



Nottinghamshire COVID Impact Assessment: Health and Wellbeing and Health Inequalities

PHASE 6: PREGNANCY, CHILDBIRTH & EARLY YEARS

March 2023

Nottinghamshire County Council Public Health Team



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Executive summary

Introduction

The overall aim of the Nottinghamshire COVID Impact assessment (CIA) is to assess the impact of the Covid-19 pandemic on the health and wellbeing of the population of Nottinghamshire, with particular regard to health inequalities in order to inform public health and partner strategies, plans and commissioning.

Phase 6 of the CIA centres on pregnancy, childbirth, and early years with the focus on three areas:

- a. Impact on parents and carers wellbeing
- b. Impact on children's early development
- c. Impact on early years health outcomes

Key Point:

Although we have attempted to draw general conclusions and recommendations it is important to highlight that there has not been a universal experience to the pandemic and this report provides a snapshot based upon the best and most suitable information available at the time of writing. Each family will have had different experiences depending on their personal situation at the time. However, there are indications it has had the greatest negative impact on our most vulnerable children and families, acting to widen pre-existing inequalities further.

Impact on parents and carers wellbeing

Key points:

- Findings locally appear to align closely with the national picture, with the pandemic largely having a negative impact on parent's wellbeing with long term implications on family relationships and parental mental health.
- 80% of parents and carers in our local Covid impact survey¹ reported that it had a negative impact on their mental wellbeing.
- Although the majority of parents/carers in our local Covid impact survey found support either from professionals or from friends or family, 12% of parents/carers didn't know where to go for support and 13% didn't feel able to, suggesting a significant proportion did not receive the appropriate support for their mental health during that time. One parent summarised the impact of this as *"The lack of support for parents was awful and will effect children for years to come."*
- There was an initial drop in referrals to perinatal mental health services. This has now recovered to roughly pre pandemic levels but with anecdotal evidence highlighting that mothers may be presenting with more urgent and complex care needs.
- 81% of the parents and carers in our local impact survey felt the pandemic had impacted their pregnancy in a negative way.
- Both the Nottinghamshire Covid impact survey and the Nottingham & Nottinghamshire Maternity Voices & Healthwatch report highlighted how antenatal care was particularly impacted due to parents having to attend appointments by themselves because of pandemic restrictions. This increased anxiety, resulted in mothers feeling very alone and was particularly challenging for those who had previously lost a baby or who

¹ Please note the caveats on our local survey on page 13.



received difficult news. It was acknowledged that staff worked very hard under unprecedented circumstances.

- Not being able to have partners present until labour was established also left parents feeling isolated and scared.
- Lack of care and support during and after birth, resulting from restrictions around visiting and demands on midwifery services, had enormous implications on post birth recovery, bonding with their baby and long-term mental health. A number of mothers described feeling frightened and being traumatised by their experiences.
- 74% of respondents to our survey said that the pandemic had made their early experiences as parents worse. Many found it a lonely and isolating time with a lack of support from family and friends. Having time alone as a family did however mean they could do things together without interruption or the pressure of visitors which in some cases did enhance bonding.
- Some fathers got to spend more time with their babies and children which they would not have pre-pandemic, thus improving their relationships.
- There is mixed feedback around the effectiveness of virtual care which appears to depend on the context within which it is provided. It can increase the risk of arising health issues being missed and affect the relationship between parents and professionals. However, it has in some instances enhanced engagement with certain groups of parents such as fathers and those with issues over transport and childcare. It has also improved some professional working relationships and sped up important multidisciplinary decision-making processes.

Impact on children's early development

Key points:

- Generally, the experiences of parents, carers and professionals align closely to that seen nationally.
- Local professionals² surveyed reported a significant impact on children's development: 96% reporting a negative impact on social and emotional development, 93% on children's communication skills and 89% on children's behaviour.
- There was a decline in 2022 of 2-to-2.5-year old's meeting the expected level of development, as measured by the Healthy Family Teams, in relation to both communication, and social and emotional skills. These were children born in or before initial lockdowns. However, the latest available data, to December 2022, suggests this decline may be showing some sign of recovery.
- There is an increasing demand for specialist speech and language therapy services, and there are now more children presenting to this service at ages 3-4 years rather than 2-3 years.
- There are challenges in access to the targeted speech and language service. It is important to note that this service is targeted at those who need support following universal health and development reviews at age 2 to 2.5 years; waits for intervention are problematic as children get older and may then become ineligible or require specialist support.

² For caveats to note around the engagement with local professionals, please see page 13.



- Practitioners in the local focus group reported a significant impact on children's speech and language development. They described these needs as persisting beyond the lockdowns and being most evident in children accessing settings for the first time at ages 2 and over. This was different to parents who tended to report their children 'caught up' as opportunities for social interaction increased.
- The number of early years registered places available in Nottinghamshire declined slightly across the course of the pandemic. However, the latest childcare sufficiency audit highlights that there are no areas of Nottinghamshire where the demand for funded childcare places for 2-, 3- and 4-year-olds outstrips supply.
- Take-up of early years funded places reduced slightly and has subsequently recovered or exceeded pre-pandemic levels. This differs from national findings.
- Feedback from early years providers is that children access fewer hours than in the years prior to the pandemic, this is due in part to cost of living pressures and they are instead making alternative childcare arrangements. This may be eased by recent Government funding announcements.³

Impact on early years health outcomes

Key points:

- The feedback received from the Nottinghamshire Covid impact survey support the national evidence with Covid-19 having both negative and positive implications on our local population.
- There is a long-standing variation in breastfeeding prevalence across Nottinghamshire, with Rushcliffe having the highest rates and Bassetlaw the lowest. The overall prevalence of breastfeeding remained relatively constant between 2019-20 and 2020-21, the year most affected by the pandemic restrictions, before increasing slightly in 2021-22. The districts of Bassetlaw and Mansfield however, between 2019-20 and 2020-21, saw a decline in breastfeeding prevalence.
- The level of A&E attendances in under 5's dropped throughout 2020 with troughs related to the lockdowns, presentations for injury remained relatively stable compared to other presentations. The number of attendances have recovered to pre-pandemic levels.
- Analysis of data for routine vaccinations in infants at primary care network (PCN) level indicates that vaccine uptake may have been impacted differently in geographic areas across Nottinghamshire, however further exploration of this is needed.
- There was a sharp uptake in flu vaccination for 2–3-year-olds in 2020-21, however this was not sustained.
- Data for under 5s accessing a dentist within Nottinghamshire has shown a sharp decline in the number and percentage of children being seen by a dental professional from 2019-20 to 2020-21. There has only been a slight recovery in the following year with the percentage seen remaining lower than it was pre-pandemic, suggesting many under 5's are unable or not accessing a dentist. It is important to note there are national challenges in access to dentistry which are mirrored in Nottinghamshire.

³ [Budget 2023: Everything you need to know about childcare support - The Education Hub \(blog.gov.uk\)](https://www.blog.gov.uk/2023/03/23/budget-2023-everything-you-need-to-know-about-childcare-support/)

Recommendations

The wellbeing of children and families need to be nurtured as they recover from the effects of the pandemic, to allow them to thrive. We are proposing the following recommendations within Nottinghamshire to support us in achieving this:

	Recommendation	Key Partners	Ambitions it relates to in the Best Start Strategy
Parent & carers wellbeing			
1	Continue to support those who may have experienced trauma through the birth process and/or perinatal period and who may be continuing to experience the long-term implications of this.	LMNS x 2 NCC NHFT	1, 2, 3, 5
2	Strengthen perinatal mental health pathways and care: <ul style="list-style-type: none"> Strengthen data capture and reporting to determine need, address gaps, and measure progress more accurately Increase engagement in perinatal mental health services Identify and support 'low level' and emerging mental health need within families 	LMNS x 2 NCC NHFT	3, 5
3	Review and enhance our local antenatal and parenting programme offers to ensure they support key areas such as: <ul style="list-style-type: none"> Early identification of maternal mental health problems and sources of support Greater engagement with fathers/partners Preparing & empowering parents for parenthood, increasing their resilience to face and overcome adversity The importance of social support 	LMNS x 2 NCC NHFT	1, 3, 5, 6
4	Ensure that for any future pandemic/emergency planning the implications of the maternity restrictions and service delivery are taken into consideration, as outlined within this impact assessment and in greater detail within the Experiences of Maternity Services in Nottingham and Nottinghamshire during the COVID-19 Pandemic report (Nottingham & Nottinghamshire Maternity Voices & Healthwatch, 2021).	LMNS	1, 2, 3
Child Development			
5	Address the increasing speech, language and communication need (SLCN) that has emerged in the cohort of children most affected by the restrictions of the Covid-19 pandemic i.e., children who are now aged 2 and over, by:	NCC NHFT ICB	7, 8

	<ul style="list-style-type: none"> Implementing additional training in the early identification of SLCN to early years practitioners Carrying out a skills analysis regarding SLCN across the early years sector and regularly reviewing training opportunities Piloting the use of a new tool in settings that supports early identification of SLCN's, and guides professionals in the appropriate implementation of strategies to support emerging need Increasing capacity for targeted SLCN interventions for those aged 2 to 3.5 years Undertaking an audit or similar to better understand the reasons for the continued increase in referrals to specialist SLT. 		
6	<p>Deliver training to the early years workforce to help early years practitioners effectively support healthy social and emotional development:</p> <ul style="list-style-type: none"> Roll out Emotion Coaching to settings Deliver workshop-style training to settings 	NCC	3, 8
7	<p>Roll out and promote "Peep" interventions via Children's Centre Services for parents/carers from pregnancy and across the early years. These interventions focus on the role of parents as early educators and champion parents and their babies/children learning together – building positive, sensitive relationships, enhancing home learning environments, and helping babies and children to become confident communicators and learners.</p>	NCC	3, 7, 8
8	<p>Ensure children continue to have access to high quality early years provision, in order to mitigate the adverse impact that the pandemic may have had on children's early experiences and development.</p>	NCC	9
9	<p>Continue to review the emerging trends in early child development, where a decrease in the proportion of children meeting the expected level of development in relation to both communication and social-emotional skills at age 2-2.5 was observed, to understand if this continues.</p> <p><i>(Please note links to recommendations 5 to 8 re: communication and social-emotional development)</i></p>	NCC NHFT	7, 8
Health Outcomes			
10	<p>Increase our understanding of patterns in A&E attendance to ensure children and families are accessing the most appropriate service for their needs.</p>	ICB	6
11	<p>Deliver and monitor targeted breastfeeding support in areas with persistently low rates, particularly in areas with significant decreases in breastfeeding across the course of the pandemic.</p>	NCC LMNS x 2 NHFT	3, 6



12	Explore data and trends in vaccination uptake in pregnancy and early years in more detail e.g. at smaller geographical areas and amongst demographic groups, to more effectively target areas of greatest need.	NCC LMNS x 2	2, 6
13	Understand and apply the strategies that were successfully used in the promotion of flu vaccination in 2–3-year-olds in 20-21, as well as successful campaigns undertaken by comparator areas, to increase uptake in future years.	NCC NHFT	6
14	Given the national challenges in access to dentistry, it is important to explore any opportunity to improve oral health in the early years, including preventative interventions such as health promotion and fluoridation.	NCC	6
Best Start for Life Offer			
15	Drive forward the development of Family Hubs across Nottinghamshire, publish and integrate our Best Start for Life Offer, informed by engagement with parents and carers. This will support both parents and professionals to have greater clarity around where to signpost and seek support.	NCC LMNS x 2	All
16	Promote our Best Start for Life Offer, local services and resources to parents-to-be as early as possible in their journey of parenthood. This will require continued close working and collaboration with key services who would play a significant role in this, such as maternity.	All	All
Inequalities			
17	Research suggests the pandemic has disproportionately and adversely impacted vulnerable families and children the greatest and is likely to have exacerbated existing inequalities (e.g., in low-income families, BAME groups, socially isolated, those with mental health issues.) All recovery work needs to prioritise understanding the specific inequalities within that area and working to address these.	All	All
Service Delivery			
18	Services continue to understand the benefits and downsides of blended service delivery models within their service (e.g., online, face to face) and build on the strengths this can provide to meet individual family's needs more effectively, without compromising on quality and safety.	All	All

Partners: Key

LMNS: Local Maternity & Neonatal System. Within Nottinghamshire we have two, Nottingham & Nottinghamshire and South Yorkshire & Bassetlaw

NCC: Nottinghamshire County Council

NHFT: Nottinghamshire Healthcare NHS Foundation Trust

ICB: Nottingham and Nottinghamshire ICB



Best Start Strategy Ambitions Key:

1. Prospective parents are well prepared for parenthood
2. Mothers and babies have positive pregnancy outcomes
3. Babies and parents/carers have good early relationships
4. Parents/carers are engaged and participate in home learning from birth
5. Parents/carers experiencing emotional, mental health and wellbeing challenges are identified early and supported
6. Children and parents/carers have good health outcomes
7. Children and parents/carers are supported with early language, speech and communication
8. Children are ready for nursery and school and demonstrate a good level of overall development
9. Children have access to high quality early years provision
10. Parents/carers are financially resilient and can access secure employment

Implementing these recommendations will also support priorities previously identified within the [Nottinghamshire Health and Wellbeing Strategy \(2022-2026\)](#) and the [Nottinghamshire Plan \(2021-2031\)](#).

1. Introduction

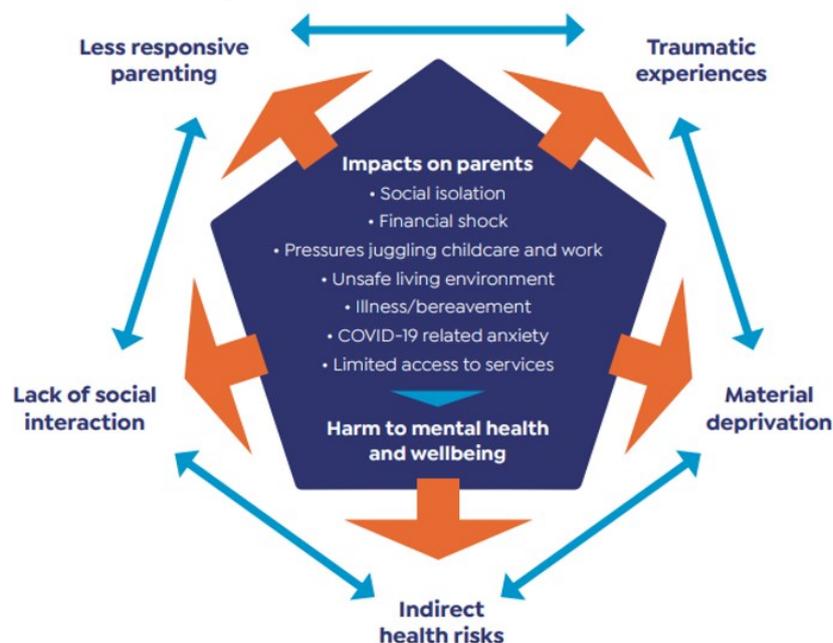
The lockdown measures announced in the UK on 23rd March 2020 to reduce the spread of Covid-19 resulted in a rapid change in circumstances for many pregnant people, those giving birth, new parents and their infants. By July 2021 most restrictions on social contacts were removed but some restrictions around health services remained into late 2022.

On the 16th March 2020, the UK Government classified pregnant people among the groups considered 'vulnerable' to coronavirus. Many mothers-to-be working in frontline roles had to take on a more administrative role or work from home once in their third trimester. Many antenatal appointments moved to telephone or virtual and hospital policies changed which limited partners from attending antenatal appointments and being present only in established labour. Birth choices for some were altered by home births not being offered for a period in many UK hospitals. Restrictions around hospital visitors were also introduced to minimise spread of Covid-19. A substantial amount of postnatal support was temporarily moved online or delivered via telephone with face to face limited to where necessary.

Many parents and carers were not able to access the various antenatal classes, support groups, activities, and childcare. Many of these either went online or were not able to be delivered until restrictions were lifted. Many children who would have spent a large proportion of their week in a childcare setting were spending time at home, in some cases being looked after by their parent or carer who were themselves trying to balance work with childcare.

Whilst these changes were deemed necessary and appropriate at the time to deal with the current outbreak, and providers of services had to work under extremely challenging circumstances, they no doubt had substantial impacts on pregnancy, childbirth and the early years. From extensive research into this early year's period (pre-conception to age 5), we know it is a crucial time for shaping short- and long-term health, wellbeing, and development. The diagrams below illustrate some of the key impacts for parents and carers, and subsequently their babies:

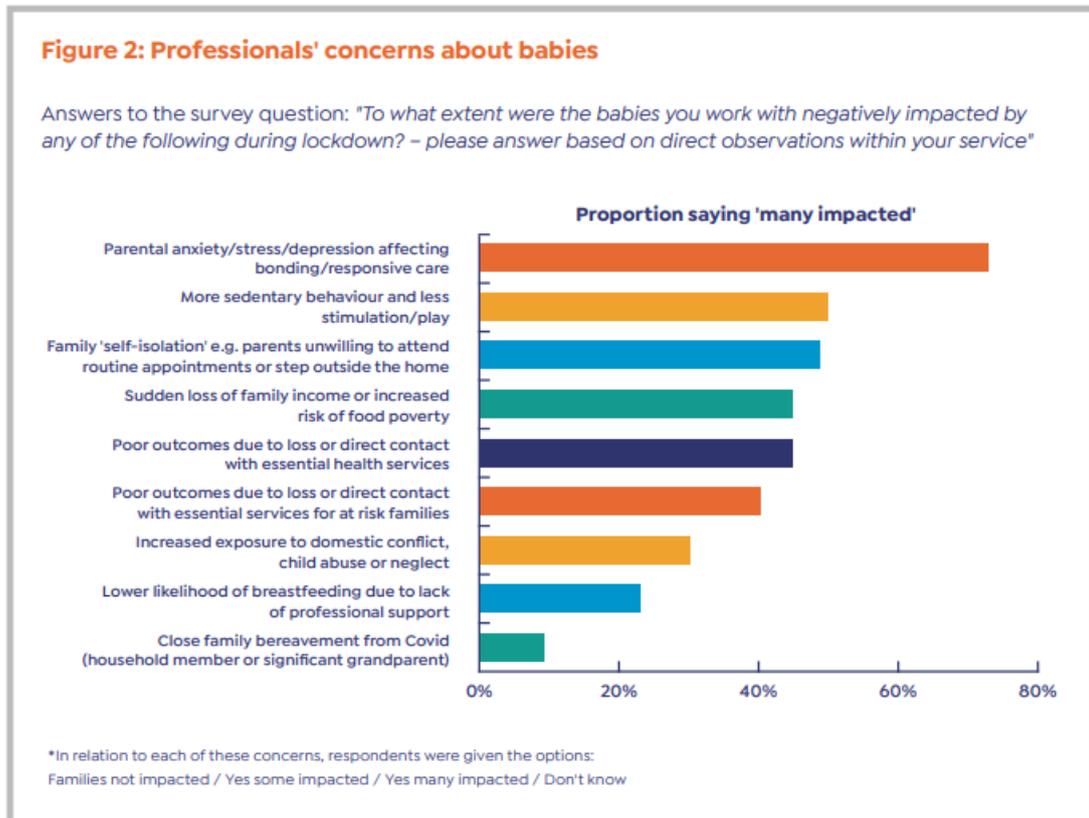
Figure 1: Hidden harms of Spring 2020 lockdown on 0-2's



Source: ISOS Partnership



Figure 2: Professionals concerns about babies



Source: ISOS Partnership 2021

It is important that we try to understand how the Covid-19 pandemic might have impacted on pregnancy, childbirth and the early years (0-5) within Nottinghamshire and propose some recommendations for how we as a local system might be able to support these moving forward.

“This generation of children have had their lives impacted in a way we’ve not seen since the second world war; we must do everything we can do to provide support”

The words of Conservative MP Tobias Ellwood (Butler, Quinn, Murphy, 2020).



2. Scope of the COVID Impact Assessment

The overall aim of the Nottinghamshire COVID Impact assessment (CIA) is to assess the impact of the Covid-19 pandemic on the health and wellbeing of the population of Nottinghamshire, with particular regard to health inequalities in order to inform public health and partner strategies, plans and commissioning.

Phase 6 of the CIA centres on Pregnancy, Childbirth and Early Years with the focus on three particular areas:

- a. Impact on parents and carers wellbeing
- b. Impact on children's early development
- c. Impact on early years health outcomes

It was decided this review would focus on pregnancy, childbirth and children up to the age of 5 years old. This is because the early years (0–5 years) are recognised as a crucial time for children's development, impacting on their short- and long-term health and wellbeing (EIF, 2021).

3. Literature review

The Office for Health Improvement and Disparities (OHID) has a research repository for Covid-19 academic research. Its literature search facility was used to ask the below questions regarding the pandemics impact on pregnancy, childbirth and early years:

Pregnancy & Birth:

- 1) What was the impact of the covid-19 pandemic on pregnancy and birth experiences for parents and carers in the UK?

Mental Health:

- 1) What has been the emotional/mental health impact of the covid-19 pandemic on babies, children (0-5 years) in the UK and their parents and carers?

Child Development:

- 1) What has been the impact of the covid 19 pandemic on children's early development (social, emotional, behavioural, speech, language & communication) in the UK (0-5 years)?

Health:

- 1) What has been the impact of the covid 19 pandemic on breastfeeding rates and experiences in the UK?
- 2) What has been the impact of the covid 19 pandemic on children between 0-5 years old experiencing food poverty in the UK?
- 3) What has been the impact of the covid 19 pandemic on non-accidental injuries in babies and children (0-5 years) in the UK?
- 4) What has been the impact of the covid 19 pandemic on children's physical activity levels? (0-5 years)

The search was undertaken in September 2022, covered the period 2020 to September 2022 and focuses on studies within the UK. It aims to provide an overview of the literature, as opposed to a comprehensive analysis of the evidence base. The quality of included/excluded research studies was not assessed.



General caveats to the national research:

- Participants in a number of these research studies and local questionnaires tend to be more likely to self-identify as white (fewer from BAME background), are married, and educated to degree level with higher levels of income.
- A number of the studies were survey based and surveys generally tend to obtain feedback from the above groups rather than our most vulnerable parents and marginalised groups. They also tend to be snapshots in time, rather than following survey subjects over a period of time.
- At the time of the review relatively little evidence specifically examines the consequences of the pandemic on children aged 0–5 years in the UK. There is a greater focus on older children and national research which is difficult to draw comparisons to due to differences in service delivery, lockdowns etc (EIF, 2021).

4. Local engagement

It was considered vital as part of this impact assessment that feedback was obtained directly from parents, carers and professionals living and working in Nottinghamshire. Their experiences were collected through two surveys and a focus group which were promoted through already established Nottinghamshire County Council networks and Facebook pages. Incentives in the form of being entered into a prize draw were funded by the Contain Outbreak Management Fund, which the government has provided to local authorities to support response and recovery from Covid-19.

Parents/carers survey

This survey was produced based upon the key topic areas outlined within this report. There were 182 responses received. Nearly all responses were from females with the majority falling within the 31-35 year age range and describing themselves as White British. Respondents tended to fall into the higher income brackets and the majority were from two person households. You can find a summary of the key findings in Appendix 1.

Professionals survey

Similar to the professionals' survey, a survey for parents and carers was produced based upon the key topic areas. This survey was produced based upon the key topic areas outlined within this report. There were 30 responses to this survey with the majority being from our Healthy Families Team with good coverage of those working across Nottinghamshire. The majority reported that they had seen an increase in families with a 0-5 year old approaching their service post pandemic and an increase in the complexity or severity of the challenges faced by the families. When asked about changes in communicating with families, responses showed an increase in remote style communications such as phone calls, teams/video calls and increased emails.

You can find a summary of the key findings in Appendix 2.

Early years focus group

An invitation to participate in a focus group to share their experiences of how Covid-19 and the Covid-19 restrictions had impacted on children's early development and education was circulated widely to early year's settings across Nottinghamshire. Five practitioners working in settings across the county attended a focus group to share their experiences. The information



gathered at the session helped to support the development of the recommendations. You can find a summary of the key findings in Appendix 3.

Although we had a good response to our surveys and focus group, their limitations should be noted.

Feedback was also incorporated from the [Nottinghamshire review of the impact of Covid-19 on child and family poverty](#) (Nottinghamshire County Council, 2021) and the Nottingham and Nottinghamshire ICB Maternity Voices Partnership and Healthwatch's survey of experiences of maternity services during the Covid-19 pandemic (2021).

5. Impact on parents and carers wellbeing

Summary of the National Picture:

- There is indication that the pandemic affected UK expectant mothers' mental health, increasing the prevalence of depression (47%), anxiety (60%) and stress.
- A large survey of new and expectant UK parents found 61% reported that their emotional and mental health was a main concern during the early days of the pandemic. 87% of parents said they were more anxious and 68% of parents said their ability to cope with their pregnancy or baby had been impacted by covid-19.
- The changes to healthcare services for pregnant women during the pandemic increased feelings of anxiety and left women feeling inadequately supported.
- Parents experiences of attending appointments and giving birth during the pandemic were predominately negative. It was especially challenging when receiving difficult news, feeling limited by one birth partner who could only be present whilst in active labour and when their baby required a stay on a Neonatal Intensive Care Unit (NICU).
- Research by the Mental Health Foundation found that almost a third of parents of children aged four and under reported loneliness.
- Even though many studies are reporting a detrimental effect of the pandemic on parents emotional and mental health there are some positives. One study found that the mother's bond with their baby was generally strong and a study looking at experiences of new fathers found many enjoyed the isolation and the increased time they spent with their new family.
- There is mixed evidence around the suitability and effectiveness of virtual support. For some, including fathers, it increased engagement due to fewer costs and barriers to attendance and meant professionals capacity to deliver help increased. However, those experiencing poverty often lacked the devices and data to engage with virtual support services.

Summary of the Local Picture:

- Findings locally appear to align closely with the national picture, with the pandemic largely having a negative impact on parent's wellbeing with long term implications on family relationships and parental mental health.
- 80% of parents and carers in our local Covid impact survey⁴ reported that it had a negative impact on their mental wellbeing.

⁴ Please note the caveats on our local survey on page 13.



- Although the majority of parents/carers in our local COVID impact survey found support either from professionals or from friends or family, 12% of parents/carers didn't know where to go for support and 13% didn't feel able to, suggesting a significant proportion did not receive the appropriate support for their mental health during that time. One parent summarised the impact of this as *"The lack of support for parents was awful and will effect children for years to come."* It was acknowledged in another local survey that staff worked very hard under unprecedented circumstances.
- There was an initial drop in referrals to perinatal mental health services. This has now recovered to roughly pre pandemic levels but with anecdotal evidence highlighting that mothers may be presenting with more urgent and complex care needs.
- 81% of the parents and carers in our local impact survey felt the pandemic had impacted their pregnancy in a negative way.
- Both the Nottinghamshire Covid impact survey and the Nottingham & Nottinghamshire Maternity Voices & Healthwatch report highlighted how antenatal care was particularly impacted due to parents having to attend appointments by themselves because of pandemic restrictions. This increased anxiety, resulted in mothers feeling very alone and was particularly challenging for those who had previously lost a baby or who received difficult news.
- Not being able to have partners present until labour was established also left parents feeling isolated and scared.
- Lack of care and support during and after birth, resulting from restrictions around visiting and demands on midwifery services, had enormous implications on post birth recovery, bonding with their baby and long-term mental health. A number of mothers described feeling frightened and being traumatised by their experiences.
- 74% said that the pandemic had made their early experiences as parents worse. Many found it a lonely and isolating time with a lack of support from family and friends. Having time alone as a family did however mean they could do things together without interruption or the pressure of visitors which in some cases did enhance bonding.
- Some fathers got to spend more time with their babies and children which they would not have pre-pandemic, thus improving their relationships.
- There is mixed feedback around the effectiveness of virtual care which appears to depend on the context within which it is provided. It can increase the risk of arising health issues being missed and affect the relationship between parents and professionals. However, it has in some instances enhanced engagement with certain groups of parents such as fathers and those with issues over transport and childcare. It has also improved some professional working relationships and sped up important multidisciplinary decision-making processes.

5.1 Pregnancy, post-natal and early years experiences

National Picture

Pregnancy

A healthy pregnancy is extremely important in setting up an unborn baby for a healthy life. The foetus is susceptible to the environment around the mother, meaning high levels of stress in pregnancy can negatively impact on the baby (Early Years Healthy Development Review,



2021). There is an indication that the pandemic affected UK expectant mothers' mental health by increasing the prevalence of depression (47%), anxiety (60%) and stress related to the psychological impact of Covid-19 (Filippetti, Clarke, & Rigato, 2022). As well as directly impacting the mother, her mental health can have indirect effects on her unborn child. Within this study high depressive symptoms were associated with reduced attachment to the unborn baby. However higher social support acted as a protective factor and was associated with lower anxiety, illustrating how important social support can be in supporting a mother's mental health throughout pregnancy (Filippetti et al, 2022).

Post-natal and early years experiences

During the period from conception to age two, babies are uniquely susceptible to their environment. Regular exposure to high levels of stress causes unrelieved activation of the baby's stress management system. Without the protection of adult support, toxic stress becomes built into the body resulting in long-term consequences for learning and a baby's future physical and mental health. Poor mental health can also impact a parent's ability to bond with their baby (Early Years Healthy Development Review, 2021).

There is already a wealth of research that suggests for many new parents the pandemic was a time of considerable stress, with exacerbations of usual concerns during birth and entry to parenthood manifesting into severe and unacceptable experiences (Saunders and Hogg, 2020). A few studies during the initial lockdown found higher rates of clinically relevant and clinical diagnoses of depression and anxiety in mothers with babies under 6 months old (Fallon et al, 2021; Myers and Emmott, 2021).

A large survey of new and expectant UK parents found 61% reported that their emotional and mental health was a main concern for them during the early days of the pandemic. 87% of parents said they were more anxious as a result of covid-19 and the lockdown and 68% of parents said their ability to cope with their pregnancy or baby had been impacted by covid-19 (Saunders and Hogg, 2020). In the COVID-19 New Mum Study 11% of mothers indicated that lockdown had adversely affected their mental health, citing anxiety, depression, isolation and loneliness. Some mentioned consequences of not being able to see their family, highlighting the lack of practical support but also distress that family members had missed seeing the new baby and the lack of social support from their friends, and missing attending mother and baby groups and activities (Vazquez-Vazquez, Dib, Rougeaux, et al, 2021).

In an online survey of women living in the UK with an infant aged less than 12 months the majority of the 1329 participants reported feeling down (56%), lonely (59%), irritable (62%), and worried (71%) to some extent since lockdown began, but 70% did feel able to cope. (Dib et al, 2020). Unfortunately, YouGov research found that 1 in 3 parents were worried they would be judged if they asked for support, and 57% felt too uncomfortable to ask for support (YouGov cited by Home-Start 2021).

Inequalities in experiences

The impact of the pandemic on parents' mental wellbeing doesn't appear to be limited to new parents as research by the Mental Health Foundation found that almost a third of parents of children aged four and under reported loneliness (Mental Health Foundation 2020) while Royal Foundation commissioned research found that parental loneliness increased from 38% before the pandemic to 63% (Ipsos Mori 2020). The impacts appear to be further exacerbated by one's personal situation and those already at greater risk of poor outcomes. Participants with more than one child showed higher negative emotional states, namely anxiety symptoms. (Costantini, Joyce & Britez, 2021) and parents and carers in; low income families, young



parents, single parent families and those supporting children with Special Educational Needs and Disabilities were particularly vulnerable to elevated mental health symptoms, higher levels of stress, depression, and anxiety (Co-Space 2021; Saunders and Hogg, 2020). Thus, further exacerbating existing inequalities.

A research study with young mothers (16-24) found the burden of taking sole responsibility during appointments when they were asked to make medical decisions without being able to consult their partners (or another significant adult in their life) was challenging along with feeling overwhelmed trying to answer questions from their partner or family members (Moltrecht et al, 2022).

Positives

Despite many studies reporting a detrimental effect of the pandemic on parents emotional and mental health there are some positives. One study found that the mother's bond with their baby was generally strong and that stronger bonding was associated with greater emotional support. Partner support being a predictor of developing mother-infant relationships during the COVID-19 pandemic highlights the importance of support during challenging times. (Myers & Emmott, 2022) (2). In some cases the pandemic enabled partners to be more present with the working from home rules or if they were furloughed. A study looking at experiences of 20 fathers of babies born after March 2020 found many enjoyed the isolation and the increased time they spent with their new family (Andrews, Ayers & Williams, 2022). Their overall response of fatherhood in the pandemic was positive.

Local Picture

Overall, the local picture for the impact on pregnancy and the early years, especially from the local Nottinghamshire covid impact surveys, reflect similar themes as outlined within the national literature search (noting the caveats). There was agreement across both our professional and parents/carers impact surveys that the pandemic had impacted negatively on parents mental wellbeing with parents accessing both formal support and informal support through friends and family. More specifically the impact survey highlighted that:

81% of the parents and carers responding felt the pandemic **had impacted their pregnancy in a negative way.**

80% of the parents and carers responding felt that the pandemic had **a negative impact on their mental wellbeing, with 14%** reporting **no impact** and only **2%** a **positive impact.**

74% of those responding said that the pandemic had made their **early experiences as parents worse.**

Several new mums, especially when it was their first baby, mention that it was lonely and isolating not being able to go to baby groups and to meet other new mums. Not being able to have family and friends to support and help was challenging. For some this then impacted on the relationship with their baby and other children:



“Being alone all the time with no outside help with a new-born and a toddler under 2, I had to ignore the needs of the toddler and put them second for a lot of months which I hated and I hated how it made him view me and the baby.”

“I’m relatively new to the area, so hadn’t met any other new mums locally as all the classes were stopped, so I felt quite alone at times. The post birth midwife visits and, childhood immunisation visits to the doctor and weigh-ins were a genuine highlight in my calendar.”

“I really struggled to bond with my baby, and felt very very isolated at the start as the support was limited due to covid meaning many baby groups weren’t running in person.”

Source: Nottinghamshire Covid Impact Survey (2022)

For many this resulted in an intense period with challenges around looking after and entertaining children, and in some cases home-schooling as well. For some families however, this enhanced bonding and relationships improved. Responses highlighted how having time alone as a family meant they could do things together without interruption or pressure of visitors. This was especially so for those with a new-born who was their first child. It was noted that a number of fathers in particular got to spend more time with their children and new-borns which they wouldn’t have pre-pandemic, thus improving the relationship between father and child:

“Made us realise what’s important, I now work from home more to spend more time with them. My husband was furloughed and got time with them he otherwise wouldn’t have had.”

“Less commitment and pressure to meet family/friends/groups. Life felt a lot simpler and basic which felt refreshing as there was less complexity. I felt able to commit more time to my children/enjoy outdoors in all weather.”

“It meant that we could limit visitors to the house and spend lovely bonding time alone without feeling guilty.”

Source: Nottinghamshire Covid Impact Survey (2022)

For several parents within the survey the transition into parenthood was particularly challenging during Covid-19, which parents reported exacerbated existing mental health problems and/or was felt to have contributed to the development of post-natal depression and



anxiety. It is evident that this has had long term implications on their family relationships and mental health:

“My partner became depressed and anxious during covid lockdowns and became a lot worse after our daughter was born”

“Being so isolated because of lockdown meant I got postnatal depression (PND), and the first year and a half with my daughter was really difficult. It will always be 'tainted' and I will always feel guilty for being so depressed. I am still affected by PND (my daughter is nearly three years old) and our relationship is more difficult than I would like it to be.”

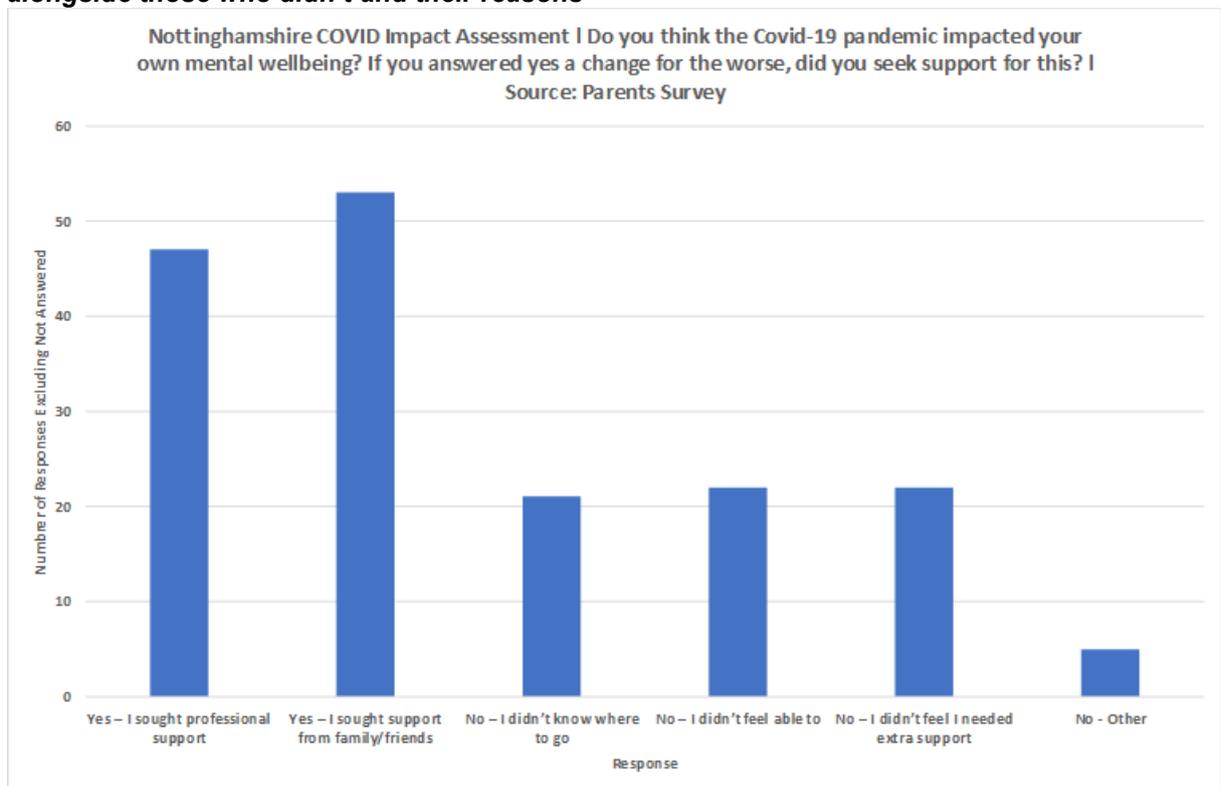
“Contributed to post natal depression. We were isolated. Hopewood were amazing and tried their very best to still see us as much as they could.”

“I had to take anti-depressants, and I am still on them now. My mental health took a massive turn for the worse and it is still affecting us today.”

Source: Nottinghamshire Covid Impact Survey (2022)

From those in Nottinghamshire reporting the covid pandemic having a negative impact on their wellbeing the majority reported seeking help from friends and family, closely followed by professionals (see Figure 3 below).

Figure 3: Numbers of parents and carers seeking support and who they obtained this from alongside those who didn't and their reasons



Source: Nottinghamshire Covid Impact Survey (2022). NB: multiple answers could be selected.

Over 25% however didn't know where to go for support or didn't feel able to (12% not knowing where to go and 13% not feeling able to) suggesting many didn't get the support they needed for their mental health during that time.

From an audit of 17 clients engaged with a Family Nurse Partnership (FNP)⁵ nurse during late 2020, ten clients felt that their mental health had deteriorated, one felt it had improved and six reported no change. Three also expressed difficulty in accessing mental health services. (Family Nurse Partnership data).

Two parents/carers summed up the implications of a lack of support during this time as:

“Yes. No baby groups were running, I had no friends or family allowed to visit. I resented the time being a parent as it felt isolating”

“The lack of support for parents was awful and will effect children for years to come.”

Source: Nottinghamshire Covid Impact Survey (2022)

Specialist mental health services

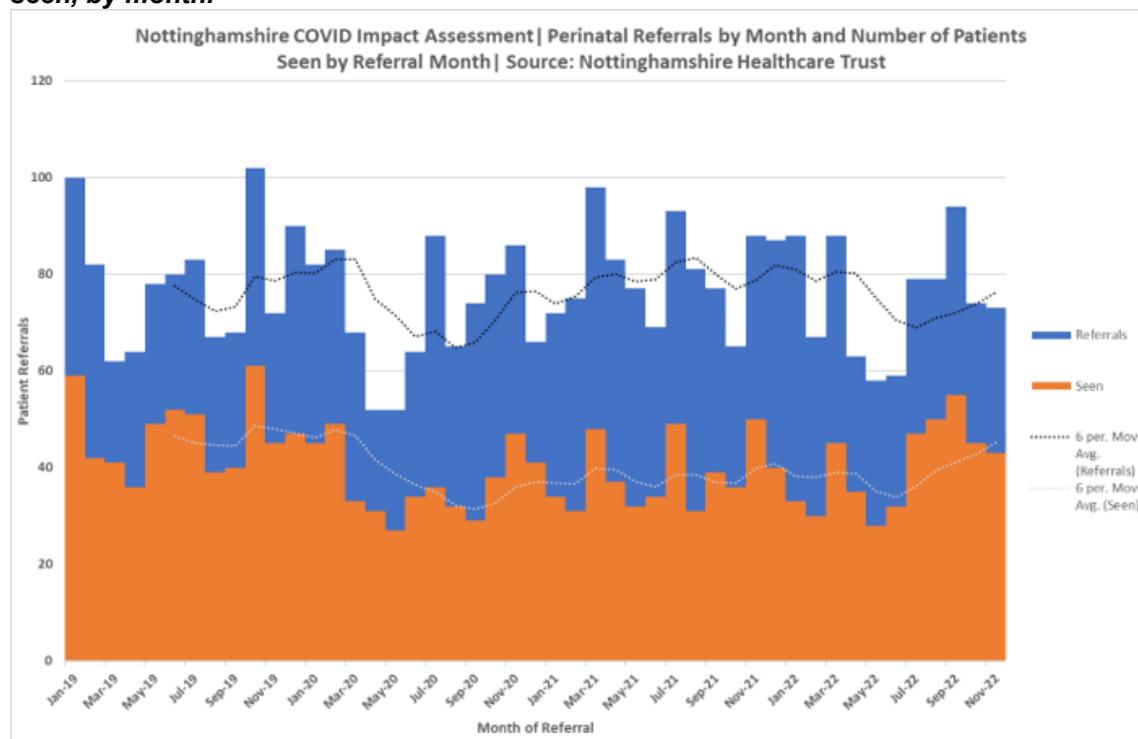
Figure 4 below illustrates that there was an initial drop in referrals to the specialist perinatal mental health community team⁶ from March 2020. This reduction was unlikely to be indicative of need and more likely a result of lockdowns and associated delays and barriers to accessing health services, however it is important to note that there was a slight reduction in births across Nottinghamshire during 2020-21 (Source: Nottinghamshire Healthcare Trust). The proportion of women referred to the perinatal mental health community team has now recovered to roughly pre-pandemic levels.

Access to specialist mental health services, i.e., the numbers of women seen, recovered at a slower rate than referrals as Figure 4 indicates. Anecdotal evidence suggests that mothers post pandemic were presenting with more urgent and complex care needs. Assessment appointments are now offered to a higher proportion of those referred than in any previous year, however there are challenges with engagement in the offer, non-attendance, and late cancellation that the service is working hard to address. A programme of engagement activity is being undertaken to increase access with a particular focus on targeted ethnic communities and areas of greatest deprivation, under-represented in both referral and access data.

⁵ The Family Nurse Partnership (FNP) programme is a home visiting service providing ongoing, intensive support to first-time, teenage mothers and their babies (plus fathers and other family members, with mother's permission). Each Family Nurse cares for up to 25 clients and the service is commissioned to support a total of 325 clients.

⁶ The perinatal mental health community team provides treatment and support to women experiencing problems with mental illness throughout the perinatal period, from 13 weeks pregnant (once the pregnancy is confirmed) up to two years after having their baby, across Nottinghamshire. <https://www.nottinghamshirehealthcare.nhs.uk/perinatal-services>

Figure 4: Referrals to specialist perinatal mental health services and number of patients seen, by month.



5.2 Experiences of antenatal care, childbirth and NICU

National Picture

Throughout the Covid-19 pandemic there were substantial changes made to the way antenatal care was delivered and changes in hospital processes and policies around childbirth. Responses to the national COVID in Context of Pregnancy, Infancy and Parenting (CoCoPIP) study identified five sub-themes, associated with the first wave of the pandemic. These were:

- rushed and/or fewer antenatal appointments
- lack of sympathy from healthcare workers
- lack of face-to-face appointments
- requirement to attend appointments without a partner
- requirement to use PPE

This study provides evidence indicating that the changes to healthcare services for pregnant women during the pandemic increased feelings of anxiety and left women feeling inadequately supported. (Aydin et al (2022)). This is further exacerbated by changes to birth experiences with a quarter of the sample from the national CoCoPIP study reporting Covid-related changes to their birth plan, including limited birthing options such as not being allowed a home birth and reduced feelings of control; difficulties accessing pain-relief and assistance, and feelings of distress and anxiety. Participant experiences of giving birth during the pandemic were predominately negative (46.9%), particularly in relation to the first national lockdown, with a smaller proportion describing it as positive (33.2%) (Aydin et al. 2022).

The Covid new mum study found that women felt limited by one birth partner who could only be present whilst in active labour but not during induction. For some this meant they had no



partner present due to issues with childcare (Vazquez-Vazquez, Dib, Rougeaux, et al, 2021). This also impacted partners feelings of isolation and a sense of loss, along with a disconnection from the pregnancy (Andrews, Ayers & Williams, 2022).

Restrictions around partners being present at appointments and birth were particularly challenging and detrimental for anyone receiving difficult news and those with a baby requiring support from the Neonatal Intensive Care Unit (NICU). A study looking at parent experiences on a NICU ward in Cambridge during the first lockdown illustrated the extent of the restrictions on babies' wellbeing, parent-infant bonding, partners' wellbeing, parental confidence, the ability to breastfeed confidently and parents' access to the medical teams. (Garfield et al, 2021). In one of the first studies to document the experiences of bereaved parents after late miscarriage, stillbirth, or neonatal death, during the pandemic women reported feeling alone during their pregnancy, especially when they found out their baby had died, whilst alone at their appointment. This was made worse by support being provided virtually which parents often felt was ineffective in these circumstances (Silverio et al, 2021).

Local Picture

Experiences of antenatal care and childbirth within Nottinghamshire during Covid-19, to which we have access to, appear to align closely to the themes highlighted within the national evidence. Despite women and families acknowledging that in general, staff worked very hard under unprecedented circumstances (Nottingham & Nottinghamshire Maternity Voices & Healthwatch, 2021) the national restrictions and resulting changes to service delivery often left parents feeling a real lack of personal and professional support at what is an important time in their lives. This had detrimental impacts on their experience and subsequent mental health.

Both the Nottinghamshire Covid impact survey and the Nottingham & Nottinghamshire Maternity Voices & Healthwatch report highlighted how antenatal care was particularly impacted due to parents having to attend appointments by themselves. This increased anxiety and left mothers feeling alone. This was particularly challenging for those who had previously lost a baby or who received difficult news:

“There was more worry in my pregnancy due to having to attend appointments alone.”

“Receiving difficult news from consultant in hospital was hard to take in and felt like I needed someone with me to fully understand what I was being told. I didn’t enjoy going to scans to see my baby alone and it felt like a chore rather than a joy.”

“had previously had a miscarriage and having to go through this process alone was awful and lonely.”

Source: Nottinghamshire Covid Impact Survey (2022)

Not being able to have partners present until labour was established also left parents feeling isolated and scared. During this time some parents had to make decisions about their birth plans on their own without the support of their birth partner. The impact of these changes in service delivery was highlighted by the finding in the Covid impact survey that:



83% of the parents and carers responding felt the pandemic **had negatively impacted their birth experience.**

Lack of care and support during and after birth, resulting from restrictions around visiting and demands on midwifery services, had enormous implications on mothers' post birth recovery, bonding with their baby and long-term mental health. A number of mothers described being traumatised by their experiences and feeling frightened:

"I felt vulnerable and frightened and in turn this effected my babies experience coming into this world. My children's attachment was disrupted and I suspect some degree of trauma for both these children will impact them long term. I myself have PTSD from the experience and still have anxiety when speaking with any healthcare professional."

"As I had emergency c section I didn't bond with my baby as he got rushed to NICU and there was just no staff suppose on the ward to advise me I can go see my child etc so I think it had massive impact I had postnatal depression which went under diagnosed"

"I was traumatised by the consequences of the lack of care when I gave birth and afterwards, which caused my son to be very ill. I struggled for almost a year with dissociation, PTSD and depression."

"I then had to leave my husband 1 hour after an emergency c-section and spent two days on hospital alone, petrified and in agony with no support in looking after my new-born."

"I really hope if this ever happens again that women will be able to get more support in hospital in terms of allowing partners visit for longer and more hands on breastfeeding support. The experience has really traumatised me and it took a long time to get over and had put me off having another child."

Source: Nottinghamshire Covid Impact Survey (2022)

You can find more detail regarding parent's maternity experiences within the specific Nottinghamshire hospitals, and subsequent recommendations, within the Experiences of Maternity Services in Nottingham and Nottinghamshire during the COVID-19 Pandemic report (Nottingham & Nottinghamshire Maternity Voices & Healthwatch, 2021).



5.3 Virtual vs face-to-face care

National Picture

The Covid-19 pandemic has altered the way services were and continue to be delivered in terms of contact with professional's face to face and/or virtually. Currently there appears to be mixed feedback about virtual vs face to face care with people preferring different methods depending on the situation. In the case of antenatal care pregnant mothers found a social media-based approach well positioned to provide antenatal care and support during the pandemic (Chatwin et al, 2021). For online antenatal clinics one study found 86% rated their experience as good or very good. Even though 56% preferred face-to-face appointments, 44% either expressed no preference or preferred virtual, and these preferences were not associated with significant differences in patient demographics. For Health Care Professionals, 78% described their experience as the same or better than face-to-face clinics with over 90% agreeing virtual clinics should be implemented long-term. (Quinn et al, 2021). Mothers found other sources of support helpful; in one sample of expectant mothers and those having given birth in the last 24 weeks, 97% reported that Baby Buddy was currently helping them highlighting a role for other methods of support moving forward from the pandemic (Rhodes, Kheireddine, & Smith, 2020).

There is some evidence to suggest when used effectively virtual methods of communication can be helpful. In trials using a secure video messaging service to send short messages from neonatal staff to families 88% perceived a benefit of the service on their neonatal experience. Families rated a positive impact of the service on anxiety, sleep, family involvement and relationships with staff. It enhanced emotional closeness, increased involvement in care and a positive effect on breastmilk expression. Staff also rated the service as easy to use, with minimal impact on workload (Kirolos et al, 2021).

With less support available face to face initially Action for Children's support service, Parent Talk, reported a 430% increase in the number of parents seeking advice online (Action for Children 2020). Some families have engaged well in virtual contacts as there are fewer costs and barriers to attendance than face-to-face services (Action for Children 2020) however, those experiencing poverty often lack the devices and data to engage with virtual support services (Action for Children 2020). For professionals, some have found that the move to virtual and digital support meant capacity to deliver help increased (Early Intervention Foundation 2020), with more families who were previously on waiting lists now receiving support (Wilson and Waddell 2020).

Local Picture

Findings from the Experiences of Maternity Services in Nottingham and Nottinghamshire during the COVID-19 Pandemic report (Nottingham & Nottinghamshire Maternity Voices & Healthwatch, 2021) highlighted that there were fewer face-to-face appointments either during pregnancy or postnatally and these were sometimes perceived to be too short, a tick-box exercise, with no real opportunity to discuss issues. Replacement telephone calls often did not fully meet women's requirements, resulting in mental and physical needs being missed.

Feedback from clients engaged with a Family Nurse Partnership (FNP)⁷ nurse

⁷ The Family Nurse Partnership (FNP) programme is a home visiting service providing ongoing, intensive support to first-time, teenage mothers and their babies (plus fathers and other family members, with mother's permission).



found that some young parents had difficulty accessing services online both due to a lack of mobile internet access/data and feeling uncomfortable engaging in online sessions, talking about sensitive subjects, with their parents next door (FNP data).

Professionals, whilst acknowledging reduced face to face contact meant issues often were not picked up as quickly as they should have been, did report some benefits from the changes in ways of working. For some this increased engagement with parents especially fathers and those who struggle with transport, childcare and finances in areas such as parenting programmes:

“Transferring services online as enabled more families to access Parenting Programmes and in particular including dads.”

Source: Nottinghamshire Covid Impact Survey, 2022

It has also led to more flexible ways of working and more effective working relationships between early years professionals, which in some cases has led to quicker resolutions for children and families.

Summary

Findings within this section illustrate some opportunities to build on positives noted and the importance of acknowledging and attempting to address the consequences of Covid-19 on parents' overall mental health and the implications that this may have had on their relationships with their babies, children and future pregnancies. Given our understanding of child development and the importance of the first 1,001 days, where parents mental health is negatively impacted this may also adversely impact their child's development (see section 6).



6. Impact on children's early development

Summary of the National Picture:

- There is particular concern between both parents/carers and staff that children's personal, social and emotional development have all been negatively impacted by Covid-19.
- The School Starters Study found that disruption from the pandemic affected children's transition and adjustment into reception classes, with children needing more support and struggling with their communication & language, personal, social and emotional, and literacy development.
- Those impacted to a greater extent are families with lower annual incomes and those with special educational needs and disabilities where access to specialist support was restricted.
- Time in early education settings throughout lockdown (as evidenced through children of keyworkers) helped to minimise the negative impacts on development.
- It appears that toddlers with no online schooling requirements were exposed to more screen time during lockdown than before lockdown.
- There is indication that attendance at early years settings across the country has not returned to pre-covid levels.

Summary of the Local Picture:

- Generally, the experiences of parents, carers and professionals align closely to that seen nationally.
- Local professionals⁸ surveyed reported a significant impact on children's development: 96% reporting a negative impact on social and emotional development, 93% on children's communication skills and 89% on children's behaviour.
- There was a decline in 2022 of 2-to-2.5-year old's meeting the expected level of development, as measured by the Healthy Family Teams, in relation to both communication, and social and emotional skills. These were children born in or before initial lockdowns. However, the latest available data, to December 2022, suggests this decline may be showing some sign of recovery.
- There is an increasing demand for specialist speech and language therapy services, and there are now more children presenting to this service at ages 3-4 years rather than 2-3 years.
- There are challenges in access to the targeted speech and language service. It is important to note that this service is targeted at those who need support following universal health and development reviews at age 2 to 2.5 years; waits for intervention are problematic as children get older and may then become ineligible or require specialist support.
- Practitioners in the local focus group reported a significant impact on children's speech and language development. They described these needs as persisting beyond the lockdowns and being most evident in children accessing settings for the first time at ages 2 and over. This was different to parents who tended to report their children 'caught up' as opportunities for social interaction increased.
- The number of early years registered places available in Nottinghamshire declined slightly across the course of the pandemic. However, the latest childcare sufficiency audit highlights that there are no areas of Nottinghamshire where the demand for funded childcare places for 2-, 3- and 4-year-olds outstrips supply.

⁸ For caveats to note around the engagement with local professionals, please see page 13.



- Take-up of early years funded places reduced slightly and has subsequently recovered or exceeded pre-pandemic levels. This differs from national findings.
- Feedback from early years providers is that children access fewer hours than in the years prior to the pandemic, this is due in part to cost of living pressures, and they are instead making alternative childcare arrangements. This may be eased by recent Government funding announcements.⁹

6.1 Impact on social & emotional, behaviour, speech, language & communication development

National Picture

Research has shown us that development takes place at an extraordinary rate during a baby's first year, with the brain doubling in size. This early development depends crucially on experience, particularly social experience, which stimulates and fine tunes the brain. Therefore, a stimulating, varied and responsive environment supports the development of language, cognition, and emotional and social competencies (Fox et al, 2021).

Early Development

During the first national lockdown (March to early summer 2020), early years settings closed to all aside from children of key workers and those considered vulnerable. During the subsequent second and third lockdowns in November 2020 and January 2021 early years settings remained open. There is indication that attendance across the country has not returned to pre-covid levels; with over 65% of local authorities surveyed in one study reporting a decrease in the demand for childcare (Jarvie, Shorto & Parlett, 2021). In summer 2020 it was reported that a third of settings (34%) in the most deprived areas were projected to be unlikely to still be operating the following year, compared to 24% of those in the least deprived areas (Pascal, Bertram, Cullinane et al. 2020).

For those children who did return to settings, many providers said that the pandemic had significantly impacted their learning and development. They were particularly concerned about children's personal, social and emotional development. Some children had returned less confident and more anxious. In some cases, children had also become less independent, for example returning to their setting using dummies or back in nappies having previously been toilet trained. (OFSTED, 2020). A survey of 905 nursery workers in the UK in late 2020 found that 42% had noticed signs that the emotional wellbeing of the children had been affected by the coronavirus pandemic or lockdowns (Nelinger et al, 2021).

In a cohort of babies born during the first 3 months of the pandemic and followed for their first year of life, at 12 months, there was a reduction in social communication developmental milestones compared with a historical cohort. Fewer infants in the pandemic cohort had one definite and meaningful word, could point or wave bye-bye at their 12-month assessment (Byrne et al, 2022). It appears time in early education settings helped to minimise the effects on development as in cohort of 8-36-month-olds between spring and winter 2020, vocabulary growth was found to be greater in those who continued to attend, with a stronger positive effect for children from less advantaged backgrounds. (Davies et al. 2021). Furthermore, children

⁹ [Budget 2023: Everything you need to know about childcare support - The Education Hub \(blog.gov.uk\)](https://www.blog.gov.uk/2023/03/23/budget-2023-everything-you-need-to-know-about-childcare-support/)



whose parents were keyworkers and therefore could access childcare tended to have lower emotional and behavioural difficulty scores than children of non-keyworkers (Lees et al, 2022).

It is currently unclear as to whether, and to what extent mask wearing could have had an impact on children's communication and language as evidence suggests attention to the mouth is particularly relevant for speech learning (Carnevali et al. 2022). It is believed this is less relevant for babies who focus more on the eyes during interactions. However, from 6 months old the focus shifts to the mouth (Tenenbaum et al, 2013).

Impact on school age children

There is some indication from the School Starters Study that disruption from the pandemic affected children's transition and adjustment into reception classes. Initial findings from a survey of parents and schools carried out in the Autumn Term 2020 highlighted that:

- 76% of schools reported that children needed more support
- Children were particularly struggling with 3 areas of development:
 - Communication & language
 - Personal social & emotional
 - Literacy
- Parents of those starting school were particularly concerned about their social and emotional development.

(National Institute of Social and Emotional Research, 2020)

This is supported by a further study finding a noticeable 'regression' of skills, such as language and communication, physical development, risk taking, social skills and independence upon transition to school after the first lockdown (Bakopoulou, 2022).

Some of this appears to be reflected in the Early Years Foundation Stage Profile (EYFSP) data collected from the national sample of schools in 2020-21. Results suggest there were 13% less children who achieved a 'Good Level of Development' (GLD) compared to the previous (pre-pandemic) cohort (2018–2019). In an average-sized Reception class this could equate to three fewer pupils reaching a GLD. These findings suggest a greater proportion of children could particularly benefit from an adjusted and responsive curriculum to support their learning and development (EEF 2022).

Inequalities in outcomes

Research to date indicates the extent to which children's development may have been impacted by the Covid-19 pandemic is strongly influenced by their home situation at the time. Parents and carers from households with lower annual incomes (less than £16,000) reported that their children had higher levels of symptoms of behavioural, emotional, and attentional difficulties than parents and carers from households with a higher annual income (greater than £16,000) (Co-Space 2021). This may be because parents with lower annual incomes have reported that they spent less time on activities with their babies and toddlers compared with parents from more advantaged backgrounds. Children from disadvantaged backgrounds also had less access to books and spent less time on play or activities requiring outdoor space (LGA, 2021). Therefore, some children thrived when their parents were able to spend more quality time with them, one survey found this was 63% of participating parents (Ipsos Mori 2020). Many parents however experienced various pressures, making it difficult for them to do this. (OFSTED, 2020). This in some cases significantly impacted parents' mental health and wellbeing. Where parents themselves experienced sustained mental distress during the pandemic they tended to report higher child externalising and internalising problems, and executive function difficulties at follow-up. Children who had spent more time engaged in



enriching activities with their parents showed stronger executive functions and social competence six months later. This highlights the importance of supporting parents' mental health and the benefit of investing in support services and interventions promoting building support networks (Hendry et al. 2022).

One group this appeared to significantly impact is children with special educational needs and disabilities (SEND) and their families. A report undertaken by the Family Fund which involved various surveys and focus groups generated feedback from over 7,000 families finding that the mental health and wellbeing of the majority of disabled or seriously ill children, as well as their siblings and parent carers, was negatively impacted by Covid-19, and was showing little signs of recovery (though this was completed early in the pandemic) (The Family Fund, 2020). This impact on both care and education is not surprising given the services that families relied on, particularly speech and language services, were unavailable (OSFTED 2020) (2). This led to children missing out on early diagnosis and specialist intervention and an inevitable lack of preparation and readiness to start school (Bakopoulou, 2022). Bakopoulou also found that, for children with special education needs and disabilities, the difficulties created by lack of face-to-face contact were magnified, especially in relation to being able to observe and get to know and understand the child before transitioning to school as well as having access to up to date and accurate information from children's early years settings.

Screen time

Over the recent years screen time in children has been increasing. However, there is some early indication that toddlers with no online schooling requirements were exposed to more screen time during lockdown than before lockdown (Bergmann et al. 2022; Proulx et al. 2021). This might be a result of various reasons such as parents needing to work at home and keep their children entertained and not being able to get outdoors and access various activities they previously would. This can impact on children's development with higher levels of screen time in children aged 2-3 being associated with poorer performance on the developmental milestones (Bassi, 2021). Screen time usage is also a factor associated with fewer hours of sleep and longer sleep latency (Bassi, 2021).

Local Picture

This section focuses on early child development, including how babies and children's early experiences and development were impacted by the restrictions associated with the Covid-19 pandemic. It is important to recognise that these experiences varied significantly depending on the personal circumstances of each family, and our sample has some limitations.

There were a wide range of views from parents and carers on the impact of the pandemic on their children's development. Many parents reported difficulty in identifying the impact the pandemic may have had on specific elements of their child's development and several parents also reported a change of the better.

Early years practitioners participating in the focus group described more children missing developmental milestones, and a lack of confidence amongst parents who had been affected by limited opportunities to socialise with other parents. They noted the impact this had on children's development. Parents had been unable to share and learn strategies to support their child's development. They described needing to take a "back to basics" approach in settings, starting with rudimentary skills and building slowly – "stages not ages". Practitioners described an adverse impact on both children attending settings for the first time, and on those ready to transition to school, noting that schools may have to adapt their approaches to engage and support children who are not at the same level of development, independence, or



resilience as in previous years. Practitioners described an increase in the complexity of challenges faced by families during and after the pandemic, with a particular focus on communication, socialisation, and behaviour.

These findings were mirrored in the Covid impact survey for professional's where:

96% of professionals responding felt that the pandemic had **a negative impact on children's social and emotional development**

89% of professionals responding felt that the pandemic had **a negative impact on children's behaviour**

93% of professionals responding felt that the pandemic had **a negative impact on children's communication, both speech and language development, and listening and understanding**

Providers caring for children who had been born since the pandemic restrictions eased felt there was not an additional need in this cohort, and instead expressed their professional opinion that there will likely be a cohort of children who were either born during the pandemic, or already in their early years during the pandemic, now aged 2 to 5 or 6, who will experience challenges for some time to come. They highlighted the significant impact that opportunities for socialisation and connection have on children's language, behaviour, and wider development.

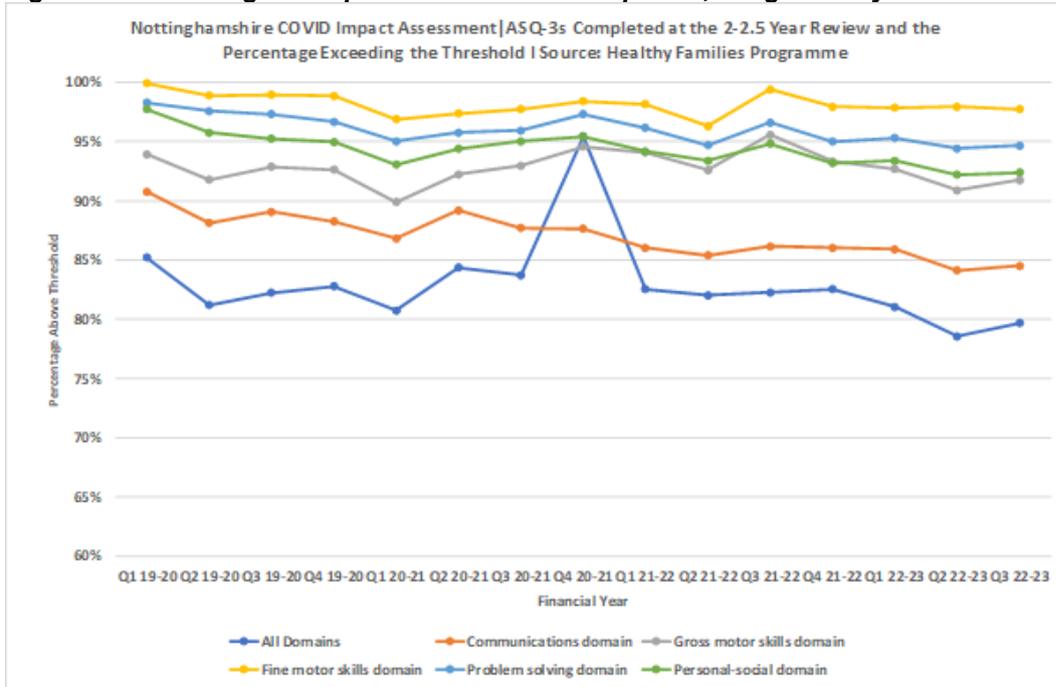
Early development

Early development is assessed by the Nottinghamshire Healthy Families Programme at age 1 and age 2-to-2.5 years using the evidence-based ages and stages questionnaires (ASQ-3 and ASQ-SE). An ASQ-3 assesses the expected level of development across five domains: communications, gross motor, fine motor, problem solving and personal-social skills whilst an ASQ-SE specifically reviews social and emotional development.

The proportion of children meeting the expected level of development across the five domains at age 2 to 2.5 years, as indicated in Figure 5 (indicated by the dark blue line) fluctuated slightly across the course of the pandemic, however declined notably from April 2022 to September 2022. However, the latest available data, to December 2022, suggests this decline may be showing signs of recovering, though it will be important to monitor this. Please note the anomaly shown in Quarter 4 of 2020-21 may be due to data quality.

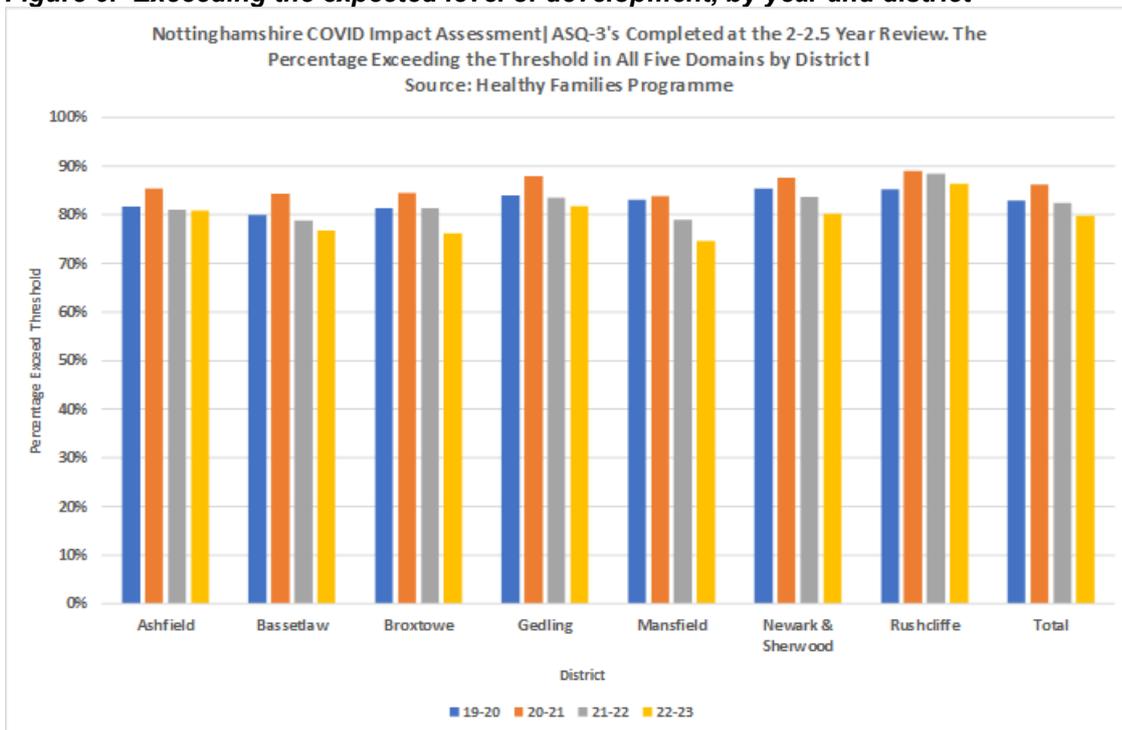


Figure 5: Exceeding the expected level of development, at age 2-2.5 years.



The notable decline, between April and September 2022, in the proportion of children meeting the expected level of development at age 2-to-2.5-years is largely attributed to a decline in communication skills, as Figure 5 illustrates (indicated by the orange line). The children whose 2-to-2.5-year review is captured in this data were born from September 2019 onwards and their earliest months were therefore shaped by the height of the Covid-19 restrictions.

Figure 6: Exceeding the expected level of development, by year and district

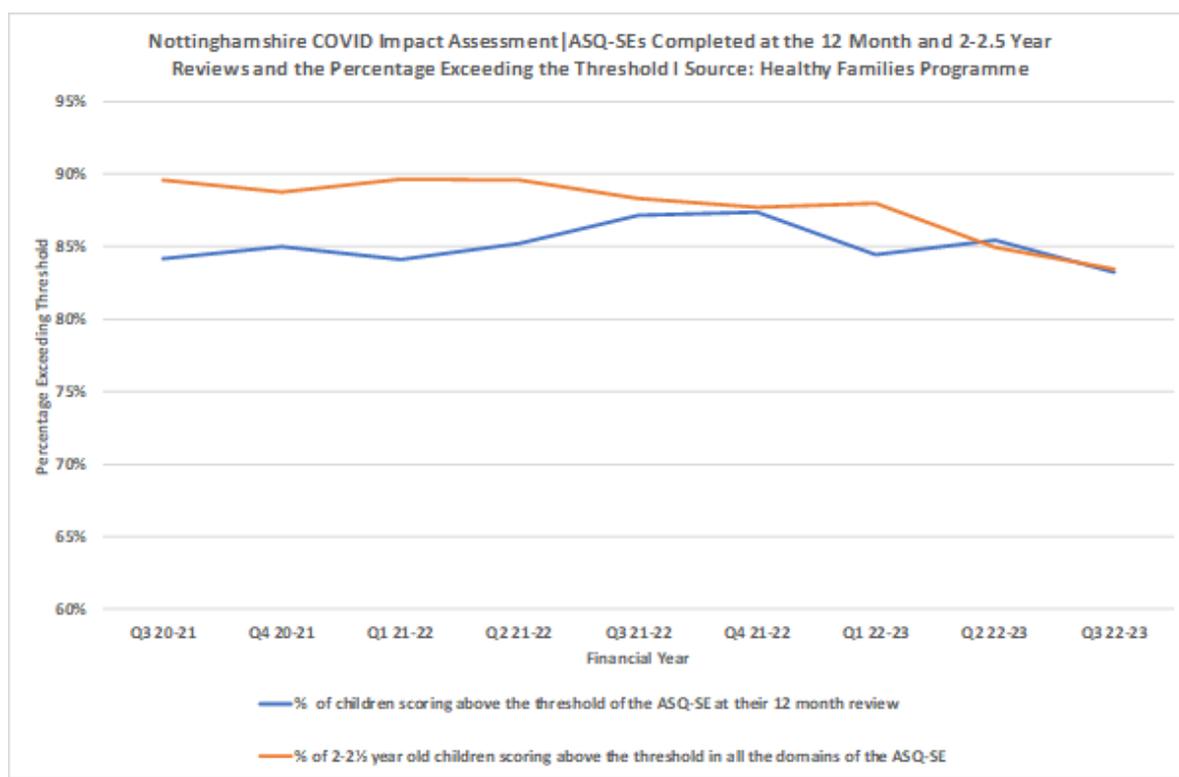




A rise in the overall proportion of children meeting the expected level of development in 2020-21, which can be seen in Figure 6 above (indicated by the orange column), is thought to be due to a change in the way the assessment was delivered: for the majority of 2020-21 the 2-to-2.5-year review was delivered virtually, by telephone, to families without additional needs in line with national guidance at the time. Vulnerable families continued to receive this face-to-face. This meant the assessment was reliant on parent's self-report rather than including a face-to-face assessment of development. There is evidence that the proportion of children meeting the expected level of development at age 2-to-2.5 in Mansfield has declined between 2019-20 and 2022-23, as shown in Figure 6. The picture for other districts across this time is less clear, but important to monitor.

We can also look specifically at social and emotional development, as measured by Healthy Family Teams using the ASQ-SE. Social and emotional development at 1 year has remained relatively steady, however there is a decline at age 2-to 2.5 years, particularly between April and December 2022, as shown in Figure 7. It is important to note the wealth of evidence about the importance of the earliest experiences in shaping brain development and early language skills.

Figure 7: Exceeding the expected level of development, social and emotional



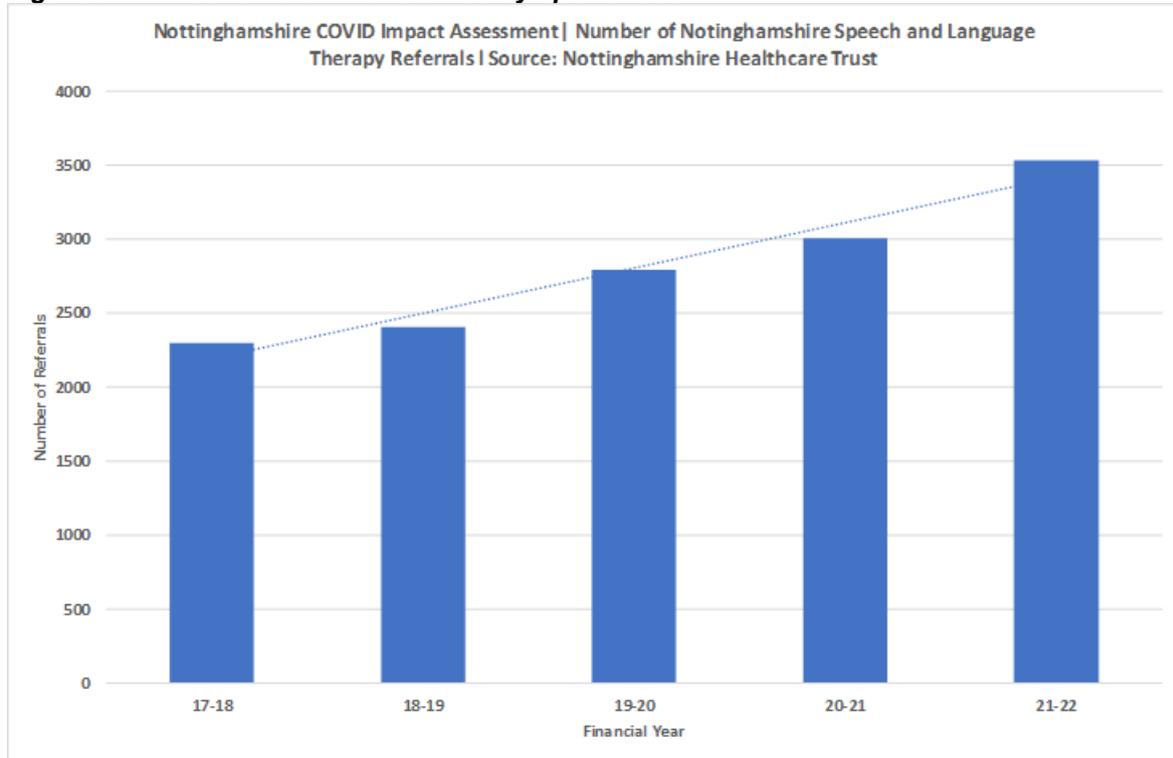
Speech, language and communication needs

Speech, language, and communication needs (SLCN) describe a wide range of needs relating to communication, including difficulties with fluency, forming sounds and words, formulating sentences, understanding what others say, and using language socially. In Nottinghamshire there is a clear pathway of support around SLCN through a ‘graduated’ offer of support: universal and early intervention support via early years settings, children’s centre services which include dedicated ‘Little Talker’ programmes, Healthy Family Teams, and libraries;



targeted support via Home-Talk for those aged 2 to 2.5 years; through to specialist support provided by specialist speech and language therapy (SLT) services.

Figure 8: Number of referrals received by specialist SLT

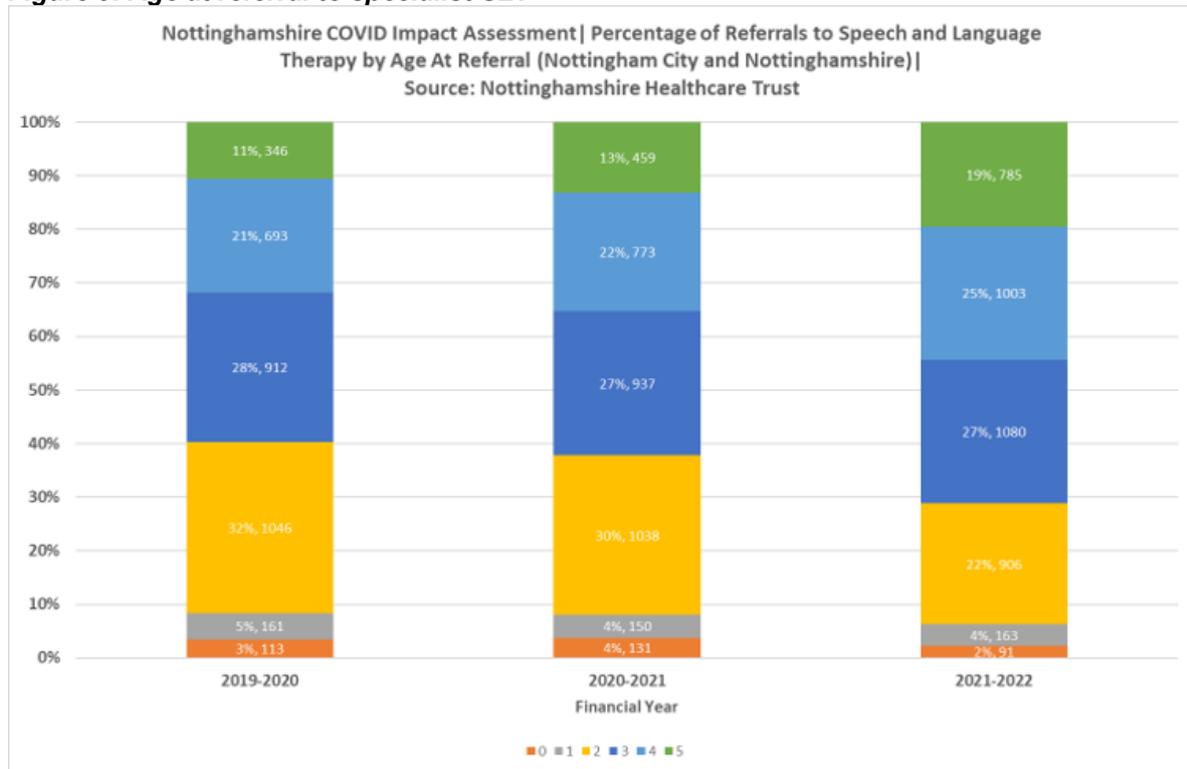


In Nottinghamshire the demand for specialist SLT for 0 to 19's has increased steadily across the last five years, as shown in Figure 8, with the sharpest increased observed in 2021-22, which is the latest available data.

Figure 9, below highlights that the age of child at point of referral to specialist SLT in Nottinghamshire (including Nottingham City) has increased steadily with more children presenting at age 3-4 rather than 2-3 in the latest year, 2021-22. Bearing in mind that early intervention is vital to improve outcomes, it is important to consider what may be driving this change. There have been some increased waiting times for targeted interventions, which may have contributed. This data suggests there were delays in the identification of SLCN's or in onward referral to appropriate services, which could occur for several reasons, including reduced access to services or professionals that help identify these emerging needs.



Figure 9: Age at referral to specialist SLT



The number of children who have accessed targeted interventions via ‘Home-Talk’¹⁰ rose moderately from:

- 818 seen in ten months of 2020-21,
- to 1038 seen in twelve months of 2021-22,
- however, was not sustained in 2022-23, with 600 seen in the nine months to December 2022.

In 2021-22 52% of eligible children received an initial assessment within 8 weeks of referral due to capacity pressures within the service, which have continued into 2022-23, with 54% receiving an initial assessment within 8 weeks of referral (to December 2022). The face-to-face intervention starts as soon as possible after this; however, this is often several weeks due to capacity pressures. Children’s centre services are offering support to those on the waiting list for Home-Talk.

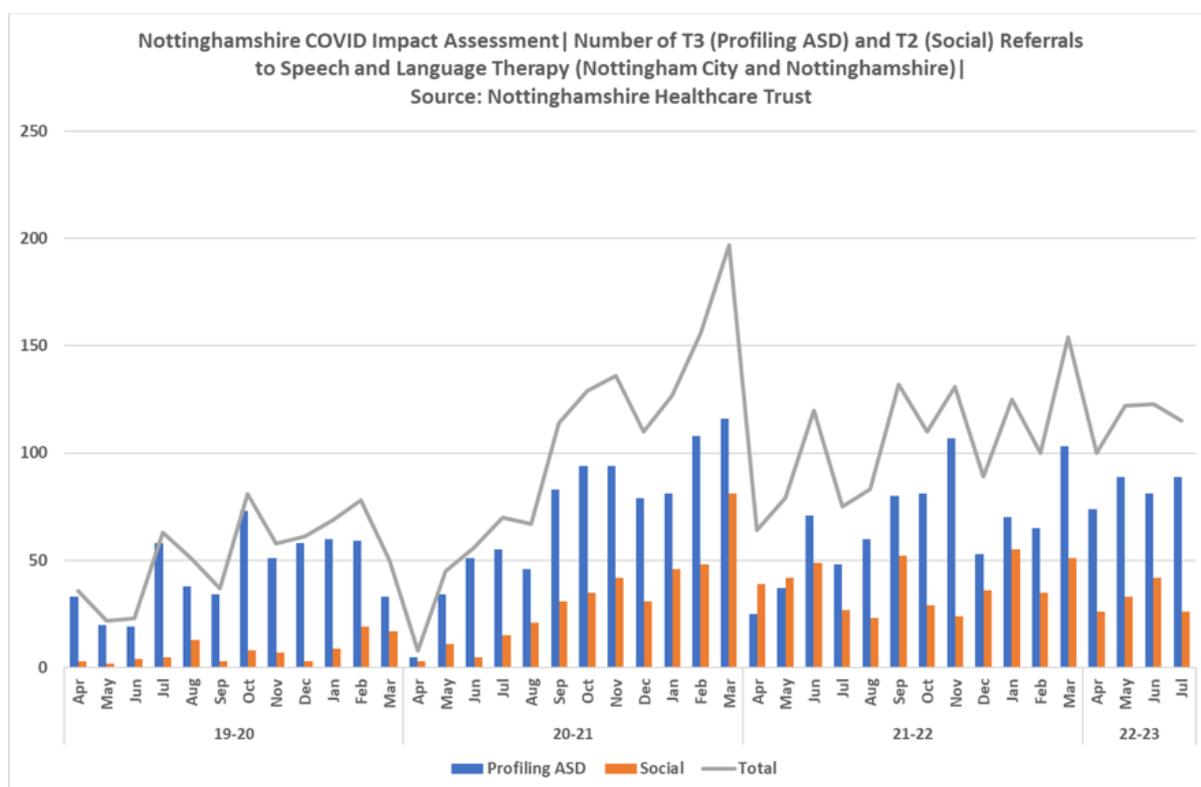
It is important to note that Home-Talk is highly targeted by age, for children aged between 2 years and 2 years 6 months, to deliver targeted support following universal 2-year health and development reviews, waits for intervention therefore become problematic as children get older and may then become ineligible or require specialist support.

Neurodevelopmental

Specialist SLT services have seen an increase in referrals for 0 to 19's relating to autism spectrum disorder (ASD) and social interaction. Whilst the service received higher numbers of referrals in relation to ASD, there has been a sharper increase in referrals for social interaction since mid-2020-21 as summarised in Figure 10 below.

Figure 10: Referrals to specialist SLT with neurodevelopmental presentations

¹⁰ [Nottshelpyourself | Home Talk - talking support for 2 year olds](#)



Engagement findings: communication

14% of parents and carers responding reported **a change for the better in their child’s communication skills**, **18%** a change for the worse and the remaining **69%** reported no impact or they were unsure of the impact.

The parents and carers who left comments in our Covid impact survey often reported an adverse impact on their children’s speech, including speech delay, although some noted the positive impact of being surrounded by adults or older siblings.

Those parents that reported speech delays encountered waits for speech and language services. Children aged 18 months to 2 years at the time of the Covid impact survey seemed most affected by communication needs. This mirrors the data presented above, where an impact on communication skills was observed in children receiving their 2-2.5-year review across 2022. Some parents reported their children ‘catching up’ as restrictions eased and opportunities for social interaction grew.



“My youngest had a speech disorder which I think was made worse by the pandemic”

“After the pandemic when my child started nursery her language development massively. Prior to that she wasn’t very interested in talking”

“It helps to socialise especially for young children so as soon as the pandemic ended I could see a huge improvement just because we could meet with others and socialise”

“So my 1 & 3 year old (at March 2020) are now 3.5 & 5.5... I think my oldest spoke better at 3 than my youngest does now at 3.5... Unsure if that’s because my oldest had an extra year at nursery pre-covid, then my youngest where nursery was closed for a while?”

Source: Nottinghamshire Covid Impact Survey (2022)

Practitioners in the focus group also reported a significant impact on children’s speech and language development, however they did not report the same ‘catch up’ as parents, describing these needs as persisting beyond the lockdowns and being most evident in children accessing settings for the first time at ages 2 and over.

“The impact on children’s speech and language development has been enormous”

Source: Nottinghamshire Covid Impact Survey (2022)

Practitioners were concerned about waits for speech and language interventions, recognising the importance of timely support and felt frustrated that were not able to support children as much as they would like to as the are unable to deliver one-to-one support.

Engagement findings: social, emotional, and behavioural development

36% of parents and carers responding reported **a negative impact on their child’s feelings or emotions**, with less than **1%** reporting a positive impact and the remaining **63%** reporting no impact or that they were unsure of the impact.

22% of parents and carers responding reported **a negative impact on their child’s behaviour**, with **4%** reporting a positive impact and the remaining **79%** reporting no impact or that they were unsure of the impact.



Though the majority of parents reported no impact, or they were unsure of the impact of the pandemic on their child's development, there were many comments from parents about the impact on behaviour, social and emotional development. Parents described an increase in behaviours that were both negative and disruptive and also shy and withdrawn.

“My eldest daughter who is now 4 was always good at mixing and being independent but after lockdown she became shy wouldn't leave my side hated being left with others even her own daddy “

“More dysregulated emotionally. Prone to outbursts”

Source: Nottinghamshire Covid Impact Survey (2022)

Of the parents and carers who shared comments in our Covid impact survey, many reported that their children struggled and found it difficult to understand why they were unable to go out or hug friends and family members often leading to frustration, outbursts and other challenging behaviour. This was also reflected in responses from parents of autistic children.

Parents report their children were anxious and struggled with their emotions. There were many responses around children becoming more clingy, introverted and shy, finding it difficult to be separated from their parents:

“He was 2 months when we went into lockdown, so therefore had only known and seen 2 adults (me and his dad) his whole life. He didn't know other people existed outside his house. So his communication/ social skills were non-existent.”

“Does appear more clingy than older child was although having an older sibling has made his social skills better than friend's children with no siblings.”

“After the pandemic, my son was very wary of other children coming near to him and didn't want to interact with them; thankfully this has improved significantly over time”

“Anxiety and social difficulties immediately after lockdown lifted and for several months after”

“Due to a lack of understanding the reasons why everything was different, my middle child's behaviour got worse, and she had very little opportunity for an outlet to help her learn how to regulate her emotions and therefore her behaviour.”

“Often emotional outbursts which I put down to not being able to leave the house to mix at preschool”

Source: Nottinghamshire Covid Impact Survey (2022)

Professionals responding to the survey commented that children found it difficult to interact with peers and adults. They felt that parents had little support to manage their children's



behaviour which sometimes led to more adverse and less social behaviour, and reported that both parents and children seemed more anxious:

“Parents and therefore children became anxious and clingy. Less socialised, more insular and afraid of wide social contact.”

“More separation anxiety due to not seeing carers outside their immediate circle”

“Parents/Carers have struggled with dealing with challenging behaviour and not having that support to access to learn about techniques or how we ourselves through our body language, gestures and language can have a negative or positive impact on the beginning or a behaviour or the outcome. Talking to someone on the telephone is not the same.”

“Not mixing with other children /peers has not allowed them the same opportunities to gain these experiences and skills, hence a delay in development.”

“Socially isolated from family and friends, lost opportunities to develop social skills. non or little routines and boundaries at home affecting behaviour and sleep”

“Children are less socialised this has had an impact on their behaviour. How they cope in situations and interact with peers and unfamiliar adults.”

Source: Nottinghamshire Covid Impact Survey (2022)

Practitioners in the focus group also described children being anxious at the separation from parents and struggling to settle when compared to previous years. They felt children lacked a range of experiences and were therefore becoming quickly overwhelmed and overstimulated. They described children struggling with behaviour and boundaries, temper tantrums and hitting at a greater frequency than previous years.

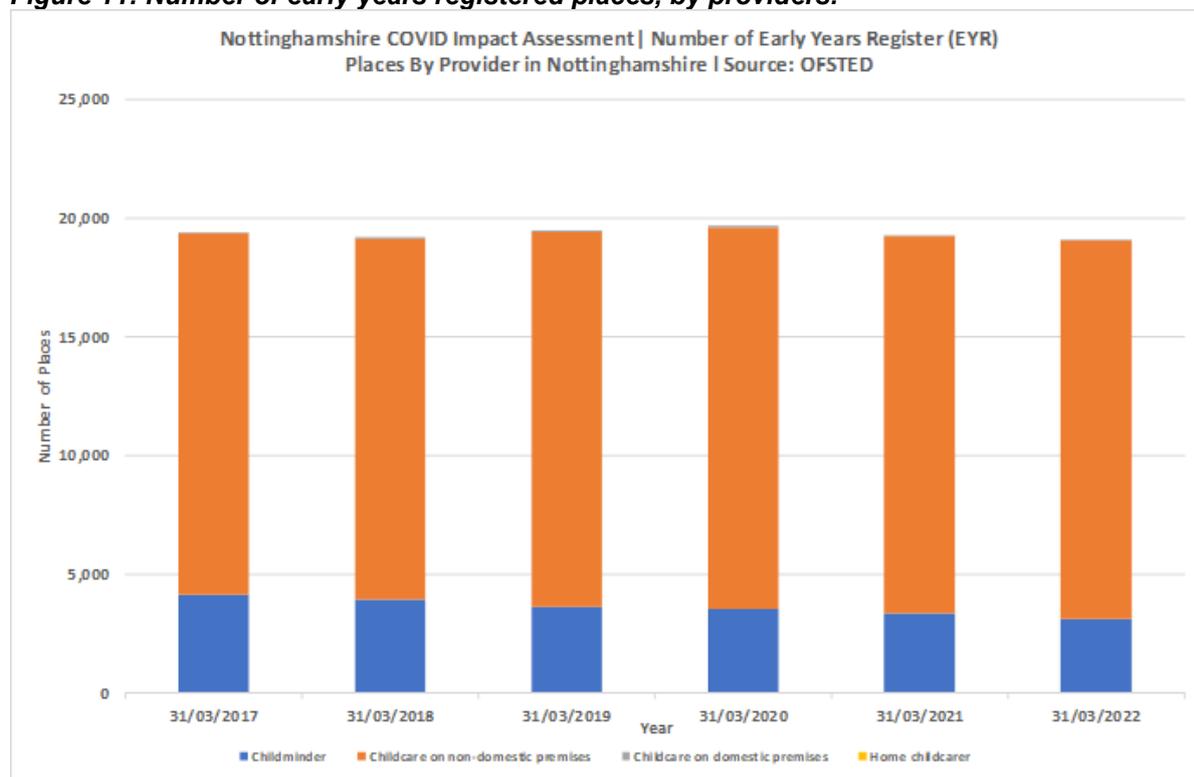
Early years childcare

The number of early years registered places available in Nottinghamshire declined slightly across the course of the pandemic, as indicated by Figure 11 below. There was also a decline in the number of early years registered providers from 2019 to 2022, with a 20% decline in the number of childminders and a 14% decline in the number of pre-schools as indicated in the latest childcare sufficiency audit for Nottinghamshire (September 2022)¹¹.

¹¹ The childcare sufficiency audit can be accessed [CSA 2022 \(nottinghamshire.gov.uk\)](https://www.nottinghamshire.gov.uk/csa-2022)



Figure 11: Number of early years registered places, by providers.



Most importantly, the childcare sufficiency audit highlights that there are no areas of Nottinghamshire where the demand for funded childcare places for 2-, 3- and 4-year-olds outstrips supply. The report also finds sufficient childcare places for both babies and toddlers: funded and non-funded places.

The take-up of funded places for 3- and 4-year-olds, as measured in the summer term, reduced moderately during 2020 and 2021, and has subsequently returned to the high take-up usually observed. The take-up of funded places for disadvantaged 2-year-olds, again measured in the summer term, was affected in 2020, however has subsequently exceeded the years prior to the pandemic. Please see Figure 12 for detail.

Figure 12: Take up rates of early years funded places, measured in the summer term

SUMMER TERM TAKE UP RATES					
	2018	2019	2020	2021	2022
2 YO*	72.6%	76%	68%	74.8%	84%
3 YO**	102%	99.9%	87.5%	96%	100%
4 YO**	104%	100.2%	93.9%	93%	106%

Source: Early Childhood Services, NCC

*2-year-old take-up rate is based on Figures provided by the DWP of potentially eligible children verses those actually taking up a funded place. **3- and 4-year-old rates are based on projected population verses children actually taking up a place (hence these exceed 100% in places).



Data collection and analysis in relation to school readiness, assessed in Reception via the Early Years Foundation Stage (EYFS), was paused due to the pandemic. Though it has resumed there is a new national EYFS framework, introduced in 2021, which makes any meaningful comparison of attainment before, during and after the pandemic difficult at this point.

Engagement findings: early years childcare

Practitioners in the focus group reported families returning slowly to settings after restrictions were lifted as there remained anxiety around Covid-19. Professionals reported that children had not returned at the level prior to the pandemic, often accessing fewer hours and instead either receiving support from family members, using flexible working arrangements, or choosing to reduce their working hours. The cost-of-living pressures were also felt by practitioners to have had a significant impact.

Early years practitioners were keen to increase opportunities for handover and joint-working with schools around the cohort of children affected most by the pandemic. They felt that it is important schools are aware of the needs that children may have and the potential lasting impact of this, and that this may require different skills and approaches.

Practitioners in the focus group described how they were able to deliver gold standard education and care to those that did attend during lockdown. These were often children of key workers, more so than vulnerable families who were also eligible to attend. They reported a positive impact on these children's development and resilience and welcomed the opportunity to deliver care differently.

Inequalities

It is widely understood that disadvantaged communities were disproportionately affected by the Covid pandemic, however it is important to note that the experiences related to early childhood were not exclusively based around deprivation. The engagement with parents and professionals highlighted the inequity in the experience of families across the course of the Covid-19 restrictions depending on individual circumstances, for example some parents were required to work full time from home without access to childcare, others were furloughed, some were eligible for access to settings and schools as key workers or vulnerable parents, and as such families had vastly different experiences. As one professional reported:

“It’s so difficult to make general comments as depending on circumstances the experience was so individual for everyone/family.”

Source: Nottinghamshire Covid Impact Survey (2022)



7 Impact on early years health outcomes

Summary of the National Picture:

- The pandemic impacted breastfeeding in both positive and negative ways with some reporting that breastfeeding was protected due to lockdown. However, the decline in breastfeeding support did appear to impact mothers.
- Food insecurity appears to have been exacerbated by Covid-19, with families who were in receipt of income-related benefits being five times more likely to make use of foodbanks and children eating more snacks.
- There is currently limited UK based research around the impact of covid on physical activity of under 5s but some reports of reduced activity and increase of screen time.
- Lockdown and social isolation were much more harmful to those children and families without access to gardens
- There are some reported increases in both type 1 and 2 diabetes in children and young people but a lack of any UK research around the 0-5 age range.

Summary of the Local Picture:

- The feedback received from the Nottinghamshire Covid impact survey support the national evidence with Covid-19 having both negative and positive implications on our local population.
- There is a long-standing variation in breastfeeding prevalence across Nottinghamshire, with Rushcliffe having the highest rates and Bassetlaw the lowest. The overall prevalence of breastfeeding remained relatively constant between 2019-20 and 2020-21, the year most affected by the pandemic restrictions, before increasing slightly in 2021-22. The districts of Bassetlaw and Mansfield however, between 2019-20 and 2020-21, saw a decline in breastfeeding prevalence.
- The level of A&E attendances in under 5's dropped throughout 2020 with troughs related to the lockdowns, presentations for injury remained relatively stable compared to other presentations. The number of attendances have recovered to pre-pandemic levels.
- Analysis of data for routine vaccinations in infants at primary care network (PCN) level indicates that vaccine uptake may have been impacted differently in geographic areas across Nottinghamshire, however further exploration of this is needed.
- There was a sharp uptake in flu vaccination for 2–3-year-olds in 2020-21, however this was not sustained.
- Data for under 5s accessing a dentist within Nottinghamshire has shown a sharp decline in the number and percentage of children being seen by a dental professional from 2019-20 to 2020-21. There has only been a slight recovery in the following year with the percentage seen remaining lower than it was pre-pandemic, suggesting many under 5's are unable or not accessing a dentist. It is important to note there are national challenges in access to dentistry which are mirrored in Nottinghamshire.

7.1 Breastfeeding

Infants who are breastfed exclusively for longer durations are significantly less likely to develop, or be admitted to hospital due to respiratory infections, gastrointestinal infections



(including diarrhoeal), and ear infections, and have significantly reduced risk of death attributed to infection, necrotising enterocolitis (NEC) and sudden infant death syndrome (SIDS) (EIF, 2021).

National Picture

The pandemic response, including lockdown precautions, appeared to impact breastfeeding in both positive and negative ways for women and their infants (EIF, 2021; Clements & Levene, 2022).

In one study 30% of women who were breastfeeding reported an increase in the frequency and 17% an increase in the duration of feeds, which could reflect more time spent at home, experiencing more frequent support from the partner and/or being able to invest more time in childcare (Vazquez-Vazquez, Dib, Rougeaux, et al, 2021). Brown & Shenker (2021) explored this in greater depth with over 1,000 breastfeeding mothers, finding 42% of mothers reporting that breastfeeding was protected due to lockdown and identifying six factors that contributed to positive experiences of breastfeeding during lockdown and increasing women's ability to breastfeed. These included:

- having more time to focus on feeding their baby without the need to be or go anywhere
- fewer visitors, leaving more time for recovery and fewer unhelpful opinions
- more privacy to learn how to breastfeed without having to feed in public
- increased responsive feeding rather than having to fit a routine around going places
- increased partner support with partners working from home or furloughed
- a delayed return to work, meaning women did not have to put their infants into childcare and could continue breastfeeding.

Despite these positives, one of the challenges appears to be around a decline in breastfeeding advice and support (Costantini, Joyce & Britez, 2021), with 27% of mothers reporting that they struggled to get support which meant some stopped breastfeeding before they were ready (Brown & Shenker, 2021). In the COVID-19 New Mum Study they found little difference in women reporting they had received enough help and support with feeding while in hospital (76% of before lockdown versus 72% of during) suggesting it might be more the case once having left hospital and at home (Vazquez-Vazquez, Dib, Rougeaux, et al, 2021).

Aside from professional support mothers also struggled with reduced social support from other mothers when encountering feeding problems (Hielscher, Ludlow, Mengoni et al. 2022). This was exacerbated for those with a lower education, more challenging living circumstances, from black and minority ethnic backgrounds, women living in more challenging living circumstances, women with suspected Covid-19, and those with worsening perinatal mental health, who were more likely to find the impact of lockdown challenging and stop breastfeeding (Brown & Shenker, 2021; EIF, 2021).

Initially throughout Covid-19 a lot of support was provided remotely with there being some evidence that this can be effective, with a systematic review and metaanalysis finding that remote support significantly reduced the risk of women stopping exclusive breastfeeding at 3 months by 25%. There was however no significant difference in the number of women stopping any breastfeeding at 4-8 weeks, 3 months or 6 months or the number of women stopping exclusive breastfeeding at 4-8 weeks. This demonstrates that remote interventions can be effective for improving exclusive breastfeeding at 3 months, but the certainty of the evidence is low suggesting remote provision of breastfeeding support and education might offer some help when it is not possible to provide face-to-face care. (Gavine, Marshall, Buchanan et al, 2022).



Local Picture

From the feedback received from the Nottinghamshire Covid impact survey the key themes support the national evidence with Covid-19 having both negative and positive implications on breastfeeding. Locally key themes were identified around limited support in hospital and in the community including means of communication. Due to the restrictions in place at the time, this meant that there were fewer face-to-face appointments and women felt rushed at appointments with support needs unfortunately not being met both before and after birth.

“Sadly, due to the staff in hospital being so busy I didn’t get the support needed to help me feed my baby within the first hour like I had wanted too. We were left trying to breastfeed, but baby was getting nothing for first 12 hours. Made me feel mad and guilty that I didn’t know my baby had not got any milk yet!”

“Had the restrictions not been in place, I would have been far less anxious and more rested with support. I believe I left hospital too soon in a rush to soon meaning I had not used the support to establish breastfeeding like I had hoped. This meant I embarked on an exclusive pumping journey with my daughter for 6 months which had never been my intention”

“I had no support in hospital or when I came out of hospital & was only able to breastfeed/ pump for a week due to this.”

Source: Nottinghamshire Covid Impact Survey (2022)

Views expressed also included issues such as tongue-tie or baby not feeding which were not picked up in a timely manner. Women felt a lack of support or wanting expertise either researched breast feeding themselves or paid for breast feeding and tongue tie resolution.

41% of parents responding said they felt Covid-19 had **negatively impacted their ability to breastfeed**

It appears from this sample that not all parents knew where to go for support, with just under a quarter of parents answering the survey expressing that they did not know how to get the support that they needed to make their infant feeding choice (23%). Those who did know whether to go said they sought support mainly from their midwife and the Healthy Family Team.

Despite knowing where to go parents’ expressed difficulties obtaining support in hospital and in the community. This was likely due to staffing pressures within hospitals and restrictions at the time. Face-to-face support was not available during times of lockdown and the women who did struggle to breastfeed then either resourced their own support via online videos turned to bottle-feeding.



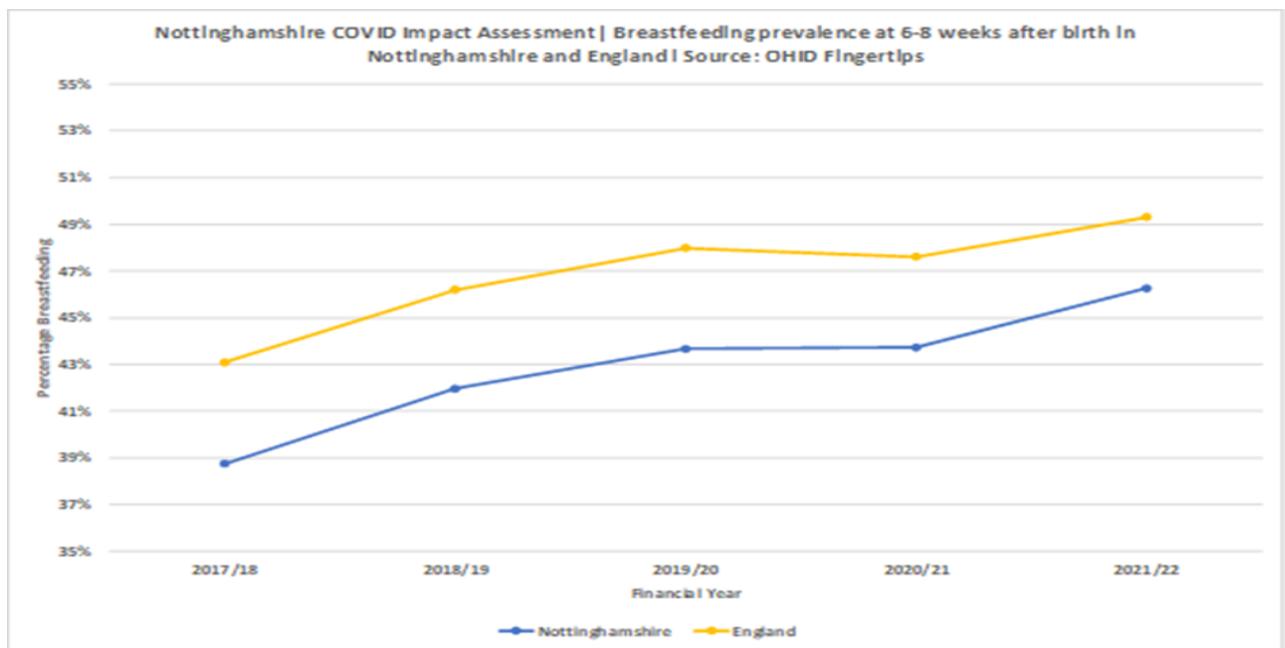
“A lot of the support offered for breastfeeding was over the phone which is absolutely no help when you need someone to watch and make sure your baby has latched on etc.”

Source: Nottinghamshire Covid Impact Survey (2022)

Local services adapted quickly to continue providing support to women and their families during lockdown periods. Support was via telephone with some specialist support for more complex cases via website and video consultation until face-to-face sessions resumed. This highlighted how important face-to-face contact was to support women. Baby and Breastfeeding Encouragement and Support (BABES) groups provided by children’s centre services offer valued support for women and were delivered as virtual sessions during the pandemic in each District, receiving good attendance and positive feedback. Subsequently these sessions are planning to continue with an element of virtual and face-to-face as a blended offer.

Despite the challenges around support for some, Figure 13 illustrates that overall, across Nottinghamshire, breastfeeding prevalence at 6-8 weeks has remained relatively constant during the years impacted most heavily by the pandemic (2019-20 to 2020-21).

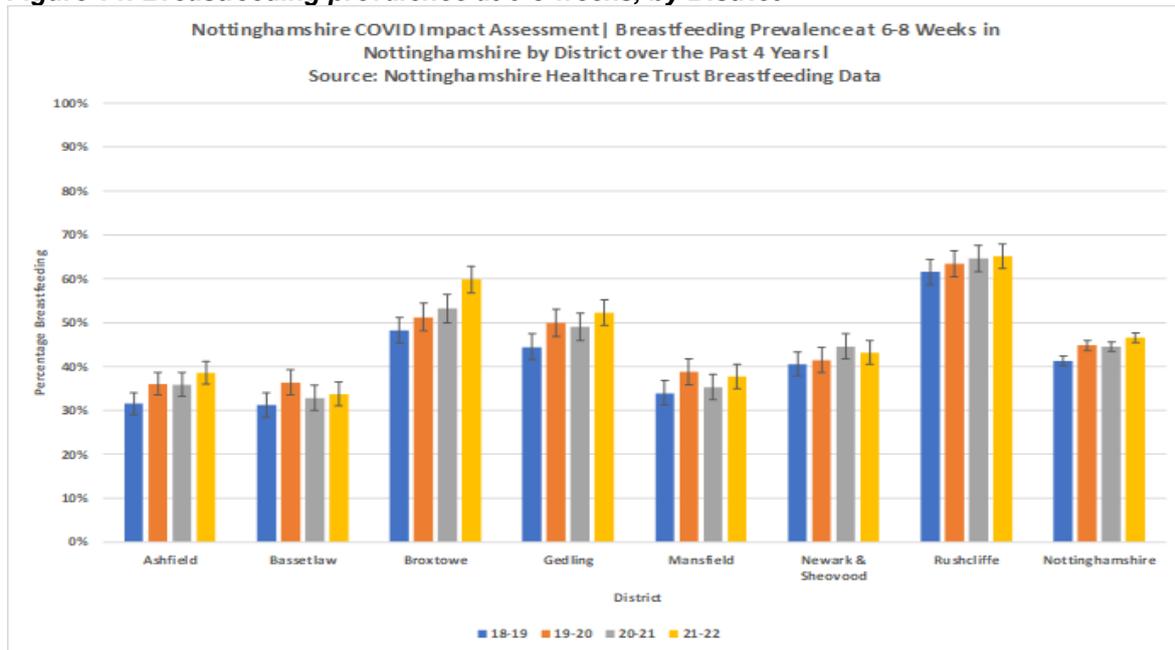
Figure 13: Breastfeeding prevalence at 6-8 weeks



Breastfeeding prevalence has started to increase in the latest year 2021-22 as seen in Figure 13, at a rate that seems to be marginally faster than the England rate. Nottinghamshire does however remain below the England average (Nottinghamshire 46.3%, England average 49.3%). This is likely a result of Nottinghamshire having significant District variation with some districts falling below the England average, and some above.



Figure 14: Breastfeeding prevalence at 6-8 weeks, by District



There are significant differences in the prevalence of breastfeeding at 6-8 weeks between Districts in Nottinghamshire. In some Districts the impact of Covid-19 can clearly be seen. Figure 14 above shows that Mansfield and Bassetlaw, during 2019-20 and 2020-21, had a significant decrease in 6–8-week prevalence rates. Rushcliffe and Broxtowe continue to have high prevalence largely unaffected by the pandemic, suggesting that breastfeeding may have been most impacted in our more deprived areas. Across Nottinghamshire during 2021-22 there was an increase in breastfeeding rates overall.

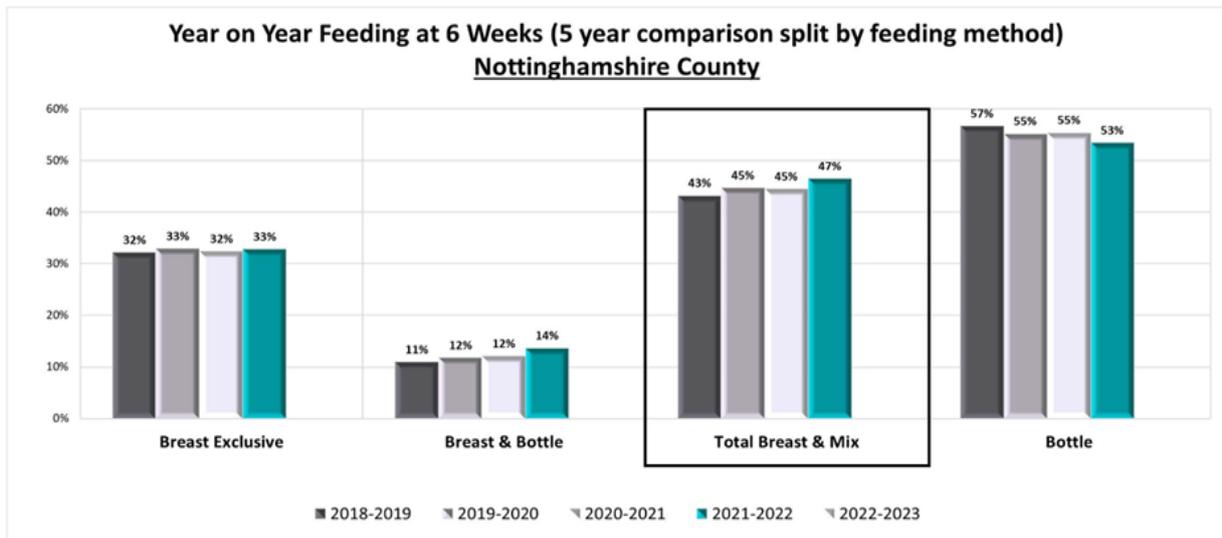
Findings nationally indicated that breastfeeding was impacted the most in deprived areas, whereas mothers in more affluent areas experienced an increase in breastfeeding rates, potentially due to some mothers having the time and/or support to focus and establish feeding with reduced external pressures.

Figure 15 looks at feeding method, and highlights that during the Covid-19 period the infant feeding methods across Nottinghamshire remained relatively static with a slight, non-significant reduction in exclusive breastfeeding. There is a statistically significant increase in the percentage of babies being fed by breast and bottle in Nottinghamshire in 2021-22, in comparison to 2020-21, but there was no statistically significant change between 2019-20 and 2020-21.

Overall, both breast and mixed feeding i.e., babies receiving any breast milk, at 6-8-weeks has increased from 43% in 2018-19 to 47% in 2021-22, indicating a positive post-Covid recovery. This in turn has led to a drop in bottle only feeding.



Figure 15: Breastfeeding prevalence at 6-8 weeks, by feeding method



Source: Healthy Family Teams & Family Nurse Partnership COVID-19 Impact Assessment, Nottinghamshire Healthcare Foundation Trust

Positive impacts of Covid-19 on breastfeeding were reported in Covid impact survey, including that having time to themselves and no visitors resulted in mothers feeling more relaxed and able to meet babies needs when breastfeeding, and partners could also support if at home.

“The ability to stay home with no visitors meant I was able to freely meet babies needs and dedicate the time needed to breastfeed on demand”

“For me I think it helped as we were unable to go anywhere so I had more time and confidence to feed baby.”

Source: Nottinghamshire Covid Impact Survey (2022)

7.2 Food insecurity and childhood obesity

Nutritious food is vital for babies and children’s development. At both extremes malnourished and overweight infants and children will experience poorer physical and mental health outcomes, with impacts on their development.

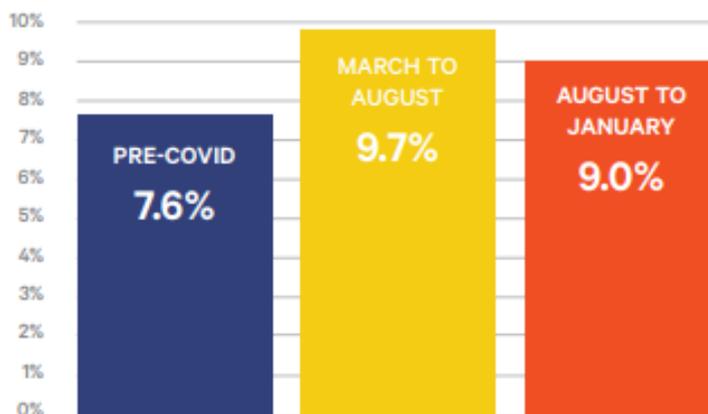
National Picture

Household food insecurity is understood as the lack of access (physically, socially, economically) to safe and nutritious food to meet individual needs for a healthy and active lifestyle (WHO, 2021). Food insecurity was prevalent in the UK before the pandemic but appears to have been exacerbated by Covid-19 (EIF, 2020), as illustrated in the below Figure:



Figure 16: Proportion of households experiencing food insecurity (national)

Percentage of all households experiencing food insecurity during the pandemic (6-month recall period 2020-21) compared with pre-Covid (12-month recall period).



Source: *The Food Foundation, 2021*

Initially, supply issues caused problems in the availability of food with the purchasing of some foods restricted due to lack of supply and panic buying creating food insecurity. As supply issues improved economic issues proceeded to get worse and this overtook as a main reason for food insecurity and continues post-Covid. Compared to the previous financial year, there was a 33% increase in the number of emergency food parcels required between April 2020 and March 2021 (Trussell Trust 2021). The increase was greatest for food parcels for children rather than adults. This may be to do with the fact as income fell families were struggling to feed themselves, which was particularly the case for single parents. For such parents' financial vulnerability explained 5-20% of the likelihood of being food insecure during the pandemic (Mills, Albani & Brown, 2021).

Families who were in receipt of income-related benefits were five times more likely to make use of foodbanks (Joseph Rowntree Foundation (JRF) 2021). More recent findings do however indicate some further improvements, suggesting Government measures such as the continuation of Free School Meal provision during lockdowns and holiday provision funded through the Covid Winter Grant Scheme did help prevent a deterioration in the winter of 2021 (The Food Foundation, 2021).

This inevitably has also impacted on the quality of food eaten with unhealthy choices in everyday meals and snacking increasing during the pandemic (EIF, 2021) and those with lower incomes eating nearly a whole portion less of fruit and vegetables (The National Food Strategy 2020). In a sample of 3–5-year-olds living in deprived areas parents reported their children did eat more snacks, but families did spend more time cooking and eating together (Clarke et al. 2021). Some countries have since reported an increase in obesity rates in children and adolescents (EIF, 2021).

The Covid-19 pandemic drew attention to the wider food insecurity agenda (e.g., Marcus Rashford's free school meals during school holidays campaign) and may have tackled some stigma sometimes attached to food support services (e.g., people facing unexpected hardship and applying for universal credit and / or food bank support).



The National Child measurement Programme (NCMP) annual report (2021) shows the largest increases in childhood obesity prevalence across the country since the programme's inception in 2006/07. Obesity rates in both Reception-aged and Year 6 school children increased by around 4.5 percentage points between 2019-20 and 2020-21, this is the highest annual rise since the NCMP began in 2006-07, the previous highest rise was less than 1 percentage point (OHID, 2022).

Local Picture

Emergency food parcels issued by The Trussell Trust foodbanks (one of many providers and therefore an underestimate of need) in the East Midlands increased 1.4 times from 101,788 in 2019-20 to 138,767 in 2020-21. This decreased to 126,877 in 2021-22 (OHID, 2022).

35% of parents responding said they did worry **sometimes** and **26%** said that they did worry **often** about having the money to buy food for themselves and their families during the pandemic.

33% of professionals responding to the Covid impact survey reported that families struggled to feed their families during and after the pandemic, and 47% were unsure on the impact Covid-19 itself had. This may be due to the demographics of those answering the questionnaire not providing a true representation of our local population and those most likely to be experiencing food poverty.

26% of parents/carers responding to the survey stated that they often worry and 35% sometimes worry about having the money to buy food for themselves and for their families. Some families used food banks and food clubs with a few turning to family as support.

Data from the Nottinghamshire review of the impact of Covid-19 on child and family poverty (Nottinghamshire County Council (2021), shows that 22% of responses did worry about having the money to buy food for their family during the pandemic and 17% sometimes worried. 2 people often used foodbanks with 9 people sometimes using them (86 responses).

“Despite struggling financially, I am not eligible and all of the schemes in place in my area require you to be recognised as on a low income. Does not support people or families on varied incomes or whose work opportunities have been affected by the lack of childcare options & availability of shifts.”

Source: Nottinghamshire review of the impact of Covid-19 on child and family poverty

Much work has been undertaken since the pandemic in Nottinghamshire to address these issues. The [Sustainable Food Network](#) [previously the Food Insecurity Network] is led by Public Health and continues to have food insecurity as a priority since 2021, bringing together county level action with District and neighbourhood action majoring on VCS action and linking with the city and universities. It brings together all of the key partners and facilitates and enables better action locally.



Nottinghamshire Council recently approved the [Food Redistribution grant fund](#) and there is also the recent NCC Public Health funded [food insecurity grant fund as part of the Cost of Living response](#).

Childhood obesity

It is difficult to determine the impact of Covid-19 on the prevalence of overweight and obese children in Reception due to school closures impacting the 2020-21 National Childbirth Measurement Programme (NCMP) data collection. The most recent data indicates that within Nottinghamshire and amongst the seven Districts the prevalence of overweight or obese children in reception has remained relatively static over the past 5 years (OHID, 2023).

Childhood Obesity Trailblazer Programme - Early years food environment (July 2019 – June 2022)

Nottinghamshire was one of five Local Authorities selected to take part in a three-year national programme: the Childhood Obesity Trailblazer programme. The purpose of the programme is to improve the home and community food environment of families with children in the early years living in areas of higher childhood obesity prevalence (for more information on the six objectives, please [visit](#)). Due to the timing of the programme, it was delivered flexibly with agility to best align with Covid-19 humanitarian response, specifically around food insecurity. For example, original plans for testing the Family Action Food On Our Doorstep (FOOD) Club scheme in four children centre service buildings to improve access to affordable healthy food, was rapidly expanded across Nottinghamshire with 22 FOOD clubs in operation in community venues and children's centres. This was funded by Covid-19 emergency grants in partnership with District and Borough and the County Council. The main motivational aspect for people accessing FOOD clubs was financial as the pandemic added more strain on families at this time. Importantly, as FOOD Clubs and other food redistribution schemes obtain their food supply from the general food system, they are an opportunity to provide low-cost healthy fresh food, and also complement other schemes such as promotion of Healthy Start and providing support and guidance on healthy eating and cooking on a budget.

“My husband lost hours. Then the pandemic hit. I heard about the FOOD Club through school. We needed something that helped us. It’s not just unemployed people that need help. It’s low-income families, families who are working but whose income has taken a hit because of COVID. I hope it continues.”

Source: FOOD Clubs Participant Key Findings (2021)

The national / local lockdowns prevented face-to-face engagement with key groups, specifically the families of children under the age of 5.

7.3 Access to outdoor space and physical activity

Physical activity has many health benefits for children including bone and muscle health, cardiovascular fitness and supporting a healthy weight. Participating in age-appropriate physical activity allows infants and young children to reach developmental milestones appropriately and earlier than infants who are not exposed to the same level of activity (EIF, 2021).



National Picture

From a study involving interviews with 20 parents of 3–5-year-olds most parents reported a reduction in their children's physical activity and an increase in screen time during Covid-19 (Clarke et al. 2021). Parents reported disliking the use of screen time as an entertainment tool but felt they had no other option when looking after their children and needing to work (Allen & Vilija, 2022). Whilst there is a lack of UK evidence around physical activity for under 5's, most studies of older children or studies from other countries report a decrease in physical activity as well as a decrease in positive attitudes towards physical activity as a result of Covid-19. Variability does exist across countries suggesting the impact will be contextually dependant (EIF, 2021). Research does however suggest very young children found it difficult to engage with anything delivered online such as Joe Wicks and Cosmic Kids which were popular with some (Allen & Vilija, 2022).

It is not surprising that lockdown and social isolation were much more harmful to those without access to gardens as during certain periods they were limited to indoor space (Marmot et al 2020). Access to outdoor space for play and spending time with other children became important during the Covid-19 recovery for them to heal from the various stresses the pandemic has entailed (The Childhood Trust, 2020).

Local Picture

Professionals responding to the Nottinghamshire Covid-19 impact survey felt that there was a negative impact on children's activity levels during the pandemic.

83% of responses felt there had been a **negative** impact on the physical activity levels of children and families.

Professionals noted that they had observed more obesity and fewer opportunities for children to be physically active, as they were often restricted to the house with groups and parks being closed:

“Limited time outdoors and not been able to visit places where they could access physical activities.”

Source: Nottinghamshire Covid Impact Survey (2022)

43% of parents and carers reported that Covid-19 did negatively impact on how active their families were with 36% saying it was a change for the better. This disparity is likely to relate to families' circumstances at the time as the experience was unique for everyone e.g., whether they were furloughed, were working and home-schooling and if they had their own garden and access to internet. Those with access to gardens and outdoor space found they were walking more:



Time together, daily walks, slower pace of life, appreciate and link with neighbours and local community.

Made us re-evaluate what was important and make better use of resources around us like walks and playing in garden.

Out walking more as there was not much else to do which meant we were healthier.

Source: Nottinghamshire Covid Impact Survey (2022)

When asked about if these changes remained, 65% stated that this was not the case now, indicating that the changes in physical activity levels throughout the pandemic have not necessarily been sustained.

7.4 Diabetes in children and gestational diabetes

National Picture

The NPDA (2021) found the incidence of Type 1 diabetes increased significantly by 21% in 2020-21 amongst those aged 0-15 years, from 25.6 new cases per 100,000 in 2019-20 to 30.9 in 2020-21. The increase during this period was higher amongst boys, amongst whom there was a 27.4% increase, compared to a 12.6% increase in girls. For type 2 diabetes there was an increase of 12% compared to the total number reported in 2019-20 (NPDA, 2021). There is currently very limited research around diabetes in under 5's to draw any meaningful conclusions around the impact of Covid-19.

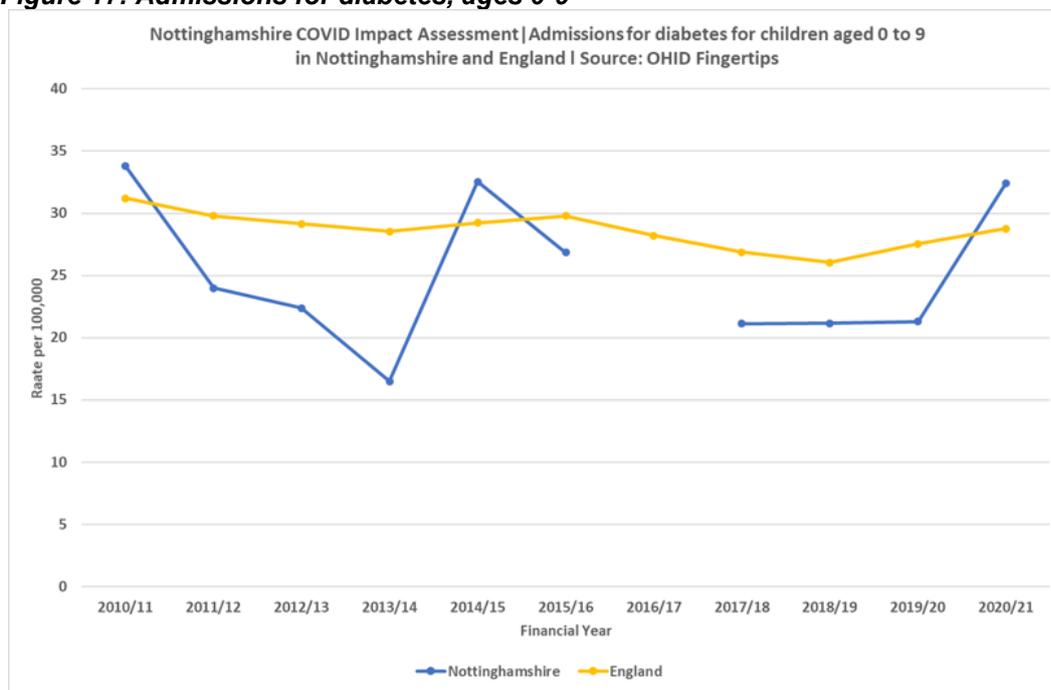
Local Picture

Admissions for diabetes in children aged 0-9 years old sharply rose during the first year of the pandemic to overtake the England average (from 2019/20 to 2020/21), see Figure 17. It is currently unclear what the driver for this was and whether it relates to any increases in need or severity.

There are only a small number of children under 5 who have coded active diabetes (e-Healthscope, 2022) suggesting this change may relate more to the 5–9-year age range. Due to the very small numbers of diabetes in under 5's it is very difficult to determine any local impact of Covid-19.



Figure 17: Admissions for diabetes, ages 0-9



Note: 2016-17 value not presented due to an issue with HES coding.

For gestational diabetes in Nottinghamshire there was a noticeable drop in diagnoses that coincides with the first lockdown (eHealthscope 2022). However, this was likely influenced by the changes in the way gestational diabetes was diagnosed. Glucose tolerance testing at 24-28 weeks (glucose drink & blood testing) is the usual testing method which was stopped nationally and replaced by HbA1c testing which was found to be less effective (Van-de-l'Isle et al, 2021). Similar to diabetes in under 5's it is therefore difficult to determine any local impact of Covid-19 on rates.

7.5 Child Safety

National Picture

From previous experience we know that violence and vulnerability increase for children during periods of school closures associated with health emergencies (Cluver et al. 2020). This can be a result of an increase on caregivers' stressors in life (NSPCC, 2022).

There are indications that the conditions caused by the Covid-19 pandemic heightened the vulnerability of children and young people to certain types of abuse, for example online abuse, abuse within the home, criminal exploitation, and child sexual exploitation (Romanou & Belton, 2020). From reviewing child protection medical examinations in one UK hospital, domestic violence, mental health, and drug abuse in parents remained the predominant risk factors for abuse in children in both 2019 and 2020. (Handi, Wright, & Lokhandwala, 2021).

The government's 2020-21 data on serious incident notifications found that from April to September 2020, there was a 31% rise in incidents of death or serious harm to children under 1 when compared with the same period in 2019 (Child Safeguarding Incident Notification System, 2021). Between April and October 2020, Ofsted had over 300 serious incident notifications. Almost 40% of these were about babies. This was over a fifth more than for the

same period the previous year. Over half of the cases about babies related to non-accidental injuries (OFSTED, 2020) (3).

Figure 18: The Impact of Covid-19 on vulnerable children and families

The impact of COVID-19 on vulnerable children and families is significant ¹		
<p>Increase in stressors to parents and caregivers</p> <ul style="list-style-type: none"> Stressors include financial insecurity, alterations to routine, juggling multiple responsibilities including work, full-time childcare and care for family members who may be shielding or ill The exacerbation of existing stressors and introduction of additional ones could increase the risk of physical, emotional, and domestic abuse, neglect 	<p>Increase in children's vulnerabilities</p> <ul style="list-style-type: none"> For children and young people who are already experiencing abuse or neglect by household members, confinement at home has meant prolonged exposure to potential harm and also have reduced access to trusted adults Increase access to social media and online resources increases the risk of grooming or other online harms 	<p>Reduction in normal protective services</p> <ul style="list-style-type: none"> Lockdown has meant that families are having fewer interactions with the services and social institutions designed to help them and are receiving only a fraction of the support and scrutiny that would normally work together to protect their children from maltreatment

(NSPCC Learning, 2020)

There is evidence that the 'normal' safeguards we rely on to protect children were reduced during the pandemic (Romanou & Belton, 2020). For example, a survey of UK parents of under two-year olds from April to June 2020 found that only 11% had seen a health visitor face-to-face during the early days of the pandemic (Saunders and Hogg, 2020). Such reductions in face-to-face visits reduces the opportunities for health professionals to detect any early signs of abuse. Consequently, levels of child protection referrals dropped across the UK, of which the greatest drop was evident from schools who also play an important role in detecting signs of abuse and acting on these. (NSPCC, 2022). However, despite the substantial fall in referrals, there was only a small decrease in children entering the child protection system. The number of children becoming the subject of a child protection plan decreased by 4 per cent, from 2019-20 to 2020-21 (DfE, 2021d).

Furthermore, various studies across the country show there was an initial reduction in acutely ill or injured children attending A&E (Isba et al. 2020; Nijman et al. 2022). Reasons for this are unclear but may be a result of reduced accidents and illness with less communicable infectious diseases reported (Nijman et al. 2022), seeking support from other avenues and not wanting to attend A&E. There is some evidence from a large-scale study to suggest parents were waiting longer before attending A&E with paediatricians seeing children later than they would have prior to the pandemic (Lynn et al, 2020). However clinical severity scores did not suggest children were presenting with more advanced disease (Williams et al. 2021) implying children were attending only when necessary. Reasons for attending appeared to vary with Gloucestershire for example experiencing upward trends in burns and dog bites during the pandemic, indicative of the burden and stressors placed on households (Jackson et al. 2021).

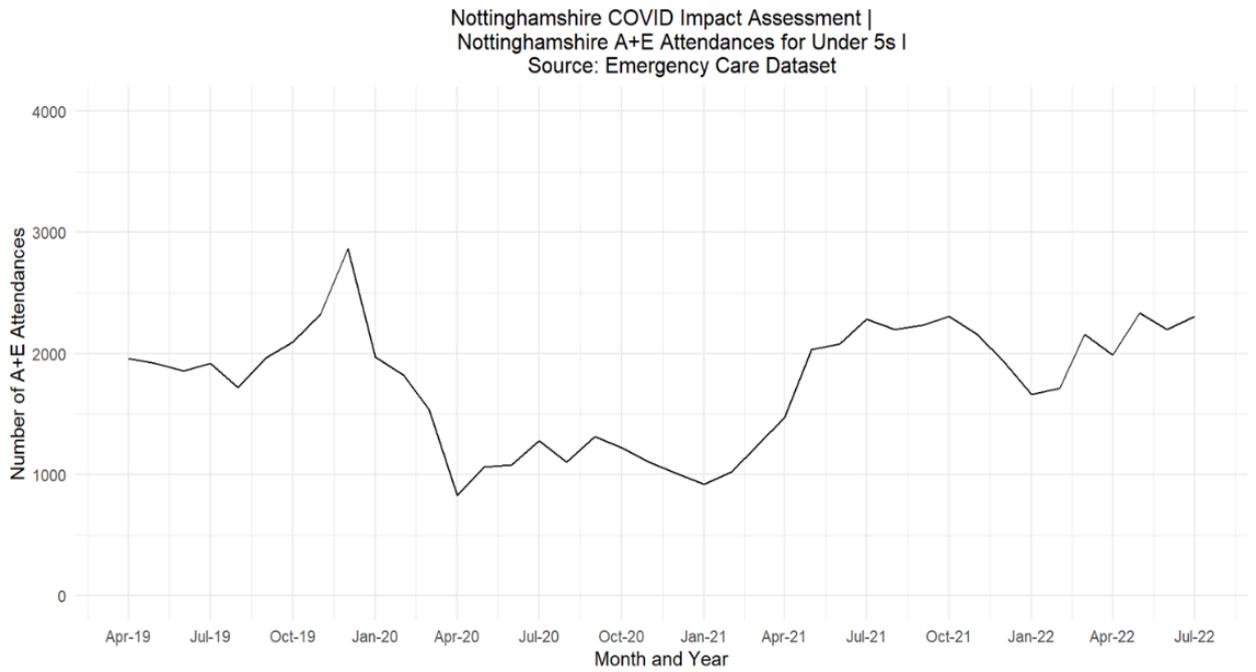


Local Picture

A&E attendances

The level of attendances in under 5’s as highlighted in Figure 19 below dropped throughout 2020 with troughs related to the lockdowns. This has recovered to pre-pandemic levels and for the first 4 months of 2022-23 the data shows a 15% increase on the same period in 2019-20.

Figure 19: A&E attendances for under 5’s



During lockdowns A&E attendance in all districts fell to similar levels, as summarised in Figure 20 below. There is now much greater variation in attendance levels than pre-pandemic with Mansfield having the lowest number of attendances. This might be related to King’s Mill Hospital having a Child Assessment Unit which children are signposted to from their GP or 111, and are encouraged to attend here instead of A&E.



Figure 20: A&E attendances for under 5's, by District

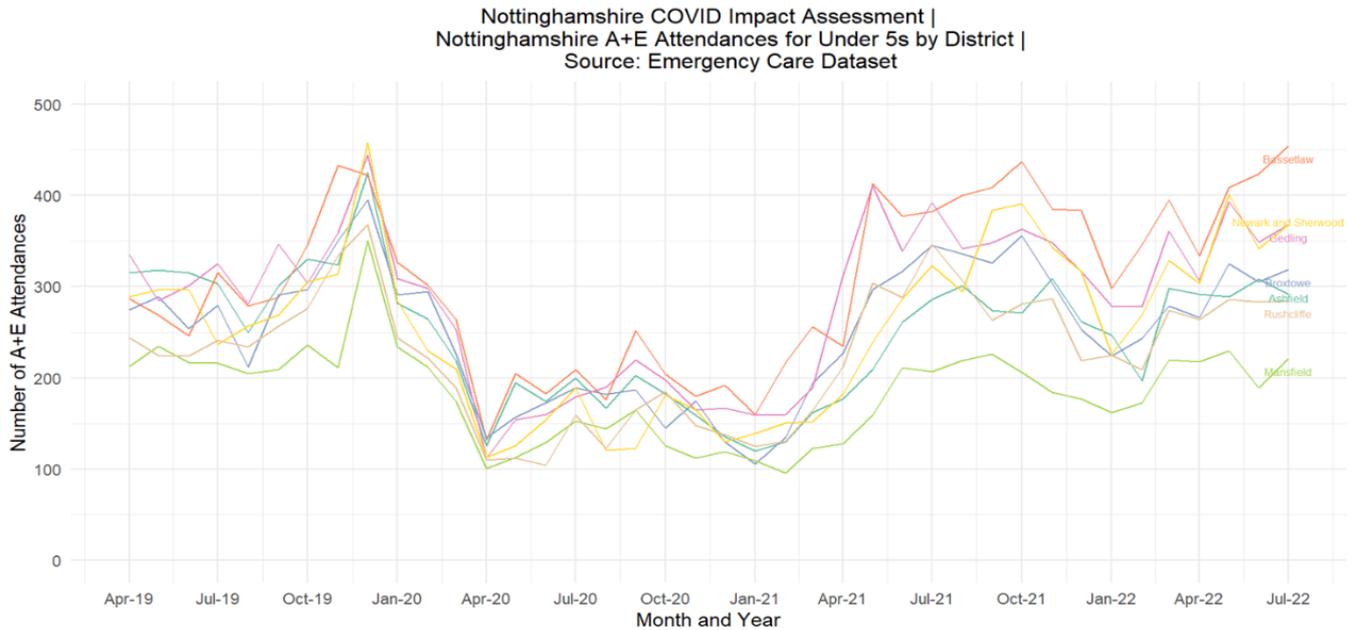
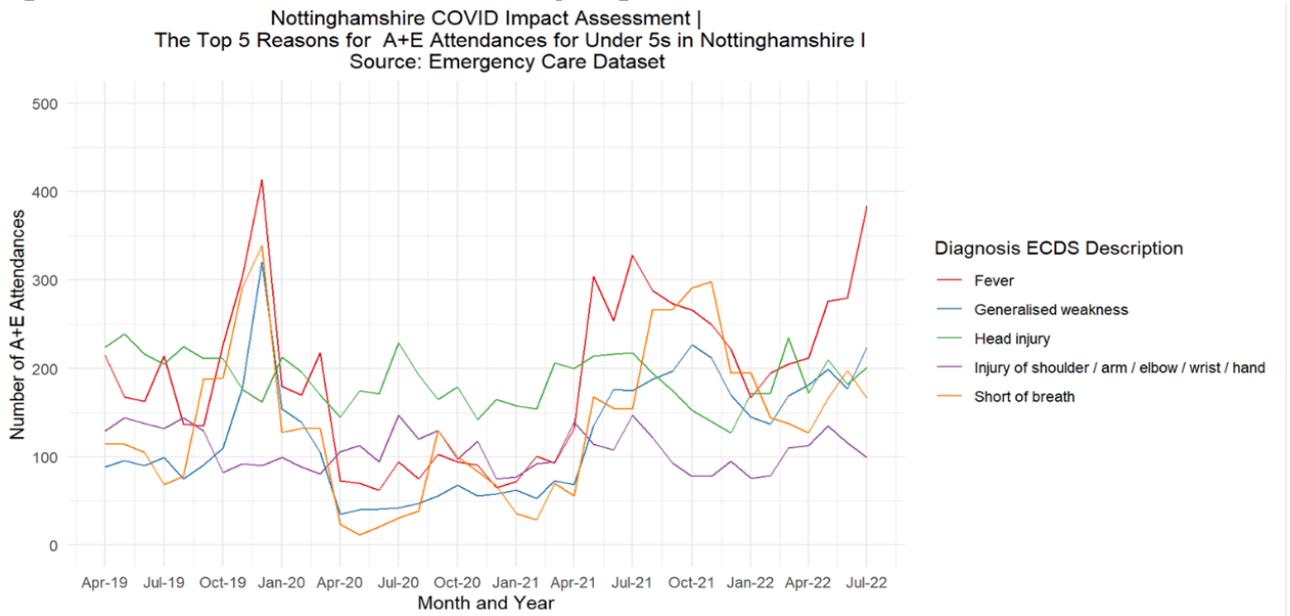


Figure 21 summarises the numbers of key presentations to A&E since April 2019. It highlights that some diagnoses have stayed similar throughout the pandemic, such as head and body injuries. The number of presentations for other conditions, such as fever, shortness of breath and generalised weakness have varied significantly with troughs associated with lockdown restrictions. These reductions in attendance could have been due to Covid restrictions reducing the levels of respiratory illness, a more appropriate use of A&E, a reluctance to attend A&E, or there may have been other drivers. It is important to better understand use of A&E by families.

Figure 21: A&E attendances for under 5's, by diagnosis





One parent, by survey, reflected on the impact of testing and PPE on their young child:

“My first son went into the pandemic just over one year old and being made to do tests if he had to visit hospital with his breathing, or because he had a cough at nursery really impacted him. He was beyond terrified of the sticks that went up the nose. And due to us having to sometimes pin him down to do it to be able to go to the above he ran away crying when he saw me with a test kit, and he would shout and cry "no not there take me home" when only driven past the test centre on the way to nursery. He became so scared of any doctors I think the PPE to him was scary that getting him to see a GP was traumatic for all involved and he would scream kick shout. It took nearly 2 years for him to trust a doctor is a nice person.”

Source: Nottinghamshire Covid Impact Survey (2022)

7.6 General vaccination uptake

Vaccinations protect against life-threatening disease and reduce infant morbidity and mortality globally.

National Picture

There is evidence to indicate that routine vaccinations in infants saw a significant reduction because of the Covid-19 pandemic in the UK and elsewhere. At the height of the pandemic, evidence suggests that some families in England were unaware that routine vaccinations should continue, and some had difficulty accessing vaccination appointments (Early Intervention Foundation, 2021). Those more likely to be unaware that vaccinations were continuing to be delivered, were households reporting an income of less than £35,000 per annum compared to households with an income of £35,000 to £84,999. (Bell et al, 2020).

In the early stages of the pandemic in the UK, notably three weeks after social distancing measures were introduced, measles mumps and rubella (MMR) vaccination counts in children were 20% lower and hexavalent¹² vaccination counts were 7% lower. (McDonald et al, 2020). More recent data collected by Public Health England from January to March 2021 (Public Health England, 2021) on vaccination coverage for children who reach their first, second, or fifth birthday during the evaluation quarter, reported some increases in vaccination coverage, however a large portion decreased. For example, in England, coverage decreased for all the vaccines offered from the first birthday (PCV booster, Hib/MenC booster, MMR1 and MenB booster), coverage for MMR2 decreased and the pre-school booster also decreased.

Local Picture

Generally, the vaccination rates in children living in Nottinghamshire, across the childhood immunisation programme, have remained relatively static in roughly the 90%-97% range depending on the indicator. Review of data at primary care network (PCN) level indicates that vaccine uptake may have been impacted differently in areas across the county, however further exploration is needed.

¹² 6 in 1 vaccine that vaccinates against diphtheria, tetanus, pertussis, polio, Hib and hepatitis B



The only vaccine with a significant change is flu vaccination coverage in 2–3-year-olds, Figure 22 shows a sharp increase in coverage in 2020-21 with a slight drop off in 2021-22. This could be as flu is also a respiratory disease similar to Covid-19.

Figure 22: Flu vaccine coverage, at 2-3 years old

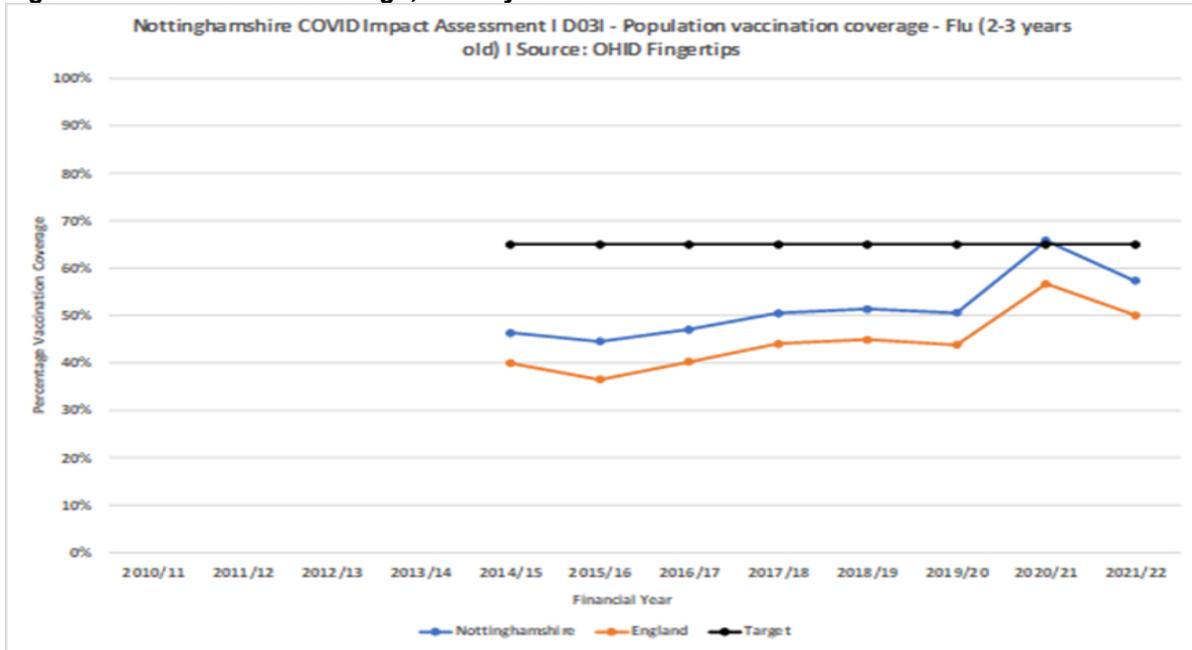


Figure 23 details uptake of the flu vaccine by primary care network (PCN) showing that changes in uptake were relatively consistent across Nottinghamshire, rather than being focused in specific geographic areas.

Figure 23: Flu vaccine coverage, at 2-3 years old, by Primary Care Network

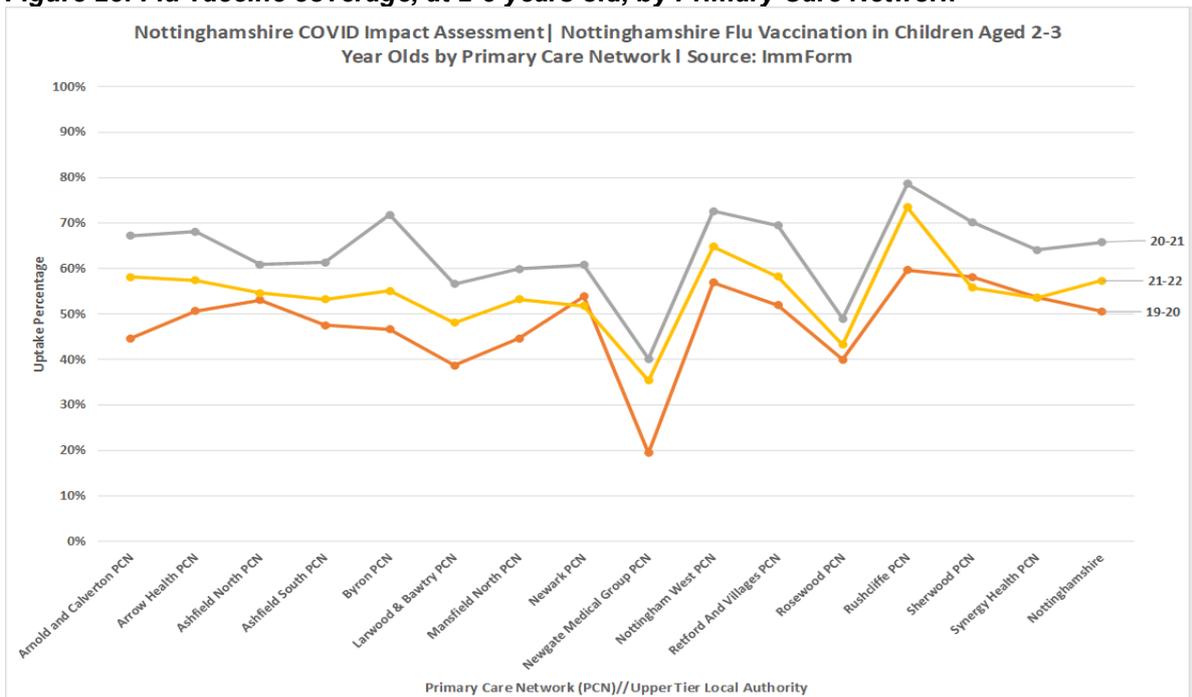
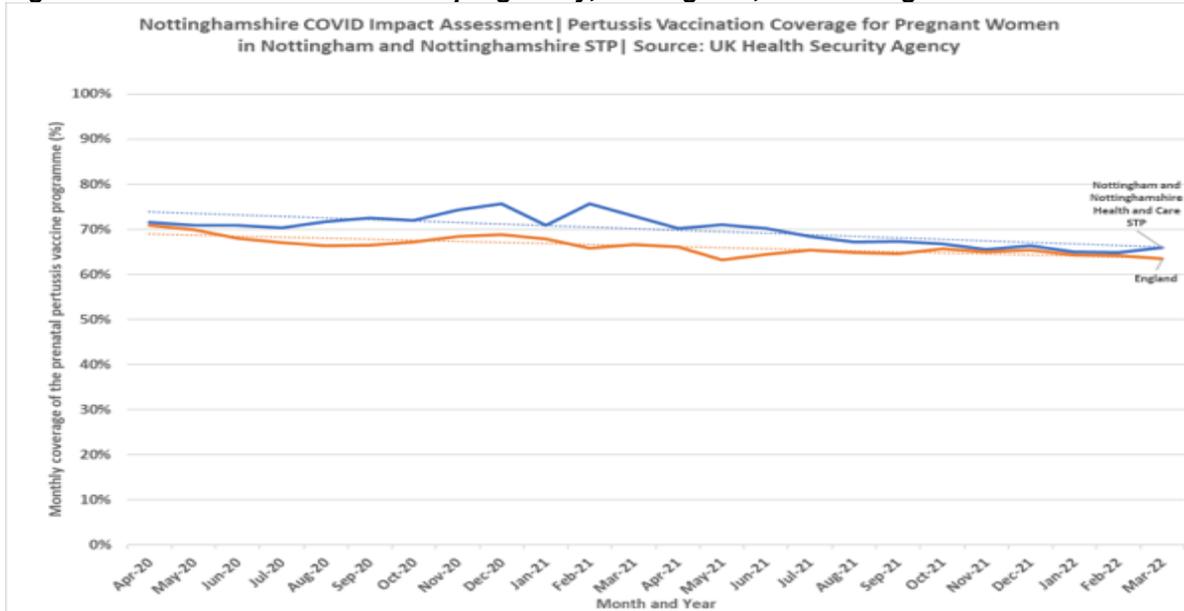


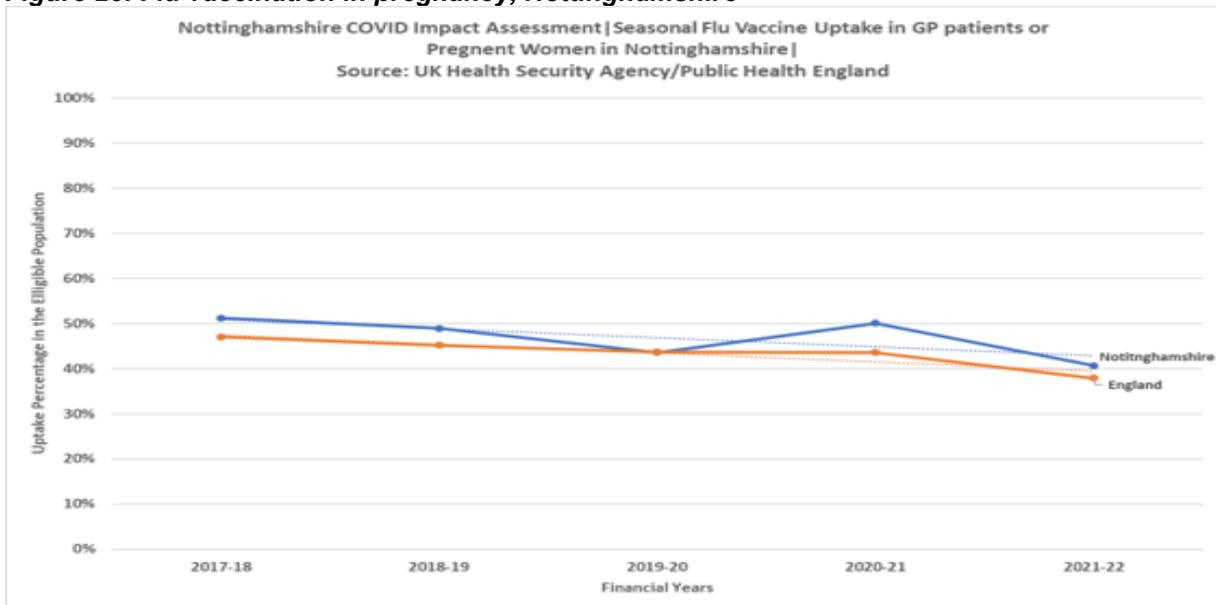


Figure 24: Pertussis vaccination in pregnancy, Nottingham, and Nottinghamshire



There has been a decline in vaccination take-up for pertussis especially after the second set of lockdowns as summarised in Figure 24. Due to the availability of the data this includes Nottingham City and Nottinghamshire but excludes Bassetlaw. Nottinghamshire is above the England average but falling slightly faster.

Figure 25: Flu vaccination in pregnancy, Nottinghamshire



Note: (This data includes all women already pregnant or becoming pregnant (in the first, second or third trimesters) as diagnosed by a medical professional from 1 September. Accurately identifying this denominator is challenging and denominators may be regarded as over-inclusive as they may include women that become eligible and then ineligible before they are vaccinated. Vaccine uptake for pregnant women is likely to be underestimated.)

There has been a general downward trend in flu vaccination take up in pregnant women in recent years. There is a slight increase in take up in the first flu season following the start of the pandemic as indicated in Figure 25. Nottinghamshire is above the England average but falling slightly faster.



7.7. Oral health and dental access

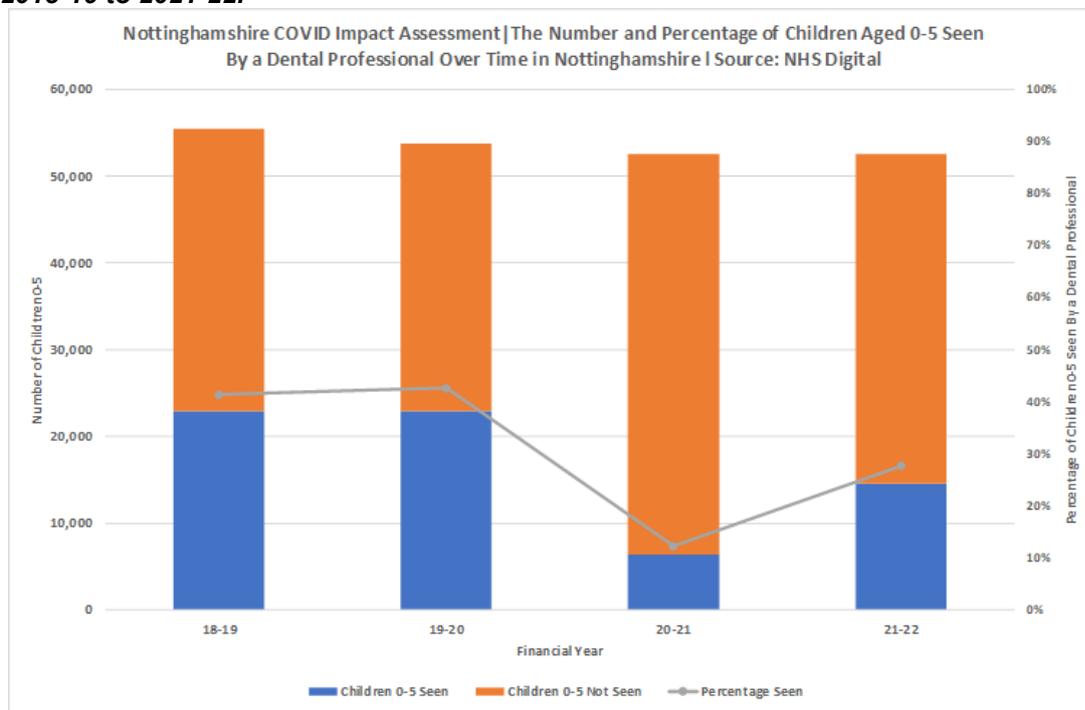
National Picture

It is recommended that children visit a dentist when their first milk teeth appear and have regular check-ups following this, so they become familiar with the environment and the dentist. During covid-19 dentists were closed, had periods of providing emergency care only and had to bring in extra safety and cleaning measures meaning routine appointments were impacted. Furthermore, health visitors and school nurses play a valuable role in giving oral health advice, especially to vulnerable families and their contact was impacted. There is also evidence to suggest children may have had exposure to more sugary snacks and unhealthy foods (EIF, 2021), increasing their risk of tooth decay.

Local Picture

The Covid-19 pandemic has resulted in fewer children in the East and West Midlands being seen by dental professionals. The percentage of the child population seen across the Midlands in the year to 31 March 2020 was 58.6%. In the year to 31 March 2021, this had dropped to 22.2%. Data suggests that the largest drop in access seems to have been within the 0-4 age group which in the year to March 2021 was well below 50% of the year to March 2020 figure. From a low point in March 2021 the percentage of children seen in the Midlands in the previous 12 months to December 2021 has recovered to 42.7% of children (OHID, 2022).

Figure 26: The number and percentage of children aged 0-5 seen by a dental professional from 2018-19 to 2021-22.



Within Nottinghamshire, as shown in Figure 26 above, there was a sharp decline in the number and percentage of children being seen by a dental professional from 2019-20 to 2020-21. There has only been a slight recovery in the following year with the percentage seen remaining lower than it was pre-pandemic, suggesting many under 5s are unable or not accessing a dentist. It is important to note there are national challenges in access to dentistry, which are mirrored in Nottinghamshire.

8. Recommendations

The wellbeing of children and families need to be nurtured as they recover from the effects of the pandemic, to allow them to thrive. We are proposing the following recommendations within Nottinghamshire to support us in achieving this:

	Recommendation	Key Partners	Ambitions it relates to in the Best Start Strategy
Parent & carers wellbeing			
1	Continue to support those who may have experienced trauma through the birth process and/or perinatal period and who may be continuing to experience the long-term implications of this.	LMNS x 2 NCC NHFT	1, 2, 3, 5
2	Strengthen perinatal mental health pathways and care: <ul style="list-style-type: none"> • Strengthen data capture and reporting to determine need, address gaps, and measure progress more accurately • Increase engagement in perinatal mental health services • Identity and support 'low level' and emerging mental health need within families 	LMNS x 2 NCC NHFT	3, 5
3	Review and enhance our local antenatal and parenting programme offers to ensure they support key areas such as: <ul style="list-style-type: none"> • Early identification of maternal mental health problems and sources of support • Greater engagement with fathers/partners • Preparing & empowering parents for parenthood, increasing their resilience to face and overcome adversity • The importance of social support 	LMNS x 2 NCC NHFT	1, 3, 5, 6
4	Ensure that for any future pandemic/emergency planning the implications of the maternity restrictions and service delivery are taken into consideration, as outlined within this impact assessment and in greater detail within the Experiences of Maternity Services in Nottingham and Nottinghamshire during the COVID-19 Pandemic report (Nottingham & Nottinghamshire Maternity Voices & Healthwatch, 2021).	LMNS	1, 2, 3
Child Development			
5	Address the increasing speech, language and communication need (SLCN) that has emerged in the cohort of children most affected by the restrictions of the Covid-19 pandemic i.e., children who are now aged 2 and over, by:	NCC NHFT ICB	7, 8



	<ul style="list-style-type: none"> Implementing additional training in the early identification of SLCN to early years practitioners Carrying out a skills analysis regarding SLCN across the early years sector and regularly reviewing training opportunities Piloting the use of a new tool in settings that supports early identification of SLCN's, and guides professionals in the appropriate implementation of strategies to support emerging need Increasing capacity for targeted SLCN interventions for those aged 2 to 3.5 years Undertaking an audit or similar to better understand the reasons for the continued increase in referrals to specialist SLT. 		
6	<p>Deliver training to the early years workforce to help early years practitioners effectively support healthy social and emotional development:</p> <ul style="list-style-type: none"> Roll out Emotion Coaching to settings Deliver workshop-style training to settings 	NCC	3, 8
7	Roll out and promote "Peep" interventions via Children's Centre Services for parents/carers from pregnancy and across the early years. These interventions focus on the role of parents as early educators and champion parents and their babies/children learning together – building positive, sensitive relationships, enhancing home learning environments, and helping babies and children to become confident communicators and learners.	NCC	3, 7, 8
8	Ensure children continue to have access to high quality early years provision, in order to mitigate the adverse impact that the pandemic may have had on children's early experiences and development.	NCC	9
9	<p>Continue to review the emerging trends in early child development, where a decrease in the proportion of children meeting the expected level of development in relation to both communication and social-emotional skills at age 2-2.5 was observed, to understand if this continues.</p> <p><i>(Please note links to recommendations 5 to 8 re: communication and social-emotional development)</i></p>	NCC NHFT	7, 8
Health Outcomes			
10	Increase our understanding of patterns in A&E attendance to ensure children and families are accessing the most appropriate service for their needs.	ICB	6
11	Deliver and monitor targeted breastfeeding support in areas with persistently low rates, particularly in areas with	NCC LMNS x 2 NHFT	3, 6



	significant decreases in breastfeeding across the course of the pandemic.		
12	Explore data and trends in vaccination uptake in pregnancy and early years in more detail e.g. at smaller geographical areas and amongst demographic groups, to more effectively target areas of greatest need.	NCC LMNS x 2	2, 6
13	Understand and apply the strategies that were successfully used in the promotion of flu vaccination in 2–3-year-olds in 20-21, as well as successful campaigns undertaken by comparator areas, to increase uptake in future years.	NCC NHFT	6
14	Given the national challenges in access to dentistry, it is important to explore any opportunity to improve oral health in the early years, including preventative interventions such as health promotion and fluoridation.	NCC	6
Best Start for Life Offer			
15	Drive forward the development of Family Hubs across Nottinghamshire, publish and integrate our Best Start for Life Offer, informed by engagement with parents and carers. This will support both parents and professionals to have greater clarity around where to signpost and seek support.	NCC LMNS x 2	All
16	Promote our Best Start for Life Offer, local services and resources to parents-to-be as early as possible in their journey of parenthood. This will require continued close working and collaboration with key services who would play a significant role in this, such as maternity.	All	All
Inequalities			
17	Research suggests the pandemic has disproportionately and adversely impacted vulnerable families and children the greatest and is likely to have exacerbated existing inequalities (e.g., in low-income families, BAME groups, socially isolated, those with mental health issues.) All recovery work needs to prioritise understanding the specific inequalities within that area and working to address these.	All	All
Service Delivery			
18	Services continue to understand the benefits and downsides of blended service delivery models within their service (e.g., online, face to face) and build on the strengths this can provide to meet individual family's needs more effectively, without compromising on quality and safety.	All	All

Partners: Key

LMNS: Local Maternity & Neonatal System. Within Nottinghamshire we have two, Nottingham & Nottinghamshire and South Yorkshire & Bassetlaw

NCC: Nottinghamshire County Council

NHFT: Nottinghamshire Healthcare NHS Foundation Trust

ICB: Nottingham and Nottinghamshire ICB



Best Start Strategy Ambitions Key:

11. Prospective parents are well prepared for parenthood
12. Mothers and babies have positive pregnancy outcomes
13. Babies and parents/carers have good early relationships
14. Parents/carers are engaged and participate in home learning from birth
15. Parents/carers experiencing emotional, mental health and wellbeing challenges are identified early and supported
16. Children and parents/carers have good health outcomes
17. Children and parents/carers are supported with early language, speech and communication
18. Children are ready for nursery and school and demonstrate a good level of overall development
19. Children have access to high quality early years provision
20. Parents/carers are financially resilient and can access secure employment

Implementing these recommendations will also support priorities previously identified within the [Nottinghamshire Health and Wellbeing Strategy \(2022-2026\)](#) and the [Nottinghamshire Plan \(2021-2031\)](#).

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APPENDICES

APPENDIX 1: COVID IMPACT SURVEY, PARENTS AND CARERS

A local Covid impact survey for parents and carers was developed based on key topic areas informed by the early findings from the literature review. This was widely promoted to parents and carers during October 2022 through established Council networks and Facebook pages.

There were 182 responses to the parents and carers survey received. Key findings from the survey are included in the main report. Due to the size of the document the full survey results have been excluded from this appendix, however they are available on request from the public health department.

The comments left by parents and carers were analysed using a step-by-step approach:

- separating the responses to the free text questions by individual question
- carrying out a detailed review of all responses to identify common and unique themes
- identifying, then combining, themes where appropriate and relevant
- write-up of summary analysis by theme, selecting appropriate and representative quotes

This appendix provides a summary of the analysis.

Please note, whilst the survey was distributed widely, it is recognised that the results provide a self-selecting sample rather than a representative sample, however the experiences they describe are impactful and often emotive. Nearly all responses were from females with the majority falling within the 31–35-year age range and describing themselves as White British. Respondents tended to fall into mid to higher income brackets and the majority were from two person households. When completing the survey some respondents did not answer or skipped a number of questions.

Summary of key themes and findings

The respondents' comments were analysed around a number of emerging themes:

- Child development
- Infant feeding and access to food
- Pregnancy and birth
- Mental health and wellbeing

➤ Child development

There were four main development questions included in the survey. A summary analysis of the comments left by parents and carers is provided for each question.

Did you see a change in your child's or children's communication skills during and after the pandemic e.g. speech and understanding?

Generally, parents responded that their children's speech had been delayed, although some suggested their children were ahead of their age as they had been surrounded by adults or older siblings. Those that had delays encountered waits for speech and language services, some turned to self-help and reported that they 'caught up' that way. It was the younger children ages 18 months to 2 years that seemed the most affected. It was reported that when the pandemic ended there was a significant improvement, and many 'caught up'.



Did you see a change in your child's or children's social skills during and after the pandemic?

The most common response was that children had got used to only seeing their family during lockdown and when it ended, they initially struggled to interact and socialise with other children. Many responded that children were wary of people outside of their household. Some became clingy and shy although this seemed to ease in most post lockdown. Parents observed that older children and those that attended settings were less impacted than those who knew no different.

Did you see a change in your child's or children's physical skills during and after the pandemic e.g. jumping, climbing, cutting, threading?

The responses to this question broke down into two parts, there were a group who went outdoors and exercised and had physical play and those that had disabilities that affect this independently of Covid. Of those that did not have disabilities it was a mixture of those that excelled with extra family time and those that had delays possibly due to the lack of groups where they could learn some of the skills.

Did you see a change in your child's behaviour during and after the pandemic?

The responses tended to be related to children's tantrums and outbursts as well as being shy and clingy. The outbursts seemed to be believed to be partly due to young children not understanding why their life had changed and afterwards why they could not always have undivided attention. Some children struggle with separation from their parents and how to interact with others outside of the family. There was also anxiety and stress reported after lockdown was lifted.

➤ **Infant feeding and access to food**

The main themes were around support in hospital and in the community including means of communication. Consequently, many parents and carers reported feeling that issues such as tongue-tie or baby not feeding were not picked up in a timely manner.

There were a cohort of respondents who due to lack of support or wanting expertise researched breastfeeding themselves, and mention of paying for breastfeeding and tongue tie resolution. There were positives reported, such as having more time to themselves and no visitors, meaning parents were more relaxed.

A few respondents mentioned financial concerns around attending a community kitchen or heating their home.

➤ **Pregnancy and Birth**

Pregnancy

The key themes in the area of pregnancy were:

- Fear of catching Covid-19 and / or fear of having the vaccination.
- Attending antenatal and scan or hospital appointments on their own (the adverse impact of this)
- Lack of face-to-face appointments.
- Sometimes having to hear difficult news or complex information on their own.



- Feeling less supported.
- Feeling lonely and being unable to meet other expectant mothers.
- Not being able to share the joy of being pregnant with others, and not being seen as pregnant.
- Lack of support with difficult experiences such as pregnancy loss and trauma.
- Working at home or being furloughed was often seen as a positive as pregnant women could spend time focussing on their health and wellbeing needs, and / or time could be spent with existing children ahead of birth.

Birth

The key themes in the area of birth were:

- Being unable to have partners with them until labour was established.
- Having to go through early labour and pain alone.
- Sometimes having to make difficult decisions on their own.
- Partners also missing out being able to support until labour established.
- Partners only able to stay for a few hours after birth.
- Isolated and traumatic not to have partner's support.
- No home birthing service running meant some women were unable to have the birth they had wanted.

Post Birth

The key themes in the area of post birth were:

- Lack of support was reported or felt to have caused post-natal depression.
- Looking after babies after C-sections own their own was difficult without partners around and a perceived lack or reduction of hospital support.
- Not able to have relatives, friends or wider support to help out.
- No baby groups to connect with other parents.
- Not able to celebrate births.
- Unable to meet and bond with grandparents.
- It was seen as positive that there was no pressure to host visitors to see new baby so they could focus on the immediate family.
- Partners working from home could spend more time bonding with baby.

➤ **Mental health and wellbeing**

The mental health questions lead to responses that clustered into around six themes.

1. Bonding and family.
2. Isolation and loneliness.
3. Disrupted or altered behaviour, and shyness and separation issues.
4. Fear of catching covid.
5. Post-natal depression and other mental illnesses.
6. Other comments.

Bonding and family

Spending time either working from home or being furloughed generally lead to positive comments from the respondents. Responses were around having time that they wouldn't normally have meant they could do things together without interruption or pressure of visitors. It was noted that fathers in particular got to spend more time with their children and new-borns



which they wouldn't have pre-pandemic and mothers commented that this improved the relationship between father and child.

However, not all of this was seen positively, there were comments about how intense this period was and it sometimes led to irritability, bad moods and an impact on relationships. There were worries around how difficult it was to teach and entertain children. Those with babies also found it difficult without being able to access support from family and friends.

Isolation and loneliness

Quite a few mothers of new babies, especially when it was their first baby, report that it was lonely and isolating not being able to go to baby groups and to meet other new mums. Being unable to have family and friends to support and help them was challenging.

Behaviour: disrupted or altered behaviour, and shyness and separation issues

This section broke down in to two separate but similar themes around (i) negative or disrupted behaviour and (ii) shyness and withdrawn behaviour.

Many reported that their children struggled and found it hard to understand why they couldn't go out or hug friends and family members often leading to frustration, outbursts and other challenging behaviour. This was also reflected in responses from parents of autistic children. Respondents report that this led to children who were anxious and that struggled with their emotions.

There were also many responses around children becoming more clingy, introverted and shy and who found it hard to be separated from their parents. Parents put a lot of this down to not mixing with other children or family and friends as well as spending a lot of time staying indoors.

Fear of catching covid

There were a number of respondents that worried about themselves or relatives or children catching Covid-19 leading to anxiety.

Post-natal depression and other mental illnesses

Women reported various mental illnesses such as depression, anxiety and especially post-natal depression, that they linked to their experiences of giving birth and becoming parents in the pandemic.

Other comments

Other responses mentioned parents with mental health issues prior to the pandemic and the difficulties that followed when their previous support was withdrawn. Parents mental health also deteriorated in lockdown, impacting on relationships.



APPENDIX 2: COVID IMPACT SURVEY, EARLY YEARS PROFESSIONALS

A local Covid impact survey for early years professionals was developed based on key topic areas informed by the early findings from the literature review. This was widely promoted to early years professionals during October 2022 through established NCC networks and commissioned services.

There were 30 responses to the professional's survey, largely from Healthy Family Programme Teams with good coverage of those working across Nottinghamshire. Key findings from the survey are included in the main report. Due to the size of the document the full survey results have been excluded from this appendix, however they are available on request from the public health department. This appendix provides a summary analysis of the responses to key questions.

Did you see an increase in the complexity or severity of the challenges faced by the families with 0–5-year-olds that you worked with during and after the pandemic? If you selected yes - what are the most common challenges?

The main thrust observed by professionals was the increasing problems with speech and language skills. This led to an increased number of referrals for these services and increased demand from some other services that were unavailable.

Early years professionals reported that during Covid and lockdowns increasing numbers of children missed developmental milestones. Another issue raised was the lack of socialisation, leading to children fearing those outside the family and not knowing how to manage their own behaviours.

Do you think the covid pandemic impacted on parents or carers of 0–5-year-olds mental wellbeing?

It was observed by professionals that new parents were isolated from support groups and wider family and friends. On occasions this was seen as a positive as parents who were working at home together or were furlough did get some quality time as a new family. However, this extra time together also led to strained relationships.

Professionals reported various anxieties and stresses for parents and carers around catching Covid-19, financial difficulties, losing work and home schooling. They also said that they observed more cases of post-natal depression and domestic abuse.

Do you think that the pandemic had an impact on children's physical development including gross motor and fine motor skills (0-5 years)?

Some professionals noted that they had observed more obesity and fewer opportunities for children to be physical active as they were often restricted to the house or that groups and parks were closed.

The development of gross motor and fine motor skills could very much depend on individual family circumstances. Some families who worked from home could focus more on encouraging children's activity and monitoring screen time as children had become more screen reliant. However, it was noted that this could also be dependent on the parent's mental health.

Do you think that the pandemic had an impact on children's behaviour (0-5 years)?



Professionals observed that as children had little variety of social settings and stimulus, they found it difficult to know how to interact with peers and adults. As parents had little support to manage their children's behaviour this sometimes led to more adverse and less social behaviour. It was also noted that parents and children were more anxious and clingier with noticeable increases in separation anxiety. This is leading to delays in development.

Has the pandemic impacted the support or services you are able to offer children and families?

Initially during the first lockdown professionals reported that services had been affected with time taken to adapt to online and MS teams working. The general response was that this enabled families who had difficulties travelling to services to access these more readily. It was also noted that virtual consultations and support better enabled fathers to be involved and generally improved the variety of communication methods. However, some professional reports that staff pressures and sickness meant caseloads increased. Also, some felt parents did not always look at electronic communications. It was acknowledged that virtual was not the same as face to face.

Have there been any successful adaptations, innovations or collaborations introduced during lockdown which you or your organisation are planning to maintain longer-term e.g., ways to communicate with parents or carers?

The use of MS teams and virtual consultations was widely welcomed. It made it easier for families to access, especially if they had travel or financial difficulties. Also, due to travelling time saved it meant professionals had more time for calls and consultations. It was mentioned that SMS was a successful communication tool especially during the recent postal strikes. Virtual meetings appeared to be more successful at engaging fathers.

Did you see any positives for children and families during the pandemic?

Some families spent more time at home leading to better bonding experiences and more time spent listening to children. This was especially the case for young babies as parents felt less rushed. This was not always the case as not all parents were at home and 24/7 being together could lead to tensions.

Some children and parents were relieved at children not going to school and this helped with anxiety around school and bullying, however, it was noted that this did not help in the development of mixing skills. There were some reports that access to services was easier without having to travel.

Are there any other comments you would like to make about how the Covid-19 pandemic impacted the children and families (age 0-5) you work with?

Professionals made a variety of comments, the impact on the development of speech and language was felt to have been "enormous", and a good portion of children had become introverted and shy. Phone calls were not thought to be as effective as face-to-face care and support. Also, professionals reported that it was only now that we were beginning to see the impact. Professionals stated that each and every family had a different set of circumstances and experiences. On the positive side, communications had been improved and that families were receptive to support that they can access easily.



APPENDIX 3: COVID IMPACT FOCUS GROUP, EARLY YEARS PROFESSIONALS

An invitation to participate in a focus group was circulated to early year's settings. Five practitioners working in settings across Nottinghamshire attended to share their valuable experiences of how Covid-19 and the Covid-19 restrictions had impacted on children's early years development and education. The information gathered at the virtual session held on the 3rd November 2022 helped to shape the CIA and supported the development of the recommendations.

Key points from the discussion have been brought together into themes:

- Overarching impact
- Socialisation, independence and behaviour
- Speech and language development
- Access to settings and childcare

Overarching impact

- 2-year-olds, 3-year-olds, 4-year-olds, and Reception children have had the greatest impact from Covid-19 and may continue to feel this impact for some time.
- Children are not achieving developmental milestones that would be expected (this has increased).
- Practitioners noted that it is not just about children catching up, their brains may not have had the opportunity to fully develop initial pathways and connections that are required to support ongoing development.
- There is a greater need to focus on stages not ages, to allow children to have time to repeat things, to revisit, and time to embed a particular skill. There is a need to implement a 'back to basics' approach with some children.
- Some children are attending settings and struggling with playing.
- The impact of the restrictions and lack of social opportunities are most evident in relation to children's language development, behaviour, boundaries and ability to interact with others. These challenges were felt to be significant.
- There has been an adverse impact on both children attending settings for the first time, and on those ready to transition to school.
- Practitioners were keen to increase the focus on handover from early years to schools (transition points) noting that schools may need to adapt their approaches.

Socialisation, independence and behaviour

- Increase in separation anxieties for both children (e.g. new 2-year-olds) and parents.
- Increase in children struggling with sharing.
- Children showing fewer self-help skills.
- Parents observed to lack knowledge about the stage of development to expect from their child, or how to move their child on. Practitioners linked this to parent's lack of opportunity to socialise with other parents and observe other children of the same age or share and learn strategies.
- Children were felt to lack a breadth of different experiences e.g. seeing new places, people and environments, messy or outdoor play and are feeling overwhelmed and overstimulated by these new experiences.
- Increase in issues with behaviours and boundaries.
- More hitting and temper tantrums such as dropping to the floor.



- Some families continue to access a variety of childcare and the impact of this can be confusing for children with different routines, rules and boundaries.

Speech and language development

- Speech and language development was identified as a key challenge, and one that persisted beyond initial lockdowns and is evident in children attending settings for the first time (circa age 2 and over).
- There were serious concerns about children with language delay as there are waits for services at specialist and targeted level and concern about the ongoing impact this could have on children's development.
- Specialist support was delivered virtually and there were some concerns about this effectiveness of this.
- There was a desire for access to additional training at a lower cost.
- Feeling that onward referral processes were delayed.
- Practitioners described being frustrated that they were not able to support children as much as they would like to e.g., unable to deliver one-to-one support.

Access to settings and childcare

- Increased resilience was reported in those children that continued to attend settings.
- Practitioners described being able to deliver a high standard of care and education to those who continued to attend during the initial lockdowns – it was a positive experience for the small group of children who were eligible, and practitioners were able to spend more quality time with them and build good relationships with parents.
- Generally, parents of key workers took up the opportunity to continue attending, but fewer 'vulnerable' children did, despite efforts to engage families.
- Families with special education needs were felt to have struggled the most across the pandemic.
- Age groups were more mixed at this time and children who did continue to attend during initial lockdowns had the opportunity to interact with different ages of children.
- There are changes to the way families are accessing settings now – more seem to be using mixed childcare arrangements – some time in a setting, some time with parents, some time with grandparents or other family. The impact of this can be confusing for children with different routines, rules and boundaries. Due to cost-of-living challenges this may become more prevalent. *(Please note the session was held prior to the Government's recent announcements on childcare reform).*
- The wealth and wellbeing of early years practitioners and the sustainability of the early years workforce also emerged as a challenge that has been further affected across the pandemic.