RESPIRATORY TRACT INFECTIONS IN CHILDREN WITH DOWN SYNDROME

ANATOMICAL DEFECTS
- Narrow external ear canals
- Midface hypoplasia
- Eustachian tube dysfunction
- Small trachea
- Tracheobronchomalacia
- Alveolar malformation

NEUROLOGICAL IMPAIRMENT
- Hypotonia
- Aspiration

IMMUNOLOGICAL DEFECTS
- Innate
- Adaptive
- S. pneumoniae
- B and T cells
- Impaired number and function
- Low IgG2, low IgG4
- High IgG1, high IgG3
- High IL-10
- high IL-6, -IL8, -IL1beta, TNF, IFN
- RS virus

QUALITY OF MEDICAL CARE
- Multidisciplinary care
- In expert center
- Infection prevention
- Early diagnostics
- Antibiotic prophylaxis
- Vaccinations
- Immunological work up
- Chest X-ray
- Bronchoscopy

PATIENT ORGANISATION
- Stichting Down Syndroom

IMPROVEMENT OF CLINICAL MANAGEMENT
- Pediatrician
- Infectiologist
- Pulmonologist
- Otorhinolaryngologist
- Cardiologist
- Ophthalmologist
- Physiotherapist

Chest X-ray
- Bronchoscopy

Figure 7.1 Respiratory tract infections in children with Down syndrome.