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Standardized Digital Training for Newborn Hearing Screening: A Scalable Model for Pediatric Audiology

The quality of Newborn Hearing Screening (NHS) depends not only on reliable measurement technology but also substantially on the qualification of the professionals involved. Structured and standardized training concepts are still largely lacking.

This presentation introduces a digital training program for NHS. The concept is based on quality-assured e-learning frameworks (DIN-PAS) and instructional design principles. Multimedia learning units, interactive exercises, and competency-oriented assessments are integrated into a scalable Moodle-based infrastructure.

Pilot data demonstrate high acceptance, increased perceived procedural confidence, and positive usability ratings. The container-based content architecture and AI-supported voice synthesis enable language adaptation without fundamental redesign, thereby facilitating international transferability.

For the hearing care profession, two key perspectives emerge: integration into the screening process and involvement in an extended tracking system that goes beyond diagnosis to include hearing aid provision. This approach strengthens the future role of pediatric audiology as a connecting element between early detection, diagnostics, and intervention in an international context.