

## **Abstract EFAS/DGA 2007**

### **Rehabilitation programs in Europe - current concepts and future perspectives**

Archbold, S.

Ear Foundation, Nottingham

Cochlear implantation for children is now a mature service, and one which is considered safe and effective. Early implantation is being undertaken increasingly in the first years of life, following early identification, and giving the increased likelihood of even better outcomes. Traditional models of service delivery provided excellent clinic-based services, with intensive early habilitation. However, the current challenges faced by implant centres, extend beyond this short time-frame; those implanted, whether adult or child, require life-long support. With the growing numbers being implanted, requiring long-term management, clinic-based services are increasingly over-stretched particularly in under-resourced health-care services.

For children, implantation is unusual in having major outcomes in terms of spoken language developed in home and school rather than in clinic, and over years rather than months. The process of implantation is one which has life-long implications for these children and their families and fundamentally changes their communication and educational options. It also makes new demands on families and on non-specialist teachers who are not part of the cochlear implant team, but who are essential for successful long-term use in children. For adults, the acquisition of new hearing requires changes in the family dynamics too, and the support required by the deaf adult changes over time. As the technology develops, traditional models of service delivery are challenged to provide the long-term support for the growing numbers of patients. Additionally, as numbers grow, intensive provision becomes unsustainable, with implant centres questioning their methods of service delivery as an effective means of providing for long-term management.

A recent review of services throughout Europe found great concerns about the long-term management of the technology for both children and adults. Major issues to arise were the management of the technology, the management of device failures and demands of implementing new technologies. Parents and adults alike expressed major concerns about the need for local technology support services to be available. Implementing complex technology in the community in the long-term for both adults and children is only possible by engaging parents, families and the local professionals, particularly teachers, from the outset, and utilising their expertise. This calls for a critical appraisal of the traditional approach to service delivery.

The new technologies not only provide us with the ability to provide implantation, but they give us with easy, instant means to provide learning resources and communicate effectively over distances. The apparent tension between keeping some implant expertise at the implant centre, with the need to make local services available, can be overcome utilizing the latest technology with web-based and internet access to services. Distance learning materials can provide resources for children, parents, teachers, clinicians and adults alike, in time and cost-effective ways. There are several initiatives currently underway in Europe, utilizing modern technologies to providing expertise in the community, and to implement training packages and resources for families and local professionals.

In order to make the opportunities brought by cochlear implantation available to all, and sustain them in the long-term, alternative models of service delivery should be considered. A move from clinic-based specialist services towards community-based services could engage the



### **Abstract EFAS/DGA 2007**

knowledge and skills of those who know the children and adults best –their parents, families, teachers and local therapists. Engaging them fully in the process ensures sustainability of culturally and linguistically appropriate support, wherever they live, and whatever their background. Cochlear implantation is now a mature service and it is time in its development to move services back to where they belong - at home and at school. This is the real world, and where implantation must be successfully managed in the future.

