

# **Developmental delay**

(March 2023)

#### Rationale

Developmental delay occurs when a child does not attain developmental milestones compared with peers from the same population. The etiology of developmental delay is multifactorial.

Primary care physicians are often the first clinicians to assess development in a child and to recognize delayed or atypical development. Children with developmental delay are normally identified through three major channels: (1) during routine developmental surveillance or screening; (2) following parental concerns; and (3) after third parties, such as preschool teachers or nursery care professionals, raise concerns.

Early intervention can have a significant positive effect on outcomes in children with many developmental disorders, so systematic developmental surveillance is an integral part of primary health care for children.

### **Causal Conditions**

(list not exhaustive)

- Global developmental delay
  - a. Neurologic disorders (e.g., fetal alcohol spectrum disorder, cerebral dysgenesis)
  - b. Genetic and metabolic disorders (e.g., trisomy 21, congenital hypothyroidism)
  - c. Toxic exposures (e.g., lead)
  - d. Severe psychosocial deprivation
- Speech and language delay
  - a. Hearing impairment
  - b. Developmental language disorder

- c. Autism spectrum disorders (when associated with atypical social and behavioural features)
- Motor delay
  - a. Cerebral palsy
  - b. Muscular dystrophies
  - c. Developmental coordination disorder
- Cognition
  - a. Inborn errors of metabolism
  - b. Neurodegenerative disorders
- Personal/social
  - a. Autism spectrum disorders

### **Key Objectives**

Using a validated developmental screening tool, the candidate will identify children with delayed or atypical development in one or more domains. Children for whom developmental concern has been raised will be referred to early developmental intervention services, which can become involved prior to specialized developmental assessment.

## **Enabling Objectives**

Given a child with developmental delay, the candidate will

- list and interpret critical clinical findings, including those derived from
  - a. the use of validated developmental screening tools to identify domains of developmental delay; and
  - b. a relevant history and physical examination, with particular attention to identification of immediately modifiable causal conditions (e.g., toxic exposures, severe neglect);
- · list and interpret relevant investigations, including
  - a. audiology assessment in case of delayed language development; and
  - b. diagnostic investigations (e.g., genetic and metabolic tests, neuroimaging) if indicated;
    and
- construct an effective plan of management, including

- a. immediate referral for specialized pediatric assessment in case of developmental regression;
- b. referral for early intervention services in case of a delay in any developmental domain;
- c. determination as to whether specialized or multidisciplinary assessment and intervention are required;
- d. involvement of appropriate community services for family support; and
- e. ongoing supportive communication with the family.