PART 7: EVALUATING, ASSESSING AND OBSERVING MENTAL HEALTH IN INFANCY AND EARLY CHILDHOOD

This section discusses ways to capture the mental health of individual babies and young children, and levels of need in communities. It includes measures that might be used to understand need in your local area.

Understanding and measuring the mental health of babies and young children and the prevalence of any problems is important for identifying need at an individual level, understanding population needs to plan services and to identify trends, and measuring the impact of interventions. Measuring an aspect of mental health before and after an intervention can help to guide clinical decisions and to capture the impact of the service.

To understand mental health needs at both an individual, and a population level, information can be gathered about:

- **The child's mental health**: the child's emotional, behavioural and social competencies and the incidence of any delays or problems.
- **The caregiver-child relationship:** the quality of the parent-child relationship, the incidence of sensitive, nurturing interactions and/or the capacity of the caregiver to be attuned to their child's need.
- **Risk and protective factors in the environment:** the incidence of risk factors such as poverty or poor housing, abuse and neglect, or exposure to parental stressors such as poor mental health, violence in the home or childhood trauma. Ideally – given the impact of cumulative risk – it is helpful to know about whether children are experiencing multiple risk factors.

There are a range of tools and instruments to measure mental health in early childhood, but there are limitations to many of them.

A variety of measures are available for use in current practice, which all differ in terms of the required resource (cost, training), applicability across different age groups, the degree to which they measure needs and strengths, and accuracy in indicating risk for mental health problems. If measures are used by professionals to inform work with individual children, they should be used alongside observation and clinical judgement.

- **Children's mental health competencies and problems** in the early years are frequently measured using parent-reported questionnaires and/or observation and assessment tools administered by practitioners or researchers[80] (see the table on page 78 for some examples). These measures vary in how they are used. Some are brief screeners that focus on specific areas of development and can prompt further assessment or evaluation. Others form comprehensive checklists that help to generate a more detailed profile of the child's strengths and weaknesses. Currently, there are tensions between what measures of emotional and behavioural functioning are feasible and available use in practice, and those measures that are robust from a psychometric point of view.
    - There is a developing evidence base from other countries for the use of specific measures of child mental health in universal services (e.g., the use of the Copenhagen Infant Mental Health Questionnaire in Denmark[81]). The World Health Organization are developing a new Global Scale for Early Development, which has a psychosocial component and is intended to be a universal measure to capture children's mental health at a population level.
- **The caregiver-child relationship** is often measured using questionnaires and observation measures. A review of parent-report measures found that few had demonstrated that they assess the parent-child relationship in a reliable and valid way, with the Postpartum Bonding Questionnaire[82] having the highest ratings of reliability and validity[83]. The Mothers Object Relations Scale (MORS[s])[84,85] and the

[s] The MORS (and its short form MORS-SF) is a parent-report measure for assessing parental thoughts and feelings about their relationship with their baby. It is a validated measure that is relatively easy to use and so widely adopted. The Department for Health and Social Care in England are asking parent-infant interventions funded through the Start for Life programme to use the MORS measure. The original version is for use in parents with babies aged 6-52 weeks. An adapted version, MORS-Child, is suitable for use in children aged 2 to 4 years old.

Prenatal Attachment Inventory[86] are currently being used and tested widely in UK practice for work with babies[87].

- A number of approaches have also been developed or tested in UK health and community services. For example, the Early Attachment Observation tool was developed by the Leeds Infant Mental Health service in collaboration with Leeds Health Visiting Services[88]. The tool features three questions about the parent-infant relationship for health visitors to ask the primary caregiver, and asks health visitors to carry out a two-minute observation of the baby and caregiver interacting.
- Different measures are designed for different ages. Many of the parent-baby relationship measures work for babies in the first weeks or months of life. Other tools are required to understand and measure aspects of the relationship in young children over a year old (for example, the ASC-3 Parenting Relationship Questionnaire and the Parent-Child Relationship Scale (P-CRS)).

- **Risk and protective factors in the environment** can be measured using checklists that assess factors such as whether the parent has experienced episodes of being in care, whether the child is living in a family with inadequate housing or income, or if there is a presence of alcohol/drug misuse in the home. For example, the Maternal Vulnerability Assessment Tool developed by the Lambeth Early Action Partnership team measures social vulnerability in pregnant people, focusing on environmental factors such as social isolation, migration status, membership of underserved communities, and experience of domestic or other violence, among other parental and family factors.

Useful resources

Measuring outcomes

Measuring what matters (Blackpool Centre for Early Childhood Development, 2022) describes current use of outcome measures by Specialist Parent-Infant Relationship Services. The review highlights the lack of consensus on what to measure and how to measure it, the difficulties and tensions surrounding parent-infant relationship outcomes that could be measured and the complexities of needs being met within and between services, and key gaps in the suitability of existing measures for very young children (under 12 months).

Local example

Understanding need in Birmingham

Between December 2021 and March 2022, four professionals from Birmingham Women's and Children's NHS Foundation Trust undertook a needs assessment of parent-infant relationship (for age 0-2) help and support in Birmingham.

The work was undertaken in agreement with Birmingham and Solihull Clinical Commissioning Group (now part of the Integrated Care Board) and was overseen by Birmingham and Solihull Infant Mental Health Steering Group, a subgroup of the local Maternity and Neonatal System (LMNS) Perinatal Mental Health Board.

The work involved:

- **Understanding local population need:** gathering a wide range of local, national, and international data to understand the need for parent-infant relationship support in Birmingham.
- **Service mapping**: interviews with 23 practitioners and service managers, analysis of service data and consultation with service leaders to map current parent-infant relationship support across Birmingham.
- **Workforce analysis**: interviews with 89 local practitioners and managers about current strengths and future training needs. Research into the workforce requirements for improving parent-infant relationships.
- **Parents' views**: 45 local parents were asked a range of relevant questions.
- The work was undertaken to inform the wider network, and the operationalisation of the Trust's commitment to parent-infant relationship support. It generated 38 recommendations relating to provision in Birmingham.

A copy of the needs assessment 'Nurturing our future: holding young minds in mind' is available by request from bwc.ftbinfantmentalhealth@nhs.net

The Centre for Early Child Development's *Measuring What Matters*[89] report contains recommendations to guide the use of outcome measures. These were intended for parent-infant relationship services but are relevant across mental health services in infancy and the early years. They include:

- **Be realistic** - there is no single, easy to use measure that captures the complexity of work in this space.
- **Seek clarity** - be clear about what the primary outcome on an intervention be, and the extent to which measures can capture that outcome.
- **Capture observation** – given the "gold standard" focus on observational measures of the child and the relationship, consider committing resources to carry out observational measures.
- **Think long-term** – implement measures and use them consistently to build evidence. Give time for services to do the work, and evaluations to capture the impact.
- **Work together** – ensure a range of stakeholders (practitioners, parents, researchers, commissioners, service managers etc) are all heard and valued in the identification of measures and development.

Example questionnaire and observation tools used in the screening and assessment of 0-5-year-olds.

For a full table for comparison see unicef.uk/EYMH-toolkit.

Measure[t]	**Ages & Stages Questionnaire: Social-Emotional (ASQ:SE-2)** *Squires, Bricker, and Twombly (2015)*
Purpose	To identify and screen children's social and emotional behaviours
Scales/Items/Constructs	A total score of social-emotional development is produced from items related to self-regulation, compliance, social-communication, adaptive functioning, autonomy, affect, and interaction with people
Age range	1 - 72 months
Training	3 training DVDs or 18-hour seminar
Interpretation	The information summary sheet for scoring provides total scores by page, total overall score, and cut-off. A graph is used that shows whether the child's score falls below the cut-off, in the monitoring zone, or above the cut-off where further assessment with a professional may be appropriate. Guidance on score interpretation is provided, and follow-up referral considerations and actions are outlined.
Format	Questionnaire
Rater	Parent
Length	~30 items
Estimates of associated costs[u]	Starter pack including User Guide, master questionnaires and scoring sheets: £245

[t] Tools and classification systems used for diagnostic purposes have not been considered here, however examples of such approaches include the Development and Well-Being Assessment (DAWBA; Goodman et al., 2000; Goodman, 2011), the Preschool Age Psychiatric Assessment (PAPA; Egger & Angold, 2004), Diagnostic Infant and Preschool Assessment Manual (DIPA; Scheeringa, 2004), and the DC: 0-5. Diagnostic Classification of Mental Health and Developmental Disorders of Infancy and Early Childhood, Washington (Zero to Three, 2016). Screening tools for specific symptom groups (e.g., The modified checklist for autism in toddlers M-CHAT-R; Robbins et al., 2014) are also not considered.

[u] These are estimations based on advertised costs described in publications related to these measures, information provided by distributors, or other publicly available sources. Costs are likely to vary depending on the context and scale of the measure's use.

Measure	**Alarm Distress Baby Scale (ADBB)** *Guedeney and Fermanian (2001)*
Purpose	To assess relational withdrawal in infants by observing their behaviour during an interaction with an unfamiliar adult (e.g., a health visitor)
Scales/Items/Constructs	Assesses social behaviour across eight items: facial expressions, eye contact, general level of activity, self-stimulating gestures, vocalisations, briskness of response to stimulation, relationship, and attraction
Age range	0 – 24 months
Training	65 hours training w/ developers
Interpretation	Each of the eight items are scored on a 0 (no unusual behaviour) to 4 (severe unusual behaviour) scale. Total scores range from 0 to 32. Based on studies of French infants, a cut-off score has been suggested for screening purposes. If a child receives a score over the threshold, re-evaluation within two weeks to assess the stability of the behaviour is advised. If the behaviours are found to be persistent, further confirmation and investigation is recommended.
Format	Observation
Rater	Practitioner
Length	~30 items
Estimates of associated costs	~£1000 – £1600 pp for training

Measure	**Brief Infant-Toddler Social and Emotional Assessment** *Briggs-Gowan et al. (2004)*
Purpose	To identify social-emotional and behavioural problems and delays in competence
Scales/Items/Constructs	The Problem scale assesses social-emotional/behavioural problems such as aggression, defiance, overactivity, negative emotionality, anxiety, and withdrawal. The Competence scale assesses empathy abilities such as empathy, prosocial behaviours, and compliance.
Age range	12 – 36 months
Training	Recommend 4 hours of training w/ clinician
Interpretation	Scoring generates a social emotional problems total score and a social emotional competencies total score. Cut-off scores are provided in the manual. Calculations can account for premature birth. The manual emphasises that possible problems or delays identified through the measure should not be considered diagnostic and further follow-up is always necessary.
Format	Questionnaire
Rater	Parent, childcare provider
Length	42 items
Estimates of associated costs	Starter kit including the BITSEA manual, and 25 parent and 25 childcare provider questionnaires: ~£100; Scoring software: ~£75

Measure	Child Behavior Checklist (CBCL; 1.5-5) *Achenbach and Rescorla (2000)*
Purpose	To assess behavioural and emotional problems
Scales/Items/Constructs	Items relate to the following scales: emotionally reactive, anxious/depressed, somatic complaints, withdrawn, attention problems, aggressive behaviour, sleep problems
Age range	18 – 60 months
Training	Recommend individuals be trained to master's degree level
Interpretation	Subscales combine into internalising and externalising scores as well as a total problem score. Raw scores are converted to norm referenced scores. Cut-offs are used to indicate clinically significant and borderline scores which suggest that further assessment or intervention may be appropriate. DSM oriented scales (e.g. depressive problems, oppositional defiant problems) comprise items that are considered to be consistent with DSM-5 diagnostic categories.
Format	Questionnaire
Rater	Parent
Length	99 items
Estimates of associated costs	~£42 for manual, plus ~£1.30 per questionnaire and scoring sheet

Measure	Conners Early Childhood *Conners Early Childhood (1989, 1997, 2009)*
Purpose	To assess the behavioural, social, and emotional development, and developmental milestones of preschool-aged children.
Scales/Items/Constructs	Items focused on children's behaviour relate to defiant and aggressive behaviours, inattention/hyperactivity, social functioning, atypical behaviours, mood and anxiety, and sleep problems
Age range	2 – 6 years
Training	Requires training up to a master's level or qualification to practice in healthcare
Interpretation	An interpretive report can be generated for each completed assessment. In the interpretive report, individual scores are compared to a normative group. Raw scores are converted to t-scores, accounting for child age and gender. It is emphasised that information gathered through this measure should be combined with information obtained through other measures and tools before being used to aid assessment and guide intervention decisions.
Format	Questionnaire
Rater	Parent, teacher
Length	190 items
Estimates of associated costs	~£120 for manual, ~£4.50 per response booklet, and ~£215 for scoring software

Measure	**Infant-Toddler Social and Emotional Assessment (ITSEA)** *Carter, Briggs-Gowan, Jones, and Little (2003)*
Purpose	To assess a wide array of social-emotional and behavioural problems and competencies
Scales/Items/Constructs	Items relate to externalising (e.g., impulsivity, aggression, defiance), internalising (e.g., anxiety, separation distress, withdrawal), and dysregulation (e.g., negative emotionality, sensory sensitivity), competencies (e.g., compliance, attention, imitation/play, empathy, and prosociality), maladaptive behaviours, atypical behaviours, and social relatedness
Age range	12 – 36 months
Training	Recommend 4 hours of training w/ clinician
Interpretation	The subscale scores are added and averaged depending on the number of items answered. Scores are then converted to t-scores and percentile ranks dependent on child age and gender. Elevated t-scores on the internalising, externalising, and dysregulation scales identify areas "of concern". The manual provides guidance for interpretation alongside exemplar clinical cases.
Format	Questionnaire
Rater	Parent, childcare provider
Length	166 items
Estimates of associated costs	Starter kit including the ITSEA manual, and 25 parent and 25 childcare provider questionnaires: ~£200; Scoring software: ~£75

Measure	**Neonatal Behavioural Assessment Scale (NBAS)** *Brazelton (1984)*
Purpose	To provide a strengths-based, in-depth neurobehavioural assessment for newborn babies
Scales/Items/Constructs	Administered or observed items focus on habituation (sleep protection), social interactive responses and capabilities, motor system, state organisation and regulation, autonomic system, and reflexes
Age range	0 – 2 months
Training	2-day course + practice phase
Interpretation	The scale has been used as a tool for observation, assessment, and intervention. The infant's responses to the behavioural and reflex items are recorded on a standardised scoring sheet. This measure does not use norming in its scoring.
Format	Observation
Rater	Clinician
Length	53 items
Estimates of associated costs	£745 for course

Measure	**Strengths and Difficulties Questionnaire (2-4)** *Goodman (1997)*
Purpose	To assess emotional and behavioural problems and prosociality
Scales/Items/Constructs	Items relate to scales for emotional problems, conduct problems, hyperactivity, peer problems, and prosociality
Age range	18 – 60 months
Training	Free, 60-min video call with Youth in Mind offered for training
Interpretation	If the measure is completed online, the Youth in Mind website produces a technical report for professionals, a description of the scores, the level of concern, an overall impression, and suggestions for further assessment and action. A provisional banding of SDQ scores for 2–4-year-olds has been developed based on prevalence estimates in the general population and data on the distribution of SDQ scores in 2–4-year-olds. The measure can be used in initial clinical assessments, in evaluating outcomes, and as a screener. For interpretation, it is emphasised that information gathered through this measure should be combined with learning from research interviews and clinical ratings.
Format	Questionnaire
Rater	Parents, childcare provider
Length	25 items
Estimates of associated costs	Free use of questionnaire, cost for electronic scoring at ~£0.21 per questionnaire

Understanding individual needs can support early identification

Despite the challenges of measurement, approaches to early identification are needed as emotional and behavioural problems can be distressing for young children and their families in the here and now of their lives. Identifying potential problems early, and providing support, may also intercept problems before they worsen – at which point the burden to children is increased and problems become more difficult and expensive to treat.

A key goal of early identification is to identify children and families who may benefit from further follow up, support, and assessment now and in the future. There is less consensus on whether and when it is appropriate to assess young children with a view to arriving at a diagnosis. This should be considered carefully based on the best interests of the child, involve specialist input, and requires a more comprehensive approach than is considered here.

Screening of the child's mental health and development is likely to be most effective when it occurs at fairly regular intervals, as variation is normal but persistent difficulties generally indicate higher risk for more significant problems. This is why it is important that children have regular contact with skilled professionals through the early years. When services, such as midwifery or health visiting, are cut or work remotely, important opportunities to identify need can be missed.

An example
Understanding mental health need

PEDAL's UKRI-funded Helping Little Minds Thrive project will work to bridge existing gaps in the assessment of, and intervention for, mental health needs in very young children (0-4 years). A key strand of this research programme will involve working directly with families and services to develop an approach which helps professionals and families to identify mental health need right from the beginning of babies' lives.

Understanding need at a population level can shape services

At a population level, service providers and commissioners can bring together a range of information including data from the use of screening tools and assessments, together with wider statistics on risk factors, to aid understanding about local need.

When working to understand the needs of babies and young children, local partnerships need to consider:

- How to create processes and systems that enable sharing data between the different services, agencies and commissioners that work with families in pregnancy and the early years, including the possibility of using unique identifiers to enable different services to track children's service use and outcomes.
- Whether data can be disaggregated by age, so the specific needs and experiences of babies and young children are visible.
- If it is possible to capture and report data on which adults interacting with public services are pregnant or have parental responsibility, which may reveal more about the numbers of children exposed to parental stress factors.

Where local data exists, it is important to analyse it locally to understand if there are some families or communities who are experiencing particularly high levels of risk, and to map service use against need. Data about whole population need and service provision can sometimes disguise the needs of particularly underserved communities.

Capturing babies', children's and families' voices

The measures described above are not designed to capture the 'being' element of mental health (i.e. whether babies are feeling good). It is also not possible to know if what is measured reflects what matters to most babies, toddlers, and young children themselves and if they feel mentally healthy.

It is easier to capture parents' views about their own, and their child's wellbeing and development. Some services use approaches such as outcome stars to capture what families want to achieve from an intervention, and the extent to which progress is made to towards these goals.

Playing with young children, and watching them play, can enable adults to gain valuable insights into their mental health. Play-based measures are being used in research, and in some cases – such as play therapy – to guide clinical assessment and intervention.

At a population level, it is important to engage babies, children, families and their communities – including those with additional needs and from traditionally marginalised communities – to capture their insights about mental health to inform local needs assessments and decision making. Utilising participatory and ethnographic methods with 0- to 5-year-olds could enhance our understanding of children's priorities. Many individual services and local partnerships are now

doing more work with parents and children to understand their needs and priorities, and in some cases, to co-produce solutions.

Useful resources

Voice of babies and young children

The Scottish Government's **Voice of the Infant Best Practice Guidelines** provide guidance on how to take account of babies' views and rights in all encounters they may have with professionals in statutory or third sector services, or in public spaces such as shops, libraries or galleries.

Local example

Lambeth's under 5s children's voice project

The Child Friendly Lambeth partnership created a range of interesting ways to consult children and young people to underpin the Lambeth Children and Young People's Strategy, and as part of their journey to become a UNICEF UK Child Friendly Community.

They wanted to ensure that the voices of children under five were heard at this crucial stage of the programme, but recognised traditional consultation may not be appropriate. As a solution they developed the Under 5's Children's Voice Project so that this age group could share their own unique experiences of the world around them and have a say in shaping the local spaces and services that have a direct impact on their physical and mental wellbeing.

Child Friendly Lambeth developed guidelines for children's centres and early years settings, and bought and shared disposable cameras. They asked children and their caregivers to take photos of things they liked in Lambeth that are good for children and young people, places they liked to go with their families, and things that make Lambeth special. The images captured a vast range of activities and places, from play grounds and green spaces to local services, and formed part of a local display. This was a crucial part of informing the selection of priority areas for Child Friendly Lambeth which, in addition to the three mandatory areas included Place, Safety and Security, and Child Friendly Services.

Local example

A partnership approach to ensuring Early Years children are actively engaged in making Liverpool child-friendly

As part of its journey to become recognised as a UNICEF UK Child Friendly City, Liverpool City Council is collaborating with universities and academics to engage young children.

In the early stage of the programme, the University of Liverpool's School for Public Health Research's *Children, young people and families programme* hosted an event to bring together researchers across universities.

As part of the programme, the universities have been working with children and young people in the city to design a website. A key part of this work has been the focus on making sure that children in their early years are involved. Liverpool Hope University's Head of Subject for Early Childhood, Dr Cleona Boyle, co-developed a participation pack for very young children with her students. They tested the activities in the packs with children and young people in the city, and worked closely with several nurseries. The activities aimed to encourage young children's voices in innovative ways and were especially designed with the Liverpool context in mind. They included telling visiting extra-terrestrial life about what they love about their city, engaging as a secret agent with Mission Liver-Bird, and creating treasure maps showing their favourite and least favourite parts of Liverpool.

Once developed, the website will be a place where all children and young people can find out information about the programme and take part in a meaningful way. The website will involve organisations and agencies from across the partnership, and showcase the best practice that they develop.

This partnership approach between the Council and its academic partners is resulting in children and young people from all ages being actively involved and included in shaping the city's services and spaces.

Suggested action

Use these questions for discussion

As providers and commissioners, it can be useful to go "back to basics" when thinking about measurement. You could start by exploring the following questions?

- Why are you interested in measuring babies' and young children's mental health (for example, is it to improve individual service delivery, to understand population need to evaluate interventions, or something else?)
- What outcomes and experiences do you specifically do you want to know about?
- What outcomes and experiences were the services and interventions in your area designed to influence?
- What resources do you have available to capture and record measurement information, and to analyse and use it?

Based on these questions, you could review current measurement and evaluation arrangements, and consider future improvements.