

Supplement 2: The CHERuB study definition of survival without neurosensory impairment		
Data source	Domains/ conditions	Definition
NNRD	Developmental delay	☐ Mild developmental delay (3-6 months) ☐ Moderate developmental delay (6-12 months) ☐ Severe developmental delay (>12 months)
	Communication	☐ Any difficulty with communication ☐ Difficulty with speech (<10 words or signs) ☐ Difficulty understanding outside of familiar context ☐ Has <5 meaningful words, vocalisations, or signs ☐ Unable to understand words or signs
	Motor	☐ Any difficulty walking ☐ Unable to walk without assistance ☐ Non-fluent or abnormal gait reducing mobility ☐ Difficulty with the use of both hands ☐ Difficulty with the use of one hand ☐ Unable or needs support sitting ☐ Unable to sit ☐ Unable to use hands e.g. to feed
	Vision	☐ Any vision problems including squint ☐ A not fully correctable visual defect ☐ Complete blindness or able to see light only
	Auditory	☐ A hearing impairment ☐ Hearing impairment correctable with aids ☐ Hearing impairment not correctable with aids
HES and ONS Mortality Records	Survival	☐ The absence of a death record in a linked HES record
	Cognitive impairment	F70-79 Intellectual impairment F81.0 Specific reading disorder F81.1 Specific spelling disorder F81.2 Specific disorder of arithmetical skills F81.3 Mixed disorder of scholastic skills F81.8 Other developmental disorders of scholastic skills F81.9 Developmental disorder of scholastic skills, unspecified R48.0 Dyslexia and alexia R 48.1 Agnosia R48.2 Apraxia R48.8 Other and unspecified symbolic dysfunctions
	Developmental disorders of speech and language	F80.0 Specific speech articulation disorder F80.1 Expressive language disorder F80.2 Receptive language disorder F80.3 Acquired aphasia with epilepsy [Landau-Kleffner]

		F80.9 Developmental disorder of speech and language, unspecified R47.0 Dysphasia and aphasia R47.1 Dysarthria and anarthria R47.8 Other and unspecified speech disturbances
	Specific developmental disorder of motor function/ dystonia/ cerebral palsy	F82 Specific developmental disorder of motor function G24.9 Dystonia, unspecified G80 Cerebral palsy G81 Hemiplegia G82 Paraplegia and tetraplegia G83.0 Diplegia of upper limbs G83.1 Monoplegia of lower limb G83.2 Monoplegia of upper limb G83.4 Cauda equina syndrome G83.5 Locked in syndrome G83.6 Upper motor neuron facial paralysis R26.0 Ataxic gait R26.1 Paralytic gait R27.0 Ataxia unspecified R27.8 Other and unspecified lack of coordination G25.9 Extrapyrmidal and movement disorder, unspecified
	Vision	H47.6 Disorders of visual cortex H51.0 Palsy of conjugate gaze H51.1 Convergence insufficiency and excess H51.2 Internuclear ophthalmoplegia H51.8 Other specified disorders of binocular movement H51.9 Disorder of binocular movement, unspecified H52.0 Hypermetropia H52.1 Myopia H52.2 Astigmatism H52.3 Anisometropia and aniseikonia H52.4 Presbyopia H52.5 Disorders of accommodation H52.6 Other disorders of refraction H52.7 Disorder of refraction, unspecified H 53.0 Amblyopia ex anopsia H53.4 Visual field defects H55 Nystagmus and other irregular eye movements H54.0 Blindness, binocular H54.1 Severe visual impairment, binocular H54.2 Moderate visual impairment, binocular H54.4 Blindness, monocular H54.5 Severe visual impairment, monocular H54.6 Moderate visual impairment, monocular H54.9 Unspecified visual impairment (binocular)

	Hearing	H90.3 Sensorineural hearing loss, bilateral H90.4 Sensorineural hearing loss, unilateral with unrestricted hearing on the contralateral side H90.5 Sensorineural hearing loss, unspecified H90.6 Mixed conductive and sensorineural hearing loss, bilateral H90.7 Mixed conductive and sensorineural hearing loss, unilateral with unrestricted hearing on the contralateral side H90.8 Mixed conductive and sensorineural hearing loss, unspecified D24 Operations on cochlea D24.1 Implantation of intracochlear prosthesis D24.2 Implantation of extracochlear prosthesis D24.3 Attention to cochlear prosthesis D24.4 Neurectomy of cochlea D24.6 Removal of cochlear prosthesis D24.8 Other specified operations on cochlea D24.9 Unspecified operations on cochlea D13 Attachment of Bone Anchored Hearing Prosthesis D16 Reconstruction of Ossicular Chain D05 Attachment of auricular prosthesis Z453 Adjustment and management of implanted hearing device Z461 Fitting and adjustment of hearing aid Z962 Presence of otological and audiological implants Z974 Presence of external hearing-aid
National Pupil Database	Academic attainment	Did not achieve expected level or the presence of a SEN that precluded assessment at: Early Years Foundation Stage Key Stage 1 national assessment Key Stage 2 national assessment
	Special educational needs	Indication of type of need for SEN provision (primary or secondary) irrespective of level of SEN provision (SEN support or EHCP) ☐ Specific Learning Difficulty ☐ Moderate Learning Difficulty ☐ Severe Learning Difficulty ☐ Profound & Multiple Learning Difficulty ☐ Speech, Language and Communication Needs ☐ Hearing Impairment ☐ Visual Impairment ☐ Multi-Sensory Impairment ☐ Physical Disability