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Improving Tennessee Health Care Providers Understanding of Neonatal Abstinence Syndrome

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Improving Tennessee Health Care Providers Understanding of Neonatal Abstinence Syndrome

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IMPROVING TENNESSEE HEALTH CARE PROVIDERS UNDERSTANDING OF NEONATAL ABSTINENCE SYNDROME Ivy Click, EdD & Nick Hagemeier, PharmD, PhD AppNET Conference March 13, 2015	
DISCLOSURES Drs. Click and Hagemeier DO NOT have a financial interest/arrangement or affiliation with one or more organizations that could be perceived as a real or apparent conflict of interest in the context of the subject of this presentation.	
OBJECTIVES Describe Neonatal Abstinence Syndrome (NAS) trends in Tennessee Explain the applicability of the Theory of Planned Behavior to prescriber and dispenser substance use prevention behaviors Describe preliminary study outcomes	

NEONATAL ABSTINENCE SYNDROME

- ▶ Neonatal Abstinence Syndrome (NAS) is a withdrawal syndrome that occurs when a baby is born dependent upon substances taken by the mother during pregnancy.
- ► NAS can be associated with:

 - Includes women on pain therapy or replacement therapy
 Prescription drugs obtained without prescription
 Illicit drugs

NAS SYMPTOMS

- ▶ Opioid withdrawal symptoms primarily related to:
 - Central Nervous System:

 - Hyperactivity

 Gastrointestinal System:

 - astrointestinal Syster
 Poor feeding
 Vomiting
 Poor weight gain
 Diarrhea
 Uncoordinated sucking

NAS SYMPTOMS

- ▶ Opioid withdrawal symptoms:
 - May appear as early as within the first 24 hours
 - ▶ May take as many as 4-5 days to appear
 - Occur in 55-94% of exposed infants

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NAS IN TENNESSEE

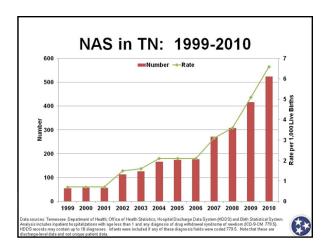
- The incidence of NAS has increased by more than 10-fold during the last decade in Tennessee
 NAS incidence highest in East TN

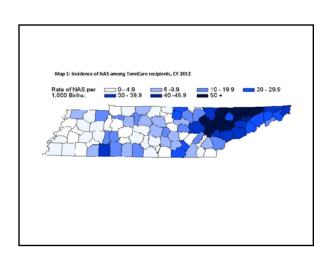
- NAS incidence nighest in East I N

 The substance of exposure is typically an opioid, which may or may not have been prescribed to the mother.

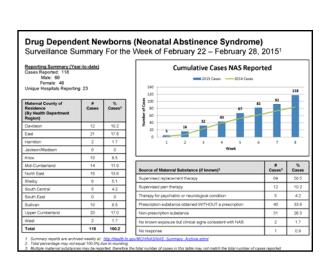
 Babies with NAS have significantly longer hospital stays than otherwise healthy infants and may be at risk for developmental delays or other health concerns as they grow.

 The average cost to Medicaid (TennCare) for caring for an affected infant is over \$66,000.
- Infants with NAS are more likely to enter state custody, placing an additional toll on the state's child welfare system.





Drug Dependent Newborns (Neonatal Abstinence Syndrome) Surveillance Summary For the Week of December 28, 2014 – January 2, 2015¹ Reporting Summary (Year-to-date) Cases Reported: 973 Cumulative Cases NAS Reported 2014 Cases — 2013 Cases 200 1.2 1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49 51 53 Week 103 10.6 94 9.7 140 14.4 Source of Maternal Substance (if known)² 3.8 3.9 2.1 7.8 10.6 210 21.6 0.3

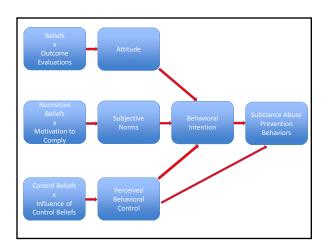


PREVENTION VS. TREATMENT Maternal substance use prevention Appropriate use Risk awareness Contraception Maternal substance use treatment 4.4% of pregnant women report past month illicit drug use (NSDUH. 2011) Withdrawal during pregnancy is not recommended (ACOG, 2012) Methadone had been gold standard, but recent evidence supports use of buprenorphine (lones et al. NBJM 2010) -55% of NAS cases in TN report supervised replacement therapy as source of medication



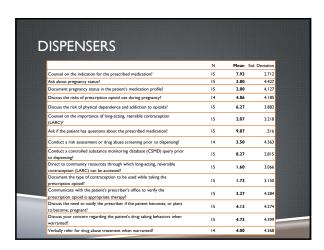
STUDY RESEARCH QUESTIONS

- ▶ What are the attitudes, beliefs, and behaviors of Tennessee
- What are the attitudes, beliefs, and behaviors of Tennessee prescribers and dispensers specific to substance use in pregnancy and NAS primary prevention?
 How do prescriber/dispenser perceptions of and behaviors regarding substance use in pregnancy and NAS prevention differ across prescriber/dispenser characteristics?
 What is the impact of a pilot NAS primary prevention academic detailing intervention with AppNET prescribers and buprenorphine prescribers on NAS primary prevention attitudes, beliefs, and behaviors?



METHODS	
➤ TPB instruments constructed ➤ Stratified random samples selected (N=100 each)	
 Buprenorphine "in-office" treatment authorized Pain management clinic directors Community pharmacists Primary care physicians 	
 Primary care NPs/PAs Pre-notification → Mailing #1 → Reminder → Mailing #2 → Telephone follow-up 	
	-
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SMALL CROLIDACTIVITY	
SMALL GROUP ACTIVITY	
	<u> </u>
	-
PRELIMINARY RESULTS	

PRESCRIBERS												
PRESCRIBERS												
		PCP+					er Catego			_	_	
	'	rCPs		Bup. Prescripbers		Pain Clinic Directors		Total				
	Mean	Ν	Std. Dev	Mean	Ν	Std. Dev	Mean	Ν	Std. Dev	Mean	Ν	Std. Dev
Discuss the risks of opioid use during pregnancy?	5.80	10	4.315	8.50	12	3.529	9.06	18	2.754	8.08	40	3.598
Discuss the patient's risk of physical dependence and addiction to opioids?	8.90	10	2.514	9.58	12	1.443	9.71	17	.686	9.46	39	1.553
Discuss the potential of physical dependence to and withdrawal from opioids in a newborn	5.80	10	4.315	6.75	12	4.808	8.67	18	3.144	7.38	40	4.081
Discuss the results of a controlled substance monitoring database query with the patient?	5.50	10	3.536	6.82	П	2.994	9.38	16	1.628	7.57	37	3.087
Discuss a birth control plan when opioids are initiated?	5.70	10	4.498	8.08	12	3.630	7.61	18	4.075	7.28	40	4.064
Recommend long-acting, reversible contraception (LARC) to patients on opioids?	3.70	10	4.244	5.50	12	4.079	6.59	16	4.022	5.49	38	4.157
Direct patients to community resources through which long-acting, reversible contraception (LARC) can be accessed?	3.50	10	4.601	4.33	12	3.725	6.00	17	4.637	4.85	39	4.386
Document the type of contraception used by the patient?	6.73	-11	4.563	8.36	П	3.107	8.33	15	3.619	7.86	37	3.758
Discuss the patient's pregnancy status at each visit if on long-term opioids?	5.27	-11	4.519	7.92	12	3.343	8.33	18	3.361	7.39	41	3.833
Discuss the expectation that hte patient inform you if she becomes, or plans to become, pregnant?	6.80	10	4.104	9.83	12	.577	9.33	18	1.782	8.85	40	2.617
Administer a pregnancy test prior to the initiation of opioid therapy?	4.60	10	4.402	7.33	12	3.750	7.35	17	4.372	6.64	39	4.264
Obtain a patient's personal history of drug abuse prior to initiating therapy?	8.91	-11	2.212	10.00	12	.000	9.83	18	.707	9.63	41	1.280
Conduct a drug abuse risk assessment prior to prescribing an opioid medication?	8.20	10	2.741	8.33	12	2.462	9.94	18	.236	9.03	40	2.044
Discuss your concern with a patient regarding her drug- taking behaviors warranted?	8.91	-11	1.973	10.00	12	.000	9.56	18	1.338	9.51	41	1.381
Verbally refer a patient for drug abuse treatment when warranted?	8.64	-11	3.233	9.09	П	3.015	9.29	17	2.257	9.05	39	2.714



NEXT STEPS
▶ Pilot intervention:
Trained academic detailers will provide an educational outreach program to ~50% of survey respondents from PCP and buprenorphine prescriber cohorts.
▶ Detailers will provide face-to-face presentations within participants' clinic settings.
▶ Post-Intervention Survey Administration & Data Analysis
▶ Repeat survey with all respondents in PCP and buprenorphine prescriber cohorts.
 Evaluate change in perceptions and behaviors between pre/post
Differences in perceptions and behavior across cohorts.
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QUESTIONS?	