



Pathways to Cochlear Implantation following  
Identification of Hearing Loss from Newborn  
Hearing Screening

# Outline

- q Discuss the multidisciplinary team members involved in the Hear & Say Implantable Technologies Program
- q Case Study 1
  - Simultaneous bilateral cochlear implantation in a baby at 8 months of age
- q Case Study 2
  - Unilateral implantation in a toddler with auditory dys-synchrony

# Multi disciplinary team

- q Family – child and parents
- q Auditory – Verbal Therapist
- q Audiologist
- q Ear, Nose and Throat Surgeon
- q Social Worker
- q Psychologist
- q Paediatrician
- q Ophthalmologist



# Case Study 1: Jonathan

- q Bilateral 'REFER' on 2 occasions
- q Born at full term
- q No risk factors identified for hearing loss
- q Large Vestibular Aquaduct Syndrome
- q Electrophysiological testing
  - q Bilateral SNHL moderately-severe to severe low-to-mid frequency HL that slopes to a severe to profound high frequency HL
- q Fitted with hearing aids at 5 weeks of age
- q Behavioural Audiological Candidacy commenced at 6 months of age

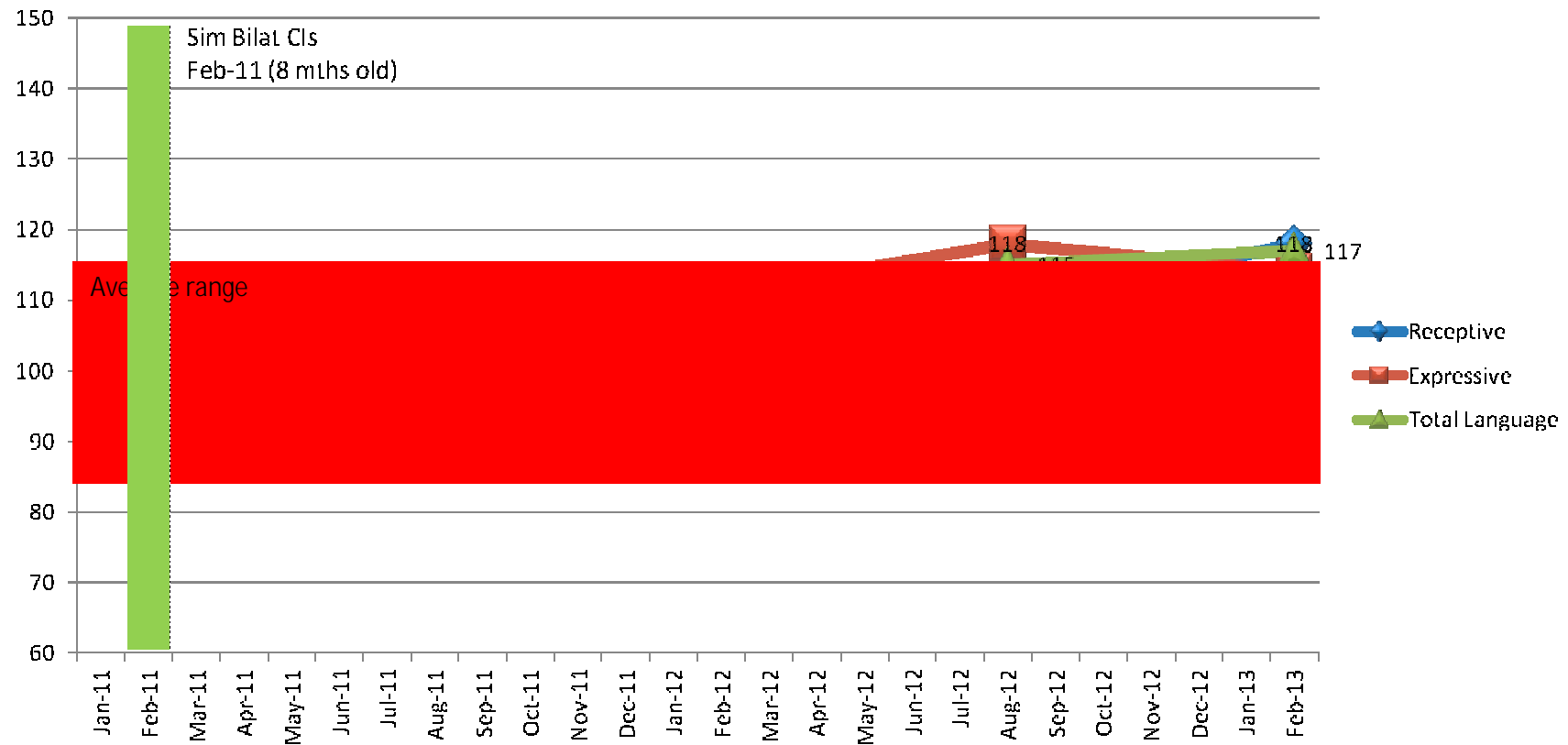


# Switch-On at 8 months of age



# Case Study 1: Jonathan

## PLS-4 Standard Scores



# Case Study 1: Jonathan



## Case Study 2: Cooper

- q Born at 36 weeks and passed UNHS
- q 2 weeks of age admitted to hospital following severe hyperbilirubinaemia (required exchange transfusion)
- q Parents reported Cooper wasn't responding to sounds as normal
- q No response to click ABR at 80dBnHL with present cochlear microphonic and OAEs bilaterally
- q Results consistent with Auditory Neuropathy



a firstvoice centre



## Case Study 2: Cooper

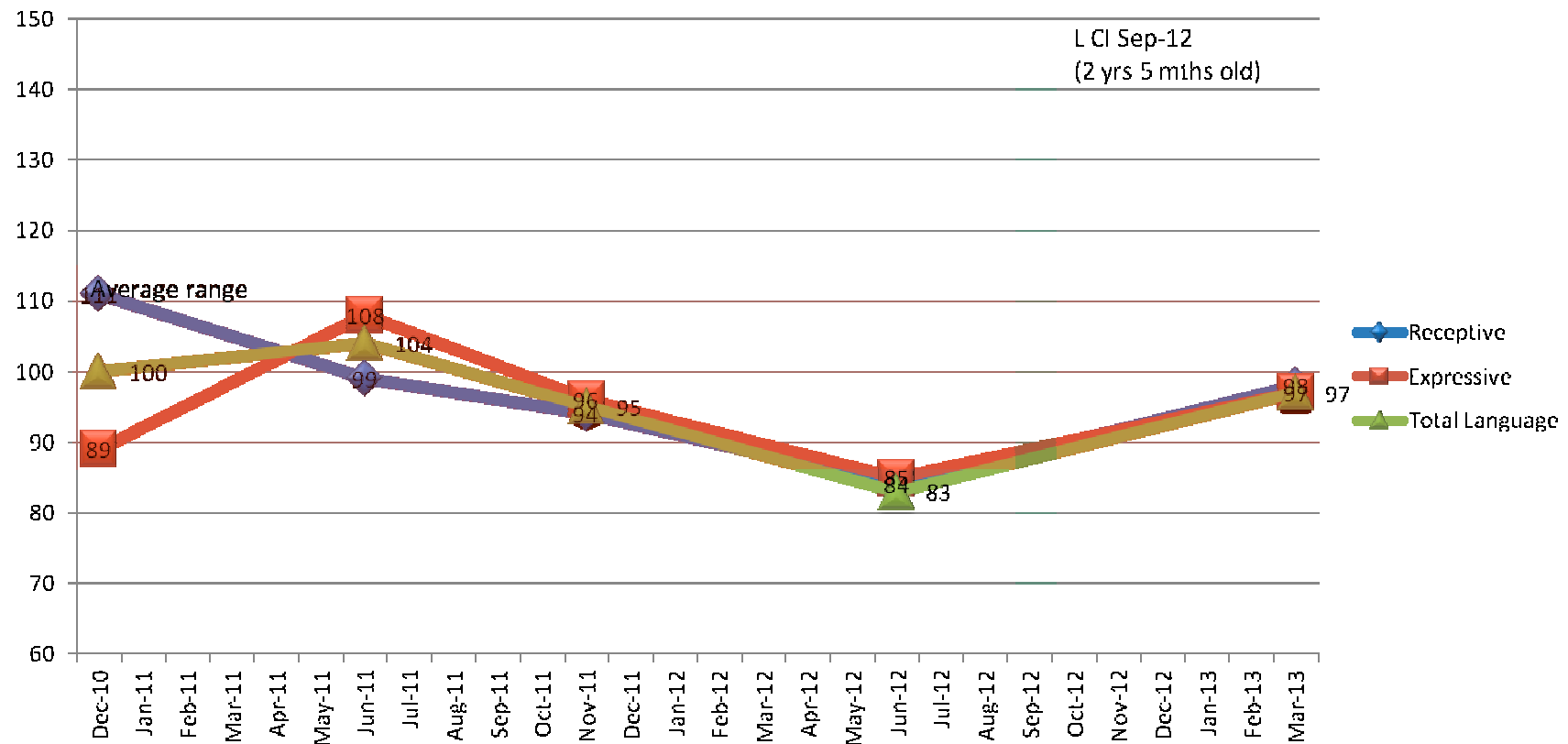
- q Fitted with hearing aids at 2 months of age
- q Parents enrolled at H&S
- q Electrically evoked ABR performed at 13 months of age. Results consistent with Auditory Dys-synchrony bilaterally
- q Grommets at 17 months of age (history of ME dysfunction)
- q Right Ear: Essentially a moderate SNHL
- q Left Ear: Essentially a moderately-severe SNHL

# Unaided Listeners Pre-Cl



# Case Study 2: Cooper

## PLS-4 Standard Scores



# Switch-On LCI





# Thankyou

Would like to thank the families and staff  
at Hear & Say



# Questions

