Previous pilot work has shown high acceptability with parents and children, and suggests digital-clinical interaction typically takes 10–15 minutes to complete, fitting well into a standard 60–90 minute initial paediatric developmental assessment.

Conclusions The Pirates app shows promise as a tool that can be used alongside initial clinical assessment including history taking and information from school, to determine whether full, detailed, diagnostic assessment is required. In some cases, it may support an early and shortened diagnostic pathway of the child at the initial stage of the diagnostic process. By improving early decision making, including increasing confidence in deciding whether or not a child needs to proceed to full diagnostic assessment, this could help improve the timeliness of diagnostic assessment, and reduce service delivery costs.

British Association for Community Child Health

606

HOW CAN WE DELIVER TIMELY AND HIGH QUALITY DIAGNOSIS FOR CHILDREN WITH POSSIBLE AUTISM IN THE UK: A RAPID REALIST REVIEW OF AUTISM SERVICE DELIVERY LITERATURE

¹Vanessa Abrahamson, ¹Wenjing Zhang, ²William Farr, ²Ian Male, ³Jeremy Parr, ⁴Lorcan Kenny, ⁵Victoria Grahame, ⁶Amanda Allard, ⁷Venkat Reddy, ⁸Grainne Saunders, ¹Patricia Wilson. ¹University of Kent; ²Sussex Community NHS Foundation Trust; ³Newcastle University; ⁴Autistica; ⁵Cumbria, Northumberland, Tyne and Wear NHS Foundation Trust; ⁶Council for Disabled Children; ⁷Cambridgeshire and Peterborough NHS Foundation Trust; ⁸West Sussex Parent Carer Forum

10.1136/archdischild-2021-rcpch.97

Background Referrals and waiting times for diagnostic assessment of possible autism in children have increased substantially within UK NHS recently, delaying opportunities for intervention and frustrating families. Research exploring which service models could improve quality and timeliness of autism assessment is a key NHSE priority.

Objectives

- Explore evidence from research and grey literature about which autism assessment pathways work well, for whom and under what circumstances, to deliver high quality and timely diagnosis.
- Inform subsequent stages of our Realist Evaluation/study.

Methods We performed a Rapid Realist Review (RRR), a well-established approach to synthesising evidence to identify service delivery models achieving desired outcomes. RRRs seek to develop programme theories (PTs), or explanations, of how, why and in what contexts an intervention works. The focus was a clearly defined intervention (diagnostic pathway), specific outcomes (high quality and timely) within particular parameters (Autism diagnostic services in UK). This was carried out in five iterative stages. We collected 129 grey literature and policy/guidelines from the background search, and 220 articles from primary search (Jan 2011-Dec 2019; seven databases, terms: autism, diagnostic pathway, model of service provision, assessment process). Following duplicate removal and screening of abstracts, two researchers carried out data extraction by hybrid approach: basic details from each included article (n=79) were recorded in an Excel data

extraction form; highly relevant articles (n=45) were coded in NVivo. PTs were developed by cross comparison and synthesis of evidence from the articles and findings were discussed with expert stakeholders.

Results 7 PTs were identified, the first 4 informing stages contributing to effective diagnostic pathways, the remaining 3, overarching principles. Potential facilitative service models were identified.

1. If frontline health/education professionals are confident in recognizing symptoms of autism, understand referral pathways and take parents' concerns seriously, then children and young people (CYP) will be referred appropriately, in a timely manner.
2. If services provide clear guidelines for referrers on what information is needed, time will be saved and fewer CYP will be assessed unnecessarily.
3. If a structured and consistent approach to service delivery is adopted, making best use of available staff and expertise then the number of assessments per individual may be reduced.
4. If feedback takes an assets-based approach and management plans are individualized, then parental expectations will be moderated.
5. If parents have a single point of contact, are provided explanations throughout and included in decision-making then diagnostic pathway may be less stressful.
6. If 'experts' including CYP and parents work together and knowledge generated is embedded into local services, this will build capacity and support service planning.
7. If professionals have access to tailored training appropriate to their role, and services engage in development and evaluation, then there will be a higher degree of consistency.

Conclusions This first theory informed review of childhood autism diagnostic pathways has identified important aspects that may contribute to more efficient, high quality and family friendly service delivery. We will test whether the resulting PTs are met, and how service design could be further enhanced through a national survey of current practice and in depth case study of exemplar services.

Association of Paediatric Emergency Medicine

608

'TO GIVE OR NOT TO GIVE – THAT IS THE QUESTION' – THE USE OF STEROIDS FOR ACUTE PRE-SCHOOL WHEEZE

¹Diluxshy Elangaratnam, ²Hugh James Whalley, ²Miriam Schechter, ²Tejal Vaghela, ²Shruti Ganatra, ²Lynn Sinitsky. ¹Addenbrookes Hospital; ²Watford General Hospital

10.1136/archdischild-2021-rcpch.98

Background There is ongoing uncertainty amongst clinicians on the use of prednisolone in acute pre-school wheeze. Some studies report that there is no positive effect by prescribing steroids for this cohort of children whilst others have shown a reduction in illness severity and duration of hospitalisation.

Objectives In our emergency department a wheeze pathway with clinical proforma helps clinicians assess the severity of presentation (mild, moderate, severe, life-threatening) and directs them to an appropriate treatment course. For pre-school children (2–4 years) presenting with moderate severity