

# Assessing the Need for an Infant Mental Health Service in NHS Lanarkshire

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### Acknowledgements

With grateful thanks to David Readhead of Lanarkshire Local Intelligence Support Team (LIST) within Public Health Scotland for his advice and assistance, and to NSPCC Scotland for their support in kind which made this report possible. Thanks to all the services within NHS Lanarkshire for their help in providing information and in particular to the Lanarkshire Family Nurse Partnership and to Alana McLellan and Sandra MacInnes for their help. Thanks also to Fionnghuala Murphy, Tze Hui Phang and Alicia Weaver who conducted the interviews for the qualitative study and to Alison Wales for proofreading.

Finally, thanks to NHS Lanarkshire Medical Illustration for the design work.

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Issue date: November 2021

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# Introduction

This paper assesses the level of need for a designated infant mental health service in Lanarkshire, a health board area which comprises 2 local authorities. It explores administrative data at health board, local authority and locality level about infant and parental vulnerabilities associated with the service criteria, which are to provide a service for infants (defined as conception - 36 months) with:

- complex and significant need in relation to parental mental health such as perinatal mental illness, substance or alcohol misuse, significant parental historical trauma, domestic abuse
- significant infant mental health disorder and development difficulty in infancy.

The paper aims to provide a general overview of population level factors and is not a reflection of the clinical population. It is intended to assist with identifying local population needs and provides information on as detailed a level as possible.

It is important to note at the outset that the data examined relates to the period before the COVID-19 pandemic, with the most recent being for the financial year up to March 2020. For a small number of areas we were provided with data for the calendar year 2020 and the financial year 2020/21. This data is discussed in Appendix 3. The impact of the pandemic on infants' wellbeing is being examined by Public Health Scotland, but published UK studies (Best Beginnings, Home-Start UK & the Parent Infant Foundation, 2020) have already identified that the wellbeing of young children and their families has been adversely and disproportionately affected by the associated social restrictions

In addition, the paper makes brief reference to an embedded qualitative study which aims to:

- examine the barriers to stakeholders' acceptance of the need for specialist IMH services.
- explore professional and personal beliefs and experiences of relevance to views about development of IMH services.
- explore stakeholders' understanding about the level of need for a designated specialist IMH service.

# Context

The Perinatal and Infant Mental Health Programme Board (PNIMH-PB) was established by the Scottish Government in April 2019. The aim of the Programme Board is to provide strategic leadership and have overall management of the delivery of improved perinatal and infant mental health services.

Part of its remit is to 'implement and fund a Scotland wide model of infant mental health provision'. These Infant Mental Health (IMH) systems aim to meet the needs of families experiencing significant adversity, including infant developmental difficulties, parental mental illness, parental substance misuse, domestic abuse and trauma as described in the Programme for Government (Scottish Government, 2019). The Infant Mental Health Implementation and Advisory Group was set up by the PNIMH-PB to provide clinical advice and support to inform the development of mental health care for infants from conception to 3 years of age and oversee the testing and implementation of evidence-based and innovative models for the delivery of these infant mental health services.

The vision for IMH in Scotland is that:

- There is a shared understanding, and definition, of 'infant mental health' across policy and practice, families and their communities
- Parents and carers are supported to build positive relationships with their infants
- Prevention of later mental health and relationship problems is paramount
- Where concerns are identified, early intervention is offered, with universal service providers being able to access specialist services via clear care pathways so that infants and their families receive the right care at the right time from universal, and if necessary, specialist services.

The PNIMH-PB Delivery Plan (2020-2021) (Scottish Government, 2020) set out a phased approach to national infant mental health service development. NHS Lanarkshire was one of the boards to receive a small amount of funding in 2020 and a number of evaluation projects have been developed here. These include this analysis of needs which is supported by the NSPCC. Links have been made to the Evaluability Assessment conducted by Public Health Scotland for the Programme Board (Scottish Government, 2021).

# Rationale

While the extent of clinical need cannot be truly assessed, there is a strong rationale for assessing the wider socio-demographic factors linked to demand for an infant mental health service. Adversity and the resulting emotional stress experienced by women during pregnancy can affect the developing fetus. Exposure to adversities such as parental mental health problems during infancy can affect mental and physical outcomes in later life.

Poverty can have a detrimental impact on all aspects of life and as a result, children who experience poverty, and other structural inequalities such as those due to sex and race, are more likely to experience adversities in their lives than children who do not (Treanor (2020); Shonkoff, Slopen & Williams (2021)). In this context poverty and inequality can create conditions which can undermine a healthy pregnancy, healthy early relationships, effective care and support for caregivers, and a safe and stimulating early environment. Adversity in childhood is highly correlated with socioeconomic disadvantage in the first year of life (Marryat & Frank, 2019). Analysing data from the Growing Up in Scotland (GUS) study<sup>1</sup>, the authors report that 11% of children in the lowest income quintile at birth had experienced 4+ adverse experiences by the age of 8, compared to 3% of children overall. Children living in the lowest income quintile had odds around seven times higher of having or more adverse childhood experiences than the most affluent children.

However, it is important to note that the majority of children who experience poverty in infancy do not experience multiple adversities in later childhood (as defined by ACE studies), while many children who do experience adversity, such as domestic abuse or parental mental health problems, are from higher income backgrounds. Marryat and Frank's study focused entirely on socio-demographic risks, and the authors suggest that future research "may wish to explore the explanatory power of factors such as attachment, neurodevelopmental disorders, parenting and parental ACEs."

At ages 3 and 5 years, there is a strong relationship between socio-economic inequality and gaps in children's cognitive, emotional and social development. GUS has shown that children whose mothers were emotionally well during their first four years had better social, emotional and behavioural development than those whose mothers had brief mental health problems, and they in turn, had better development than those whose mothers had repeated mental health problems.

Research tells us that a healthy and safe start in life is based on the following key requirements (Galloway, Haynes & Cuthbert, 2014: 8-9) (see Table 1).

<sup>1</sup>https://growingupinscotland.org.uk/

A healthy pregnancy – mothers' mental and physical health in pregnancy are crucially important for babies' later wellbeing and development. Adequate nutrition and the absence of toxins plays an important role in ensuring the healthy development of a fetus, as does the psychological wellbeing of their mother. Poor maternal health during pregnancy is associated with low birth weight and premature birth, postnatal depression, and longer term cognitive and emotional difficulties for the child.

**Healthy early relationships** – babies need caregivers to provide sensitive, responsive and consistent care. They thrive when their caregivers have healthy relationships with one another. An infant's brain develops through interaction with others, and it is particularly influenced by their primary care givers. Caregivers may not be able to develop secure relationships with their baby for many reasons, including domestic abuse, poor mental health, their own history of poor relationships with caregivers, childhood abuse and neglect, or the baby's own developmental difficulties, which may be related to prematurity, congenital abnormality or maternal alcohol or substance misuse in pregnancy.

**Effective care and support for caregivers** – parents themselves need respectful care and support in addressing the problems they face, so that they can have the emotional resources to care for their baby. This is especially the case for parents who are already facing additional stressors such as persistent poverty and destitution, housing insecurity and homelessness, and domestic abuse.

A safe and stimulating environment – babies need to be in a safe and stimulating environments that supports them to learn and explore. They need an environment which provides appropriate sensory, social and emotional stimulation, for example the space and encouragement to play and explore, to learn and to be creative.

When these requirements are absent, or compromised by family circumstances, it increases the potential for, but does not determine, mental health disorder and developmental difficulty in infancy.

# Methodology

The Adverse Childhood Experiences (ACEs) approach focuses on the individual characteristics of parents or family environments, seen as risk factors, rather than looking at the structural inequalities which may be responsible for family difficulties. The literature cites strong evidence that having a young mother is a risk factor for children, while having an older mother (35 years+) is a resilience factor. Maternal age, maternal mental health, domestic abuse, parental substance and alcohol misuse are all associated with cognitive, emotional and developmental delay and disorder in young children, but it is important to remember that these associations are not deterministic, for example, many younger mothers will have children who thrive.

Our public policy is grounded in an understanding of the impact of inequality and disadvantage on early child development, and this informs both systems and practice in our universal services. Our maternity and health visiting pathways are designed to help us intervene early to support children and families through early identification and prevention. Getting it Right for Every Child (GIRFEC) (Scottish Government, 2019) provides a systemic approach to support parents, carers, statutory and voluntary agencies to work together to ensure the best outcome for every child. Routine inquiry enables maternity and health visiting services to gather sensitive data about the family circumstances of each infant and record the progress of each child's development. This paper draws on these sources as well as administrative data from specialist services in Lanarkshire. A note on methods and the limitations of available data is in Appendix 1.

Data is presented here as it relates to the main requirements for a healthy and safe start in life. It also includes data on signs of concern about infant wellbeing, and data on infants who have experienced neglect or abuse which meets the threshold for statutory intervention.

For the embedded qualitative work, so far 13 60-minute interviews have been conducted with Lanarkshire stakeholders who had been identified as members of the multi-agency Lanarkshire Infant Mental Health Stakeholder Group. These have been transcribed verbatim and analysed for content (Braun & Clarke, 2006). This qualitative work is ongoing, and its next stages will be informed by the findings of the quantitative needs assessment described in the Results section below.

# **Results**

# A healthy and safe start: numbers of infants at greatest risk of developing a significant IMH disorder and development difficulty.

#### Framework

Data is presented under the following headings:

- Overview
- A healthy pregnancy
- Healthy early relationships
- A safe and stimulating environment
- Signs of concern
- Child Protection

### **Overview: broad numbers**

We present here first what we know about the size of the population of infants in Lanarkshire whose life circumstances may undermine what they need for a healthy start, and whose odds of experiencing significant mental health disorder and development difficulties during the first 36 months of life are elevated. Unless stated otherwise, all numbers are Lanarkshire-wide and for the most recent financial year available, which in most cases is 2018/19 but does also include some reports for 2019/20. Where a 3 or 5-year average is referred to, this is for years up to and including 2018/19. In some instances, the data has been reported to us in relation to calendar years.

Some of the limitations of this data are discussed in Appendix 1, but it is important to highlight here that what this picture doesn't show us is complexity. It doesn't give information about individual infants who are subject to multiple factors or being counted multiple times within the same piece of data. Nor does it give information about the inter-relationship between indicators, although the paper does show that most indicators have a social or deprivation 'gradient' and are associated with experiencing poverty.

For a number of reasons these figures may understate the size of this population. In a Danish study, the prevalence of serious mental health disorders in 18-month-old infants in the general population was found to be 16% in a large cohort longitudinal general population epidemiological study (Skovgaard, 2010). Predictors of these serious mental health disorders in 18-month-olds were identifiable at 10 months through a Health Visitor general population screening programme.

Disclosure to a professional is often difficult and self-report data may not be reliable. The picture presented by child protection figures in this study is a partial one. Hidden here are the families where there are concerns about care giving, but who sit just below the threshold for statutory intervention. Children's social care providers in the third sector, especially those who provide intensive family support, are a key source of information but, as the Wellbeing for Wee Ones report showed, provision is inconsistent and fragmented and caseload data is not centrally collated (PMHN & NSPCC, 2020).

#### Table 2: Broad numbers

Indicator	Count
Number of maternities 2018/19	6,380
Birth circumstances/Sociodemographic factors	
Maternities in the lowest income quintile 2018/19	1,813
<i>of whom</i> First time mothers aged 19 or under	103
Young mothers receiving intensive support from Family Nurses (2019/20)	175
of whom Number in the most deprived SIMD quintile	81
Pre-birth child protection referrals (3-year average)	191
Newborns requiring special care after birth (2018/19)	991
Number of women reporting domestic abuse at antenatal booking appointment (2018/19)	267
Number of women reporting substance misuse at antenatal booking appointment (4 year median)	90
Number of women reporting alcohol use at antenatal booking appointment (2018/19)	593
Number of women referred to the Lanarkshire Additional Midwifery Service	4.45
(2019 calendar year) Alcohol related	445 189
Drug related	256
Expectant mothers disclosing mental health issues at booking in appointment (2019 calendar year)	2,453
Expectant or new mothers referred to the community perinatal mental health service (2019 calendar year)	526
Referrals accepted by the community perinatal mental health service (2019 calendar year)	280
Lanarkshire admissions to the specialist perinatal mental health West of Scotland Mother and Baby Unit (2019 calendar year)	12

Home care environment and developmental concerns	
Domestic abuse related referrals to social work by police concerning children under 3 years (2019/20)	879
Infants at 6-8 week review on 'enhanced' Health Visitor caseload (2018/19)	1,087
Infants at 13-15 month child health review needing additional input (2018/19)	1,148
Infants at 27-30 month child health review needing additional input (2018/19)	1,236
Infants at 27-30 month review with a concern noted in the personal and social domain (2018/19)	403
Infants at 27-30 month review with a concern noted in the emotional and behavioural domain (2018/19)	411
Infants at 27-30 month review with a concern noted in the speech, language and communication domain (2018/19)	752
Infants under 3 years referred to CAMHS (2018/19)	22
Experience of harm	
Infants under 3 referred to the Children's Reporter on care and protection grounds (2018/19)	915
Infants under 3 years placed on the Child Protection Register (2018/19)	194
Average number per year of Child Protection cases of infants under 3 years involving:	
Parental alcohol misuse	60
Parental alcohol and/or substance misuse	90
Average number per year of infants under 3 years starting to be looked after of whom	127
At home with parents	38
Foster care	50
Kinship care	43

# A healthy pregnancy

### Maternal poverty and deprivation

Figure 1 shows maternities by income quintile (using the income domain of the SIMD only)<sup>2</sup>.

In 2018/19, there were 1,813 maternities and 1,850 births recorded in Lanarkshire to mothers in the most deprived income quintile (SIMD quintile 1)<sup>3</sup>. If Marryat and Frank's (2019) findings are applied, then 11% of newborns may experience 4+ adverse life experiences by the age of 8 years, an estimated 204 infants in Lanarkshire in this single year.



Source: SMR02, Public Health Scotland

The higher percentage of births in North Lanarkshire in the most deprived income quintile (30.2%) reflects the pattern of deprivation within Lanarkshire; by locality the percentage of births in Income Quintile 1 ranges from 3.5% (East Kilbride) to 39.5% (Bellshill).

The components of the income domain comprise 5 different measures of social security benefit receipt including Universal Credit, Pension Credit, Income Support and Tax Credits (Scottish Government, 2020). The most deprived SIMD income quintiles are where there are large numbers of people living at subsistence level. The families most affected by recent welfare changes are those with children under the age of 5, especially lone parent households, and parents with mental health difficulties. Young parents are also badly affected: on the basis of age alone, young single parents under the age of 25 on Universal Credit receive 20% less benefit than those over the age of 25, equivalent to being £66.13 worse off per month<sup>4</sup>. The Joseph Rowntree Trust (2020) records growing levels of destitution amongst these families.

- <sup>2</sup> A note on the limitations of the SIMD data can be found in Appendix 1.
- <sup>3</sup> Source: SMR02, Public Health Scotland. Calculation using the average number of births in SIMD quintile 1 over the 4-year period 2015/16 to 2018/19.
- <sup>4</sup> Calculation of the SIMD income domain is at p.12. Scottish Index of Multiple Deprivation

### Young motherhood

One way of examining the lived experiences of infants born into the most deprived circumstances in Lanarkshire is through the lens of maternal age, using data from the Family Nurse Partnership (FNP). Teenage parenthood has a strong social gradient and is closely associated with poverty and its effects, which increase the likelihood of experiencing other adversities. In North Lanarkshire in 2018/19, almost one half (48.2%) of all maternities were to young mothers under 20 years of age living in the most deprived income quintile. This compares with almost one third (32.4%) of teenage maternities in South Lanarkshire (see Figure 2)<sup>5</sup>. This makes supporting young parents and their babies important to ensure a healthy safe start in life. It is not age per se which makes babies born to young mothers more vulnerable but the fact that maternal age is often associated with adverse life circumstances. In recognition of this, the Government has developed a national Strategy aimed at providing additional support to young parents (Scottish Government, 2016).



Source: SMR02, Public Health Scotland.

Family Nurse Partnership data provides an indication of the level of need being met by an existing service, but only in relation to mothers who meet the service criteria, which are based on age, first time motherhood, and vulnerability. There remains a question about how much unmet need for intensive support exists amongst the wider population of pregnant women and new mothers in Lanarkshire, including those having second and subsequent pregnancies.

While the teenage pregnancy rate has fallen across Scotland over the past decade, pregnancy rates amongst those living in the most deprived areas remain 5 times higher than those living in the least deprived areas (58.9 compared to 11.8 per 1,000)<sup>6</sup>. Teenagers in the most deprived areas are much more likely to deliver than to terminate their pregnancy, with a rate 12 times that of teenagers in the least deprived areas (40.2 compared to 3.3 per 1,000). This means that despite the overall decline in teenage pregnancies over the past decade, in terms of outcomes, the gap between the most and least deprived areas has grown. Figure 3 shows that the teenage maternity rate in the most deprived quintile in North Lanarkshire is 14.1 per 1,000 compared to 5.8 per 1,000.<sup>7</sup>

- <sup>5</sup> SMR02, Public Health Scotland. Note that these figures relate to all maternities to teenage mothers rather than maternities to first time teenage mothers (shown in Figure 1).
- <sup>6</sup> Nationally, there has been a fall in the teenage pregnancy rate across every SIMD quintile. The greatest reduction in the rate of teenage pregnancy has been in the most deprived quintiles.
- <sup>7</sup> Note that these rates are the median over the 4 year period 2015/16 to 2018/19.



Source: SMR02, Public Health Scotland.

There were 211 first time maternities to mothers under the age of 20 in 2018/19, with 64% of these young mothers living in North Lanarkshire<sup>8</sup>. Over half of these first-time maternities were to young mothers under 20 years of age living in the most deprived area by SIMD income quintile. The Family Nurse Partnership provides intensive support to first time mothers under the age of 20 years and also mothers aged 20-24 years where the woman meets certain criteria, such as homelessness. The support is delivered in the home by specialist Family Nurses, from pregnancy through to when the child is two years old. There are 24 family nurses in Lanarkshire, 13 in South Lanarkshire and 11 in North Lanarkshire, with two supervisors in each. Supporting mothers to support their baby's physical, cognitive, emotional and social development is a core aim of this service. Family nurses use a strengths and relationship-based approach to promote sensitive, positive, well-informed care giving.

In 2019/20, the year immediately before the pandemic, the Lanarkshire FNP service supported 175 young mothers and their babies, 81 of whom lived in the most deprived areas (SIMD quintile 1). The size of the caseload demonstrates the reach of the service beyond the relatively small numbers of teenage pregnancies. That reach includes young mothers in need of support due to a range of adverse and complex circumstances).

<sup>8</sup> Source: SMR02, Public Health Scotland. This is an average for the four years 2015/16 to 2018/19.



Source: Lanarkshire HSCPs

The relationship between early motherhood and poverty and disadvantage is reflected in the profile of the Family Nurse Partnership caseload by SIMD quintile. Figures 4 and 5 show the picture for the 4 most recent years. In 2019/20, just under half (46%) of all the young mothers supported by Family Nurses belonged to the most deprived SIMD quintile, and 77% of mothers and babies supported lived in the two most deprived SIMD areas.



Source: Lanarkshire HSCPs

The Re-evaluation Report of the Family Nurse Partnership in Scotland (Scottish Government, 2019) describes some of the most common challenges faced by young mothers experiencing poverty and deprivation. Family nurses report that these mothers have often experienced some form of abuse, neglect or poor parenting in their upbringing. Mental health issues, particularly anxiety and depression, are common. Many of their young clients are in or have been in abusive relationships. Recent Scottish research found that mothers who are both young and poor experience a far greater level of domestic abuse than those who are older and more affluent: 1 in 3 are predicted to experience some type of domestic abuse. In contrast, amongst women who are in neither of these categories, that is neither the youngest nor the poorest, just 1 in 10 are predicted to experience domestic abuse (CRFR, 2021).

A 'vulnerabilities profiling tool' has been developed to assist with recording both historic and current difficulties experienced by women entering the FNP programme (Scottish Government, 2019).



Figure 6 shows the annual number of women supported by Family Nurses in each locality.

Source: Lanarkshire HSCPs

### Substance and alcohol use in pregnancy

### a. Self-report at booking in appointment

#### Substance misuse

The numbers of expectant mothers in Lanarkshire who report substance misuse at ante-natal booking is small. Figure 7 shows the figures for 2015/16 to 2018/19.<sup>9</sup> On average 90 women report substance misuse each year.<sup>10</sup>



Source: SMR02, Public Health Scotland

<sup>9</sup> It should be noted that the method of data recording changed in 2017/18.

<sup>10</sup> Source: SMR02, Public Health Scotland. This is the median number for the 4 years 2015/16 to 2018/19.



In Lanarkshire substance misuse is reported in 3.1% of maternities in the most deprived areas (SIMD quintile 1) compared to 1.8% of maternities in Lanarkshire as a whole (2018/19 figures) (see Figure 8).

#### Source: SMR02, Public Health Scotland

All Lan SIMD

Quintile 1

All

Lanarkshire

There is a social gradient to substance misuse; these expectant mothers are concentrated in the most income deprived SIMD quintiles. In 2018/19, 54.5% of expectant mothers reporting substance misuse in North Lanarkshire (n=36) and 39% in South Lanarkshire (n=20) lived in the most deprived areas by income quintile (SIMD quintile 1). Figure 9 indicates, for expectant mothers who report substance misuse in each of the past 4 years, the percentage of these mothers who live in the most income deprived SIMD quintile (quintile 1). In North Lanarkshire this ranged annually from between 54% to 78% of the total number of mothers reporting substance misuse.

South

Lanarkshire

SL SIMD

Quintile 1

North

Lanarkshire

NL SIMD

Quintile 1



#### Source: SMR02, Public Health Scotland

The percentage of maternities where substance misuse is reported is therefore higher in the most deprived areas, although rates do appear to be falling.

## **Alcohol consumption**

At their booking appointment with a midwife, women are asked about their average weekly consumption of alcohol over the three months prior to booking. The question is intended to capture alcohol use in early pregnancy, a period in which women may not have known that they were pregnant. In 2018/19, 593 expectant mothers (around 1 in ten) said that they had drunk alcohol in the past 3 months.<sup>11</sup>

Self-reported alcohol use is known to be a problematic measure because of the tendency for people to underestimate their own consumption, and the risk of this may be greater during pregnancy because of women's concerns about being judged.



Source: SMR02, Public Health Scotland

Thus, the data on alcohol consumption reported at ante-natal booking is likely to underestimate the true average weekly alcohol consumption during pregnancy due to under reporting. However, the data does show that alcohol use during early pregnancy is widespread in Lanarkshire and follows the general pattern of alcohol consumption in relation to socio-economic background.

The information presented here (Figure 10) relates to whether alcohol was ever consumed in an average week during early pregnancy.<sup>12</sup>

- In relatively more affluent South Lanarkshire, the rate of alcohol consumption per 1,000 expectant mothers is greatest in the least deprived quintile.
- The rate of alcohol consumption per 1,000 expectant mothers is greater in the least deprived quintile in South Lanarkshire (121.1 per 1,000) than in the most deprived quintile in North Lanarkshire (100.9 per 1,000).

#### <sup>11</sup> Source: SMR02, Public Health Scotland.

<sup>12</sup> If a woman says she has not drunk any alcohol over the last three months, number of units would be recorded as '0'. If the woman states that she has consumed an average of 0 to 1 units per week over the three months this would be recorded as '1'. Otherwise the nearest number averaged over the three months would be recorded.

#### b. Referrals to Lanarkshire Additional Midwifery Service (LAMS)

The LAM Service provides specialist antenatal care to women across Lanarkshire who have a current or recent history of drug or alcohol misuse and associated complex needs, including poor mental health, domestic abuse and homelessness. The exceptions to this are women resident in Cumbernauld most of whom are supported by the Special Needs in Pregnancy (SNIP) service in NHS Greater Glasgow & Clyde and a small number of women in Airdrie and Coatbridge who sometimes choose to deliver their babies in other health board areas.

While the main pathway into LAMS is through midwifery, other services also refer into the service including police, addictions services and social work. The different pathways into LAMS are shown in Figure 11. It shows for two recent calendar years the numbers of expectant mothers referred to LAMS either through midwifery (alcohol and drug use in pregnancy) or by other services (alcohol and drug referral). Most referrals from other services relate to substances, 103 in 2019, compared with 43 for alcohol.



Source: Lanarkshire Additional Midwifery Service

Figure 12 relates to the LAMS service in North Lanarkshire only.<sup>13</sup> It shows the total number of new referrals made to LAMS each year and the outcomes in terms of the number of women who received an assessment and the number who received care from the LAMS service during their pregnancy. The chart also shows the number of women whose support continued from one year into another.

LAMS supported an average (median) of 82 families in each of the last 6 years in North Lanarkshire (range: 59-100). This includes families who began receiving care as well as continuing cases (cases carried over) in each year.



Source: Lanarkshire Additional Midwifery Service (LAMS)

## c. Child protection involving parental alcohol and substance misuse

Each year in Lanarkshire there are an average of 60 child protection cases involving children under the age of 3 years, in which parental alcohol misuse is involved.<sup>14</sup>

Child protection cases involving children under 3 years where parental alcohol and/or substance misuse is involved number 90 on average each year in Lanarkshire.<sup>15</sup>

<sup>13</sup> North Lanarkshire accounts for the majority of referrals to and cases supported by the LAMS service.

<sup>14</sup> Scottish Government Children's Social Work statistics. Data for South Lanarkshire required suppression.

<sup>15</sup> Ibid.

### **Maternal Mental Health Difficulties**

Women are asked at their antenatal booking whether they have any current or past history of mental health issues. As self-disclosure may not be reliable, an alternative source is to link maternity data with historic data on acute psychiatric admissions. Early identification and prevention are vital, as these mothers are at elevated risk of mental health difficulties during pregnancy and in the year after childbirth and they and their families may need additional help including in caring for their baby.

#### Mental health disorder reported by mother at antenatal booking

On average 36% of women annually disclose mental health issues during their booking in appointment. As shown in Figure 13, during the years 2017, 2018 and 2019 between 1,900 and 2,500 women in Lanarkshire disclosed mental health issues at booking in. Current or past history of anxiety and depression are the most common mental health issues disclosed. Improvement work within NHS Lanarkshire is focused on better understanding the causes of anxiety in pregnancy with additional services planned to support families during the perinatal period.



Source: Badger, NHS Lanarkshire

#### New mothers with a history of acute mental health difficulties

Maternity data can be cross-checked with data about acute inpatient admissions (SMR01) for any mental health disorder (ICD-10 F00-F99) in any diagnostic position, and with data on inpatient admissions receiving care in Mental Health Specialties (SMR04) within the 10 years before the date of delivery. This allows us to supplement the self-disclosure data from antenatal bookings.

- In an average year, more than 240 new mothers in Lanarkshire have a history of mental illnessrelated acute hospital admission in the decade prior to the date of delivery of their baby.
- Most of these women live in North Lanarkshire (n=136) with 110 residing in South Lanarkshire.<sup>16</sup>

Figure 14 shows the annual number of maternities where the mother has had an acute psychiatric admission in the 10 years prior to delivery.



Source: SMR01 and SMR04, Public Health Scotland

Figure 14 shows that Hamilton has the highest annual average number of new mothers who have experienced a prior mental health acute admission (n=43). However, the **percentage of maternities** annually where the mother has a history of acute mental health difficulties is highest in Wishaw (6.1% of annual maternities) with the lowest in North Lanarkshire North (2.%) and East Kilbride (2.8%). This confirms a social gradient in mental illness. This data is shown as a 4-year annual average percentage of maternities by locality in Figure 15.

<sup>16</sup> This is for maternities where the mother has an acute inpatient admission (SMR01) for any mental health disorder (ICD-10 F00 – F99) in any diagnostic position, OR an inpatient admission receiving care in Mental Health Specialties (SMR04), within 10 years before the date of delivery.



Source: SMR01 and SMR04, Public Health Scotland

With investment from the Scottish Government, the Lanarkshire specialist perinatal mental health service is currently being extended and its service model and service criteria revised. Previously it aimed to see women with moderate to severe mental health difficulties. Its aims were to provide assessment and management of women who are at risk of, or who experience, significant perinatal mental health or mental disorder while pregnant and up to the first six weeks after giving birth (PMHN, 2019). Because of these narrow service criteria, the data provides a limited picture of the number of women annually who experience PNMH difficulties

The origin of referrals in 2019 reflects the service criteria, with the majority coming from midwives (61%) and GPs (21%). The service takes direct referrals from primary care, health visiting, maternity services and other mental health services. The highest rate of accepted referrals is in Motherwell (84.7 per 1,000 maternities) and the lowest in Airdrie (30.2 per 1,000 maternities) (see Figure 16).<sup>17</sup> For historical reasons women in Cambuslang/Rutherglen ('Camglen') are referred to the specialist community PNMH service in Glasgow rather than Lanarkshire. This explains the zero referrals for this locality.

<sup>17</sup> Note: Accepted referral data is for the calendar year 2019. The denominator used is total maternities for the financial year 2018/19 (maternities for either 2019/20 or for 2019 calendar year was not available at the time of calculation).



Source: Lanarkshire PNMH service, SMR02

Figure 17 provides a comparison of accepted referrals to the specialist PNMH service with levels of maternal income deprivation. It shows for 2019 the rate of accepted referrals to the specialist service alongside the percentage of new mothers who are in the most deprived SIMD income quintile. Localities are ranked by level of maternal income deprivation, from lowest (left hand side) to highest level (right hand side).

It shows a complex picture and raises issues which merit further exploration with local practitioners. Some of the underlying factors here are likely to include differences in awareness/ training between and within community midwifery teams, with a bearing on subjective decision-making, and the differing strengths and consistency of relationships between the specialist service and other services at locality level. Levels of staff turnover within local services and any difference in this is likely to have a bearing on both.

- East Kilbride has the lowest level of maternal income deprivation but the highest rate of accepted referrals to the specialist service.
- Bellshill and Airdrie have the highest levels of maternal income deprivation (40.5% and 38.6% of new mothers, respectively, are in the lowest income quintile) but the rate of accepted referrals to the specialist service is significantly lower than in other localities with less maternal deprivation.
- The highest rate of accepted referrals is in Motherwell (84.7 per 1,000 maternities) which also has a relatively high level of maternal deprivation (37.6% of new mothers are in the most deprived SIMD income quintile). Wishaw is similar to this.



#### Specialist inpatient perinatal mental health services

Scotland has two Mother and Baby Units, in Glasgow and Livingston, where mothers can be admitted with their babies to receive specialist perinatal mental health care. Over the past 4 years an average of 10 women each year from the NHS Lanarkshire area have been admitted to a Mother and Baby Unit and in the majority of cases this has been to the West of Scotland MBU (see Figure 18). Years 2016 and 2017 are combined in Figure 18 to avoid disclosure; the first bar represents two years of data.



Source: West of Scotland Mother and Baby Unit

### Neonatal admissions and special care after birth

Babies born prematurely or with other complications after birth are admitted to a neonatal unit to receive intensive, high dependency or special neonatal care depending on their level of need.<sup>18</sup> This can be traumatic for babies and their parents. It is challenging for parental mental health, and many parents can experience symptoms of post-traumatic stress, which can add to the risks of infants not forming a secure attachment (BLISS, 2017: 34-35).

There are plans in NHS Lanarkshire for a CAMHS/Paediatric joint service for young children with Neurodevelopmental Disorders. A Clinical Psychologist provides input to babies, parents and staff in the neonatal unit at Wishaw General Hospital which provides maternity services to the whole of Lanarkshire.

In 2018/19, 991 newborns required special care after birth. Over the past four years the annual number has ranged from 991 to 1296 (see Figure 19).



#### Source: SMR02, Public Health Scotland

A higher percentage of newborns receive neonatal care in Lanarkshire compared with other health boards. Figure 20 compares for two recent years the levels of care in Lanarkshire compared with Scotland overall. The Scottish Birth Record notes the highest level of care received by a newborn during its stay in neonatal care so, for example, an infant admitted for Special Care who is later transferred to Intensive Care will be recorded under Intensive Care. In each year, the percentage of newborns receiving neonatal care, at every level, is greater in Lanarkshire than in Scotland. In 2018/19, 15.4% of all newborns received some type of extra care at birth, compared with 11.1% in Scotland.

<sup>18</sup> https://www.isdscotland.org/Health-Topics/Maternity-and-Births/Publications/2018-11-27/2018-11-27-Births-Report.pdf



Source: Scottish Birth Record

### **By SIMD**

There is a social gradient associated with infants requiring neonatal/special care and for families with the least resources, a longer stay in hospital causes its own additional stress. Figure 21 shows at locality level the percentage of maternities where babies are admitted for neonatal or special care (2018 data).<sup>19</sup> In most localities the percentage is significantly higher for mothers in the most deprived area (those in SIMD quintile 1), compared to the area as a whole. Wishaw is the exception to this with 21% of all maternities requiring neonatal/special care for infants, and 22% of maternities in the most deprived quintile.



Source: SMR02, Public Health Scotland

<sup>19</sup> Note that SIMD quintile 1 data for Clydesdale and East Kilbride was suppressed as numbers <10.

Figures 22 and 23 show the rate per 1,000 maternities of infants being admitted to a neonatal unit or with birth complications requiring admission to special care in North and South Lanarkshire, over a 4-year period.



Source: SMR02 Public Health Scotland



Source: SMR02 Public Health Scotland

# **Healthy Early Relationships**

### Infants and domestic abuse

Domestic abuse is one of the most prevalent family adversities but its effects on infant development tend to be overlooked (Cuthbert et al, 2011). The transition to parenthood is a major life change and can place considerable stress on the couple relationship. There is an evidenced association between the perinatal period and first experience of domestic abuse, and pregnancy is sometimes referred to as a 'trigger' for domestic abuse. As well as creating new pressures, pregnancy and the birth of a child may intensify existing sources of conflict such as low income, unemployment and other financial worries. This is confirmed by a new study which has looked at the experience of domestic abuse amongst children in the Growing Up in Scotland survey (CRFR, 2021). Compared to mothers in the highest income households, mothers on the lowest incomes were far more likely to experience any form of domestic abuse, and they had 5 times greater odds of experiencing more forms of abuse and doing so more often.

Domestic abuse is the near universal experience of infants supported by Glasgow's specialist IMH service, the Glasgow Infant and Family Service (GIFT). It was the most common adversity, present in 29 out of 33 families, in an early audit of the GIFT service (NSPCC, 2018). It should be noted that this service supports infants and their carers where the infant is looked after and accommodated either in a foster care or kinship care placement.

In 2019, the Domestic Abuse (Scotland) Act introduced a 'statutory aggravator' relating to children. This means that, for the first time, the impact of domestic abuse on children is recognised in law, even if the children themselves are not the 'focus' of the abuse. It also introduced a new duty on the court to consider making a non-harassment order (NHO) to protect victims on sentencing and extended the scope of the NHO to protect child as well as adult victims.

#### Mothers reporting domestic abuse at antenatal booking

Over the past 4 years on average between 4% and 5% of women (around 1 in 20) have reported domestic abuse at their antenatal booking (see Figure 23). The percentage is higher in North Lanarkshire where between 5% and 7% of expectant mothers report domestic abuse.



Source: MIDIS, NHS Lanarkshire

In terms of numbers, between 267-350 women each year in Lanarkshire disclose domestic abuse at their antenatal booking (see Figure 24). Most of these women are in North Lanarkshire where over the last 4 years the number reporting domestic abuse has ranged from between 180 -254 women annually. These figures are based upon women feeling able to disclose to a professional with whom they (typically) have no prior relationship and are likely to understate the extent of domestic abuse.



Source: MIDIS, NHS Lanarkshire

#### Police referrals to social work: domestic abuse incidents involving children under 3 years

In the single year 2019/20, under the Non-Offence Reporting Mechanism (NORM), Police Scotland made 879 non-offence referrals to social work services in Lanarkshire on domestic abuse grounds where at least one child under 3 was at the locus. We do not know whether these 879 incidents involved 879 separate victims/perpetrators, or whether this number includes repeat incidents, where the police were called out twice or more during the year to the same address where an infant was resident.

Incidents reported to the police are a subset of the actual population of domestic abuse incidents. For both these reasons it is not possible to calculate a reliable rate per population for Lanarkshire which reflects young children's lived experience of domestic abuse.

Figure 26 shows the number of children under 3 years of age included in domestic abuse referrals to social work services from the police. The total number of referrals Lanarkshire-wide is denoted by the grey line.

Just over a third of incidents subject to referral to social work services took place in South Lanarkshire (37%) while 63% were in North Lanarkshire.

A longer time series is available for North Lanarkshire. Over the five-year period 2015/16 to 2019/20 there were on average 675 children under 3 years of age each year subject to police domestic abuse referrals to social work.



Source: Lanarkshire HSCPs

Domestic abuse is reported predominantly by mothers in the most deprived SIMD quintiles. In the least deprived quintiles the number of reports was so low the number was suppressed (and therefore quintiles 4 & 5 are not shown in Figure 27). As stated earlier it may be that people in more affluent areas are for a range of reasons less likely to disclose or are perhaps less used to being asked by professionals to disclose sensitive personal information of this kind.



Source: MIDIS, NHS Lanarkshire

# A safe and stimulating environment

### Infants and homelessness

A health needs assessment of children in North Lanarkshire experiencing homelessness was conducted in 2018 by the NHS Lanarkshire Local Intelligence Support Team (LIST).<sup>20</sup> This looked specifically at how infants are affected by homelessness and its main findings are quoted directly here (Campbell, 2019).

In 2016/17, a total of 571 children under 5 were homeless in North Lanarkshire.

- a **significantly higher proportion of children aged 0-5 years** are present in households presenting as homeless, compared to the general population of North Lanarkshire.
- Under-fives represent 38.9% of all children in homeless households, but 29.9% of the child population (<16years).

This health needs assessment reinforces the findings of earlier research by NSPCC and the Anna Freud Centre on homelessness in infancy, which explores its relationship with other life adversities and the importance of supporting infants' caregivers (Hogg et al, 2015). In Lanarkshire a range of reasons for homelessness were described and these include relationship breakdown, domestic abuse, fleeing violence (in the family or the community), mental health or addiction issues, antisocial behaviour, rent arrears, eviction and liberation from prison. Poverty, unemployment and financial insecurity were raised as being at the root of many of the issues presented. The health assessment reports that:

- At the 27-30 month health check conducted by health visitors, infants in homeless households had significantly higher rates of any concern, for example:
  - 24.3% had a previous or new concern in speech/language/communication (15.5% in the wider North Lanarkshire age cohort).
  - 17.5% had a previous or new concern in emotional/behavioural domain (7.1% in the wider North Lanarkshire age cohort).
- Attendance at A&E for young children (<5 years) in homeless households was 31.9% higher than for the wider North Lanarkshire age cohort. The attendance rate was 569 per 1,000 (compared to 432 per 1,000 for the wider North Lanarkshire age cohort).
- CAMHS referrals for young children in homeless households was 21.0 per 1,000 compared to 7.8 per 1,000 for the wider North Lanarkshire age cohort.
- This group of children were more likely to present or contact emergency or out of hours services due to respiratory issues or conditions than the wider North Lanarkshire age cohort.
- They were also less likely to take up preventative services and were less likely to attend appointments for an already identified health issue. The needs assessment found that this was likely to be due to a range of practical issues related to being homeless, and its associated adversities.

<sup>20</sup> It was not possible to obtain homelessness data for the two local authorities within the timescale of this paper.

# Signs of concern

### Infants referred to Child and Adolescent Mental Health Services (CAMHS)

The CAMHS Reach Out Team for infants, children and young people with parents with severe and enduring mental illness or mental health difficulties offers short and long term home-based Parent-Infant Psychotherapy and Emotional State Assessments for infants. Older under-3s referred to the CAMHS Reach Out Team with the most severe, complex and entrenched emotional and attachment difficulties, can access long term non-intensive (once or twice weekly) and intensive individual psychotherapy (up to 3 or 4 times weekly individual sessions) with parallel regular supportive work with the parent(s). The CAMHS Reach Out Team also delivers multi-agency training on the impact of parental mental illness on children which includes a component on the impact on infants and early attachment relationships.

The CAMHS Children and Young People (CAYP) Team offers Emotional State Assessments for looked after and accommodated infants with moderate to severe mental health and attachment difficulties, consultation to professionals and carers, and ongoing developmentally informed carer–infant work to support and promote the infant's primary attachment relationship and enhance the infant's capacity to relate. Older under-3s referred to the Children and Young People (CAYP) Team with the most severe, complex and entrenched emotional and attachment difficulties can access long term non-intensive (once or twice weekly) and intensive individual psychotherapy (up to 3 or 4 times weekly individual sessions) with parallel regular supportive work with the foster carer. The CAYP Team also delivers Infant Observation Skills Training to social workers supervising contact of looked after infants with their parents, and ongoing training and consultation to the South Lanarkshire PACT Team which undertakes Parenting Capacity assessments with parents of infants removed at birth. Foster carers of infants may attend Nurturing Attachment groups run by the CAYP Team.

The CAMHS Early Intervention Team 0–12 offered short-term, time limited Parent–Infant Psychotherapy for infants with less severe mental health difficulties, within a clinic setting, prior to the Team being discontinued.

Figure 28 shows the annual number of children aged 0-2 years referred to CAMHS in Lanarkshire. Over the 3-year period shown, an average of 18 children each year were referred in North Lanarkshire and 12 in South. Data for 2019/20 is available but has been suppressed, as fewer than 10 children were referred in North and South Lanarkshire respectively.

It is worth noting that the decrease in the referral rate since 2016/17 may be related to the introduction of HEAT targets and waiting list initiatives against the background of a rise in the number of older children and adolescents presenting with urgent concerns including self-harm.



<sup>.</sup> 

### **Developmental concerns in infancy**

Our system of support for infants and their carers is based on an approach of enhanced (or 'progressive') universalism. Scotland's Universal Health Visiting Pathway aims to ensure that every child (and/or their carer) who needs it receives help to reach their health or development potential. Health visitors provide each child with a developmental review at age 6-8 weeks, 13-15 months, and 27-30 months. The 13-15 month review was reintroduced in April 2017. Infants are allocated 'additional' status if significant concerns are identified at these reviews, requiring sustained additional input (>3 months).

The support services which may be required include additional health visitor support, parenting support, enhanced early learning and childcare, and specialist medical input.<sup>21</sup> This is crucial for Getting It Right for Every Child (GIRFEC) in this age group.

In 2018/19 over 1,000 infants in Lanarkshire at each of the three key child health reviews needed additional input to meet their health or developmental potential. Across the three reviews a total of 3,471 infants and their carers required additional input.

<sup>21</sup> Universal Health Visiting Pathway.



#### Source: CHSP-Pre-School November 2020, SIRS, Public Health Scotland

The coverage or uptake of the reviews is one of the factors that must be taken into account in interpreting these figures. In 2018/19 approximately 12% of infants eligible for the 6-8 week review were known to be missing, for various reasons and this may affect the figures presented here. More details about this are included in Appendix 1.

Figure 30 shows that in Lanarkshire just under 1 in 5 infants (17.2% - 18.7%) who were eligible and received a review were identified as needing additional input in 2018/19. The percentage was slightly lower than this in North Lanarkshire and very slightly higher in South Lanarkshire, although this may be affected by the coverage.

The percentage of infants identified as needing additional input at the 27-30 month review (18.7%) is slightly higher than at the 6-8 week review (17.2%).



Source: CHSP-Pre-School November 2020, SIRS, Public Health Scotland
## Deprivation and infant development

At a national level, there is a clear social gradient in the population of infants and/or their carer being provided with additional support from health visiting services. The most recent published national figures, show that 22% of children living in the most deprived areas of Scotland (SIMD quintile 1) had a concern recorded for at least one developmental domain compared to 9% of children living in the least deprived areas (SIMD quintile 5). There is a clear social gradient across all domains of the child health review, but at national level this is most pronounced in the speech, language & communication and emotional/behavioural domains.<sup>22</sup>

Figure 31 indicates the social gradient in infants needing additional input to meet their potential. Infants in the most deprived income quintile are more likely to be identified as needing extra support. So for example, at 6-8 weeks, 22.8% of newborns and their families in the most deprived income quintile are assessed as needing additional support, compared to 17.2% amongst their peers in Lanarkshire overall. The gap between infants in the most deprived quintile and their peers at Lanarkshire level who need additional input is 5.6 percentage points at 6-8 weeks, 7.3 percentage points at 13-15 months and 8.4% percentage points at 27-30 months.



Source: CHSP-Pre-School November 2020, SIRS, Public Health Scotland

<sup>22</sup> https://beta.isdscotland.org/find-publications-and-data/population-health/child-health/earlychild-development/ The charts below compare infants in the most deprived income quintile with those in the general age cohort. Figure 32 emphasises that the percentage of infants assessed as requiring additional input increases slightly at each developmental stage. This is most marked amongst infants in the most deprived SIMD income quintile. (NB: For clarification; these figures represent three age cohorts of children within a single year; they do not represent a single cohort of children over time).

At each of the three age-related reviews, the percentage of infants on enhanced status (that is, those identified as needing additional input) is higher in South Lanarkshire than in North Lanarkshire, despite deprivation levels being greater in the latter.

This pattern is also evident amongst infants and carers in the most deprived SIMD income quintiles and deciles. Of infants in the most deprived income quintile, a higher percentage have enhanced status at 13-15 and 27-30 months in South Lanarkshire (27.8% and 29.1%) than in North Lanarkshire (23% and 25.7%).



Source: CHSP-Pre-School November 2020, SIRS, Public Health Scotland

## Developmental concerns noted at 27-30 month review

In 2018/19, 6,613 infants in NHS Lanarkshire received a 27-30 month review. This represents 94% of the 7,027 infants who were eligible. This means that 414 (6%) of all eligible children did not receive a review or their information was incomplete, which could be due to several factors. There is more about this in Appendix 1.

Figure 33 shows the percentage of children in Lanarkshire and in the two local authorities who had concerns noted in:

- any domain;
- the emotional/behavioural domain;
- the speech, language & communication domain;
- the personal and social development domain.



Source: CHSP-Pre-School November 2020, SIRS, Public Health Scotland

It compares children in the most deprived area (SIMD Quintile 1) with the wider cohort of children (the whole area). It shows that in Lanarkshire in 2018/19:

- 17% of Lanarkshire children who received a review (n=1,153) had a concern in any domain.
- 11.4% of children had a concern in the domain of speech, language and communication (n=752). This is high relative to Scotland.
- 6.2% of children had a concern in the emotional/behavioural domain (n=411).
- 6.1% of children had a concern in the personal and social domain (n=403).

## **Developmental concerns over time**

As stated, a child health review at 13-15 months was reintroduced in April 2017 (financial year 2017/18) and so as yet there is no time series data. However, time series data is available for the established 27-30 month review.

These figures focus on the developmental domains most relevant to the emotional and social health of infants. For each of these domains, they show the percentage of infants who have a concern noted at the 27-30 month review, comparing infants in the most deprived quintile with those in the wider age cohort. They clearly illustrate the higher level of concerns noted amongst infants in the most deprived areas.<sup>23</sup>

The health visiting service in Lanarkshire is currently focused on improving the identification of concerns in the emotional and behavioural development of infants. It is recognised that currently the data may not accurately reflect needs and work is ongoing to improve this.



Source: CHSP-Pre-School November 2020, SIRS, Public Health Scotland

<sup>23</sup> These charts are based on the most deprived quintile (SIMD quintile 1) using the income domain only.



Source: CHSP-Pre-School November 2020, SIRS, Public Health Scotland



Source: CHSP-Pre-School November 2020, SIRS, Public Health Scotland

Figure 37 shows the same information for Lanarkshire localities, for the single year 2018/19. It shows that the areas with the highest percentage of infants with concerns (by domain) are:

- Bellshill, Coatbridge and Airdrie: speech/language/communication domain.
- Clydesdale, Bellshill and Airdrie: personal/social domain.
- Clydesdale, Bellshill and Airdrie: emotional/behavioural domain.





## A&E attendances by children 0-3 years

People living in the most deprived areas make greater use of unscheduled care via A&E departments than those in the least deprived areas. The data shows this is also the case with A&E attendance by infants. However far more contextual information is needed to make sense of this data, particularly at locality level and this requires exploration with local practitioners.

Figure 38 shows for 2019/20, A&E attendances per 1,000 children aged 0-3 years in North Lanarkshire: in the most deprived SIMD quintile the rate is 349.3 per 1,000 compared with 275.2 per 1,000 in the least deprived quintile.

Even in the **least deprived** quintile in North Lanarkshire the rate is 275 per 1,000, compared to 284 per 1,000 in the least deprived quintile in South Lanarkshire 2019/20 (see Figure 39).

As reported earlier, Campbell (2019) found that attendance at A&E is particularly high for young children (<5 years) in homeless households (31.9% higher than the wider age cohort).



Source: A&E Datamart, Public Health Scotland



Source: A&E Datamart, Public Health Scotland

Figures 40 and 41 compare the rate of infant A&E attendance across localities in North Lanarkshire and South Lanarkshire respectively. These show that the picture of A&E attendance for infants is very different between North and South Lanarkshire.

In the North, the rate of A&E attendance is very similar between localities. Figure 40 shows the locality rates are consistently and closely grouped around 500 per 1,000 infants. In contrast, in the South there is a wide variance in rates of A&E attendance by infants (Figure 41). Rutherglen/ Cambuslang stands out as having particularly high rates of A&E attendance by young children, while Clydesdale has a relatively low rate over time. This could perhaps reflect proximity to services.



Source: A&E Datamart, Public Health Scotland



Source: A&E Datamart, Public Health Scotland

Figure 42 compares rates of A&E attendance by infants by SIMD quintile. As mentioned, there is a known social gradient in A&E attendance. However, if we look solely at infants in the most deprived quintile (Quintile 1) the rate of attendance at A&E varies between localities. It ranges from 811 per 1,000 infants in the most deprived quintile in Rutherglen/Cambuslang (811 per 1,000) to 318 per 1,000 infants in the most deprived quintile in Clydesdale.

Local services may have insights into the reasons for this variance at locality level.



Source: A&E Datamart, Public Health Scotland

## Out of hours medical attendance



Source: GP Out of hours datamart, Public Health Scotland



Source: GP Out of hours datamart, Public Health Scotland

Figures 43 and 44 show that the rate of out-of-hours attendances by children aged 0-3 years is also related to level of deprivation.

## **Unintentional injuries**

Unintentional injuries are a leading cause of death and disability in young children and repeated emergency admissions for unintentional injury is one of many indicators that may raise concerns about caregiving. Children in the most deprived areas are more likely than those in the least deprived areas to be admitted to hospital for an unintentional injury.<sup>24</sup>

The age sex standardised rate of unintended injuries is just under 1,000 per 100,000 in both North and South Lanarkshire. Figure 45 shows the actual count of unintentional injuries in under-fives and Figure 46 shows the age-sex standardised rate.<sup>25</sup> Each of the years in Figure 46 represents aggregated data for a 3-year period, so 2015/16 represents data for the 3-year period 2014/15 to 2016/17.<sup>26</sup>







Source: SMR01, Public Health Scotland

<sup>24</sup> https://beta.isdscotland.org/find-publications-and-data/health-services/hospital-care/ unintentional-injuries/

- <sup>25</sup> Data on unintentional injuries is not available at locality level.
- <sup>26</sup> Similarly, the year 2016/17 represents aggregated data for 2015/16 to 2017/18 and the year 2017/18 represents data for 2016/17 to 2018/19.

# **Child Protection**

Some infants are subject to child protection processes because they have been assessed as being at risk of or having already experienced significant harm and their numbers are recorded in official data. This is unlikely to provide a complete picture. Statutory social work resources are under great pressure and are subject to rationing (Audit Scotland, 2016; NSPCC, 2020). In addition to the infants and their carers receiving statutory intervention there is a larger population of infants and families who sit just below the threshold for intervention. The size of this group will be reflected in the numbers receiving support from Family Nurses (providing mothers meet the service criteria) and enhanced support from Health Visitors. Others may be receiving input from intensive family support services such as the Families First team (North Lanarkshire Council), the Burnbank and Cambuslang Family Centres (South Lanarkshire Council) or third sector services in Lanarkshire such as Home-Start, Transforming Lives and Resilient Families.<sup>27</sup>

The Child Welfare Inequalities Project investigated the steep social gradient present in statutory child protection interventions (see chart below).<sup>28</sup> There is evidence this gradient is particularly steep for very young children, although this relates to England.<sup>29</sup> The socio-economic circumstances of families are the key factor in explaining area-based inequalities in rates of intervention. In the words of The Promise, the report of the Independent Care Review:

"An economy characterised by poverty, precarity and inequality can be a driver of the incidence of the need for care. When the economy hurts children and adults, and housing and social security systems fail to provide the protection from harm needed to compensate, increased pressures on family life can increase the odds of interacting with the care system."<sup>30</sup>



Source: reproduced from Child Welfare Inequalities Project final report, p.30.

<sup>27</sup> Data about the numbers of children referred and accepted for these services and in particular third sector services is not centrally collated or reported and so not available to report.
<sup>28</sup> Child Welfare Inequalities Project Final report.

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<sup>29</sup> Ibid, p.33.
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<sup>30</sup> https://www.carereview.scot/wp-content/uploads/2020/02/The-Promise.pdf p.18.

## **Pre-birth Child Protection referrals**

Lanarkshire-wide, more than 500 infants were subject to pre-birth child protection referrals in the past 3 years, an average (median) of 191 infants each year. The actual count each year is shown in Figure 47. Just under two thirds of these pre-birth child protection referrals (63%) were in North Lanarkshire.



Source: SWIS, Lanarkshire HSCPs

## Infants experiencing abuse and/or neglect - referrals to the Children's Reporter

The number of infants under 3 years referred to the Children's Reporter on care and protection grounds has fallen in recent years but 915 infants 0-36 months were referred to the Children's Reporter in 2018/19. This compares to 1,499 in 2015/16.<sup>31</sup>

In North Lanarkshire the rate of referral to the Children's Reporter on care and protection grounds is 8 per 1,000, and in South Lanarkshire 7 infants per 1,000 population.

## Infants placed on the Child Protection Register

Scotland has consistently had relatively lower rates of Child Protection Registrations compared with the other UK nations, but a much higher rate of children being looked after.<sup>32</sup> Statutory intervention rates in Scotland are highest in the under-five age group, for example: 42 per 10,000 children 0-4 years are on child protection plans compared with 28 per 10,000 for 5-9 year olds, and 18 per 10,000 for 10-15 year olds (Bywaters, 2020).<sup>33</sup>

Since 2008, with the exception of one year, a majority of children on the Child Protection Register in Scotland have been under 5 years of age. For children aged 4 and under placed on the Register the most common identified concerns at case conferences are (in order) domestic abuse, parental mental health problems, parental substance misuse, neglect and emotional abuse.<sup>34</sup>

There is variation year on year at local authority level in the numbers of children placed on child protection registers. Over the past 3 years, a total of 747 children under 3 years were placed on the child protection register in Lanarkshire, with similar numbers in both North and South (see Figure 48).

<sup>31</sup> Source: Scottish Children's Reporter Administration.
<sup>32</sup> Scottish Government, Children's Social Work Statistics 2019/20.
<sup>33</sup> 2015 figures, Child Welfare Inequalities Project Final report. Table 2 page 32.
<sup>34</sup> Ibid, Additional Tables, Table 4.4.



Source: SWIS, Lanarkshire HSCPs

## Looked after infants

In 2019/20, one in five children (19%) looked after by local authorities in Scotland were under five years of age. The percentage of children in North and South Lanarkshire who were aged under five was slightly higher than this, at 22% and 21% respectively.<sup>35</sup>

Figure 49 shows the number of Lanarkshire children under 5 years of age who started to be looked after in the most recent year, 2019/20. The age breakdown shows that three and four year olds comprised the larger group, with a smaller number of infants aged under 3 years of age entering care.



Source: Scottish Government Children's Social Work Statistics 2019/20

<sup>35</sup> Scottish Government, Children's Social Work Statistics 2019/20, Additional Tables. Table 3.2

Figure 50 shows, for the past 3 years, the initial type of placement for infants under 3 years who began to be looked after in North and South Lanarkshire. Across both local authorities an average of 127 infants under 3 years of age started to be looked after annually.<sup>36</sup> An average of 50 infants each year were placed in foster care and 43 in kinship care, while 38 infants began to be looked after at home with their parents.



Source: SWIS, Lanarkshire HSCPs

## Experiences of infants entering foster care

We do not have specific information about causes of emotional trauma amongst infants who become looked after in Lanarkshire. However, an audit of the Glasgow Infant and Family Service (GIFT) families provides an insight into the profile of looked after infants (NSPCC, 2018), in this case specifically those aged 36 months or under where the child is placed in foster care (NSPCC, 2018). Of the first 50 GIFT children: 88% had experienced domestic violence, 76% of mothers and 33% of fathers were involved with adult mental health services; 50% of mothers and 39% of fathers were involved with addiction services; and 50% of fathers were imprisoned at some point during the period of GIFT involvement. The main grounds for children becoming looked after and accommodated were (ranked first to last): neglect (almost all) parental substance misuse (15/32), domestic violence (13/32), risk of physical harm (6/32), parental mental health, risk of emotional harm.

<sup>&</sup>lt;sup>36</sup> This figure is the 3-year average (median).

## **Stakeholder views**

Thematic analysis of the thirteen qualitative stakeholder interviews carried out so far revealed several themes describing **barriers** that professionals perceive towards the development of Infant Mental Health Services and also several themes which conveyed an overall sense of **optimism**. Certain themes were commonly identified in the accounts of a wide range of professionals. These included the following **perceived barriers**:

### • Societal stigma and lack of understanding of infant mental health:

"any time I tell people what I am doing, they are like 'babies with mental health difficulties, you are kidding?!"

### A parent-focussed approach:

"people lose sight of the infant and they focus on the adult"

### Lack of Synergy:

"There is probably a lack of synergy about systems all kind of working together around this, without a doubt and I suppose that's what we have to achieve."

#### ...and the following perceived enablers:

### • Reflective practice:

"it will also be about the emerging evidence base, responding and reflecting"

#### • Current optimism and enthusiasm:

"when you come right back to working with tiny infants there is so much hope"

See Appendix 3 for a more detailed account.

## Discussion

Data, especially sensitive personal data, should be collected for a purpose. It should be used effectively to inform service development and delivery; and support its evaluation.

In this study, the analysis of routinely recorded data held at national and local level provides an insight into inequality and its effects on infant mental health outcomes. As discussed in Appendix 1, the data reflects the services from which it is drawn, many of which are woman-focused, and concerned with maternal vulnerabilities, or infant-focussed. As a result, information about fathers and the wider family is not included here.

The global picture presented here, with all its limitations, shows that very many parents have difficulties in their lives, and a significant number of infants have experiences that can compromise and undermine their mental wellbeing and development from the very start of life. The broad numbers presented here are likely to understate the size of this population. They are drawn from service data and therefore reflect those infants and families who are in contact with, or eligible for, services or support.

The complex interplay between these factors merits further investigation. The analysis is helpful for highlighting the relative risks of experiencing adversity for the infant population. A higher number of adversities are more likely to be experienced by infants, and their parents and carers, living in socioeconomically deprived areas. A clear social gradient runs through the data and provides evidence that the structural inequalities in society may predetermine unequal developmental outcomes for infants. However, the data presented also underlines the fact that need extends beyond infants and parents experiencing poverty or living in areas of concentrated deprivation. Although strong efforts are being made to anticipate need, these can arise unexpectedly after birth if, for example, an infant has significant developmental problems. Yet there are also strong social gradients for the occurrence of prematurity and neurodevelopmental problems. A very wide range of cross-societal factors are at play and these include access to services which may be more difficult for those in socioeconomically disadvantaged families.

The access to some services for parents in socioeconomically deprived areas appears to be more challenging than for those in for those in less deprived areas. This is best illustrated by the rate of referrals to perinatal mental health services which is higher per 'maternity event' in one of the least deprived areas (East Kilbride) than in some more deprived localities. However, expectant mothers in the most deprived areas are more likely to have had an admission to an acute psychiatry inpatient unit in the previous 10 years; to have a family history of mental illness; to be under 25; and to have a history of substance use.

In practice, rates of intervention depend upon many different factors. These include the ethos and approach to delivering services, service criteria, and factors which may vary across localities such as the awareness of the importance of infant mental health, the knowledge and skills base within teams of practitioners, the capacity for outreach, and the quality and consistency of relationships locally. A combination of local factors is likely to underpin these differences, and many issues may be relevant here. Do services struggle to engage with these parents/expectant parents? Do these parents omit to give a full history? Or are professionals involved less likely to probe about known risk factors? Do midwives and health visitors offer these parents and their infants referral for enhanced support? Does the presence of multiple difficulties, some of which will be difficult to mitigate, discourage them from doing so?

An obvious exception might be referral to Family Nurse Partnership. The characteristics of those seen by family nurses in Lanarkshire show that as well as being young, mothers very often experience multiple and interrelated difficulties with over 50% of the family nurse caseload residing in the most deprived areas. Examination of the patterns of referral by family nurses to perinatal and infant mental health services may be warranted.

The analysis of data about the infant population in the most deprived SIMD quintile found that a higher percentage in South Lanarkshire, compared to North Lanarkshire, have concerns noted or receive interventions, despite the latter being the more deprived authority overall. This was found in relation to both referrals to the specialist perinatal mental health service, and child health reviews conducted by health visitors (discussed further below). Recent research into child protection intervention rates has found that intervention rates are higher in areas of low deprivation but high income inequality, than in highly deprived areas with less income inequality (Bywaters et al, 2020). This evidence of an inequalities intervention law, or inverse care law, in service provision for infants in Lanarkshire is worthy of further exploration.

The issue of alcohol and substance use merits its own consideration. In keeping with research evidence, this study finds that expectant mothers of higher socioeconomic status are more likely to report consuming alcohol in pregnancy or the period immediately before conception. The literature also reports that mothers of low socioeconomic status who do drink alcohol are more likely to do this excessively. Given that any alcohol may be damaging to fetal development, public health initiatives to address this should be targeted at all women of child-bearing age, and interventions should also be available to all women.

The percentage of maternities where substance misuse is reported is higher in the most deprived areas: it is reported in 3.1% of maternities in the most deprived areas (SIMD quintile 1) compared to 1.8% of maternities in Lanarkshire as a whole (2018/19 figures). This finding applies to both North and South Lanarkshire. In both, there is a social gradient relating to substance misuse; these expectant mothers are concentrated in the most deprived SIMD quintiles. The rate does appear to be falling but consideration should be given to prevention in these areas and to facilitating access to Lanarkshire Additional Midwifery Service for all those affected.

As would be expected, both alcohol and substance use are associated with child protection referrals.

Both alcohol and substance use by an expectant or new mother may be associated with a spouse's or partner's use. Enquiries by midwives and obstetricians, health visitors and others are likely to be limited to the expectant mother with the recording of such data similarly limited. A systems approach to alcohol and substance use would support wider enquiry into the circumstances of those beyond the mother-infant dyad, who may be supportive, or otherwise, of it.

Post birth it is recorded that between 991 and 1296 babies received some form of special or intensive care during the 4-year period to 2018-2019. In most areas there is a clear relationship between SIMD category and admission to the Special Care Baby Unit or neonatal intensive care. The exception to this is Wishaw itself where in 2018, 21% of all babies were admitted. Elsewhere the rates for the total population were lower but elevated to 40% in 3 of the most deprived North Lanarkshire localities.

The data provided did not permit an exploration of the rationale for this intervention or the length of time for which this occurred. Thus, it is not possible to say if a significant number of babies were cared for away from their mother for a long period. Nonetheless, it is of concern that this proportion of newborns experienced a period of separation from their primary caregiver at a time which is crucial for the development of the mother-infant relationship. Any disruption of this process may lead to later difficulties if the pair are not later supported to tune into each other and bond. This would be worthy of further exploration in due course.

In 2018/19,17% of Lanarkshire infants who received a child health review at 27-30 weeks (n=1,153) had a concern in any domain, with a higher percentage than the national average having a concern in the domain of speech, language and communication (n=752).

Further, the data about infant outcomes at routine health visitor monitoring shows that at each of the three age-related reviews, the percentage of infants on 'enhanced' status is higher in South Lanarkshire than in North Lanarkshire, despite deprivation levels being greater in the latter. Social gradient trends were also evident for A&E and out of hours attendances by infants.

Data gathered about child protection concerns and referral to the Children's Reporter shows that the rates for North and South Lanarkshire were broadly similar. The percentage of under 5s 'looked after' in Lanarkshire was higher than the national average.

Further exploration of local data with a view to understanding the local factors which might ameliorate or enhance the risks to the mental health of children and their parents and carers has the potential to inform both prevention and specialist service provision. Investment in public health interventions in disadvantaged areas may help to mitigate some of the consequences of adversity while the provision of targeted specialist perinatal and infant mental health services may alleviate distress and disorder, preventing later poor outcomes for infants.

The picture presented here can inform thinking about the issues involved in the development of locality based infant mental health systems and the development of pathways to specialist services. Reference has been made to the importance of drawing on the knowledge, experience and understanding of practitioners to help understand some of this data. It is intended that Phase 2 of the Qualitative Study comprises focus group discussions with stakeholders about the findings reported here.

## **Recommendations**

- 1. All Health boards should consider using data routinely collected by their own services and by local Social Work services to inform the planning and delivery of preventative interventions at a locality level, and to facilitate the targeting of specialist services for infants and their families.
- 2. Local data analysis will be utilised most effectively if stakeholders are engaged in discussion about its relevance to their own areas of practice and service delivery.
- 3. There is a need to ensure equitable access to services, and service providers may need to consider developing engagement strategies to reach those most in need.
- 4. Strong evidence has been presented which links infant mental health outcomes to contextual factors which range from the intrauterine environment, developmental problems in the infant, and the mental health and age of mothers, and to wider domestic factors such as poverty, homelessness and violence. Addressing these will require a focus on infant mental health within integrated children's services plans. At health board level, good links will be required between public health, the local authority and those responsible for planning and prioritising service development.

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# Appendix 1

## **Methodology and limitations**

The Evaluability Assessment of the Scottish Government's perinatal and infant mental health programme conducted by Public Health Scotland (May 2020) provided the starting point for this paper. The evaluability assessment identifies existing core datasets of relevance to perinatal and infant mental health.

The Lanarkshire Local Intelligence Support Team (LIST) collated many of the analytical outputs used in this paper from various sources. Data sources include PHS publications, analysis from PHS datasets, information requests from PHS analytical teams, information requests from NHS Lanarkshire information teams. All analytical outputs are aggregated and no patient level data has been shared, ensuring patient confidentiality is not compromised. The analytical outputs have been shared with Lanarkshire Health Board / Health & Social Care Partnership contacts as management information for the purposes of this Infant Mental Health Needs Assessment. The PHS Statistical Disclosure Protocol (https://www.publichealthscotland.scot/downloads/statistical-disclosure-control-protocol/) has been followed and any counts of less than 10 have been suppressed.

### **Limitations and caveats**

A major limitation of the information presented is that it doesn't tell us about infants and carers with multiple challenges, about the extent or intensity of difficulties and experiences, nor about complexity and inter-relationships. We do not know whether individual infants are counted multiple times within certain datasets or appear in more than one dataset.

The report uses the data available within the timescales of the project. As it was produced during the public health pandemic when most data providers were under considerable pressure, as a result there are inconsistencies in the data sources used. For example, the Child Health Review data presented is provided by Public Health Scotland (Figures 33 to 39) whilst the data about infants on 'enhanced' status on health visiting caseloads has been provided by NHS Lanarkshire from its MIDIS system. The PHS data has been validated and provides complete annual figures, while the MIDIS information is a snapshot of cases on the system at a particular point in time.

### Level of analysis

Because of the small numbers for many of these indicators – for example, expectant mothers disclosing substance misuse - a further breakdown by SIMD quintile, or locality and SIMD quintile is not possible without risk of disclosure.

A breakdown of children's social work data by SIMD quintile was not requested but would have enabled a comparison with rates of health intervention with infants.

### Deprivation Areas

These are based on Scottish Index of Multiple Deprivation (SIMD). It is comprised of seven domains (income, employment, education, housing, health, crime, and geographical access). This is the standard way of assessing deprivation for small areas known as Data Zones. Small areas are grouped into 5 categories called quintiles, numbered 1-5, with quintile 1 the most deprived area and quintile 5 the least deprived areas.

There have been SIMD releases in 2004, 2006, 2009, 2012, 2016 and 2020. This report uses the most appropriate SIMD for each year; years 2014-2017 use SIMD 2016; and years 2018-2020 use SIMD 2020. This method is more appropriate when trying to track whether the inequality between the most and least deprived categories has changed over time.

A limitation of SIMD is that it does not relate to individuals. Not all individuals or families who are income deprived live in areas which are ranked as deprived according to the domains of the SIMD. Individuals and families with low incomes who live in areas which do not rank as amongst the most deprived are excluded when the focus is on the most deprived areas.

### Child Health Reviews

A number of factors are recognised as affecting the data included here about child health and development concerns. These mean that some infants are missing from the data but also for those children who are included, the recording of concerns may not always accurately reflect the level of need.

The coverage of child health reviews is variable. This is for a number of reasons. Children may not be seen for a variety of reasons e.g. due to a hospital stay or the health visitor being unable to make contact with the family. It can also be because the review form was not returned for data entry.

Some children, particularly for the later reviews (27-30 months) may not be seen until up to, and sometimes more than a year after they become eligible for a review. These children may be missing from the analysis until a subsequent extract is taken.

There are recognised issues around incomplete data being returned by health visitors especially for particular developmental domains. Omissions in key developmental outcome and other field recording is a feature across Scotland.

For example, the current HV national mandated assessment toolkit (ASQ-3) does not support the basic or enhanced assessment and recording of the emotional, behavioural and social developmental outcome. This developmental outcome is frequently left omitted unless health visiting staff exercise professional judgement in the assessment process.

In NHS Lanarkshire, infant mental health professionals and stakeholders have worked together to develop the Lanarkshire Infant Mental Health Observational Indicator Set, aspects of which have been piloted successfully with 4 health visitor teams. This may support enhanced assessment and recording.

### Fathers

The data in this report reflects the services from which it is drawn. Because women give birth these services are woman-focused and concerned with maternal vulnerabilities. As a result we lack information about fathers.

There are limitations in terms of available data. Severe pressure on teams due to the Covid pandemic meant some data could not be provided in the timescale required.

This includes data:

- In relation to maternal mental health: EPDS rating breakdown, Whooley Questions responses.
- In relation to alcohol and substance misuse in pregnancy: Numbers of infants born with FAS or NAS

Some data which may be potentially useful to inform policy and service developments is collected via booking in processes and the SWHHR is not routinely collated or analysed for small area geographies.

Data on children in homeless households is collected but again not routinely analysed and reported. This includes children by age in households made homeless because of domestic abuse.

### Perinatal mental health

There remain gaps in information about women who experience mental health difficulties in the perinatal period:

- Uniform data about the admission of new mothers to generic adult psychiatric wards is not currently available. The Mental Welfare Commission for Scotland is piloting data collection about this.
- Similarly, data is not routinely recorded about the number of women who are referred to generic adult community mental health teams in the perinatal period, including the outcomes of these referrals (whether accepted or referred elsewhere).
- There is no routine collation of data on numbers of women referred to and accepted by third sector service providers.
- There is a widespread lack of information about the mental health and support available to fathers/partners.

### Infants experiencing multiple complex adversities

Service data may not provide a reliable indication of the size of this population of infants and carers. This is because scarcity of resources means numbers in receipt of both statutory and non-statutory supportive interventions are in practice rationed using service criteria and 'thresholds'. The size of the population of infants and carers below statutory social work thresholds but in need of support is not fully known. Some of these families may be engaged with third sector community based services, but these resources are also under pressure from increased demand and not all families in need may be able to access a service or in deed wish to engage with. These families will therefore not be reflected in service figures. In addition, data on the numbers of children and carers referred to and accepted for third sector community based services is not centrally collated or reported and so not available to report. Data supplied to us relating to April 2020 onwards, the period of the COVID-19 pandemic has been excluded from our main analysis but is included in Appendix 2.

## Appendix 2

## 2020/21 Data

We were recently supplied with more up to date data spanning the calendar year 2020 and the financial year to April 2021. Observations about this data recorded after the onset of the pandemic and associated restrictions should prompt local discussion about how need was perceived and addressed, and facilitate future contingency planning

### Maternity Care

As shown in Figure 1A, the number of women disclosing mental health issues at booking continued to rise. This was in contrast to a fall in referrals of women with alcohol and drug-related issues to LAMS (Figures 2A and 3A) during the same period. This may be a reflection of the disruption to specialist service delivery during the pandemic.







#### Family Nurse Partnership

Recent data relating to FNP caseloads is shown in Figures 4A, 5A and 6A. As shown in Figure 5A, the percentage of cases held by family nurses is highest in the most deprived quintile during 2020/21. This may reflect an active policy to reach the most vulnerable infants and their families during the pandemic.









# Appendix 3

## Qualitative study, Phase 1

### Methods

Thirteen professionals were interviewed from the Lanarkshire Infant Mental Health Stakeholder Group. Purposive sampling was used to select participants with the aim of reaching a wide range of professionals including from health, education, social care and the third sector. Professionals interviewed included the following (does not add up to 13 because more than 1 interview was conducted in certain professional groups):

- Early Learning Quality Officer (Education)
- Child and Adolescent Psychiatrists (Health)
- Infant Mental Health Lead for NHS Lanarkshire: Child Psychotherapist (Health)
- Child and Families Officer (Third Sector)
- Adult Psychiatrist (Health)
- Family Nurse Partnership Supervisor (Health)
- Service Improvement Coordinator: Early Years (Health)
- Perinatal and Infant Mental Health Project Manager (Health)
- Neonatal Psychologist (Health)
- Educational Psychologist Education)
- Manager, Children and Families (Health and Social Work)
- Midwife (Health)

Sixty-minute interviews were conducted, transcribed verbatim and thematically analysed following Braun and Clarke (2006).

All themes identified in the qualitative analysis of 14 interviews:

### **Barriers to Change**

- Societal Stigma & Lack of Understanding
- Lack of Synergy
- Time to Change
- Parent Focused Approach
- Lack of Resources & Finances
- Competing Demands
- Parental Blame
- Leadership
- Fear of Pathologising
- Staff Burnout
- Professional Lack of Exposure
- Voice of Infants

### **Enabling Factors**

- Current Optimism & Enthusiasm
- Training, Education & Evidence
- Cultural Change
- Empowering Parents
- Staff Wellbeing
- Reflective Practice

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