



*Topic Expert Group: Follow-up and continuing care*

**Communication, speech, and language**

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*Target group*

Infants born very preterm or those infants with risk factors (see preamble TEG Follow-up & continuing care), parents, and families

*User group*

Healthcare professionals, neonatal units, hospitals, health services, and follow-up services

*Statement of Standard*

Standardised assessment of communication, speech, and language development is conducted by two years of age and repeated at transition to school.

*Rationale*

The goal is to assess and evaluate communication, speech and language development and guide pathways for parents and educational management in case of impairment.

Clinically significant long-term adverse effects of preterm birth have been shown for speech and language. (1–4) Biomedical risk factors, such as brain injury, extremely low gestational age, intrauterine growth restriction, and bronchopulmonary dysplasia (5–7), as well as social risk factors, such as low maternal education, lack of parenting responsiveness, and ethnical minority status (4,6,8), increase risk. Association with delays in other domains is common (30%) and very frequent in case of neurological damage (9), motor or neurosensory impairments. (10)

Weaknesses in early basic cognitive, communication and motor skills affect later language abilities. (5,6,11,12) In particular, gestural, and vocal production are less advanced in very preterm infants and predictive of language skills at two years. (6,13–15) Joint attention is weaker in very preterm infants but modulated by maternal behaviour. (16,17) Early feeding problems may contribute to oral, sensory, motor, and speech dysfunctions. (18) Delays in lexicon, grammar, and phonological skills are detectable at two-three years (2,5,19–23) and become more evident during preschool and school age when also pragmatic difficulties appear. (1,2,24–26)

Delays in phonological awareness, a precursor of literacy and school achievement, have been identified in very preterm infants at six and eight years. (24,27) Language difficulties impact learning and academic achievement as well as social interactions (28) and are associated with high individual and societal costs.

*Benefits*

*Short-term benefits*

N/A



### *Long-term benefits*

- Improved information on communication, speech, and language functioning that is required for diagnosis of communication, speech, and language impairment and for differential diagnosis (autism, etc.) (4,16)
- Provides feedback to parents and/or main caretakers (4,16)
- Improved planning of appropriate intervention or management (4,16)
- Improved decision making for schooling and learning support (4,16)
- Provides feedback to perinatal and neonatal services and healthcare officials (4,16)
- Provides an endpoint for obstetric and neonatal high-quality trials (4,16)
- Reduced undue performance pressure on the child (consensus)
- Reduced risk of secondary mental health problems (consensus)
- Improved parent-child interaction and adaptation to the child language skills (4,16)
- Improved reading and writing skills and academic outcomes (consensus)
- Increased social integration and quality of life (consensus)
- Reduced social burden and social costs (consensus)

### *Components of the standard*

<b>Component</b>	<b>Grading of evidence</b>	<b>Indicator of meeting the standard</b>
<b>For parents and family</b>		
1. Parents are informed about and invited by healthcare professionals to attend follow-up programme including speech and language assessments.	B (High quality)	Patient information sheet
2. Parents receive standardised feedback in language that is accessible to them.	B (High quality)	Parent feedback
3. Parents are encouraged to communicate with their infant and expose them to language during family-centered care. (4,29) (see TEG Infant- & family-centred developmental care; see TEG Follow-up & continuing care)	B (High quality)	Parent feedback
<b>For healthcare professionals</b>		
4. A guideline on standardised follow-up programme including speech and language assessments is adhered to by all healthcare professionals.	B (High quality)	Guideline
5. Country specific test norms are applied when interpreting the results of screening tests. (30)	A (High quality)	Training documentation



6. Training on standardised speech and language assessments, in which gestational age and first language are taken into account is attended by all responsible healthcare professionals. (1–4,7)	A (High quality) B (High quality)	Training documentation
7. The predominant language at home (main caretaker), is noted in the assessment. (31,32)	A (High quality)	Parent feedback, training documentation
For neonatal unit, hospital, and follow-up team		
8. A unit guideline on standardised follow-up programme including speech and language assessments is available and regularly updated.	B (High quality)	Guideline
9. Speech and language follow-up programme after discharge is funded and supported.	B (Moderate quality)	Audit report
10. Appropriate assessment rooms and facilities are available (hospital or provider).	B (Moderate quality)	Audit report
11. Follow-up rates are continuously monitored. (33,34)	A (High quality) B (Moderate quality)	Audit report
12. Speech and language outcomes are used for healthcare professional feedback.	B (Moderate quality)	Training documentation
13. Training on standardised speech and language assessments is ensured.	B (High quality)	Training documentation
For health service		
14. A national guideline on standardised follow-up programme including speech and language assessments is available and regularly updated.	B (High quality)	Guideline
15. A follow-up service including speech and language assessments is funded and monitored.	B (High quality)	Audit report



*Where to go – further development of care*

<b>Further development</b>	<b>Grading of evidence</b>
<b>For parents and family</b>	
<ul style="list-style-type: none"><li>• Parents are supported by a case manager. (see TEG Follow-up &amp; continuing care).</li></ul>	B (Moderate quality)
<ul style="list-style-type: none"><li>• Parents are provided with incentives to attend follow-up for those who are socially disadvantaged.</li></ul>	B (Moderate quality)
<ul style="list-style-type: none"><li>• Families receive support in communication and language strategies.</li></ul>	B (Moderate quality)
<b>For healthcare professionals</b>	
N/A	
<b>For neonatal unit, hospital, and follow-up team</b>	
<ul style="list-style-type: none"><li>• Establish an integrated electronic system with communication, speech, and language follow-up provider to schedule follow-up visits.</li></ul>	B (Moderate quality)
<ul style="list-style-type: none"><li>• Provide a dedicated assessment facility.</li></ul>	B (Moderate quality)
<ul style="list-style-type: none"><li>• Support feeding, functioning or communication by physiotherapists and speech therapists.</li></ul>	B (Moderate quality)
<b>For health service</b>	
<ul style="list-style-type: none"><li>• Develop a national network for benchmarking of follow-up quality.</li></ul>	B (Moderate quality)
<ul style="list-style-type: none"><li>• Provide common observation and clinical tools for identifying early indexes of risk of language delay in preterm children.</li></ul>	B (Moderate quality)

*Getting started*

<b>Initial steps</b>
<b>For parents and family</b>
<ul style="list-style-type: none"><li>• Parents are informed by healthcare professionals about follow-up programme including speech and language assessments.</li><li>• A service is initiated that uses parent reports using screening questionnaires. (35–42)</li></ul>
<b>For healthcare professionals</b>
<ul style="list-style-type: none"><li>• Attend training on standardised speech and language assessments.</li><li>• Institute a standard schedule of assessment.</li><li>• Establish communication with other healthcare institutions providing follow-up care.</li></ul>
<b>For neonatal unit, hospital, and follow-up team</b>
<ul style="list-style-type: none"><li>• Develop and implement a unit guideline on standardised speech and language assessments.</li><li>• Develop information material on follow-up programme including speech and language assessments for parents.</li><li>• Support healthcare professionals to participate in training on standardised speech and language assessments.</li><li>• Provide space and resources for follow-up assessments in clinics or postal/online.</li></ul>
<b>For health service</b>
<ul style="list-style-type: none"><li>• Develop and implement a national guideline on standardised follow-up programme including speech and language.</li></ul>



## Source

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### *Lifecycle*

5 years/next revision: 2023

### *Recommended citation*

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