Inpatient Monitoring

The American Academy of Pediatrics recommends inpatient monitoring for **4-7** days for SENs for signs of NAS.(1) Approximately 40-70% of SENs require pharmacologic treatment for NAS despite optimal non-pharmacologic first-line treatment. Most SENs will exhibit signs and symptoms within 48-72 hours of birth after in-utero opioid exposure. (2) Infants exposed to short-acting opioids such as oxycodone have a reported lower risk for NAS requiring pharmacotherapy.(3) We recommend that infants exposed to short acting opioids be observed for a minimum of 4-5 days for signs of withdrawal.

Co-exposure to nicotine and psychiatric medications increase the risk for NAS requiring pharmacotherapy due to an overlap of withdrawal symptoms from these medications with opioid withdrawal, and drug interactions.(4–6) Careful consideration of the symptom profile (primary neurologic symptoms) and timing of symptoms (< 24 hours of life) can help to distinguish between opioid and co-exposure withdrawal.

References:

- 1. Hudak ML, Tan RC, Neonatal drug withdrawal. Pediatrics. 2012;129(2):e540-60. doi:10.1542/peds.2011-withdrawal. Pediatrics. 2012;129(2):e540-60. doi:10.1542/peds.2011-3212
- 2. Brogly SB, Saia KA, Walley AY, Du HM, Sebastiani P. Prenatal Buprenorphine Versus Methadone Exposure and Neonatal Outcomes: Systematic Review and Meta-Analysis. Am J Epidemiol. 2014;180(7):673-686. doi:10.1093/aje/kwu190
- 3. Desai RJ, Huybrechts KF, Hernandez-Diaz S, et al. Exposure to prescription opioid analgesics in utero and risk of neonatal abstinence syndrome: population based cohort study. BMJ. 2015;350:h2102. doi:10.1136/BMJ.H2102
- 4. Patrick SW, Dudley J, Martin PR, et al. Prescription opioid epidemic and infant outcomes. Pediatrics. 2015;135(5):842-850. doi:10.1542/peds.2014-3299
- 5. Wachman EM, Newby P k., Vreeland J, et al. The Relationship Between Maternal Opioid Agonists and Psychiatric Medications on Length of Hospitalization for Neonatal Abstinence Syndrome. J Addict Med. 2011;5(4):293-299. doi:10.1097/adm.0b013e3182266a3a
- 6. Jones HE, Heil SH, Tuten M, et al. Cigarette smoking in opioid-dependent pregnant women: neonatal and maternal outcomes. Drug Alcohol Depend. 2013;131(3):271-277. doi:10.1016/j.drugalcdep.2012.11.019