

## Improving the Performance and Documentation of Infant Genital Examinations in the Newborn Nursery

**Background:** There are several factors that impact the development of an infants' external genitalia. Timely detection of congenital differences in these structures is vital to providing appropriate screening and medical care to infants. Given the significant variation in the appearance of infants' genitals, residents and students require training in accurately performing and documenting this portion of the examination. The novel training session provided is structured on the principle that education is contextual and that formal classroom instruction should be integrated with experiential learning.

**Methods:** Target learners include second year pediatric residents, family medicine residents, medical students, and final year physician assistant students. They receive the education intervention during the newborn nursery rotation at two teaching hospitals. The session includes a small-group interactive lecture followed by hands-on practice performing the genital examination on a male and female infant. Learners receive immediate instruction and individualized formative feedback. They incorporate a systematic approach to performing and describing any infants' genital examination. The systematic approach involves evaluation of the clitorophallic structure, palpation for gonads and masses, orifice identification, and labioscrotal fold evaluation. Afterwards, learners complete a retrospective pre and post evaluation of their subjective confidence in their genital examination and documentation skills and answer free-text questions about the education intervention.

**Preliminary Results:** The survey response rate was 100% (n=31). Prior to the session, 46% and 23% of learners felt confident in performing and describing their infant genital examinations, respectively. Afterwards, 100% reported increased confidence in their ability to accurately perform and describe this examination. Learners appreciate the opportunity to practice their examination skills right after finishing the interactive lecture. They also recognize the importance of accurately performing and describing the infant genital examination and recognized the gaps in their knowledge before the session. None had previously had any training focused on infant genital exams.

**Conclusion:** Providers in the newborn nursery examine infant genitals and communicate their findings daily. However, the majority are not confident in their ability to do so accurately. Trainees are more confident after incorporating a systematic approach. The multimodal education session will serve as a model for other providers looking to improve their evaluations of infants' genitals.