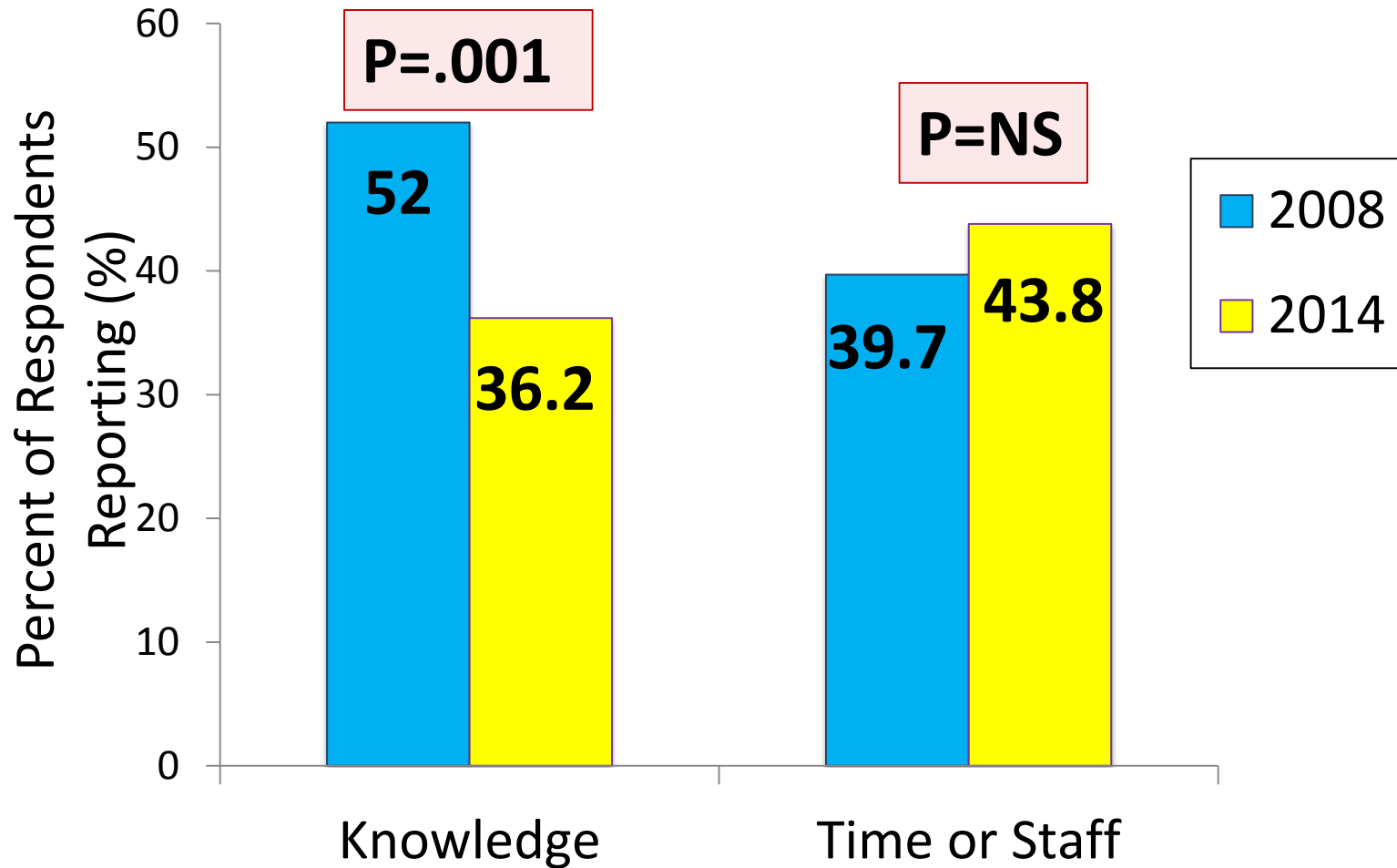
2008	2014	2017
<ul style="list-style-type: none"> <li>• All registered pediatricians (3519)</li> <li>• 25.7% response rate</li> <li>• N=469</li> <li>• Practice setting: more solo practitioners</li> </ul>	<ul style="list-style-type: none"> <li>• Representative sample (613)</li> <li>• 30% response rate</li> <li>• N=130</li> <li>• Practice setting: more hospitalists</li> </ul>	<ul style="list-style-type: none"> <li>• Representative sample (613)</li> <li>• 40% response rate</li> <li>• N=160</li> <li>• Practice setting: no significant differences</li> </ul>

# Annual screening rates



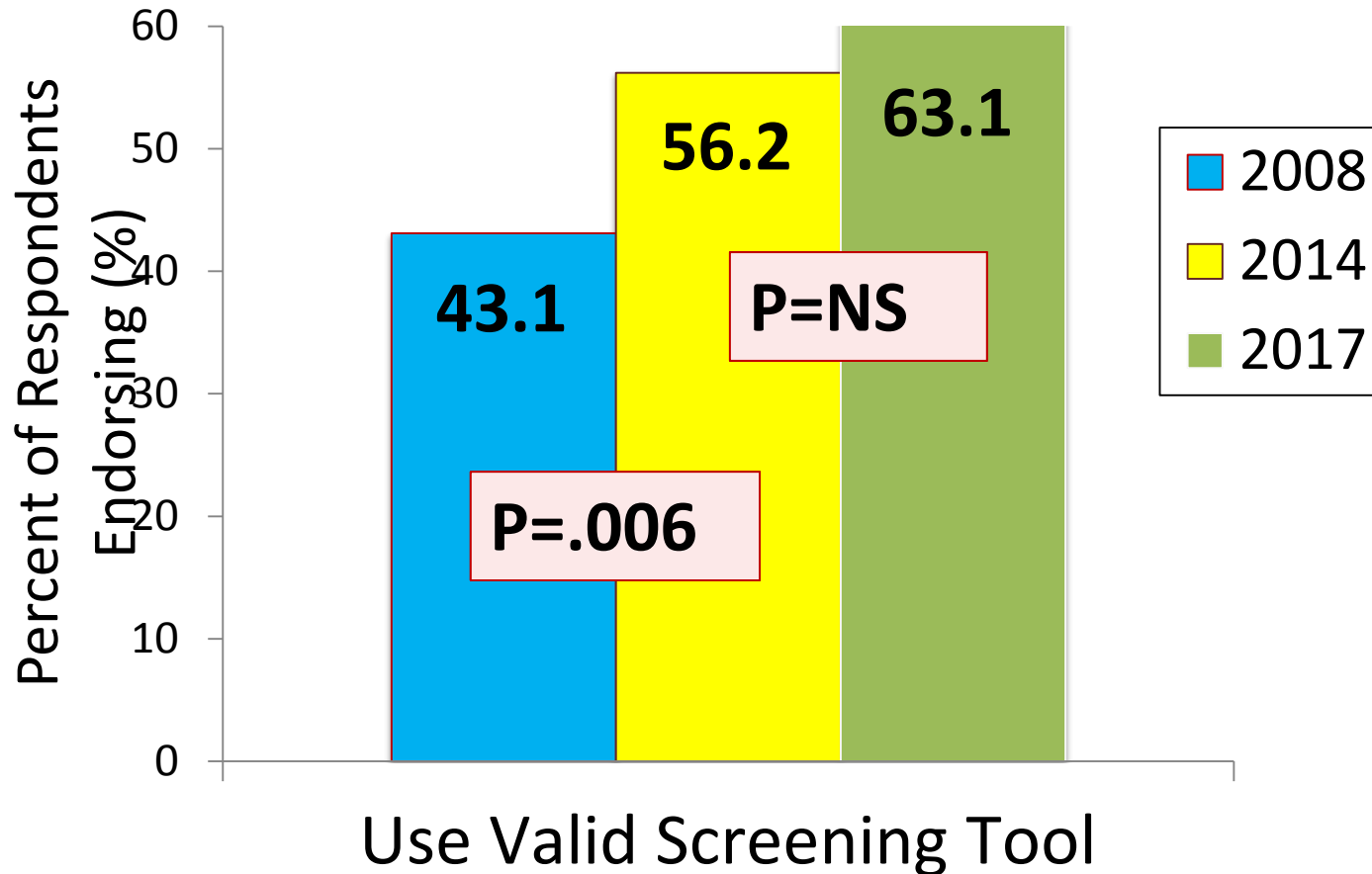
1) American Academy of Pediatrics. Periodic Survey of Fellows #31: Practices and Attitudes Toward Adolescent Drug Screening. Elk Grove Village, IL: American Academy of Pediatrics, Division of Child Health Research; 1997. 2) Levy et al, 2017. Screening Adolescents for Alcohol or Other Substance use in Massachusetts: Tracking trends in attitudes, practice, and knowledge. Manuscript in preparation.

# Barriers to screening





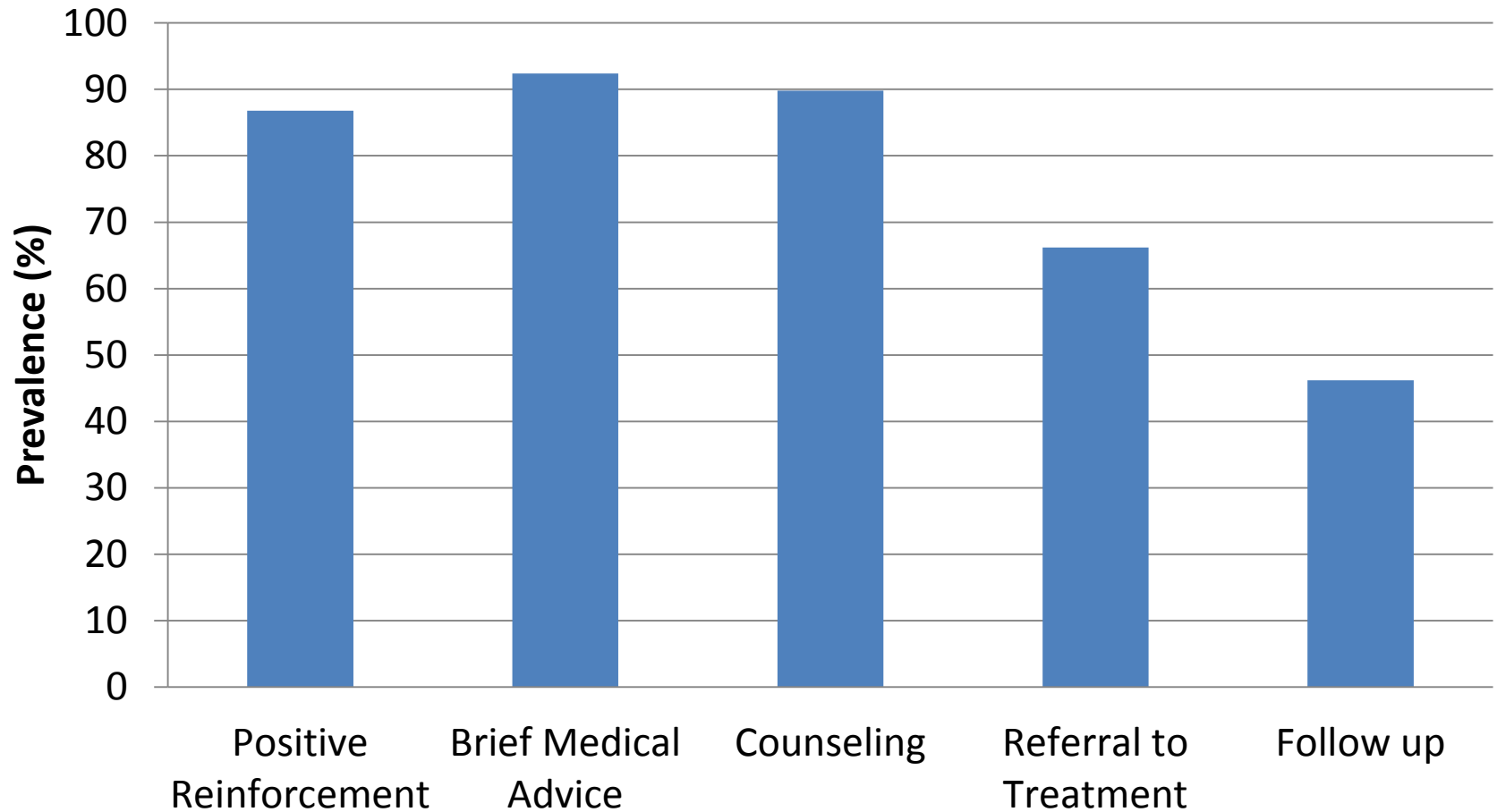
# Valid Screening Tool Use



45.6% screen with a parent in the room



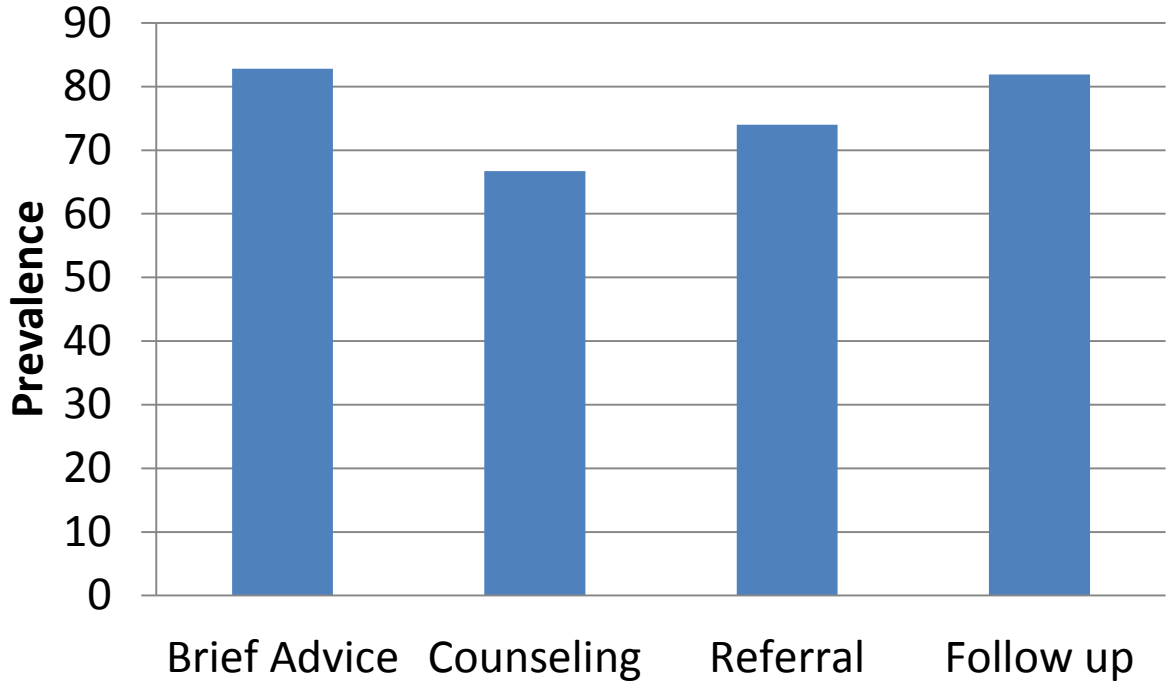
# 2017 screen responses



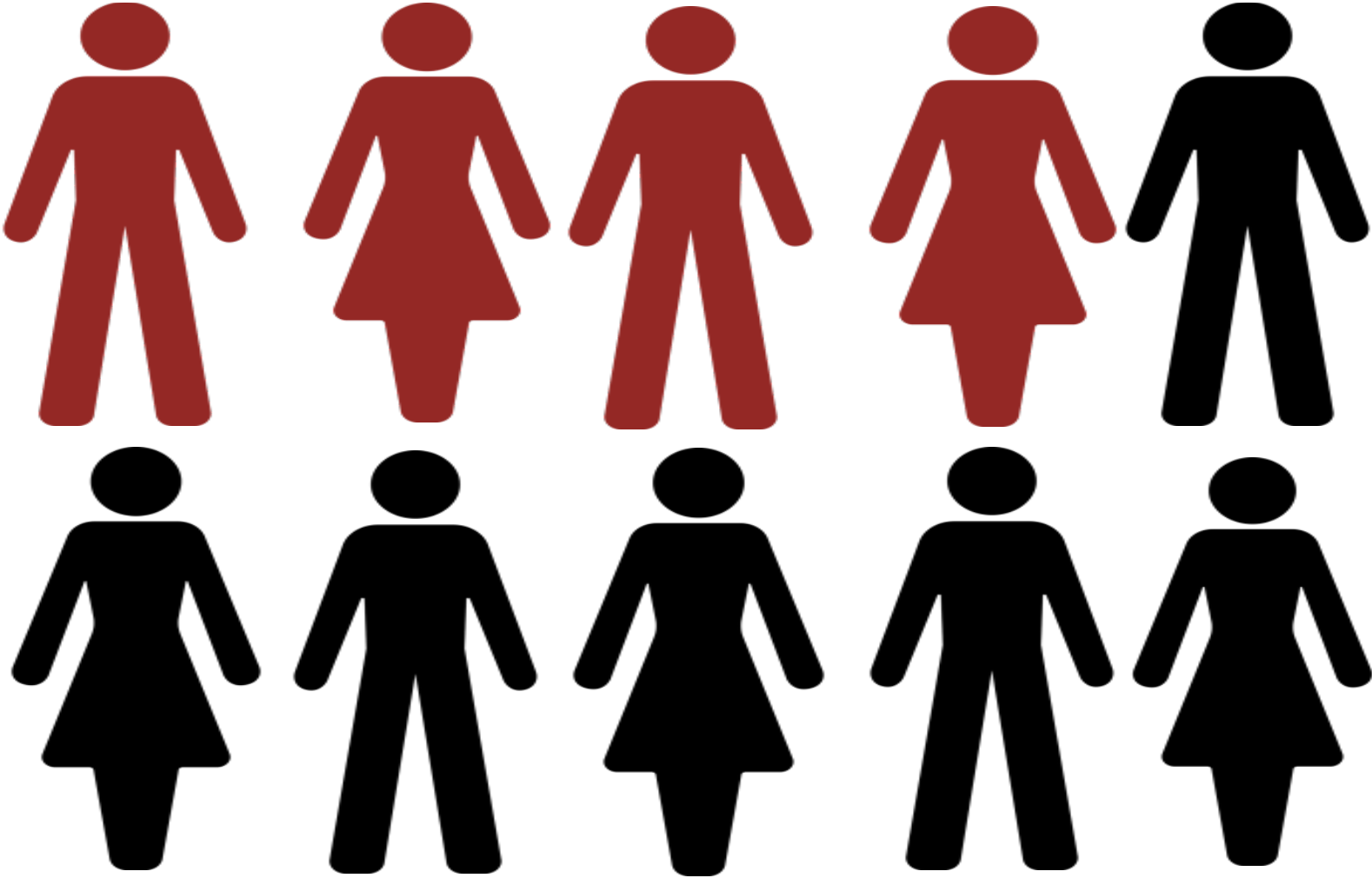
# Time spent on screen response



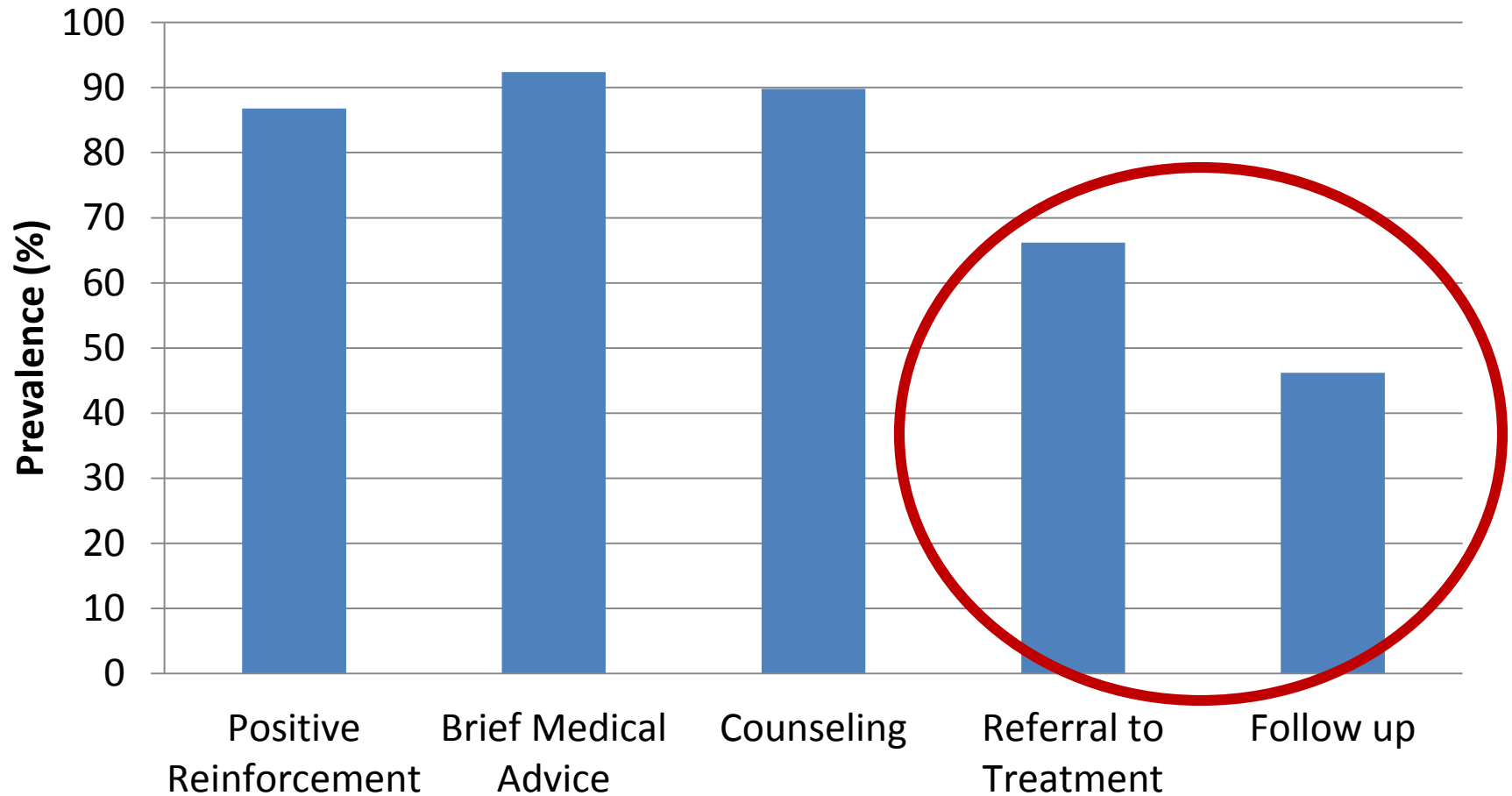
Report taking < 5 min



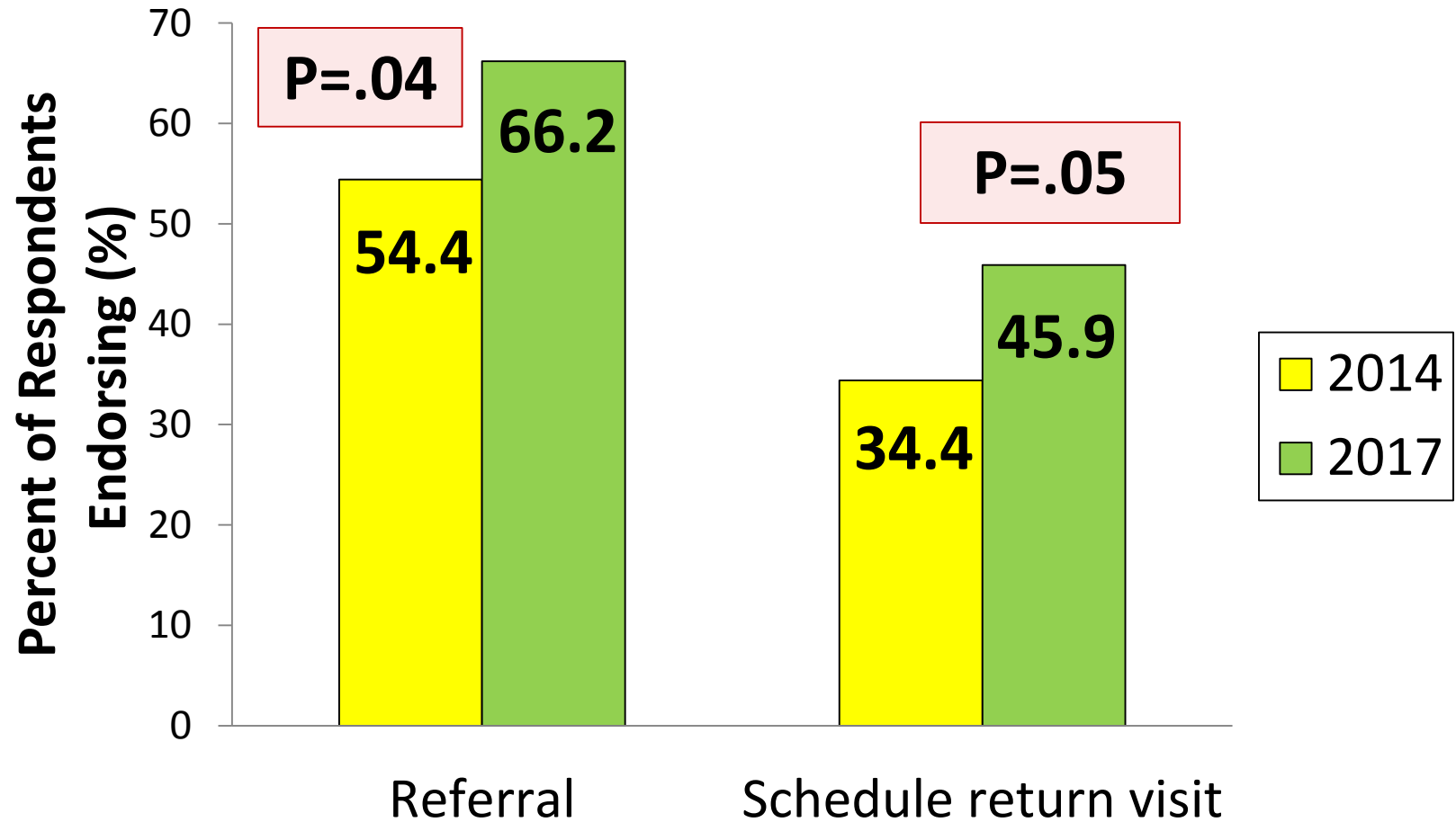
# 4 out of 10 reported **TIME** as a barrier to responding to screens



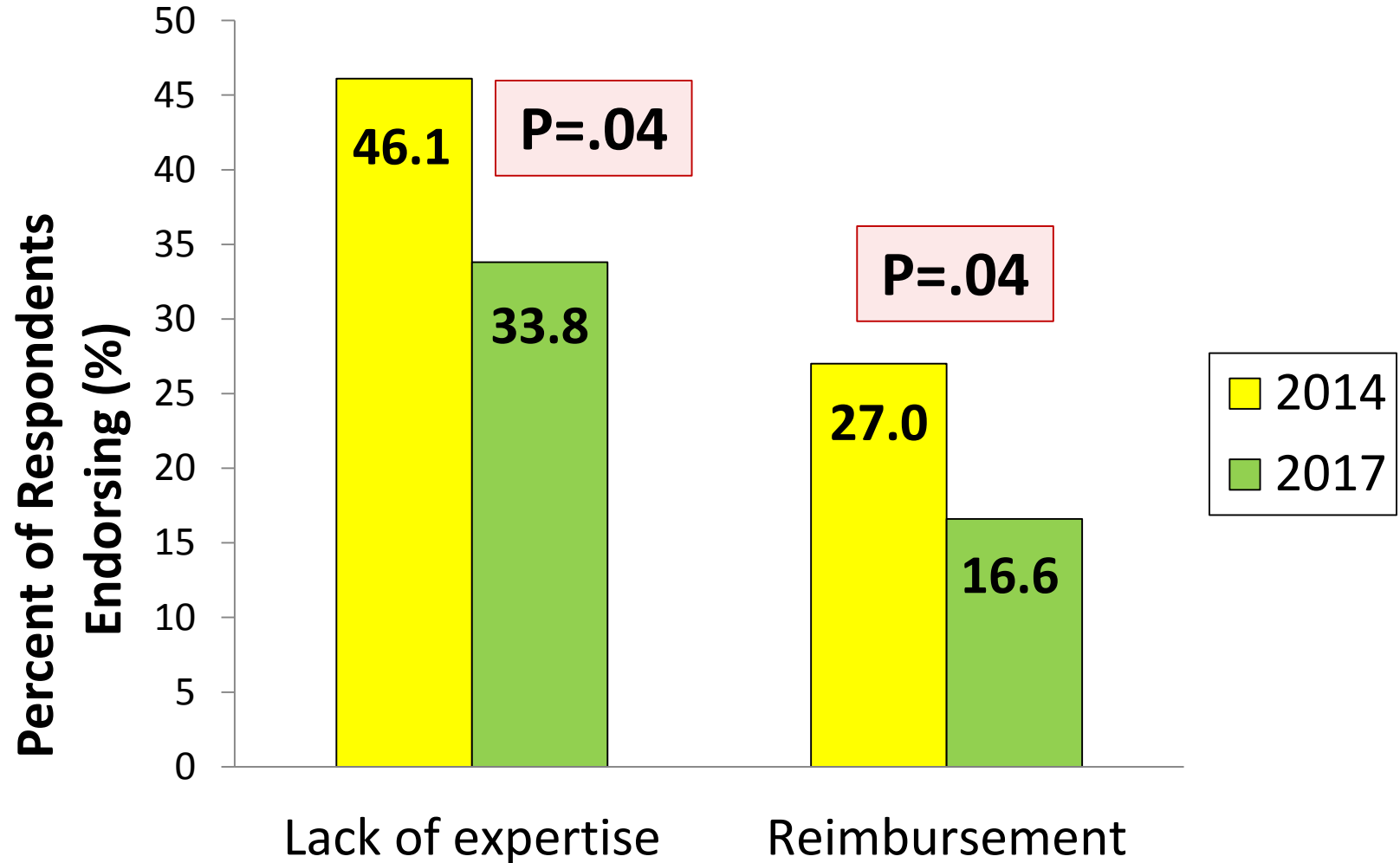
# 2017 screen responses



# Response to Positive Screen



# Barriers to follow-up





# Barriers to referral: Adolescents don't agree to return





## Brief Motivational Counseling

# Barriers to referral: Confidentiality





Ask permission to engage parents

# Barriers to referral: Limited Access to/Knowledge of Programs



Where can I send a kid for SUD treatment??

# Conclusions

- Self reported SBIRT practices continue to improve.
- Referrals and follow up for adolescents with higher risk use are relatively low but improving
- More training on over coming teen resistance and managing confidentiality could be helpful.