Increasing Diagnostic Testing Access for Newborns with Suspected Hearing Loss

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The Ear Institute at the New York Eye and Ear Infirmary of Mount Sinai provides diagnostic testing for infants that have “failed” their newborn hearing screening. In partnership with the New York State Department of Health’s Early Hearing Detection Initiative, and in support of the Mount Sinai Health System which operates the 3rd and 6th largest birthing hospitals in the State of New York, the Pediatric Audiology team provides mandated diagnostic testing for infants who demonstrated absent responses on Otoacoustic Emission (OAE) testing following birth. Traditionally, Auditory Brainstem Response (ABR) testing has been the gold standard follow-up test, but has proven to require protracted testing cycle times resulting in scheduling bottlenecks, increased patient wait times, and a decreased year-over-year volume.

Baseline: 2016-2018
- Original work flow scheduled all children for ABR, a three-hour test
- ABR wait times increasing from 36-41 days
- Volume decreased from 302-194 visits annually

Intervention
- New technology known as Auditory Sustained Stimulus Response (ASSR) allows testing of multiple sound frequencies simultaneously
- Studies indicate that ASSR is effective in identifying infants with intact hearing
- Requires half the testing time as traditional ABR
- Implemented ASSR to rule out OAE false positives
- Only ASSR “fails” scheduled for ABR

Results
- Wait times decreased from 41-33 days (p>0.0001)
- Volume increased from 194 to 419 visits
- $50,987 increase in Revenue
- Success instrumental in Exemplary Practice designation from New York State Practice Transformation Network