



GPCE 2015

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SWISH Program

Aim for SWISH
program →
Intervention to be
commenced prior to
6 months of age

Automated ABR



Aims and results

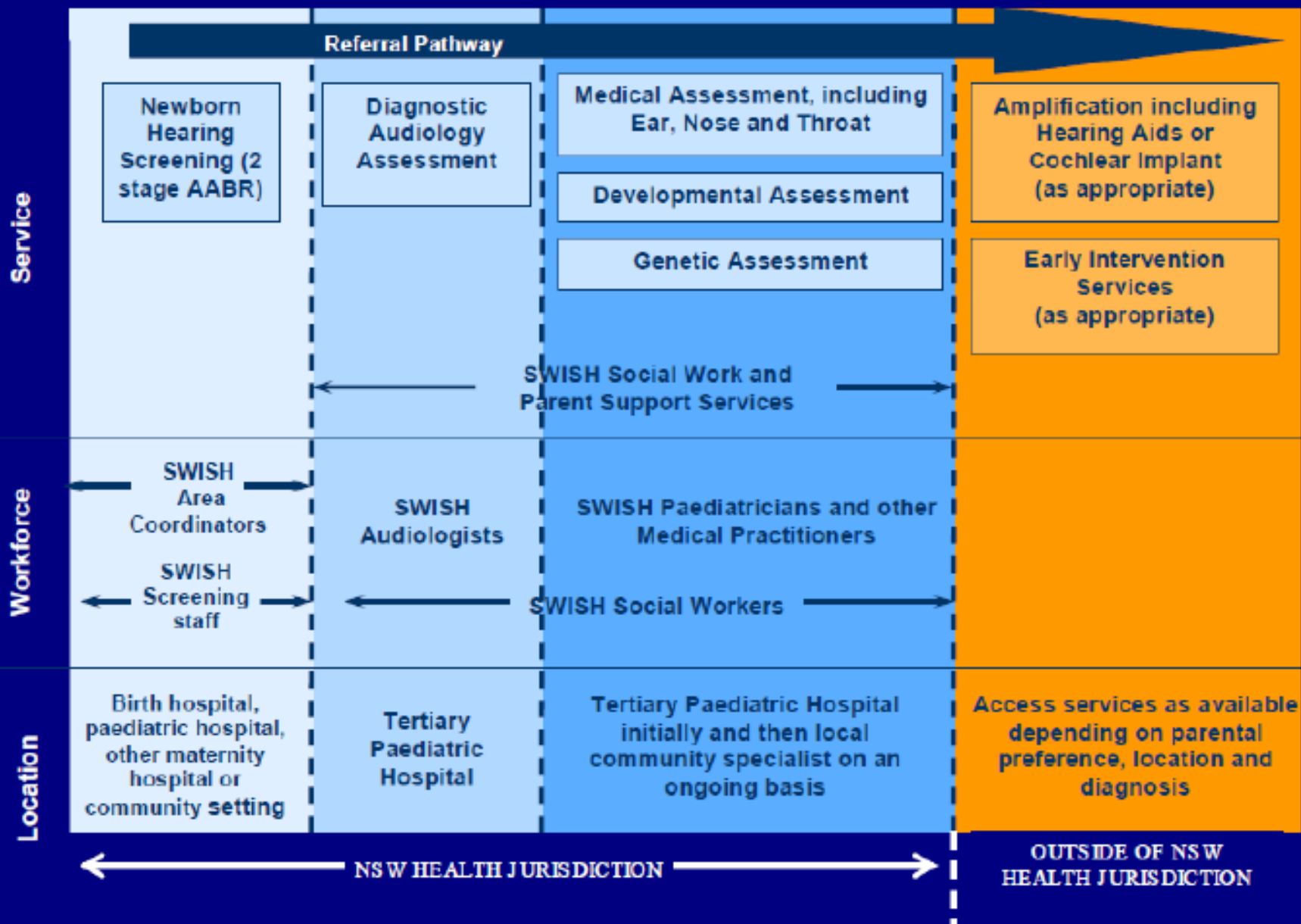
- Significant hearing loss is defined as being greater than 40dB in the better ear.
- 4.2%-9.5% of children fail the initial SWISH test, and are required to undergo a second screening test
- Overall about 4% of children require formal audiologic assessment

Aims and results

Financial Year	Number diagnosed with >40dB Permanent Bilateral Hearing Loss	Significant Bilateral Hearing loss diagnosed per 1000 live births	Number diagnosed with >40 dB unilateral Hearing Loss	Unilateral hearing loss diagnosed per 1000 live births
2006/07	101	1.06	70	0.74
2007/08	85	0.90	57	0.60
2008/09	97	1.02	37	0.39
2009/10	86	0.89	43	0.44

Statewide Infant Screening – Hearing (SWISH) Program

Figure 1



Considerations

- Neural development inner ear around 6-7 weeks.
- Infections in first trimester can cause SNHL. TORCH
- Bacterial meningitis commonest cause of acquired SNHL: very close monitoring required. Urgent cochlear implantation if cochlear ossification

Key Points

- More than 50% of prelingual deafness in developed countries is attributable to genetic factors.
- 25% are due to environmental causes of HL: which may include adverse perinatal factors, for example, extreme prematurity, hyperbilirubinaemia, aminoglycoside drugs, hypoxia, meningitis and congenital infections and head trauma
- 25%: no cause is found for the hearing loss
- Seventy percent of prelingual hereditary HL is nonsyndromic (NSHL), the remaining
- 30% is syndromic (characterized by accompanying symptoms).
- Approximately 80% of genetically caused prelingual NSHL has an autosomal recessive mode of inheritance, while autosomal dominant cases account for approximately 15%, and X-linked cases for 2 to 3%

Paediatric Implantation

- Bilateral profound sensorineural loss
- Must be done before age 6.
- Improved outcomes <2 , ideally <1
- In general terms the younger the better.

- Mostly bilateral simultaneous implantation

The Cochlear Implant

