Objectives

1. To identify parental anxiety in children with Neurodisability
2. Can a digital platform with the child's developmental profiling and visual report, app-based support with tailored individualized informed based profiling address parental anxieties.
3. Do children have better outcomes If parental anxieties are addressed

Methods A parental stress index (PSI) with 5 items was constructed. 83 parents enrolled in the intervention program were interviewed. 50 parents scored higher than 30%. The parents were shown visual profiling of their child's development. We ensured that the parents could identify the developmental areas the child needed help. We provided parents with an app that had some targeted tailored information with play ideas to perform at home. We repeated the parental Stress index interview every 2 months with these parents. Only 44 parents continued the program.

Results After 8 weeks of support, the Parental stress index interview was reperformed on all 44 parents. Significant improvement was noted in PSI with a mean difference of 19.71 and t value of 7.56, with a significant .00 level. Their children's developmental progress also improved in parents with lower PSI.

Conclusions We believe that addressing parental anxiety improves interaction with the child. The result is limited on the number of parents and inability of a control population due to lack of resources, it highlights an important area of empowering parents and using digital technology for its implementation.

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CHANGES IN HEALTHCARE USE DURING TRANSITION FROM PAEDIATRIC TO ADULT CARE FOR CHILDREN WITH LEARNING DISABILITIES OR AUTISM IN ENGLAND: POPULATION COHORT STUDY

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Background Children and young people with learning disability (LD) and/or autism spectrum disorders (ASD) often have multiple health needs, requiring frequent involvement with healthcare services. Transition from paediatric to adult services can disrupt continuity of care, and impact on health outcomes of young people with LD/ASD.

Objectives To describe changes in emergency and planned secondary healthcare use for young people with LD/ASD before (at ages 10–15 years), during (16–18 years) and after (19–24 years) transition from paediatric to adult services.

Methods We used Hospital Episode Statistics, a national hospital admissions database, to develop one cohort of young people with LD, and one cohort of children with ASD, born in 1990–2002 in England, who were admitted to hospital in 1998–2019. We included individuals who had a diagnosis of LD, a condition associated with LD in more than 30% of

cases, or ASD. Young people were followed-up from their 10th birthday until death, their 25th birthday or 31st March 2019 (end of the study period).

We determined the annual (year-on-year) change in rates of planned and emergency admissions before, during and after transition, using multilevel negative binomial regressions models, accounting for area-level deprivation, sex, year of birth, presence of comorbidities and allowing for multiple observations per child using random intercepts. We ran analyses separately for individuals with LD and ASD.

Results The cohorts included 63,017 young people with LD and 58,363 with ASD. Overall, young people with LD aged 10–24 years had 219 emergency admissions per 1000 person-years. Emergency admission rates increased by 2% per year of age before (incidence rate ratio [IRR]: 1.02, 95% confidence interval: 1.02–1.03), by 3% per year during (IRR: 1.03, 1.01–1.05) and by 4% per year after transition (IRR: 1.04, 1.03–1.05). Emergency admission rates for individuals with ASD were 181/1000 person-years. Rates increased sharply by 14% per year of age before (IRR: 1.14, 1.13–1.14), remained constant during (IRR: 1.01, 1.00, 1.02), and increased by 6% per year after transition (IRR: 1.06, 1.05–1.06). Increases in emergency admission rates for young people with LD or ASD were mainly due to non-specific symptoms (eg. headache, abdominal pain), injury due to self-harm or mental health conditions.

For planned admissions, young people with LD aged 10–24 years had 491 admissions per 1000 person-years. Rates were highest and constant before transition (IRR: 0.99, 0.99–1.00), declined most rapidly during transition (IRR: 0.87, 0.86–0.87), and by 3% per year after transition (IRR: 0.97, 0.97–0.98). Young people with ASD had 239 planned admissions per 1000 person-years. Admission rates increased moderately before transition (IRR: 1.04, 1.04–1.05), declined during transition (IRR: 0.95, 0.94–0.95) and increased moderately after transition (IRR: 1.04, 1.04–1.05).

Conclusions Increases in emergency admission rates after transition among young people with LD or ASD could reflect unmet health needs due to higher thresholds for planned hospitalisation or accessing support from adult mental health or social care services, or loss of support from schools. Our findings are of relevance to the NHS Long Term Plan, which prioritises improving care of young people with LD/ASD and supporting young people during transition.

Quality Improvement and Patient Safety

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REVIEW OF THE NICE GUIDANCE FOR EARLY ONSET NEONATAL SEPSIS WITH THE USE OF A SEPSIS RISK CALCULATOR

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Background The incidence of culture proven Early Onset Neonatal Sepsis (EONS) is approximately 0.5/1000 live births, but with high morbidity and mortality, it represents an infrequent but significant risk. NICE guidance states that any infant with ≥ 2 risk factors for sepsis or 1 red flag risk factor should be screened for infection and intravenous antibiotics given within 1 hour of being identified. A previous audit in this level 2 unit demonstrated that only 11.8% of asymptomatic infants,