Total IgE levels are nonspecific and these don't add in management of the patients.

Guidelines to prescribe Epipen should be followed and every patient should be given Epipen when indicated.

Guidelines for doing Specific IgE testing will be revised will be revised.

Re audit will be done in due course to see if the updated guidelines are being implemented.

British Paediatric Neurology Association

552

TAILORING TRANSITION CARE PATHWAYS TO COMPLEXITY OF YOUNG PEOPLE'S NEEDS

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10.1136/archdischild-2021-rcpch.64

Background Historically, families reported 'falling off a cliff' on reaching adulthood, as paediatric care ceased. If health needs of disabled adults and those with long-term conditions starting in childhood are to be adequately met, they must first be accurately identified and documented for children and young people. Clear arrangements are required to ensure all needs continue to be addressed, including who is responsible for leading clinical care through transition and into adulthood.

Objectives To describe how local transition care pathways have been developed, based on the evidence of complexity of the needs of young people and in collaboration with families. To describe the numbers of young people on each transition pathway and detail their needs.

Methods Data capture about the multifaceted needs of children and young people is embedded at the point of care in local paediatric clinics. These underpin care pathway design, including on transition to adulthood. Identification of learning disability is prioritised in the paediatric service. Joint paediatric-neurorehabilitation transition clinics have been held for 20 years. Collaboration with learning disability and adult palliative care teams has supported young people with the most complex needs through transition.

This work was approved by the Chief Executive Officer of the NHS Foundation Trust. Funding for the data analysis was from Together for Short Lives.

Data from birth years 1997–2003 were analysed. Complexity of needs was calculated using the Disability Complexity Scale.

Results For 756 young people aged 17 years+ seen in paediatric clinics, the lead for adult healthcare was identified as: routine general practitioner (GP)-led care for 484; enhanced GP care, with annual learning disability health checks, for 183; epilepsy neurology clinic for 62; regional neurofibromatosis service for 5; neurorehabilitation service for 93; adult palliative + learning disability multidisciplinary team care for 9. Whilst the numbers of young people graduating on the neurorehabilitation and palliative care pathways have been relatively stable over time, the number identified with learning

disabilities have increased from 4 in the 1997 birth cohort to 44 for those born in 2003.

The range of medical, functional and family-reported needs and technology dependencies of the young people following each transition care pathway will be presented, including for the group who have died.

All young people on the palliative pathway had 11+ needs, with a higher burden of technology dependencies compared to other groups.

Conclusions Population data evidencing complexity of needs of young people approaching transition to adulthood led to redesign of care pathways in collaboration with families. Population data evidence equality of access to transition care pathways for all young people with the same level of needs.

British Paediatric Allergy Immunity and Infection Group

553

SEROPREVALENCE AND KINETICS OF SARS-COV-2 ANTIBODIES IN CHILDREN IN THE UK: A PROSPECTIVE MULTICENTRE COHORT STUDY

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10.1136/archdischild-2021-rcpch.65

Background During the first wave of the SARS-CoV-2 pandemic in England, children accounted for just 1% of confirmed infections, had a milder clinical course and had much lower mortality than adults, a pattern similar to other international settings. The proportion of children in the UK infected with SARS-CoV-2 was unknown, with children less likely to attend symptomatic testing and issues with the sensitivity of real time reverse transcription PCR of oral/nasal swabs.

Objectives To measure the seroprevalence of SARS-CoV-2 antibodies in children of healthcare workers in the UK and to characterise the antibody response to SARS-CoV-2 infection and longitudinal antibody kinetics of SARS-CoV-2 infection.

Methods Multicentre observational prospective cohort study designed to determine seroprevalence of antibodies to SARS-CoV-2 in healthy children and report on symptoms experienced. Children of healthcare workers were recruited from five UK centres and underwent phlebotomy at three time points, beginning 16 April. There were follow up plasma/serum collections at two and six months after the original collection. Serum and/or plasma were tested for SARS-CoV-2 antibodies.

Results 1042 potential participants were screened for inclusion, with 35 excluded. Of the 1002 included 15 were excluded from analysis due to unsuccessful phlebotomy. Of the 992 included participants at the first time point, 68 had positive SARS-CoV-2 antibody tests, giving a seroprevalence of 6.9% (95% CI 5.4% to 8.6% n=992). Belfast had a significantly lower seroprevalence than all other sites at 0.9% (95% CI 0.2% to 3.3%, n=215, p<0.0001), and London had a seroprevalence significantly higher.

849 of the 992 participants in the first round returned (86%). The median time between initial and follow up collections was 62 days. Of the 849 participants, 65 had positive SARS-CoV-2 antibody tests (7.66% CI 6.05–9.64). Of the 45 participants with positive antibody tests in the first round who attended the follow-up visit mean antibody titres increased. With Roche's Elecsys assay, mean antibody titres increased from 84.7 cutoff index (COI) to 115.8 COI (difference 31.08, 95% CI 13.82–48.34, $p=0.0007$) and with DiaSorin's LIAISON assay, mean antibody titres increased from 67.5 AU/ml to 81.4 AU/ml (13.89, 0.31–27.46; $p=0.0452$).

Table summarising seroprevalence by site.

Site	Round 1 (Number Reactive)	Round 2 (Number Reactive)	First round Percentage Reactive (95% CI)	Second Round Percentage Reactive (95%CI)
All	992(77)	849(65)	7.76(6.26–9.59)	7.66(6.05,9.64)
London	199(26)	135(20)	13.07(9.07,18.46)	14.81(9.8,21.78)
Belfast	215(6)	200(4)	2.79(1.29,5.95)	2(0.78,5.03)
Cardiff	178(10)	134(7)	5.613(3.08,10.03)	5.22(2.55, 10.39)
Glasgow	224(20)	210(19)	8.93(5.85,13.39)	9.05(5.87, 13.7)
Manchester	176(15)	170(15)	8.52(5.23,13.58)	9.82(5.42,14.05)

The samples collected from the six month time point are still being processed, and results of antibody seroprevalence and antibody titre levels from this timepoint will be available before June.

Conclusions The seroprevalence of SARS-CoV-2 antibodies amongst children of healthcare workers following the first wave in the UK was 6.9%, which was similar to the seroprevalence reported for adults in the UK at that time, and to international reports.

The results from the second time point indicate that antibody titres in children infected with SARS-CoV-2 remain detectable for at least 62 days and indeed in this cohort increased.

British Association of General Paediatrics

554 CO-DESIGNING CHILD HEALTH RESOURCES FOR PRIMARY CARE COLLEAGUES AND FAMILIES DURING THE COVID-19 PANDEMIC

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10.1136/archdischild-2021-rcpch.66

Background The Covid-19 pandemic forced organisational change onto healthcare services. Health care professionals have been challenged by the rapidly evolving situation, significant capacity issues, anxiety from patients, and risks to personal health. Safe assessment of febrile children in primary care became unclear and potentially a risky situation.

Objectives To support primary care professionals to safely assess febrile children during the pandemic, and to help

parents safely navigate a disrupted health system, an information bundle was co-produced and distributed to GPs and families across an inner-city area.

Methods Connecting Care for Children (CC4C) is a collaborative that supports the delivery of integrated child health services. Through established primary and secondary care networks, CC4C was able to listen to primary care colleagues practicing in the pandemic, and to understand their clinical worries and needs. Similarly, CC4C used its network of patient champions to hear what families were grappling with. With this understanding, the CC4C team was able to initiate the development of supportive child health resources.

A Primary Care and Community Resource Pack for use during the Covid-19 pandemic was co-produced by general and infectious disease paediatricians, local GPs, and junior doctors. The resource bundle included:

- Guidance for assessing febrile children in primary care
- Advice for minimising the risk of Covid-19 transmission during face-to-face assessment
- Answers to frequently asked questions
- Information about when Covid-19 tests are indicated

A sample group of GPs provided feedback to an initial draft, and their suggestions were incorporated into the guideline.

Resources for GPs to distribute to parents and carers were also included in the bundle:

- a flow-chart to aid decision making about school attendance based on a child's symptoms
- when to seek medical attention based on their child's clinical condition.

Patients and citizens were involved in the development of the 'Should I Send my Child to School' flowchart, providing suggestions to make the guidance clearer.

During the second wave of the pandemic, new resources were added including:

- information about Paediatric Multisystem Inflammatory Syndrome
- the new Covid-19 variants

Results The resource pack was distributed to GPs across a large inner-city population, and two adjacent regions requested permission to use the resources. Resources from the bundle are available online at: www.cc4c.imperial.nhs.uk/our-experience/common-paediatric-questions. Elements of the bundle were shared widely on social media, reaching audiences across the country- the FAQs for GPs document was seen by over 1,000 Twitter users and shared by 28; the 'Should I Send my Child to School' flowchart was seen by over 1,700 users. GPs provided positive feedback and felt that the bundle offered reassurance, was an 'extremely helpful resource on how they can safely assess their paediatric patients this winter' and a 'must-read for primary care physicians'.

Conclusions Co-designing and co-producing a child health resource pack with both primary care colleagues and parents and carers enabled the development of resources that were useful and supportive to all those caring for children and young people during the Covid -19 pandemic.