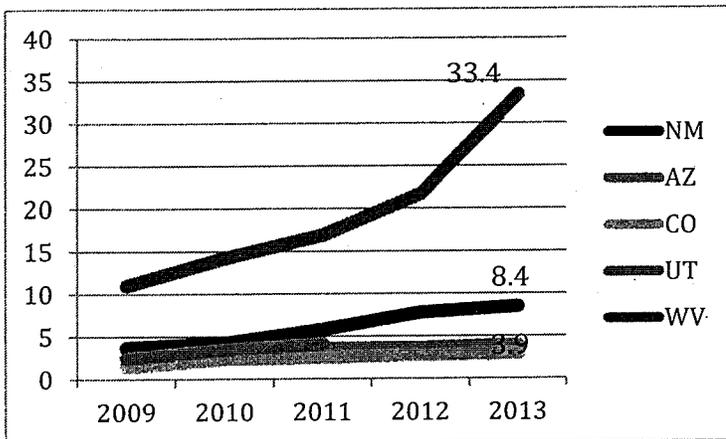


Andrew Hsi, MD, MPH, Director UNM Health Sciences Institute for Resilience, Health, and Justice
 Neonatal Opioid Withdrawal Syndrome (NOWS)
 Presentation to LHHS and CCC NM Legislative Interim Committees 28 October 2016

The number of infants born with NOWS has increased. Caring for infants with NOWS costs more mainly driven by neonatal intensive hospital costs. What we do to help the development of infants who leave the hospital after treatment for NOWS changes for the outcomes of children and families for the better.

NM data shows **increase** in numbers of infants born with NOWS since state has contributed data to the CDC. In 2009, NM had **3.5** infants with NOWS per 1000 live births, in 2013 **8.9** per 1,000.



The increase comes from more pregnancies affected by use of opioids. Pregnancies affected by prenatal opioid use are women who have prescribed long acting opioids for treatment of chronic pain. Affected pregnancies also include women who illegally obtain narcotic pills, or who use heroin (smoking or IV). A third group includes pregnant women receiving monitored substance use disorder treatment on methadone or buprenorphine (brand name Subutex preferred) or combination buprenorphine with naloxone (brand name Suboxone) medications. Women have better pregnancy outcomes with treatment on methadone or buprenorphine medications especially less risk of premature delivery with associated increased hospital costs for infant and sometimes mother. They risk have a spontaneous abortion if they stop abruptly.

Infants have variable risks for requiring treatment if they have prenatal exposure to opioids. A mistaken belief on the street and in some clinics is that the infants of mothers using short acting opioids like heroin or hydrocodone don't go through NOWS. Medical experts cannot predict which infant will need only observation and supportive care versus requiring treatment. *Infants of mothers who receive treatment with buprenorphine early in pregnancy have fewer hospital days for treatment of NOWS.*

Modified US data	Without NOWS (Normal Nursery)	Observed for NOWS	Treated for NOWS (NICU)
Days of hospitalization	2.1	4	16.9
Costs hospitalization	\$3500	\$6800 normal nursery ~\$16,000 observed in NICU	\$66,700

We don't know about the long-term outcomes for infants with NAS. Long-term outcomes result from the interplay of many variables, *it's complicated!* The FOCUS Program has provided comprehensive early intervention and primary medical care for infants who have had opioid exposure or required treatment for NOWS. After having some success supporting the progress of infants to normalized development, the program started caring for the parents. Currently FOCUS provides home-based early intervention under Part C Medicaid funds that improves child development. It also helps parents meet their children's needs and increase the emotional and intellectual abilities of the infants. The work with parents results in reductions of risks for child neglect and abuse because parents feel more confident meeting the stresses of becoming parents. FOCUS provides Suboxone treatment for parents with opioid substance use disorders. We have seen increasing numbers of parents become stabilized in treatment resulting in greater stability for children in their homes and helping parents enter the workforce or complete education.

What FOCUS does to help the development of infants who leave the hospital after treatment for NOWS changes the outcomes of children and families for the better.