

Editorial

Universal Newborn Screening



Over the years, we, as a profession, have confronted a number of serious issues. Seldom, however, has there been a more contentious debate than the one concerned with the issue of universal screening for hearing loss in newborn babies. Early on, skeptics of the concept raised a number of important questions relating to prevalence, cost-benefit ratio, sensitivity and specificity, and the actual need for such early identification. Fortunately, we have progressed to the point where the importance and feasibility of universal newborn screening are now generally accepted. Yet, two critical issues remain central to every serious debate: (1) what is the best way to implement contemporary technology for screening? and (2) how much will it cost?

In this issue of *JAAA*, Michael Gorga and his colleagues at the Boys Town National Research Hospital in Omaha, Nebraska, Kimberly Preissler, Jeff Simmons, Lisa Walker, and Brenda Hoover, provide some much needed cost estimates bearing on these matters. Their goal was to present "cost facts," as they could best be determined, and then let others decide if they wanted to engage in universal neonatal hearing screening, and, if so, what approach they might choose to follow.

First, the authors show that, for a hypothetical cohort of 4000 babies, if you consider

equipment costs, disposable costs, salaries and benefits, and follow-up costs, then the estimated cost per baby screened is \$23.25 if you do only auditory brainstem response (ABR) on every baby, \$23.63 if you do only otoacoustic emissions (OAEs) on every baby, and \$17.08 if you carry out a combined procedure. Thus, the most cost-effective protocol is one in which all babies are initially screened by OAE, and the failures are subsequently screened by ABR.

Next, the authors show how the estimated cost per baby screened over a 5-year period declines with the number of births per year from a high of \$155 for ABR alone and 25 births per year to a low of \$12.99 for the combined OAE and ABR protocol in a situation where there are 8000 births per year.

Finally, the authors present a cost analysis of their own screening program, in which all testing is carried out by audiologists rather than less costly personnel. Even here, they show that the cost per baby can be contained below \$30.

Whether you are already involved in a screening program or are considering whether to become involved, you will find a host of valuable information in this very informative paper.

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