**Supplemental Information**

1. Diagnoses in “Other” group.

*Neurological*

1. Charcot-Marie-Tooth
2. Rett syndrome
3. Arnold-Chiari malformation
4. Hereditary spastic paraparesis
5. MECP2 deletion/ duplication
6. Visual impairment
7. Guillain-Barré Syndrome
8. Epilepsy
9. Peripheral neuropathy
10. Friedreich’s ataxia
11. Brachial plexus injury
12. Diencephalic syndrome
13. Arylsulfatase deficiency
14. Myoclonus-dystonia
15. TOR1A dystonia
16. Dopa-responsive dystonia
17. Neuronal migration disorder

*Neuromuscular*

1. Spinal muscular atrophy
2. Muscular dystrophy
3. Myopathy
4. Unconfirmed others
5. Duchenne muscular dystrophy
6. Limb-girdle muscular dystrophy

*Musculoskeletal*

1. Osteogenesis imperfecta
2. Limb deficiency
3. Ehlers-Danlos syndrome
4. Osteogenic sarcoma
5. Arthrogryposis
6. Juvenile idiopathic arthritis
7. Juvenile dermatomyositis
8. Fixed flexion deformity
9. Jeune syndrome
10. Compartment syndrome
11. Thoracic spine fracture

*Metabolic*

1. Congenital disorder of glycosylation 1a (CDG1a)
2. Glycine encephalopathy
3. Sanfilippo syndrome
4. Leigh’s disease
5. Morquio syndrome
6. Mitochondrial disorder

*Deconditioning*

*Miscellaneous*

1. Conversion disorder
2. Anxiety
3. Intellectual disability
4. Global developmental delay
5. CHARGE
6. Dysarthria
7. Chronic lung disease
8. Multiple congenital anomalies syndrome
9. Freeman-Sheldon
10. Exomphalos
11. 1q deletion
12. 6p25 deletion
13. Postural orthostatic tachycardia syndrome
14. C. perfringens enterocolitis
15. Cardiac intraventricular thrombus
16. Congenital heart disease
17. Oculoauricular vertebral syndrome
18. Oculodermal syndrome

2. Comorbidities by diagnostic subgroup.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Comorbidity | ABI (%) | Cerebral Palsy (%) | Spinal (%) | Other (%) | Total (%) |
| Epilepsy | 25 (18.7) | 72 (30.9) | 7 (12.7) | 20 (17.2) | 124 (23) |
| Intellectual disability | 26 (19.4) | 54 (23.2) | 8 (14.5) | 35 (30.2) | 123 (22.9) |
| Visual impairment | 22 (16.4) | 54 (23.2) | 6 (10.9) | 17 (14.7) | 99 (18.4) |
| Hearing impairment | 20 (14.9) | 13 (5.6) | 1 (1.8) | 8 (6.9) | 42 (7.8) |
| Scoliosis | 9 (6.7) | 18 (7.7) | 26 (47.3) | 16 (13.8) | 69 (12.8) |
| Autism | 6 (4.5) | 6 (2.6) | 0 | 4 (3.4) | 16 (3) |
| ADHD | 6 (4.5) | 0 | 0 | 2 (1.7) | 8 (1.5) |
| Chronic pain | 5 (3.7) | 8 (3.4) | 7 (12.7) | 11 (9.5) | 31 (5.8) |
| Spinal cord injury (secondary diagnosis) | 4 (3) | 0 | 0 | 0 | 4 (0.7) |
| Anxiety | 2 (1.5) | 5 (2.1) | 0 | 3 (2.6) | 10 (1.9) |
| Deconditioning | 2 (1.5) | 0 | 0 | 0 | 2 (0.4) |

ABI: acquired brain injury, ADHD: attention-deficit/hyperactivity disorder.

3. Children’s Functional Independence Measure subscores and total score by diagnostic subgroup.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Subgroup** | **Subscore** | **Admission** | **Discharge** | **6/12 post discharge** |
| ABI | Cognitive Score | Mean: 20.53 | Mean: 21.82 | Mean: 24.50 |
| ABI | Cognitive Score | Median: 21.00 | Median: 23.00 | Median: 25.00 |
| ABI | Cognitive Score | SD: 9.26 | SD: 8.82 | SD: 7.45 |
| ABI | Mobility Score | Mean: 19.89 | Mean: 23.07 | Mean: 24.14 |
| ABI | Mobility Score | Median: 21.00 | Median: 25.00 | Median: 25.00 |
| ABI | Mobility Score | SD: 9.97 | SD: 9.62 | SD: 8.99 |
| ABI | Self Care Score | Mean: 30.46 | Mean: 34.44 | Mean: 37.78 |
| ABI | Self Care Score | Median: 30.50 | Median: 36.00 | Median: 38.00 |
| ABI | Self Care Score | SD: 15.36 | SD: 15.02 | SD: 13.46 |
| ABI | Total Score | Mean: 70.88 | Mean: 79.33 | Mean: 86.64 |
| ABI | Total Score | Median: 74.00 | Median: 79.00 | Median: 89.50 |
| ABI | Total Score | SD: 30.89 | SD: 30.46 | SD: 25.57 |
| Cerebral Palsy | Cognitive Score | Mean: 20.24 | Mean: 20.63 | Mean: 20.47 |
| Cerebral Palsy | Cognitive Score | Median: 20.00 | Median: 20.00 | Median: 19.00 |
| Cerebral Palsy | Cognitive Score | SD: 10.14 | SD: 9.73 | SD: 10.07 |
| Cerebral Palsy | Mobility Score | Mean: 13.48 | Mean: 16.60 | Mean: 18.92 |
| Cerebral Palsy | Mobility Score | Median: 9.00 | Median: 14.00 | Median: 19.00 |
| Cerebral Palsy | Mobility Score | SD: 9.26 | SD: 9.63 | SD: 9.95 |
| Cerebral Palsy | Self Care Score | Mean: 22.56 | Mean: 24.36 | Mean: 26.64 |
| Cerebral Palsy | Self Care Score | Median: 20.00 | Median: 21.00 | Median: 23.50 |
| Cerebral Palsy | Self Care Score | SD: 13.71 | SD: 14.78 | SD: 15.87 |
| Cerebral Palsy | Total Score | Mean: 56.09 | Mean: 61.49 | Mean: 66.04 |
| Cerebral Palsy | Total Score | Median: 52.00 | Median: 58.00 | Median: 65.00 |
| Cerebral Palsy | Total Score | SD: 28.89 | SD: 30.97 | SD: 33.21 |
| Spinal | Cognitive Score | Mean: 25.41 | Mean: 26.33 | Mean: 26.42 |
| Spinal | Cognitive Score | Median: 28.00 | Median: 29.00 | Median: 29.00 |
| Spinal | Cognitive Score | SD: 9.27 | SD: 8.65 | SD: 8.33 |
| Spinal | Mobility Score | Mean: 17.66 | Mean: 21.14 | Mean: 21.93 |
| Spinal | Mobility Score | Median: 16.50 | Median: 23.00 | Median: 23.00 |
| Spinal | Mobility Score | SD: 9.40 | SD: 9.70 | SD: 9.89 |
| Spinal | Self Care Score | Mean: 30.10 | Mean: 34.29 | Mean: 34.49 |
| Spinal | Self Care Score | Median: 29.50 | Median: 36.00 | Median: 38.00 |
| Spinal | Self Care Score | SD: 16.09 | SD: 15.73 | SD: 15.67 |
| Spinal | Total Score | Mean: 73.17 | Mean: 81.77 | Mean: 82.37 |
| Spinal | Total Score | Median: 71.00 | Median: 85.00 | Median: 86.00 |
| Spinal | Total Score | SD: 32.28 | SD: 31.57 | SD: 31.94 |
| Other | Cognitive Score | Mean: 23.30 | Mean: 24.11 | Mean: 23.69 |
| Other | Cognitive Score | Median: 25.00 | Median: 27.00 | Median: 25.00 |
| Other | Cognitive Score | SD: 10.70 | SD: 10.41 | SD: 9.74 |
| Other | Mobility Score | Mean: 19.59 | Mean: 21.55 | Mean: 22.03 |
| Other | Mobility Score | Median: 20.00 | Median: 23.00 | Median: 21.00 |
| Other | Mobility Score | SD: 9.70 | SD: 9.89 | SD: 9.53 |
| Other | Self Care Score | Mean: 31.61 | Mean: 34.55 | Mean: 34.57 |
| Other | Self Care Score | Median: 33.00 | Median: 38.00 | Median: 40.00 |
| Other | Self Care Score | SD: 16.35 | SD: 16.14 | SD: 16.20 |
| Other | Total Score | Mean: 74.51 | Mean: 80.21 | Mean: 79.89 |
| Other | Total Score | Median: 78.00 | Median: 87.00 | Median: 88.00 |
| Other | Total Score | SD: 33.26 | SD: 33.09 | SD: 32.28 |

ABI: acquired brain injury, SD: standard deviation