

Algorithm Aids in Diagnosis of NAS in Newborns

The Perinatal Institute developed the neonatal abstinence syndrome (NAS) algorithm in response to an increase in maternal illicit and prescription drug use, which can result in a higher risk for newborns developing NAS. Among newborns exposed to opioids in utero, withdrawal signs will develop in 55% to 94% of newborns, and roughly 40% will require pharmacologic treatment.

The first step is to identify babies who fit into this algorithm. This is done by universal maternal drug testing. The test is obtained on admission to the hospital on all mothers, after consent is signed.

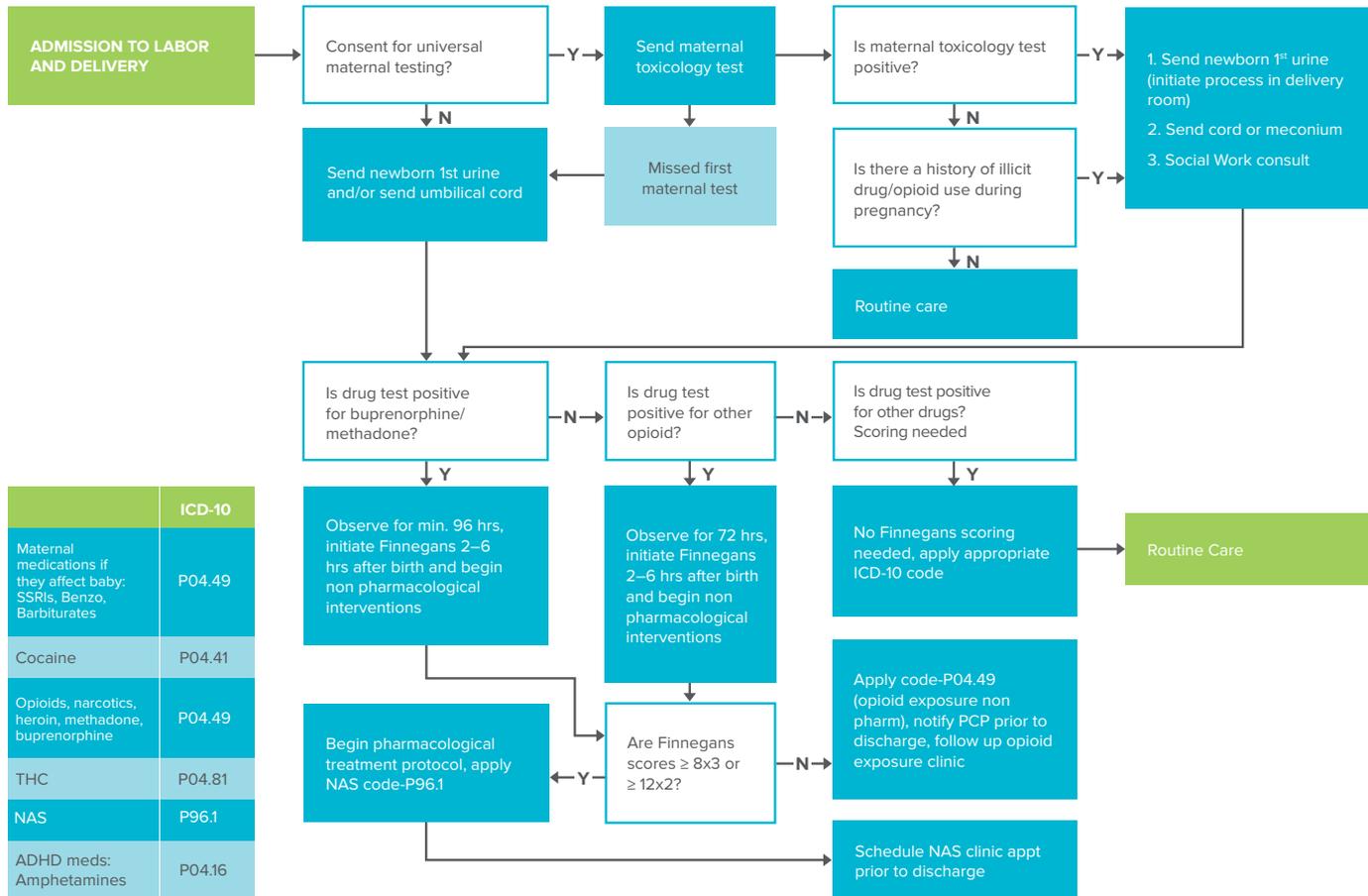
A newborn urine sample and/or umbilical cord/meconium should be sent for testing per algorithm and a social work consult obtained as early in the hospitalization as possible. These two pieces help with treatment choices as well as with assessing the family and safety of the home environment.

There are different time points for observation because each class/drug has different pharmacokinetics, in that the half-life of the drug differs and may have a later onset of withdrawal symptoms.

Applying an appropriate ICD-10 code enhances data tracking and flags follow-up needs of the newborn. Whether medication is needed to manage maternal exposure dictates the follow-up pathway. If pharmacologic treatment is required to help manage withdrawal symptoms, a phone call to the follow-up primary care provider would be warranted, as well as an appointment with the NAS follow-up clinic.



Perinatal Institute Neonatal Abstinence Syndrome Management Process Map



	ICD-10
Maternal medications if they affect baby: SSRIs, Benzo, Barbiturates	P04.49
Cocaine	P04.41
Opioids, narcotics, heroin, methadone, buprenorphine	P04.49
THC	P04.81
NAS	P96.1
ADHD meds: Amphetamines	P04.16