

| November 2024 | Report

This content was created by
What Works for Children's Social Care before
merging with the Early Intervention Foundation
to become Foundations.

The content contains logos and branding
of the former organisation.

 **Foundations**

What Works Centre for Children & Families

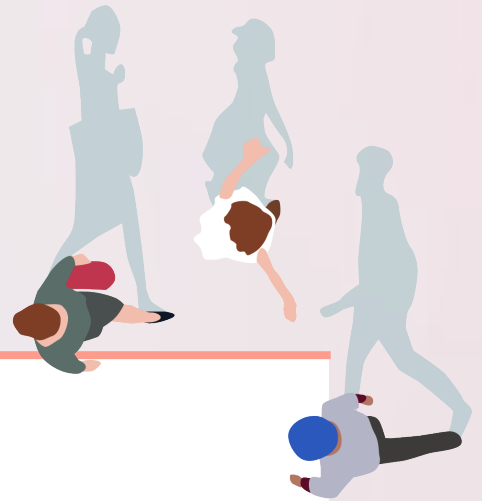
foundations.org.uk



What Works for
**Children's
Social Care**



EARLY
INTERVENTION
FOUNDATION
Coming together as What Works
for Early Intervention & Children's Social Care



Watch Me Play!

A pilot feasibility study of a
remotely-delivered intervention to
promote mental health resilience
for children (aged 0-8) across UK
early years and children's services

November 2024





What Works for
Children's
Social Care



Coming together as What Works
for Early Intervention & Children's Social Care

Acknowledgements

We would like to thank all those who enabled this study to go ahead. In particular, we would like to thank all the participants, the practitioners and managers who generously gave their time and support to the study. We would like to thank Dr Sarah Walker (University of Exeter), Dr Billie Lever Taylor (King's College London), Ms Catherine Sutton (Norfolk Special School) and Ms Ema Mortimer (PPI) for generously giving up their time to support this study as a critical friend through our Executive Committee. We extend thanks to What Works for Children in Social Care and, later, Foundations who provided funding for this research and for supporting the team throughout its duration. We would also like to thank the various members of our PPI group – busy parents/carers who graciously gave up their time at important timepoints during the study to ensure that our work was sensitive and appropriate.

Trial registration

The study was registered on the International Standard Randomised Controlled Trial Number registry on 14 April 2023 (ISRCTN) (<https://www.isrctn.com/ISRCTN13644899>).

Authors

Elizabeth Randell (1)
Claire Nollett (1)
Vaso Totsika (2)
Eilis Kennedy (3, 6)
Sean Johnson (1)
Lena Meister (1)
Kim Smallman (1)
Rachel McNamara (1)
Jeremy Segrott (1)

Jenifer Wakelyn (3)
Angela Casbard (1)
Kathy McKay (3, 7)
Ekaterina Bordea (4)
David Wilkins (5)
Ema Mortimer

- (1) Centre for Trials Research, Cardiff University, Cardiff, Wales.
- (2) Division of Psychiatry, University College London, England.
- (3) Tavistock and Portman NHS Foundation Trust, London, England.
- (4) Comprehensive Clinical Trials Unit, University College London, England.
- (5) School of Social Sciences, Cardiff University, Cardiff, Wales.
- (6) Department of Clinical, Educational and Health Psychology, University College London, England.
- (7) Institute of Population Health Sciences, University of Liverpool, England.



What Works for
Children's
Social Care



Coming together as What Works
for Early Intervention & Children's Social Care

Funding and competing interests

What Works for Children's Social Care (GRA000135). The authors have declared that no competing interests

About What Works for Early Intervention and Children's Social Care

What Works for Children's Social Care (WWCSC) and the Early Intervention Foundation (EIF) are merging. The new organisation is operating initially under the working name of What Works for Early Intervention and Children's Social Care.

Our new single What Works centre will cover the full range of support for children and families from preventative approaches, early intervention and targeted support for those at risk of poor outcomes, through to support for children with a social worker, children in care and care leavers.

To find out more visit our website at: www.whatworks-csc.org.uk

About Tavistock and Portman NHS Foundation Trust and partners

Watch Me Play! was Sponsored by the Tavistock and Portman NHS Foundation Trust in collaboration with University College London and the Centre for Trials Research (CTR) at Cardiff University. The Chief Investigator is a Child and Adolescent Psychiatrist at the Tavistock and Portman which is a specialist NHS mental health trust which offers a full range of mental health services and therapies for children and their families, young people and adults. The Co-Chief Investigator is an Associate Professor in Intellectual Development at University College London (UCL). UCL have also health economics expertise via their Comprehensive Clinical Trials Unit.

The CTR is the largest group of academic clinical trials staff in Wales and is funded by the Welsh government through Health and Care Research Wales. The CTR took the lead in running and managing the study.

If you'd like this publication in an alternative format such as Braille,
large print or audio, please contact us at: info@whatworks-csc.org.uk



CONTENTS

Executive summary	5
Introduction	10
Methods	14
Findings	25
Limitations	57
Discussion	59
Conclusions	64
References	65
Appendices	70



Executive summary

Background

Half of mental health problems are established by the age of 14 years (Public Health England, 2019) and intervention to prevent or reduce the likelihood of mental health problems developing is important. However, services have experienced rising demand and are not always able to offer help when families need it. In 2019–20 only a quarter of children estimated to need support in England received it (Children’s Commissioner, 2021). Those who do get access to services often have to wait months or years. Barriers to accessing help are further exacerbated for certain groups, such as children with developmental delay and those living in areas of high deprivation. This is despite such children being known to be at increased risk of developing mental health problems (Crenna-Jennings & Hutchinson, 2020). Strengthening parent/carer–child interaction and relationships is known to protect children’s mental health. Watch Me Play! (WMP) is an intervention for caregivers with their babies or young children that aims to enhance child development and caregiver–child relationships. WMP involves a parent/carer watching the child play and talking to their child about their play for a period of up to 20 minutes (this is called one session). Some sessions are facilitated by a trained practitioner who joins the parent/carer in watching the child or baby either in-person or online (using secure video conferencing software), and talking to the child about their play, and provides prompts to the parent/carer where necessary. It was recommended that services offer five facilitated sessions, following an introductory meeting, and parents/carers did at least ten independent sessions with their child over a five-week period (i.e. three sessions a week, of which one was facilitated). Adherence was defined as having done ten (of 15) sessions, including the five facilitated ones.

Watch Me Play! was first developed in a local authority service for children in care to promote mental health resilience for babies and children. It aims to do this by promoting individual attention and age-appropriate stimulation and by supporting the caregiver relationship and interaction with their child. Caregivers have reported improvements in their relationship with their baby or child and in children’s play skills, speech and language development, and behaviour. We think these improvements may help to prevent future mental health problems.

Although WMP shows promise and it is already used in some services, we do not yet know whether it is effective. To determine if WMP improves wellbeing in families, we would ultimately want to conduct a randomised control trial (RCT). However, before we are in a position to do this, we need to understand how parents/carers engage with WMP by doing this smaller, feasibility study.

Objectives and research questions

The primary objective was to assess the feasibility of delivering WMP for babies and children (age 0 to 8 years) referred to early years and children’s services in the UK. To achieve the primary objective, the following were assessed:



- The feasibility of recruiting families, recruitment rates, adherence to the intervention, and retention rates (the number of families remaining on the study at three months).
- The feasibility of recruiting and training suitable intervention providers and facilitators to deliver the WMP intervention.
- Implementation of WMP (online and face-to-face).
- The acceptability of study processes to delivery organisations, delivery staff, and parents/carers.
- The acceptability, barriers, and facilitators of the WMP intervention to delivery organisations, delivery staff, parents/carers to inform a future trial.
- Intervention receipt and hypothesised mechanisms of action in order to refine the intervention logic model.
- Intervention costs and the feasibility of conducting a full economic evaluation in a future definitive effectiveness trial.
- Treatment as usual (TAU) as delivered by participating services, how WMP interacts with or is delivered in relation to TAU, and the most appropriate comparator for a definitive trial.
- A primary outcome for a future definitive trial.

Design and sample

This was a non-randomised single group study, including a process evaluation, of WMP delivered remotely via an online video platform in the home of parents/carers with children aged 0 to 8 years referred to early years and children's services. We proposed to recruit up to 40 families from early years, children's health services, and some social care, education, or voluntary services. Measures on child and parent/carer outcomes were obtained from the participating parent/carer at baseline and follow-up (three-months (+2/-2 weeks) post-recruitment). Information on the child's status as in contact with a social worker (current and in the past), and reported developmental delay were collected at baseline only. Participants completed questionnaires via an online survey.

Qualitative semi-structured interviews were conducted remotely in the context of the process evaluation which aimed to explore the experiences of parents/carers and practitioners who took part in the Watch Me Play! intervention.

Findings

Recruitment and participation

The recruitment process faced some challenges but ultimately managed to engage a number of families. A total of 37 families were contacted and invited to participate, with 21 families (57%) providing informed consent. Among those families, 20 completed the screening questionnaire, all of whom were eligible to participate in the study. Baseline assessments were completed by 17 families, with 12 families (60%) completing at least one follow-up assessment. Of the families who self-reported their attendance, eight out of nine (89%) had attended at least one WMP session.



Barriers and facilitators to recruitment

Staff and parent/carer feedback indicated a range of barriers and facilitators to recruitment. Delays in obtaining NHS Ethics and NHS R&D approval created a restricted period for recruiting parents/carers and delivering the intervention, leading to challenges in recruitment. Additionally, increased workloads for some teams limited their capacity to offer WMP to multiple families simultaneously. Parents/carers noted that the recruitment process was generally acceptable.

Retention rates and adherence

Retention was measured by families reaching the three-month timepoint and completing at least one follow-up measure. Out of 20 families who stayed in the study until closure, 12 families reached the three-month timepoint and eight (67%) completed at least one follow-up measure. Among these, five families completed the session questionnaire, indicating they attended 22 facilitated sessions out of a possible 25 (88%), with a mix of in-person and online attendance.

For families who received the follow-up measures prior to reaching the three-month timepoint, only 10 facilitated sessions were attended out of a possible 20. Factors contributing to this could be the limited time available to complete the sessions due to the need to bring some participants' data collection windows forward in order to fit data collection into the main study timeline.

Fidelity of WMP programme delivery

The fidelity of the WMP programme was assessed using checklists completed by practitioners. A total of 68 checklists were returned for 15 families, with 52 (76%) containing complete data for fidelity analysis. All of these checklists achieved a score of 10 or above on a 15-item scale, indicating a high level of fidelity. The median fidelity score was 13. Incomplete fidelity checklists were mainly due to missing information or blank scoring.

Acceptability of WMP and research procedures

Overall, semi-structured interview data indicate that WMP and study processes were broadly acceptable, with both parents/carers and practitioners reporting a positive experience. Caveats include different perspectives on the feasibility of online delivery (which is likely to work better for some groups than others), and a view that some study processes particularly in relation to research in NHS settings were potentially burdensome. The package of outcome measures was also too onerous for participants, as indicated by lower than anticipated response rates and from interview data.

Barriers and facilitators to implementation

Qualitative data from staff and parents/carers revealed various challenges and successes in implementing WMP. Practitioners were cautious about which families they approached, targeting those for whom the programme seemed most appropriate rather than adopting a blanket recruitment approach. Additionally, while online sessions offered flexibility, not all parents/carers found them suitable, indicating that a hybrid model of delivery may be more effective.



One key concern emerged around the appropriateness of the Vineland measure for certain age groups. Some parents/carers reported that the questions were not suitable for their young children, highlighting the need to revisit the assessment tools used in the study. Overall, this initial evaluation of the WMP programme provides valuable insights into recruitment challenges, participant engagement, programme fidelity, and implementation barriers and facilitators. The results suggest a positive reception from participants, with notable room for improvement in specific areas, particularly around recruitment timelines, assessment tools, and the flexibility of the programme's delivery model.

The health economic analysis aimed to estimate the cost of the Watch Me Play! (WMP) intervention and assess the feasibility of a full economic evaluation in a future effectiveness trial.

Cost of WMP

This involved calculating the costs from the provider's perspective, including training, supervision, and delivery. The total cost of training 16 practitioners was £7,986, with each practitioner costing £499.1. Supervision meetings varied, with the average attendance being five meetings at a total cost of £10,645, or £665 per practitioner. The total cost included facilitator's time delivering the sessions, preparing and undertaking administrative duties, and practitioners' time attending the sessions. The cost of delivering the intervention depended on the number of facilitated sessions and the mode of delivery, with a range of £209 to £418 per child, depending on attendance and session type.

Cost of healthcare resource use

Healthcare resource utilisation was measured using the CA-SUS questionnaire at baseline and follow-up. Response rates for the CA-SUS questionnaire were 50% at both baseline and follow-up. Average resource use cost was £346 at baseline and £859 at follow-up. This estimate included primary care, community care, and emergency care. Most resource use involved NHS services, with a few instances of private healthcare, and costs were reported in 2021/22 GBP.

Parent/carer health-related quality of life (HRQL) and quality-adjusted life years (QALYs)

The EQ-5D-5L questionnaire was used to assess HRQL at baseline and at three-month follow-up. The analysis calculated QALYs using an area under the curve approach. At baseline, the average HRQL was 0.85, increasing slightly to 0.89 at follow-up. The average QALYs were 0.23, indicating generally high quality of life among participants.

The economic analysis highlighted the varying costs of the WMP intervention depending on delivery mode, supervision requirements, and participant attendance. It also showed that most healthcare resource use was within the NHS framework, with parents/carers generally reporting high HRQL and QALYs.

Design considerations for future trials

We set out to describe treatment as usual (TAU) for this population, in order to identify an appropriate comparator for a future trial. Practitioners who participated in semi-structured



interviews described how they worked within multidisciplinary teams that interacted with numerous agencies and referral pathways. WMP was therefore being introduced into a complex system but could be offered to families either in addition to, or while waiting for TAU services.

We also sought to identify a candidate primary outcome measure for a future definitive trial. Evidence from semi-structured interviews with parents/carers around the needs of this population suggest that the Strengths and Difficulties Questionnaire (SDQ) would be an appropriate primary outcome for a future trial, given it is a well-validated mental health screener widely used in clinical services and research that is brief and normed across a wide age range (2 to 17 years old).

Conclusions and implications

The initial evaluation of Watch Me Play! in early years and family services shows that the programme was well received by both service providers and families, indicating its value. Despite some challenges with site and participant recruitment, future evaluations can use the insights gained about barriers and facilitators to address these issues. The evaluation also provides guidance on adapting the Watch Me Play! training to reach parents/carers earlier and on modifying the research process to better align with the needs of parents/carers and supporting sites.

The feasibility of a health economics evaluation is encouraging, with initial cost analysis showing promise. A proposed hybrid delivery model – where families primarily receive remote support (i.e. via an online video platform) with optional in-person sessions based on need – was positively received by parents/carers and service providers, with preliminary evidence suggesting increased acceptability among staff.

However, there are still unresolved questions about the acceptability of randomisation and the feasibility of recruiting participants from a broader range of early years and family services. These issues should be further explored in a future feasibility randomised controlled trial.



Introduction

Half of mental health problems are established by the age of 14 years and 75% by 24 years (Public Health England, 2019). Early intervention and prevention of mental ill health is therefore vitally important. However, increased demand over recent years has meant that access to child mental health services is often restricted to those in severest need. In 2019–20, only a quarter of children estimated to need help received it (Children’s Commissioner, 2021) and difficulties accessing treatment remained a key concern in 2021 (BBC, 2021a, 2021b). Those not offered help include children at higher risk of developing problems later and those with problems that do not meet service thresholds (Crenna-Jennings & Hutchinson, 2020). Important opportunities for prevention and treatment are therefore missed and resource-stretched services and practitioners are left frustrated at not being able to intervene at an optimal time (Colizzi et al., 2020).

The importance of child-led play for development and learning is widely attested (DCSF, 2009; Sunderland, 2007). Discovery through play is linked with the development of social–emotional skills, attention, and problem-solving – these executive functioning skills are foundational for school readiness (Broadhead, 2004; Fabian, 2009; Yogman et al., 2018; Slade 1994). Providing attention to a child’s play and putting their play into words has been found to enhance confidence, self-efficacy, imagination, self-esteem, concentration, regulation, and co-ordination. Benefits have also been reported in the attunement and sensitivity of the caregiver (Panksepp, 2007; Sunderland, 2007; Dozier et al., 2009; Ayling & Stringer, 2013).

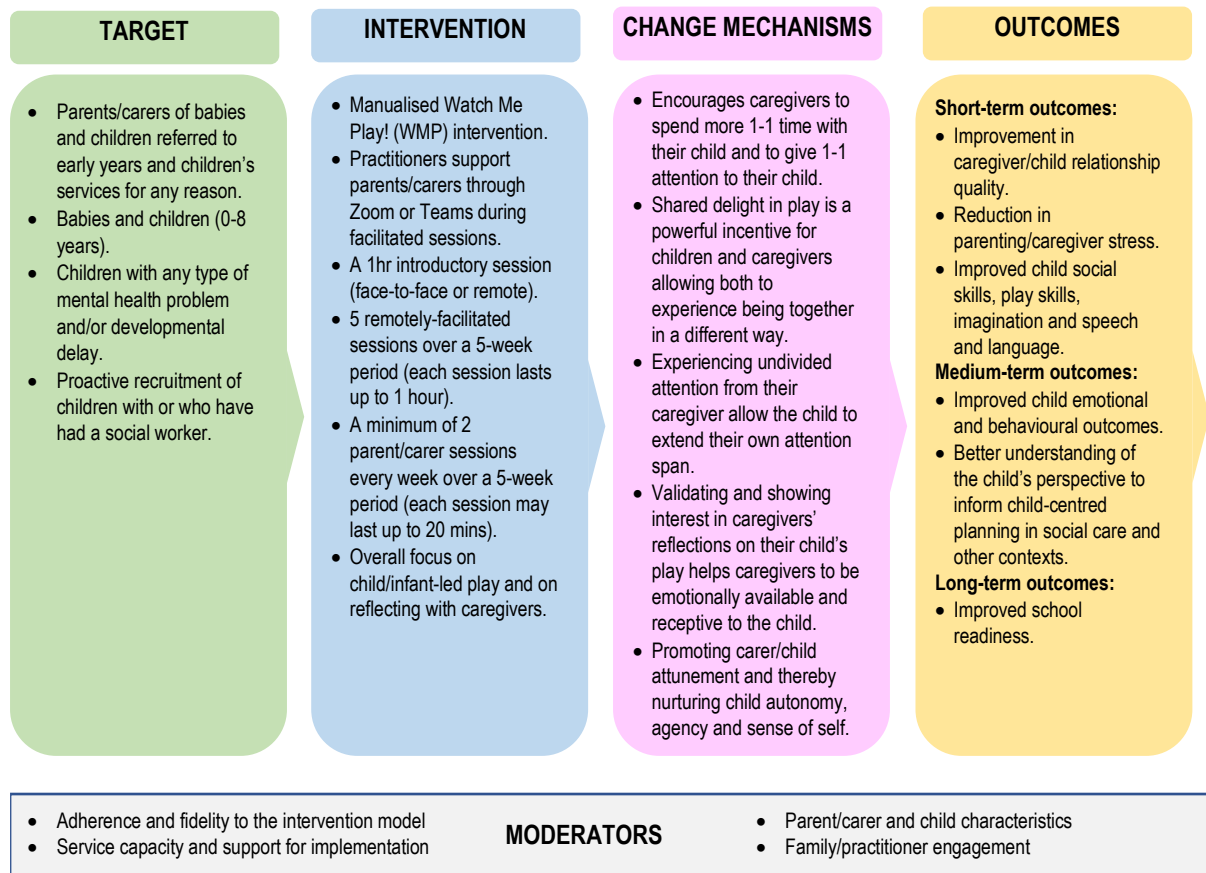
Watch Me Play!

Children in care are known to be at high risk of developing mental health problems in childhood and adolescence (National Youth Advocacy Service, 2019; York & Jones, 2017; Care Leaver Covenant, 2018).

Watch Me Play! (WMP) (Wakelyn, 2018; Wakelyn & Katz 2020) was first developed in clinical work to support babies and young children in care together with their caregivers. It is an early intervention designed to support caregiver attunement and attention to the child in order to promote social–emotional well-being and thereby mental health resilience (see Figure 1).



Figure 1. Watch Me Play! logic model



WMP can be delivered in the first weeks of a baby's life up to the age of eight years depending on the kind of play they enjoy and are ready for. Parents/carers are encouraged to provide children with age-appropriate toys and their undivided attention in a quiet environment for regular periods of up to 20 minutes, and to talk to their child about their play (this is called one session). The parent/carer watches their child as they play, only joining in if the child invites them to do so, allowing the child to lead the play, as long as this is safe. The parent/carer follows the child's play and describes what the child is doing. With a baby, the caregiver notices and follows the baby's signals; mirrors expressions, movements, or sounds; and watches the baby's responses. This can give an idea of what the baby is interested in. The parent/carer does not direct the child's play. The parent/carer does not engage in other activities, instead giving their full attention to the child or baby during the 5 to 20-minute session. Caregivers are encouraged to reflect on their observations of their child's play and about being with their child as they play in a diary at the end of a session.

Some sessions are facilitated by a trained practitioner who joins the parent/carer in watching the child or baby, and talking to the child about their play, and providing prompts to the parent/carer where necessary. Towards the end of the session, the trained practitioner discusses the child's play with the parent/carer: what they saw, what was new, or not new, what the child enjoyed or was frustrated by; and about the parent/carer's experience: what they noticed, enjoyed or found difficult. A facilitated session with a practitioner lasts up to one hour. WMP is a flexible model that fits in with parents/carers' time availability, the needs of the family, and the resources that services can offer.



Since the approach was manualised in 2018 (Wakelyn, 2018), it has been introduced in a wider range of services including Child and Adolescent Mental Health Services (CAMHS), early years and perinatal services. Equality, diversity, and inclusion are promoted through a focus on learning from each family's culture and journey. All caregivers looking after a child aged from birth to eight years including mothers, fathers, teenage parents, single parents, same-sex parents, transgender parents, kinship carers, foster carers, and adoptive parents can be offered support using this approach. Flexible ways of working that include home visits, clinic sessions, and online and telephone sessions to meet the needs and wishes of families also promote inclusion. Translated resources for families and practitioners produced in response to requests from services include leaflets in Bengali, Chinese, Dutch, French, Greek, Italian, Japanese, Mongolian, Norwegian, Polish, Romanian, Russian, Ukrainian, and Urdu.

The approach was found to be helpful during the pandemic as many services supported their clients or patients remotely, WMP was delivered online or as a combination of online and face-to-face sessions. WMP therefore likely addresses/may have the potential to address the need for a low intensity, scalable, preventative intervention, inclusive of a broad age range (0 to 8 years) that can be offered by practitioners in NHS, local authority and voluntary sector settings. It has the potential to address key challenges for children's mental health identified in the 2021 Children's Commissioner's report of both increasing access to intervention for children and broadening the 'system of support' on offer across a range of services (Children's Commissioner, 2021).

In the UK, a study of the feasibility of providing and evaluating WMP online to families with a child with developmental delay under the age of seven was completed in 2022. This single-group feasibility study aimed to recruit parents/carers of 0 to 6-year-old children with developmental delays through the community. Evaluation data were collected at baseline and following five weeks of remote (i.e. online) facilitation of WMP. Semi-structured interviews were conducted at the end of the programme. Analyses examined recruitment, WMP completion, and measure completion rates. Interviews investigated the acceptability of WMP (to services and parents/carers) and the feasibility of the evaluation. Thirty-eight parents/carers expressed an interest in the study; 15 consented to take part. Of those, 53% completed WMP in the planned five-week period, while 73% completed over seven weeks. Carer-reported outcome measure completion rate was 88%. Parenting efficacy, child behaviour and emotional problems, socialisation, and communication were the outcomes where clinically significant change was reported by most participants. WMP acceptability was high; the main facilitator was online delivery. Findings from this study support the potential of WMP as an intervention for this group of carers and indicate that further evaluation is warranted (Koenig et al. (submitted for publication). 'A feasibility study of Watch Me Play! for parents/carers of young children with a developmental delay').

The current study directly addresses priority four of the top ten priorities for children's mental health identified by the James Lind Alliance – i.e. 'What are the most effective early interventions or early intervention strategies for supporting children and young people to improve mental resilience?' (McPin Foundation, 2018). The key importance of early intervention in improving children's lifelong mental health and the need to develop widespread service and practitioner capacity within the UK in order to do this is further



highlighted in the recently published Department of Health and Social Care Early Years Health and Development Review Report: 'The Best Start for Life: A Vision for the 1,001 Critical Days' (DHSC, 2021). In addition, the *Five Year Forward View for Mental Health* emphasises the need for 'action to intervene early and build resilience as well as improving access to high-quality evidence-based treatment and services' (Mental Health Taskforce, 2016). Maximising opportunities for prevention and improving access are also noted as priorities in the Framework for Mental Health Research (DHSC, 2017) and in the Mental Health Research Goals 2020–2030 (Academy of Medical Sciences, 2020).

WMP was designed to complement or precede other interventions – e.g. video-feedback and parent/carer training programmes. As it is less resource-intensive to deliver, WMP may enable services to increase access and address barriers to engagement that can limit the reach of more intensive approaches. WMP has been found to be particularly of benefit in circumstances where there may be additional barriers to accessing mental health support, such as children in the care system, remote rural areas, areas of high deprivation, ethnic minority communities. Children with a social worker may experience particular risk factors which may be addressed with WMP. The broad age range includes the possibility of early intervention in infancy when relationships and developmental trajectories may be most amenable to change. It is therefore essential that the evidence base for WMP is developed to enable services to offer the right support to families. The first step in this process is to formally assess the feasibility and acceptability of WMP for families referred to early years and children's services, either currently experiencing mental health problems or at significant risk of developing mental health problems in later life. Results of the present study will indicate whether it is feasible and appropriate to conduct further evaluation of WMP.

Aims and objectives

The primary objective of the current study was to determine the feasibility of delivering WMP to families of young children (aged 0 to 8 years) referred to early years and children's services in the UK.

Specifically, we addressed the following:

1. The feasibility of recruiting families, recruitment rates, adherence to the intervention, and retention rates.
2. The feasibility of recruiting and training suitable intervention providers and facilitators to deliver the WMP intervention.
3. Implementation of WMP (online and face-to-face).
4. The acceptability of study processes to delivery organisations, delivery staff, and parents/carers.
5. The acceptability, barriers, and facilitators of the WMP intervention to delivery organisations, delivery staff, parents/carers to inform a future trial.
6. Intervention receipt and hypothesised mechanisms of action in order to refine the intervention logic model.
7. Intervention costs and the feasibility of conducting a full economic evaluation in a future definitive effectiveness trial.
8. Treatment as usual (TAU) as delivered by participating services, how WMP interacts with or is delivered in relation to TAU, and the most appropriate comparator for a definitive trial.
9. A primary outcome for a future definitive trial.



Methods

Design

A non-randomised single group feasibility study of WMP, including a process evaluation, delivered remotely via an online video platform, or in person for parents/carers with children aged 0 to 8 years referred to early years and children's services.

The study ran for 23 months from June 2022 through to April 2024. Recruitment started on 24 August 2023 and final follow-up was completed on 11 March 2024.

Ethical approval and research governance

Ethical approval was granted by South Central – Berkshire B Research Ethics Committee on 10 March 2023 (ref: 23/SC/0045). Research Governance approval was also granted by host care organisations.

Study setting and participants

Watch Me Play! was conducted through six NHS early years and children's health services and one local authority education service. Eligibility criteria were that children were aged between 0 and 8 years old and had been referred to, or accepted by, an early years/children's service. Parents/carers of those children were then asked to consent to participation.

Sample size

As this was a feasibility study, we did not perform a formal sample size calculation. We aimed to recruit up to 40 families (one caregiver of one child) from up to 15 sites. This was felt to represent a sufficiently large sample to address key questions of acceptability and feasibility of intervention delivery and study procedures.

Recruitment

Site recruitment and training

Following emails inviting expressions of interest in the study, clinical leads in UK early years and children's services were contacted in July 2022 with further information and an invitation to meet with the research team. Interested services were sent a list of frequently asked questions and an overview of training arrangements practitioners would undertake as part of the study. Following initial training, practitioners were expected to join in supervision, offer WMP support during the intervention period and complete and return a short checklist after each facilitated WMP session. Each participating service (i.e. research site) was invited to identify up to three practitioners to take part. One practitioner per service was invited to be the co-ordinator for information between the service and the research team. The co-ordinating practitioner undertook an online course in Good Clinical Practice for research on



ethical, scientific, and practical standards for research conducted in health and social care settings.

Study specific WMP training consisted of an introduction to the intervention in two three-hour online workshops. This introduction included a discussion of a preparatory free play activity; overview of key principles of the intervention; video illustration, case studies, overview of leaflets introducing the intervention and practitioners' roles; an overview of the study and of materials and resources for families and for practitioners; small group case discussions, a quiz and discussions about next steps. Practitioners received a resource pack including: Further Information about WMP, A Guide to Online Working, Caregivers' Interview, WMP Diary, Case Discussion Template and Practitioners' Checklist. Practitioners were encouraged to share resources in a website launched in July 2023 – watchmeplay.info – with families, including a short animated video illustrating the intervention.

Once trained and delivering intervention, practitioners were invited to join regular supervision meetings. These were 75-minute small group work/discussion meetings to discuss the intervention. Practitioners were expected to take part in four group supervision meetings, facilitated by the intervention developer and trainer, for each five-week intervention. They were also invited to attend the group supervisions with any question or issue they wished to discuss. The focus in the supervision meetings was on a detailed account of meetings with the family, the play session, and the discussion with caregivers about the child's play. Practitioners were invited to use a case discussion template to present this detailed account of interactions with the parents/carers and the child and to complete and discuss the five-item Practitioners' Checklist to monitor their fidelity of implementation.

Sixteen services identified approximately 40 practitioners who took part in training in November 2022, January 2023, and February 2023. Services included CAMHS and Early Years CAMHS, Infant Parent and Early Attachment services, a Placement Support Team (for children in care), a Virtual School (for children in care and previously in care and children with a social worker), a charity supporting parents at risk of having a child removed into care, a child development service for children with autism/neurodiversity, and a perinatal service. Nine services dropped out, however, largely due to staff turnover – the staff who had trained were no longer in the services at the time site recruitment began in February 2024; with one exception – a service based in Edinburgh that had to be excluded because of different ethical approval frameworks in Scotland. The seven remaining services, however, included both NHS and non-NHS settings.

Practitioners taking part in the training included early years practitioners, early years mental health practitioners, social workers, therapeutic social workers, placement team senior practitioners, therapy therapists, counsellors, specialist health visitors, clinical psychologists, assistant psychologists, highly specialised clinical psychologists, educational psychologists, child and adolescent psychotherapists, child and adolescent psychotherapists in training, and a dramatherapist. All practitioners had at least two years' experience working with families referred to early years and children's services and were trained to deliver WMP by the intervention developer according to a standardised protocol.



Participant recruitment

Participants were identified by services as potentially eligible according to the eligibility criteria. Members of the direct care team shared a brief information leaflet (briefing sheet) about the study with parents/carers, either via email or in person. Parents/carers interested in taking part or knowing more could then either use a link code on the briefing sheet to go straight to the full participant information sheet and online consent form or they could contact the research team via contact details on the briefing sheet. Those who provided informed consent were then screened for eligibility via online questionnaire or telephone call with a team member.

Informed consent

Informed consent was obtained for all participants prior to the participant undergoing full screening and study related procedures. Informed consent for the whole study was recorded as e-consent (via Qualtrics). All potential participants were provided with an information sheet and offered the opportunity to discuss the study with the research team. Separate optional selection boxes on the study e-consent form allowed the participant to consent (or not) to being contacted by the study team for a qualitative interview and/or to complete a video recording of a play session. If these boxes were selected, the researcher contacted the participant to arrange these at the appropriate time (for video recording this was before the intervention and for interview this was after the intervention). At this point, the participant could still decide not to take part in the interview or video recording. For semi-structured interviews, the parent/carer's verbal informed consent was obtained by a member of the research team, prior to interview using a standard script including the content of the study consent form.

Withdrawal

Parents/carers could withdraw consent at any time during the trial period. If a participant initially consented but subsequently withdrew from the study, clear distinction was made as to what aspect of the study the participant was withdrawing from:

1. Withdrawal from intervention
2. Partial withdrawal from further data collection (e.g. questionnaires, interviews)
3. Complete withdrawal from further data collection
4. Withdrawal of consent to all of the above.

The withdrawal of participant consent did not affect the study activities already carried out and the use of data collected prior to participant withdrawal. It was important to collect safety data ongoing at the time of withdrawal, especially if the participant withdrew because of a safety event. A participant could withdraw or be withdrawn from study intervention for the following reasons:

- Withdrawal of consent for intervention by the parent/carer
- Any alteration in the child's condition which justified the discontinuation of the intervention in the PIs opinion.

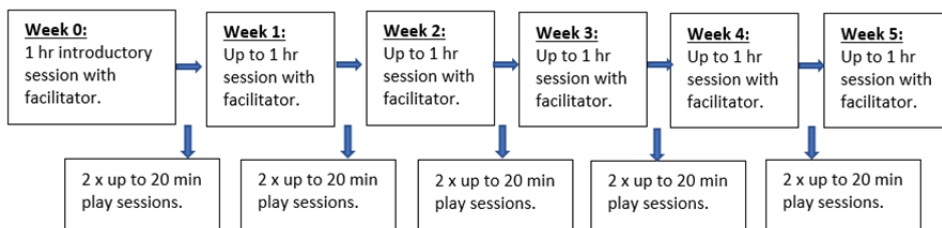


Once consented, any participant wishing to formally withdraw from the study would be asked to complete a withdrawal form.

Intervention

In this study, the intervention was designed to run over a five-week period (see Figure 2). We asked services to deliver an introductory session to explain the intervention and then offer five facilitated sessions with parents/carers. Parents/carers were also asked to complete an additional ten independent sessions (two each week between facilitated sessions). The format was therefore three sessions a week, of which one was facilitated. A full description of the intervention can be found in the study protocol (Randell et al., 2024).

Figure 2. Watch Me Play! intervention flow diagram



As mentioned above, since WMP's publication in 2020, families have been supported in face-to-face sessions as well as remotely (i.e. online), with practitioners supporting parents/carers through Zoom or Teams during the facilitated sessions. In this study, WMP was primarily delivered online but where the parent/carer or the WMP practitioner felt that some in-person contact was important, services could offer face-to-face facilitated sessions (e.g. the introductory meeting and/or one facilitated session). Many services have returned to face-to-face contact, but we wanted to see how WMP could provide a flexible model of support through a mixture of face-to-face and online sessions (hybrid format).

Any healthcare, social care, or early years professional with two or more years' experience of working with children and families can be trained in WMP. Training is two sessions of three hours each followed by group supervision.

The manual¹ and other resources are intended to help parents/carers to support their child's development through play, and covers:

1. What is Watch Me Play!
2. How to do Watch Me Play! – Quick View
 - a. Preparing
 - b. Baby and Child-led play
 - c. Watching your child play
 - d. Talking with your baby or child about their play
 - e. Talking with another adult about the child's play
3. Toys and materials for play
4. A Watch Me Play! Diary

¹ See: <https://tavistockandportman.nhs.uk/our-models-of-care/watch-me-play/>



5. Why Play Matters

Two shorter leaflets and a four-minute video explaining the approach are also available for parents/carers. In line with regular practice outside the study, practitioners were asked to complete a five-item self-rated WMP checklist after each session with caregiver(s) (Appendix A).

Supervision: WMP practitioners were expected to attend supervision for each participant with whom they worked, with four group supervision meetings anticipated during the five-week intervention period. Group supervision involved WMP practitioners taking turns to discuss their case with the WMP supervisor drawing on written notes of a recent session. An additional option of a monthly drop-in supervision was also available to discuss issues arising.

Outcomes

Primary outcomes assessed feasibility and were as follows:

1. Recruitment: Overall recruitment rate. Data from semi-structured interviews with staff and parent/carers on barriers and facilitators of recruitment to the study. Descriptive statistics of number of parents/carers who have or had (in the previous 24 months, or prior to this) contact with a social worker who agreed to participate.
2. Retention: Descriptive statistics on the number of participants who remained in the study at three months.
3. Adherence to the intervention: descriptive statistics on the number of sessions (total and facilitated) offered to and completed by parents/cares as an indicator of engagement, percentage of participants who completed 10/15 sessions, including all five facilitated sessions.
4. Fidelity of WMP programme delivery: a standardised WMP checklist was completed by practitioners after each session with parents/carers to assess whether the intervention was delivered as intended. Each of the five items was self-rated as 'achieved' (2), 'partially achieved' (1), 'not yet achieved' (0) and 'explored with caregiver?' (Yes = 1, No = 0). For a session to be completed with acceptable fidelity, it was expected that a score of 10 out of 15 items would be achieved.
5. Acceptability of WMP to parents/carers, WMP practitioners and service managers: qualitative data from the process evaluation interviews.
6. Acceptability and feasibility of data collection procedures: views of parents/carers on the experience of taking part in the study assessed via semi-structured interviews.
7. Assessment of the barriers and facilitators to implementation: assessed via semi-structured interviews with delivery staff (practitioners) and service managers, including feasibility of recruiting and training practitioners, acceptability and feasibility of offering online WMP, including the barriers and facilitators of delivering WMP; whether implementation differed across different types of services; fidelity of implementation assessed using data from fidelity checklists described above.
8. Intervention mechanisms: Data from semi-structured interviews with parent/carers and delivery staff on how they experienced the process of WMP and perceived impacts.



9. Intervention costs and the feasibility of conducting a full economic evaluation in a future definitive trial.
10. Treatment as usual (TAU) description: descriptive data from early years and family services on the named interventions (manualised intervention packages) they offer to families of 0–8-year-old children referred for support. Data from interviews with staff to describe how WMP interacts with or is delivered in relation to TAU to define the most appropriate comparator for a definitive trial.

Data collection

Secondary measures on child and parent/carer outcomes (see Table 1) were obtained from the participating parent/carer at baseline and follow-up (three-months (+2/-2 weeks) post-recruitment). Information on the child’s status as in contact with a social worker (current and in the past), and reported developmental delay was collected at baseline only. Participants completed questionnaires in an online survey designed specifically for this trial using Qualtrics, and through Q-Global and PARiConnect for the Vineland Adaptive Behavior Scale (VABS) and Parent Stress Index (PSI) respectively. For participants who struggled with online data entry, participants were offered the option of telephone support from a researcher.

We asked a small number (n=8) of participants who had consented, to video record up to 20 minutes of play with their child via MS Teams. The purpose of this was to assess the feasibility and acceptability of collecting data in this way in a future trial but would not be required for delivery of WMP as standard care.

Table 1. Parent/carer-reported outcomes and health economic measures

Construct	Measure
Child mental health	Child Behavior Checklist; CBCL (Achenbach, 2011)
	Strengths and Difficulties Questionnaire; SDQ (Goodman, 2001)
Child Socialisation and Communication	Vineland Adaptive Behavior Scale 3; VABS (Sparrow & Cicchetti, 2016)
Parenting Stress	Parent Stress Index-Short Form; PSI (Abidin et al., 2006; Haskett et al., 2006)
Parenting Competence	Being a Parent scale; BAP (Johnston & Mash, 1989)
Parent–Child Relationship	Mothers’ Object Relations Scale-Short Form; MORS-SF and MORS (Child) for 0–4 years (Oates et al., 2018; Simkiss et al., 2013), Child–Parent Relationship Scale-Short Form (CPRS-SF) for 4+ years (Driscoll & Pianta, 2011), and the frequency of parent–child activities (Parent–Child Activity Index; CPAI (Totsika, 2015))



Parent–child interaction	A 20-minute videotaped free play interaction between the parent/caregiver and the child (n=8 baseline participants)
Parent/carer Health-Related Quality of Life and Quality-Adjusted Life Years	EQ-5D-5L (Herdman et al., 2011)
Service use for child	A modified version of the Child and Adolescent Service Use Schedule (CA-SUS) (Byford et al., 2007)

Qualitative data collection

Interviews were conducted virtually or by telephone. A topic guide was developed using a scoping literature review and input from the research team and PPI advisory panel. Semi-structured interviews with parents/carers explored their experience of receiving the intervention, including perceived benefits and mechanisms. These data were collected to enable us to explore the extent to which key intervention mechanisms appear to be working as intended, variation across context (e.g. delivery sites, professional role of delivery staff, family characteristics such as child's age), and any unintended mechanisms or barriers to participation. This data was used to refine assumptions underlying proposed intervention mechanisms and theory of change and inform final selection of outcomes for a future effectiveness trial.

Semi-structured interviews were conducted virtually or by telephone with staff members delivering the intervention. We also invited other staff members, e.g. managers in the organisations who have been involved but not delivered the intervention. A topic guide was developed using a scoping literature review and input from the research team. Interviews with staff explored engagement with WMP, and factors affecting adherence. We invited members of delivery staff: trained WMP practitioners and managers/individuals responsible for implementation coordination to participate in interviews to explore their experience of delivering WMP, and influences on implementation fidelity. These interviews also explored the systems and structures needed for future implementation of WMP at scale across a range of early years and children's services.

Semi-structured interviews with parents/carers, delivery staff and trainers/managers explored provision of existing services (usual practice) and distinctiveness of WMP from other interventions. This aided interpretation of quantitative data collected on service utilisation. We asked staff to reflect on their feelings about taking part in the intervention, any barriers and facilitators to participation and any way in which the intervention or the surrounding administration could be improved. A key aspect of this was to find out from the staff members whether the experience of the intervention online had been a success in comparison to their experiences (if any) of delivering the intervention in person.

The topic guides for parents/carers and staff included overarching topics but were flexible and allowed the interview to be guided by the interviewee in terms of order and wording, and allow the interviewee to initiate and develop topics that had not been pre-empted by the study team and PPI advisory panel. We were pragmatic in sample size. The number of interviews was based on preliminary analysis/interviewer field notes indicating whether the



data collected sufficiently answer the research questions. Our proposed sample size for interviews with parents/carers was up to 20 and for staff was 6–8. We aimed to conduct up to three parent/carer interviews and one staff interview per participating site, thus giving greater breadth of practice variation. We monitored the breadth and depth of data, whether interview participants were representative of the study population, and practical aspects of recruitment (attempts to invite participants, numbers declined, and withdrawn). We continually reviewed our sampling decisions and kept detailed notes on our sampling strategy to maintain transparency. Data collection was iterative, allowing preliminary analysis to guide the subsequent sampling decision and selection of further interviewees. We purposefully sampled interviewees with maximum variation across location.

Participant payments

Those who completed a baseline and follow-up questionnaire were offered a £50 voucher at each timepoint. A £50 voucher was also offered to parent/carer participants taking part in qualitative interviews and those who took part in the free play video recording. To address digital poverty and support the inclusion of those who might struggle to participate, we also offered £20 to support those who may not have had adequate internet data to undertake the online evaluation.

Safety reporting

In addition to the standard ICH GCP SAE reporting requirements, for the purposes of this study the removal of a child from the biological family (or unplanned removal more specifically) was considered to be an adverse event and any instances were recorded.

Process evaluation

Using the MRC guidance (Craig et al., 2018) as a framework, the process evaluation employed mixed methods and examined (i) recruitment and reach; (ii) retention; (iii) engagement and adherence; (iv) intervention implementation; (v) intervention acceptability, barriers, and facilitators of participation. Recruitment rates/patterns and intervention fidelity/adherence data were summarised descriptively. Semi-structured interviews were conducted with participants and delivery staff, including trainers, and examined thematically to explore implementation processes, intervention mechanisms, and the role of contextual factors.

Analyses

The primary outcome was to determine the feasibility of future research. This was a mixed methods approach, including qualitative interviews.

Quantitative analysis

The quantitative measures contributing to the primary feasibility outcomes were:

1. Recruitment feasibility: The number of families invited to take part, and the number and percentage who attended at least one WMP session.



- a. Number and percentage of children with reported developmental delay recruited.
 - b. Number and percentage of children with contact with a social worker recruited.
2. Retention: The number and percentage of families who remained in the study at three months as defined by completion of three-month questionnaires.
3. Adherence:
 - a. Number of online and/or face-to-face WMP sessions.
 - b. Number of independent and/or facilitated WMP sessions.
 - c. The number and percentage of families who completed 10/15 sessions including all five facilitated sessions.
4. Fidelity of programme delivery: Quantitative data from the standardised WMP checklist descriptively summarised with tabulations and graphics. Practitioners completed a short WMP checklist after each session with caregiver(s). Checklists were self-rated according to fidelity criteria to determine whether acceptable fidelity was achieved.
5. Acceptability for families:
 - a. The number of questionnaires (incl. EQ-5D-5L, and service use) completed by families at each timepoint.
 - b. Number of remote videos captured by families completing this element, and number of over five minutes duration.

Outcome measures related to the clinical, Quality of Life and health economics were:

1. Cost of WMP: Total costs attributed to WMP from study sites and cost per child.
2. Identification of potential outcomes and assessments for a future trial:
 - a. Descriptive tables of baseline demographic information including social worker contact status at baseline.
 - b. Descriptive tabulations and graphics showing responses to the parent/carer, child and health economic measures.
 - c. Number and percentage of children in the programme with existing mental health problems (as defined by the clinical cut-off score of the CBCL) at baseline, number and percentage of children with sustained, improved, and worsened mental health problems at three months, as reported by the families, according to changes in CBCL scores from baseline.

Qualitative analysis

Interview transcripts were analysed using reflexive thematic analysis (Braun & Clarke, 2022). Familiarisation of data began with reviewing rapid research sheets completed after each interview and re-listening to interviews with the transcript. Data were then reviewed by site and preliminary codes generated to label data of interest based on the research objectives. Coded data were then retrieved to generate themes and produce summaries of interviewees' talk on each theme, for each individual participant, and visually arranged in a table to build an overall picture of the whole data set. This allowed for comparison across parents/carers, staff and sites to identify variation and similarities in the final stage of interpretation of data. The next stage involved using the summaries to examine the quality and boundaries of themes identified. From this, we finalised a thematic map refining the specifics of each theme to capture key concepts and produce analytical commentary and interpretation of the data set as a whole and connect with the original research objectives. The qualitative software package, NVivo (2015) was used to manage the data and project memos maintained to record analytic progress and decisions made. Coded data and thematic frameworks produced were checked by a second researcher for understanding and



content consistency and NVivo (2015) used to manage and interrogate the data. These data were analysed by two researchers experienced in thematic analysis and qualitative research methods.

Economic evaluation

We assessed the costs of delivering facilitated WMP, including cost of training sessions and time spent on different components of the intervention. We also examined the feasibility of collecting service use data and Health Related Quality of Life (HRQL) information for use in a future cost-effectiveness analysis. Service use was collected using a modified version of the Child and Adolescent Service Use Schedule (CA-SUS) at baseline and three months after the intervention. We collected the self-reported EQ-5D-5L from parents/carers to assess their HRQL at baseline and three months after the intervention.

Data cleaning and transfer

Data were exported from Qualtrics, QGlobal, and PARiConnect in CSV format and then imported into SPSS and cleaned by the study Data Manager. All data were then stored on Cardiff University servers in restricted folders available only to those on the trial team who required access. Pseudonymised health economics data was separated and securely transferred to University College London for analysis.

Study management and independent oversight

Project Team

The Project Team (PT) met on a weekly basis and included the CI, co-CI, Study Manager/s, Data Manager, Statistician/Data Analyst, Administrator, and other research staff directly employed by the study. The Study Manager was responsible for day-to-day running and coordination of the study. The PT discussed all day-to-day management issues and referred any key management decisions to the Study Management Group (SMG).

Study Management Group

The Study Management Group (SMG) met every four to six weeks and included all Investigators and the study Project Team (as detailed above) to discuss study progression and key management issues. SMG members were required to sign up to the remit and conditions as set out in the SMG Charter.

Executive Committee

Given that the intervention was classed as low risk, there was no separate Data Monitoring Ethics Committee (DMEC). An Executive Committee (EC) was instead set up to provide independent oversight. It comprised of an independent Chair/Statistician, one local PI (for experience of WMP implementation and study participation), one independent WMP expert (research in families and children) and one member of the Parent Carer Advisory Group. The EC met three times during the course of the study to provide overall supervision and advice through its independent chair. EC members were also required to sign up to the remit and conditions as set out in the EC Charter.



Parent/Carer Advisory Group

Throughout the study, various aspects of the research process were checked with the parent/carer advisory group to ensure that the questions being asked, and the ways in which data were collected, were both appropriate and sensitive. The group was co-led by a member of the research team (KM) and two foster carers. The parent/carer advisory group was made up of an additional five members from across the UK – four mothers and one father. All had heard of WMP as it was offered through the services they were involved with, and one had practical experience of WMP. Given the spread of the group across the UK, and acknowledging the time constraints of parents/carers and service providers, meetings were conducted via Zoom and individually with a member of the study team, or via emails checking in about different aspects of the study. This allowed for all meetings to be conducted at times best for the group members. All members of the group were given vouchers as a thank you for their time.

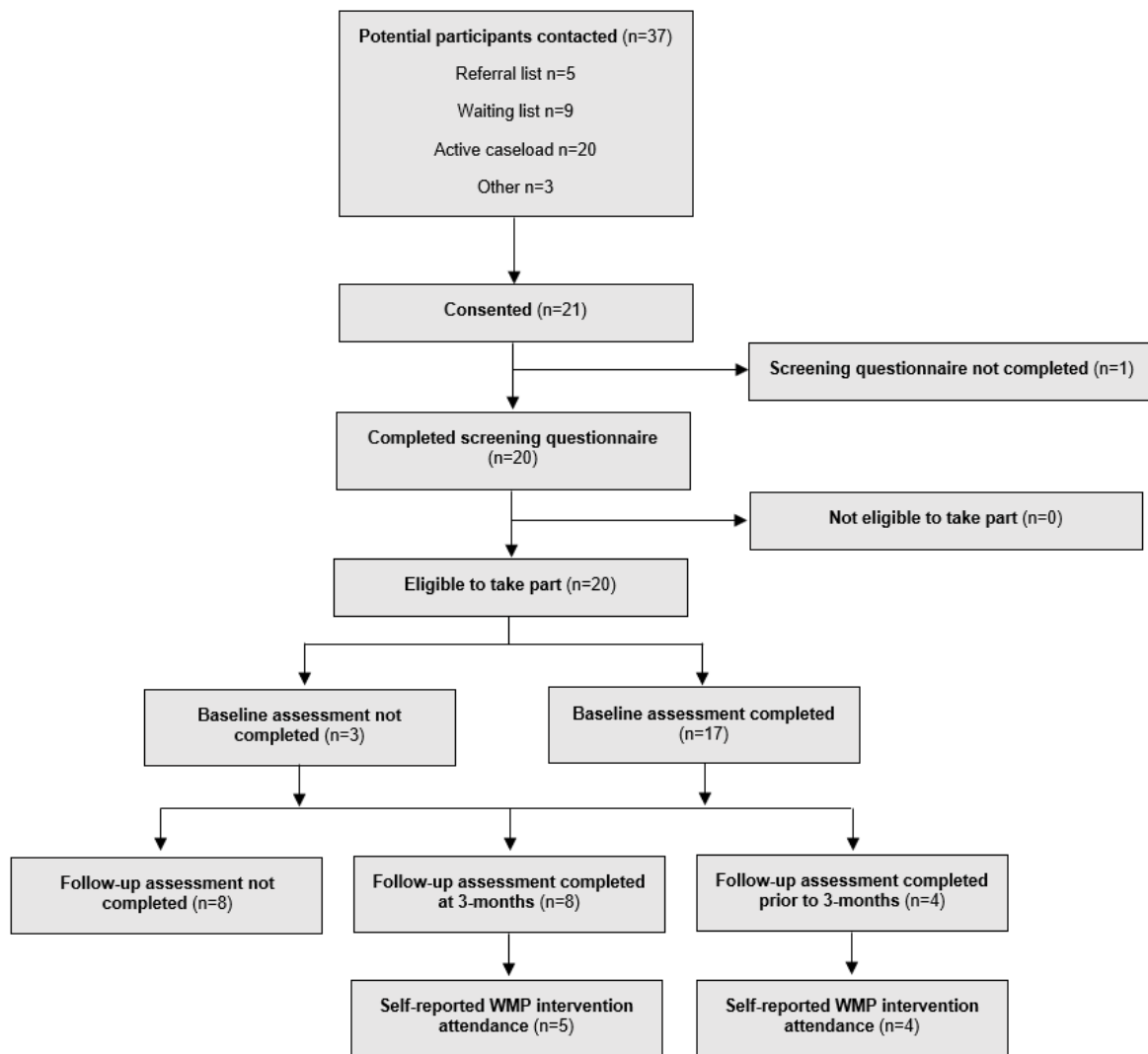


Findings

Recruitment

Recruitment: Semi-structured interview data from staff and parent/carers on barriers and facilitators of recruitment to the study. Descriptive statistics of number of parents/carers who have or had (in the previous 24 months, or prior to this) contact with a social worker and have been invited to participate, and the number who agreed to participate.

Figure 3. Flow diagram for the WMP study



- The number of families invited to take part, and the number and percentage who attended at least one WMP session.

Figure 3 shows how families progressed through the WMP study. In total, 37 families (of the target of 40) were assessed by participating sites as potentially eligible during the recruitment window and were therefore contacted and invited to take part in the study. Of



these, 21 (57%) provided informed consent. All but one family completed the screening questionnaire (n=20) and all were eligible to take part (i.e. child aged 0 to 8 years and referred to/accepted by an early years/children's service).

At least one baseline assessment was completed by 17 families (85%) and at least one follow-up assessment was completed by 12 families (60%). Nine (45%) of families self-reported their WMP intervention attendance as part of the follow-up questionnaires. Of these, eight (89%) attended at least one WMP session (see Table 2).

- b. Number and percentage of children with reported developmental delay recruited
Of the 20 families who completed the screening questionnaire, 13 families (65%) reported their child having a neurodevelopmental disorder (either diagnosed or under assessment).

Table 2. Parent/carer self-reported baseline characteristics

Characteristic	Measure
Age: (years) median [Inter Quartile Range [IQR]]	34.5 [32.0;39.5]
Gender:	
Male	2 (10%)
Female	18 (90%)
Another gender/prefer not to say	0 (0%)
Missing	0 (0%)
Ethnicity	
Asian/Asian British: Bangladeshi/other	3 (15%)
Asian/Asian British: Indian/Pakistani	0 (0%)
Asian/Asian British: Chinese	0 (0%)
Black/African/Black British: African/Caribbean/Black other	0 (0%)
Mixed/multiple ethnic groups: White and Black Caribbean/White and Black African/White and Asian/Mixed other	0 (0%)
White: English/Welsh/Scottish/Northern Irish/British	11 (55%)
White: Irish	2 (10%)
White: Travelling community	0 (0%)
Any other ethnic background	0 (0%)
Prefer not to say	3 (15%)
Missing	1 (5%)
How is your health in general?	
Very good	6 (30%)



Good	9 (45%)
Fair	5 (25%)
Bad/very bad	0 (0%)
Missing	0 (0%)
Do you have a longstanding illness, disability or infirmity?	
Yes	7 (35%)
No	13 (65%)
Missing	0 (0%)
Highest level of educational qualifications	
No qualifications	2 (10%)
Some GCSEs passes or equivalent	4 (20%)
5 or more GCSEs at A*-C or equivalent	0 (0%)
5 A/AS Levels or equivalent	2 (10%)
Higher Education but below degree level	3 (15%)
Degree (e.g. BA, BSC, MA)	9 (45%)
Don't know/prefer not to say	0 (0%)
Missing	0 (0%)
Occupation	
Employed full time (30+ hours/week)	7 (35%)
Employed part-time (or variable hours)	3 (15%)
Employed but on maternity/paternity leave, sick leave	1 (5%)
Full time parent/carers	7 (35%)
Not working	2 (10%)
Missing	0 (0%)
Do you feel that you will be able to complete questionnaires in English?	
Yes	20 (100%)
No	0 (0%)
Missing	0 (0%)
Are you already doing Watch Me Play outside of this study?	
Yes	0 (0%)
No	20 (100%)
Missing	0 (0%)



Relationship to the child	
Biological mother	16 (80%)
Biological father	1 (5%)
Adoptive/foster parent	1 (5%)
Grandparent	0 (0%)
Other	1 (5%)
Missing	0 (0%)
Child's current age	
Below 18 months	3 (15%)
18 months to 23 months	0 (0%)
2 years old	1 (5%)
3 years old	8 (40%)
4 years old	3 (15%)
5 years old	4 (20%)
6 years old	1 (5%)
7+	0 (0%)
Missing	0 (0%)
Child's gender	
Male	12 (60%)
Female	8 (40%)
Another gender/prefer not to say	0 (0%)
Missing	0 (0%)
Does your child have a longstanding illness, disability or infirmity?	
Yes	5 (25%)
No	15 (75%)
Missing	0 (0%)
Conditions professionals have diagnosed or have told you might apply to your child (diagnosed/under assessment)	
Learning disability/intellectual disability/developmental delay	14 (70%)
Autism or ADHD	13 (65%)
Motor disorder/cerebral palsy/genetic syndrome	3 (15%)
Specific learning difficulty/communication disorder	3 (15%)
A mental health problem (diagnosed/under assessment)	2 (10%)



Children with reported neurodevelopmental condition	
Yes	13 (65%)
No	7 (35%)
Missing	0 (0%)
Are you or have you ever been in contact with social services because of your child?	
Yes	7 (35%)
No	13 (65%)
Missing	0 (0%)

- c. Number and percentage of children with contact with a social worker recruited
- Seven families (35%) reported being in contact with a social worker because of their child. Of these, two were currently in contact with social services, three were in contact with social services within the past 24 months, and two were in contact with social services but not within the past 24 months.

Parents/carers interviewed found recruitment to the study acceptable and understood the information provided to them about taking part and reassured by practitioners presenting the information:

“But [named practitioner] explained everything ... and really reassured us that it was like, she explained that I don’t need to take part in it, if I don’t want to.” (P0102)

“... I trusted [named practitioner], is lovely, at [area in site 6], I sort of, trusted what she was saying anyway.” (P0602)

One parent/carer required the briefing information to be translated and said that the translation was of poor quality, although this did not deter them from deciding to take part. Parents/carers were motivated to participate, perceiving potential benefits from the intervention to increase their understanding of their child and an opportunity to learn. Although taking part was seen as something positive, one parent/carer recalled how they ‘jumped’ at the opportunity describing having had no support or help for two years:

“... we had nothing else to um, I mean to go to, as a, as a help, as a support.” (P0601)

For staff, the key factor which affected recruitment was the delay in the study receiving NHS ethical and governance approval to begin participant enrolment, and the restricted period which then remained for recruiting parents/carers and delivering the intervention. In some cases, by the time teams were able to commence recruitment, increases in general workloads meant that they had reduced capacity, resulting in some practitioners only being able to deliver WMP to one family at a time (rather than offering it to multiple participants in parallel).



Another important theme in the semi-structured interview data concerned how services (sites) operationalised eligibility criteria to identify which families to approach. Overall, it appeared that practitioners sought to identify families for whom they thought WMP might be suitable or directly helpful, rather than offering it as a 'blanket' service to anyone they were working with or were due to do so:

"... we did think quite carefully about who we would approach and who we wouldn't, so, I guess we were particular with that. We didn't just sort of, do a blanket." (0202)

Relatedly, a number of practitioners suggested that they felt it most appropriate to offer WMP where they (or a partner service) had already established a relationship with the family in question – it was not always seen as an intervention to be offered prior to a service working with a family:

"So, we were only approaching families who already had a Care Coordinator, within the service." (0103)

"Our thoughts were, when we agreed to do the research, was that this would work with existing caseloads. ... it would be something else we could offer families we were already working with." (0201)

"... the whole team had it in mind that this was going on, so, potentially, we could offer it to, to new referrals, but I think it felt like, actually, um, it felt more, we felt more comfortable with offering it to people that we already knew ..." (0202)

Some barriers to recruitment were also reported by practitioners in relation to the need for families to use electronic devices (e.g. laptops) to provide study data:

"... for some families, that wasn't ... wouldn't be an option, you know, if they didn't have the technology, they didn't have a laptop, or they were too anxious to be ... to work in that ... in that online way." (0201)

Retention

Retention: Descriptive statistics on the number of participants who remained in the study at three months. Retention was defined as having reached the three-month timepoint and completed at least one of the follow-up measures. Twenty families remained in the study until closure. Of these, 12 families reached the three-month timepoint and eight (67%) completed at least one of the follow-up measures. Due to study closure, eight families were sent the follow-up measures prior to reaching the three-month timepoint. Four (50%) of families completed at least one of the follow-up measures. There was no evidence that retention differed in terms of parent/carer characteristics. However, the small sample size precluded any meaningful conclusions.

Adherence

Adherence to the intervention: Quantitative data to describe the degree to which parents/carers engaged with the intervention (descriptive statistics on the number of



sessions (total and facilitated) offered and completed, percentage of participants who completed 10/15 sessions, including all five facilitated sessions).

- a. Number of online and/or face-to-face WMP sessions
- b. Number of independent and/or facilitated WMP sessions
- c. The number and percentage of families who completed 10/15 sessions including all five facilitated sessions.

Table 3. Session summary

	Three-month follow-up n=5	Pre-three-month follow-up n=4
Attended at least one facilitated session	5 (100%)	3 (75%)
Did not attend any facilitated sessions	0	1 (25%)
Attended one facilitated session	0	0
Attended two facilitated sessions	1 (2%)	0
Attended three facilitated sessions	0	2 (50%)
Attended four facilitated sessions	0	1 (25%)
Attended five facilitated sessions	4 (80%)	0
Number of attended facilitated sessions: median	5.0	3.0
Number of facilitated sessions attended online	11 (50%)	3 (30%)
Number of facilitated sessions attended face-to-face	11 (50%)	7 (70%)
Independent WMP sessions: median	11.0	4.5
Families who completed 10/15 sessions including all five facilitated sessions	4 (80%)	0 (0%)

For families who reached the three-month timepoint (n=12), five responded to the session questionnaire (42%). These families reported a total of 22 out of a possible 25 facilitated sessions (5 per family x 5 families: 88%). Four families (80%) attended all five facilitated sessions. The median number of reported independent sessions was 11.

For the families that were sent the follow-up measures prior to reaching the three-month timepoint, four responded to the session questionnaire (50%). It must be noted that it is unlikely that these families had sufficient opportunity to complete all planned sessions.

Fidelity

Fidelity of WMP programme delivery: Checklists were rated to determine whether fidelity was achieved: each of the five items was rated as achieved (2), partially achieved (1), and not yet achieved (0). In addition, a further question enquired whether the item had been explored with the parent/carer (1) or not (0). For a session to be completed with acceptable fidelity, it was expected that a score of 10 out of 15 items will be 'achieved'.

Sixty-eight practitioner checklists (N.B. practitioners were asked to complete one per session) were returned for 15 families. Fifty-two (76%) contained complete data for inclusion in the fidelity analysis. All 52 (100%) of the fidelity checklist achieved a score of ten or above. The median total fidelity score was 13 (out of 15). The returned but incomplete fidelity



checklists (n=16, 24%) were either missing the second page (n=2), did not include scoring on whether the item was explored with the caregiver (n=7), or scoring left completely blank (n=7).

Table 4. WMP fidelity checklist

	Preparation	Baby- or child- led play	Watching the baby or child play	Talking with the baby or child about their play	Taking with another adult about the child's play	Overall
Achieved n (%)	39 (75%)	31 (60%)	32 (62%)	29 (56%)	28 (54%)	61%
Partially achieved n (%)	13 (25%)	21 (40%)	20 (38%)	22 (42%)	23 (42%)	38%
Not yet achieved n (%)	0 (0%)	0 (0%)	0 (0%)	1 (2%)	1 (2%)	1%
Explored with caregiver n (%)	50 (96%)	52 (100%)	51 (98%)	52 (100%)	49 (94%)	98%
Not explored with caregiver n (%)	2 (4%)	0 (0%)	1 (2%)	0 (0%)	1 (6%)	2%

In discussing the five-item checklist practitioners interviewed describe this as a useful tool for reflecting on practice and those who had started intervention delivery reported its usefulness in preparing for supervision.

“Yeah, it was fine, it was easy to do, erm, and it helped me to kind of reflect on whether I’d been doing the intervention properly or if there’s things I need to work on. And, it was useful so to do that before the supervision. So, if there was anything I felt I hadn’t done properly I could talk it through with [trial team psychotherapist] ... erm. So, yeah, it was really useful and it was quick to do as well.” (0602)

“Oh, yeah, I found the checklist actually really helpful. Um, mainly that it does just draw your attention back to sort of, just reflect, oh, you know, did I do, you know, did I do all of those things and oh perhaps actually next time, I need to do a bit more of that or, it helps gather, it helps me reflect at the end of the session. I found, I found it really helpful.” (0202)



Acceptability of the WMP programme

Acceptability of WMP to parents/carers, WMP practitioners and service managers: data from the semi-structured interviews.

In terms of the intervention and research overall there was a good level of acceptability with both parent/carer and practitioners reporting a positive experience.

“Um, no, everybody was really kind, and quick to respond, um, yeah, it was a fantastic study, everybody was really dedicated, um and very kind, so, yeah, I’m really, really happy that I participated, yeah.” (P0203)

“... it was a really positive, um, a really positive way of interacting, it’s just, I can’t think of any way that I would change it, no.” (P0602)

Staff and parents/carers interviewed were supportive of the intervention and the aims of the research. The information provided to them was clear and as noted in recruitment, parents/carers understood what participating in the study would involve and were reassured by practitioners.

There was buy-in from participating sites in the intervention itself. Staff interviewed saw value and benefit in the intervention, with many having previous experience of delivery and the intervention being a feature of their current service provision. Some practitioners reported having worked with the trial psychotherapist and established a relationship prior to taking part.

“Erm, it was one of the first interventions I learned in perinatal.” (1103)

“I mean, my training is as a Child Nurse Psychotherapist. So, you know, and, then Watch Me Play! was part of the training, when [trial team psychotherapist] came to my training school, to deliver the, you know, kind of, introduce us to it. And, I liked it right from then.” (0101)

Additionally, training and supervision provided as part of the trial was seen as both an incentive and benefit of participation by sites.

“I was very interested in the training, for Watch Me Play!, it’s a good fit with the clients that we work with.” (0201)

The online mode of delivery of Watch Me Play! was explored with parents/carers and staff. Of the parents/carers interviewed three had received the intervention online and one parent/carer had requested face-face explaining how online delivery would not be feasible or appropriate in their circumstances. The difficulty of working online with children with autism and families where there are high needs was a concern raised by practitioners.

“Um, if it’s gonna be a face-to-face thing, then we’re definitely going to do it, because it’s a different thing, with an autistic child, you can’t really do online things, he’s not gonna pay attention for two or three minutes and that’s more than, that’s not more than he can do, I mean his attention span is quite short. And, keeping him online, in front of a computer, is absolutely non-, non-viable.” (P0601)



“... I think with working with kids with autism. Um, I think it’s, it’s really quite difficult online.” (O601)

For those parents/carers where online delivery was acceptable, they reported on the accessibility and flexibility provided by this mode of delivery. They were able to schedule sessions around work and family and a comfort afforded from being at home.

“Yeah, it was more useful for me to have them online, because with work and stuff, it was just, it literally was half an hour out of the morning and that is it.” (P0102)

“But then we started having the online sessions, we were able to um, play here and do the Watch Me Play! online, that worked really well, cos he was more comfortable at home and he was still um, you know, he, he knew, he still knew that he was being watched but he was in his comfortable zone, and he was playing.” (P0203)

There are a number of intersecting factors affecting the acceptability of online delivery of Watch Me Play! for practitioners including technological capacity and practicalities, needs of the family, and therapeutic connection and efficacy. Practitioners were open to online delivery however appreciated practitioner discretion where face-to-face delivery was provided. Practitioners did express a preference for face-to-face delivery, acknowledging that much of their experience and work with families is in-person and for some this was a new way of working.

“And, then we had a go online, for, you know, to start online, but there, there was lots of sort of problems with technology, she kind of, couldn’t manage to get into the link, and there was a, it, kind of, lots of things, made it quite disrupted.” (O202)

“I would say, as, as you’ll probably gather, from what I’ve said so far, I’m not, I don’t like working, I’m, I’m fine with our interview [chuckling], um, basically, I rarely do meetings online with other, you know, schools and that sort of thing, I really don’t do any clinical work online.” (O601)

For practitioners there were concerns around the technology and the capacity of families having access to a suitable device and the ability to engage in the intervention online. It was noted that phones used by parents/carers can be difficult to position and concern that the technology might be a distraction for the child. Parents/carers interviewed however did not raise any challenges experienced as a result of the online mode of delivery; it was not viewed as a distraction or intrusion.

“... you know, he, he knew, he still knew that he was being watched but he was in his comfortable zone, and he was playing.” (O203)

“You just blank, you just blank out, like they’re not there.” (P0102)

Staff interviewed reported limitations about the field of view for observing sessions, delays in streaming, sound quality and being able to fully hear and see the parent/child interactions. These limitations, however, seemed to result in practitioners asking for input and narrative from the parent/carer thus facilitating conditions for Watch Me Play! by asking the parent/carer to narrate the play and their observations, describing what the child was saying and doing.



“When we were online, and then, Mum became more active in that sense, she was, she took, cos I actually had to say, you know, I, I’m not quite sure what the little girl was saying, I, I wonder if you can tell me? You know, and, and then Mum took more of an active role, so, so, in some way, it paradoxically, also helped.” (0101)

Practitioners had reservations about the physical distance created with online delivery and feeling disconnected from their families, being able to pick-up on body language and verbal cues as well as feeling they could respond appropriately through an online medium.

“... and when she’s on the phone, it was much more difficult to feel her and I connected.” (0202)

“Even though there was, you know, sort of, um, err, the, the mum and, and the little girl there and yeah, that was, it, yes, I, I found a sort of, a bit of a distance with the online, um, way of working.” (0101)

Although practitioners highlighted their concerns, reservations and challenges with online delivery, there were also successes reported. There was an openness from practitioners to delivering Watch Me Play! online and appreciation for researching this mode of delivery.

“I think it worked ... I was surprised by how well it worked, and I would guess that it depends on the families that are able to use it, as well...” (0201)

“Um, I think Watch Me Play! could be delivered online...” (1502)

In exploring the acceptability of the trial and its processes practitioners interviewed share a mixed experience. Site leads describe activity undertaken at a service and trust level, liaising with teams and managers and co-ordinating activity often across different sites and geographical areas.

“As a, a sort of Trust-wide organisational level, and once they gave their go ahead, then um, I could um, begin to kind of, err, ask whether other people were interested, so, err, our, our team, is spread across several sites, well sites. So, there’s this, [geographical location 1]. Um, and err, [geographical location 2], which is the site I work in and then there’s [geographical location 3], um, and, and that’s the team where my colleagues work.” (0101)

“Er we didn’t get it right and you know, different people had, so all of us had to fill out multiple forms. And that felt difficult to coordinate.” (0401)

Although practitioners felt that study information provided was clear, for some sites there were challenges in accessing documentation within the Microsoft Teams space. Site leads also acknowledged the volume of work and additional administration involved in taking part, some of which was unexpected and in addition to a busy workload.

“... we had to do the um, the training online. Which was quite long, for the ... the research training, which took me about four hours and it was at a really busy time.” (0201)

“I’ve got to get them to the forms, then felt like an extra admin, I think cos we do all our own admin for everything anyway, so, any extra admin, feels a complete pain in the arse.” (0601)



Sites were generally new to research involving evaluation of an intervention, particularly in an NHS context. Similarly, most researchers were not familiar with the specific clinical context.

“Um, right, okay, well, that sort of, was a learning curve for me, err, in the sense of, I, I mean, I, I didn’t realise quite how involved it was going to be in terms of getting Trust approvals ... Um, but um, I, I, I think, I wasn’t quite aware of all the behind the scenes ...” (0101)

“I mean it’s the first time I’ve been Principal Investigator ... erm, like to do that extra training.” (1101)

“And I’ve, yeah, I’ve not been part of a Research study before ... So I think I was a bit green ...” (0401)

“And I think initially I don’t think ... and that’s probably my fault, I hadn’t fully appreciated then that we had to wait for all of that bit to be done, before we could actually then even approach families, and then start it.” (1501)

Practitioners like site leads acknowledged the volume of paperwork and documentation received which for some was confusing and overwhelming. Similarly, time was also a factor for practitioners engaging with study documents and processes.

“So, I think at first, it was overwhelming and then I, and then I managed, I, I think I, I kind of narrowed down the necessary documents, that I really needed to, to sort of focus on.” (0101)

“Well, I think it was clear, but I think we were sent so many documents throughout and then again, and repeat, that’s been really confusing to kind of, gather it all in one place...” (0103)

“And, so, that, that’s just me, I, I’ve found that difficult, to get my head around it, because it doesn’t seem to be starting it, or, or it tis now, obviously. And, so, yes, so, I found that quite difficult, because there is a lot of information.” (0303)

Although there were challenges experienced in terms study management and study processes, all sites report positively about their communications with different members of the research team feeling that they were supported in their participation.

“Um, you know, when I’ve got in touch and emailed, everyone’s been quite quick to reply and you know, really helpful, in thinking about, you know, whether this is okay for the study and yeah, absolutely, yeah, really supportive.” (0202)

“There was, you know, there was something really basic that I didn’t know and then I emailed, I can’t remember, one of your colleagues and she was like ‘Oh well I’m online now you know, I had offered this space for people if there were difficulties.’ And I went and had a chat with her and that was hugely helpful.” (0401)

“Most definitely, erm, when I felt, we’ve had a question or something pop up, yeah, then everyone’s been really helpful and answered, really clearly, yeah, so brilliant.” (1103)



Acceptability and feasibility of study processes

A distinction is made between definitions of acceptability and feasibility, to allow for the possibility that an intervention may be acceptable to either practitioners and/or parents/carers but may still not be feasible to implement in the context of the research study as designed.

Acceptability and feasibility of data collection procedures: Data collected from parents/carers via semi-structured interviews on the experience of taking part in the study.

As previously stated, parents/carers interviewed found recruitment and participation in Watch Me Play! acceptable. They report positively of their experience of taking part in research and in this small sample report mostly positively about completing the questionnaires with varying preference for accessing these via phone or laptop. They reported that they were able to access the questionnaires and that they didn't take as long as they thought they would to complete. However, one parent/carer felt so overwhelmed when they received the email with links to all the questionnaires that they asked to withdraw – not feeling that they would have the time to complete them.

“Yes, yes, um, there were a lot of questionnaires and actually, um, when I saw the list of questionnaires, I thought, oh, I won't have time to do all these.” (P0203)

Ten parents/carers felt that the questions in the Vineland measure were not appropriate given their child's age. They left comments to suggest that their children were too young for the measure to be applicable to them. General comments on the measure included:

“[Child's name] is 5 so some of the things in this form are not relevant to [Child's name].”

“[Child's name] is only 3 and non-verbal so this doesn't relate to him at all.”

“My son is only 3 and non-verbal.”

“Many of the questions could be filtered according to age. I found plenty of these to be absolutely irrelevant.”

Parents/carers also commented on the communication domain of the measure:

“[Child's name] has phenomenal memory/ This is not applicable as [Child's name] is 5 years old and not yet at these stages.”

“[Child's name] is 5 and so some of these things he has not done or able to do as of yet.”

“He is non-verbal.”

“[Child's name] is non-verbal.”

“Completely non-verbal.”

“Still learning to write (started reception in September). [Child's name] is 4 years old. These questions seemed for an older child?”

“[Child's name] is 4 years old.”



“She is too young, only 3.”

Similarly, across the daily living skills domain, socialisation domain, and motor skills domain, parents/carers felt they could not answer questions for younger (three- or four-year-old) children. The study team discussed whether the interview version of this questionnaire would be more appropriate for this group of participants, which would require staff trained to conduct them. The interview version can be across a wider age range and adapt to the child’s profile (i.e. the total number of questions differs depending on parents/carers’ answers to earlier questions). Some participants also needed a lot of support from practitioners to complete the questionnaires, sometimes requiring multiple sessions. With the small number of participants involved in this study, this was manageable but could be more difficult if scaled up.

Table 5. Questionnaire completion

	Baseline n (%)	Three-month follow-up n (%)
Parenting competence		
Being a Parent Scale (BAP)	15/20 (75%)	12/20 (60%)
Parent–child relationship		
Mothers’ Object Relations Scale-Short Form (MORS-SF) 0–4 years	12/15 (80%)	10/15 (66.6%)
Child–Parent Relationship Scale (CPRS) 4+ years	2/5 (40%)	1/5 (20%)
Child–Parent Activity Index (CPAI)	13/20 (65%)	11/20 (55%)
Child mental health		
Child Behavior Checklist 1.5–5 years (CBCL)	11/16 (68.75%)	11/16 (68.75%)
Child Behavior Checklist 6–18 years (CBCL)	0/1 (0%)	0/1 (0%)
Strengths and Difficulties Questionnaire 2–17 years (SDQ)	11/17 (64.7%)	11/17 (64.7%)
Parent/carer Health Related Quality of Life and Quality-Adjusted Life Years		
EQ-5D-5L	13/20 (65%)	12/20 (60%)
Service use for child		
Modified version of the of the Child and Adolescent Service Use Schedule (CA-SUS)	12/20 (60%)	12/20 (60%)
Parenting stress		
Parent Stress Index-Short Form (PSI-SF)	10/20 (50%)	11/20 (55%)
Child socialisation and communication		
Vineland Adaptive Behavior Scale 3 (VABS-3)	7/16 (43.75%)	7/16 (43.75%)



Child mental health

We are currently in the process of procuring the scoring for the Child Behaviour Checklist from ASEBA

Table 6. Strengths and Difficulties Questionnaire (SDQ) 2–17 years

	Baseline		Three-month follow-up	
	median	IQR	median	IQR
Forms completed	11		11	
Emotional symptoms	1.0	[1.0–4.0]	1.0	[0.0–3.0]
Conduct problems	3.0	[2.0–4.0]	2.0	[1.0–5.0]
Hyperactivity/inattention	6.0	[3.0–9.0]	6.0	[5.0–8.0]
Peer problems	4.0	[2.0–5.0]	3.0	[1.0–4.0]
Total difficulties	13.0	[11.0–20.0]	11.0	[8.0–16.0]
Prosocial	5.0	[3.0–6.0]	4.0	[3.0–7.0]
Impact	2.0	[0.0–4.0]	1.0	[0.0–5.0]

Child socialisation and communication

Table 7. Vinelands Adaptive Behavior Scale (VABS)

	Baseline		Three-month follow-up	
	median	IQR	median	IQR
Forms completed	7		7	
Adaptive Behaviour Composite	80.0	[66.0–87.0]	67.0	[65.0–87.0]
Communication	84.0	[54.0–93.0]	68.0	[57.0–92.0]
Daily Living Skills	85.0	[73.0–85.0]	77.0	[69.0–87.0]
Socialisation	78.0	[66.0–84.0]	73.0	[61.0–85.0]
Motor Skills	84.0	[72.0–93.0]	79.0	[75.0–95.0]

Parenting stress

Table 8. Parenting Stress Index (PSI)

	Baseline		Three-month follow-up	
	median	IQR	median	IQR
Forms completed	10		11	



Total stress	99.5	[84.0–121.0]	90.0	[82.0–101.0]
Parental distress	37.0	[29.0–45.0]	31.0	[22.0–40.0]
Parent–child dysfunctional interaction	27.0	[23.0–37.0]	24.0	[21.0–33.0]
Difficult child	35.0	[34.0–45.0]	35.0	[26.0–37.0]

Parenting competence

Table 9. Being A Parent (BAP) Scale

	Baseline		Three-month follow-up	
	median	IQR	median	IQR
Forms completed	15		12	
Satisfaction Scale	28.0	[22.0–31.0]	32.5	[25.5–36.0]
Efficacy Scale	29.5	[25.0–1.0]	29.5	[26.0–33.0]
Total	54.5	[47.0–62.0]	62.0	[53.5–68.0]

Parent–child relationship

Table 10. Mothers' Object Relations Scale (MORS-SF) 0–4 years

	Baseline		Three-month follow-up	
	median	IQR	median	IQR
Forms completed	12		10	
MORS warmth	27.0	[23.0–31.5]	25.0	[20.0–29.0]
MORS invasiveness	13.0	[10.5–18.5]	11.0	[9.0–21.0]

Table 11. Child–Parent Relationship Scale (CPRS-SF) Short Form 4+ years

	Baseline		three-month follow-up	
	median	IQR	median	IQR
Forms completed	2		1	
Conflict Items	25.0	[22.0–28.0]	22.0	[22.0–22.0]
Closeness Items	30.5	[30.0–31.0]	31.0	[31.0–31.0]

Table 12. Child–Parent Activity Index (CPAI)

	Baseline		Three-month follow-up	
	median	IQR	median	IQR



Forms completed	13		11	
Total shared time score	25.0	[21.0–26.0]	25.0	[21.0–27.0]

Table 13. Video recordings of free play

	n (%)
Number of families consenting to video recordings	19 (91%)
Number of families invited to take part in video recordings	8 (42%)
Number of families taking part in video recordings	8 (100%)
Number of video recordings over 5 minutes duration	8 (100%)

Screening and consent presented a number of challenges reported by practitioners; however, the parents/carers interviewed did not report any problems. It is noted that the parent/carer sample is small and those interviewed were engaged and articulate and therefore important to consider what the experience might have been like for others taking part in light of the challenges reported from practitioners.

“It was alright, it was pretty straightforward as well. Um, it was quite quick, it takes a couple of minutes to do and that’s it.” (P0102)

“... and with then families, you know so for instance, one family we got was rejected. Erm it turned out they’d filled the form in wrong. You know, so there was, you know, that, there’s kind of back and forth.” 0401

For practitioners there was a sense that the forms were off-putting and a challenge for parents/carers to complete. This was an important factor within the context of service delivery and the high needs of families described by practitioners. Additionally, the impact of this was the additional time needed by the practitioner to support a parent/carer to complete the screening and consent forms.

“So, my family, the mum nearly, erm, withdrew because of all the paperwork she had to complete.” (0602)

“I think it’s, I mean, the thing about doing those forms is quite off-putting for families, some families. Especially, the less resourced ones or the less confident in English ones.” (0601)

Parents/carers interviewed did not report any major concerns around the acceptability of the video recording. They did express some initial anxiety about what to expect and concern around practicalities and the child remaining within the recording frame. One parent/carer, however, noted a familiarity having accessed services online during COVID-19.

“I thought that maybe I was just gonna be in a room and it was just gonna be loads of people on the laptop watching me um, so, I was a bit wary...” (P0102)

Findings here confirm the feasibility of video-taping free play interactions remotely in terms of the acceptability of this method by study participants. Initial exploration of the videos indicates though that the feasibility of this approach as an evaluation outcome in a future



study might be limited by these factors: (a) participants tended to participate in the remote video capture using their mobile phone which has a limited camera width, often resulting in participants being off frame as they prioritised their child being visible; (b) mobile phones often resulted in data loss (freezing, switching off, falling down); (c) child reactivity to the researcher capturing the video. In terms of the latter, the observer was conducting non-participant observation remotely but maintained their camera on; this often resulted in the child trying to interact with the observer (by talking to them or showing them their toys). These factors limit the length and/or quality of data capture. In addition, for the age range targeted in this study (0 to 8 years old), our search identified only one suitable observational coding scheme (Emotional Availability System; EAS, version 4.1; Biringen, 2022). This restricts options for analysis of such data in future evaluations.

Barriers and facilitators

Assessment of the barriers and facilitators to implementation: semi-structured interview data from delivery staff and managers on the acceptability and feasibility of offering online WMP, including the barriers and facilitators of delivering WMP; qualitative data on whether implementation differed across types of services; quantitative data from the standardised WMP checklist that practitioners completed after each session with caregiver(s) to describe fidelity of implementation.

In synthesising interviewees' experience of taking part in Watch Me Play! there is evidence of what has worked well in terms of processes and intervention delivery as well as challenges experienced, providing some insight into the barriers and facilitators to implementation going forward.

Facilitators

Buy-in and engagement from site leads and practitioners in the intervention

Watch Me Play! was seen as a valuable and credible intervention. Previous and current experience in delivery and relationships with the trial psychotherapist were important factors and considerations in taking part. The training and supervision provided through the trial were also seen as beneficial for professional development and incentive for sites and practitioners.

Quicker access to treatment and support

Parents/carers saw participation in Watch Me Play! as an opportunity to access support and were motivated to try something that could make a difference.

"I thought, oh, it could be beneficial for, for my son, and you know, we could start right away, no waiting time, and it might you know, contribute to something bigger, you know, like, bigger study." (P0203)

"And, um, because we had nothing else to um, I mean to go to, as a, as a help, as a support. Err, and then um, [practitioner 1] or [practitioner 2], err, offered this err study to us. Err, and we said, yeah, if anything can help and will help, we'll, we might as well try anything at this point [chuckling]." (P0601)



A simple intervention

Delivery of Watch Me Play! is simple in that it does not require specialist facilities or equipment. The model is accessible and acceptable to practitioners and parents/carers who refer to the simplicity of the approach of Watch Me Play!

“Right, that’s our time to be focusing on routines around, you know, that’s the specific point of the intervention, um, I think as well, um, in terms of kind of, early intervention, cos one thing that has kind of, struck me with the Watch Me Play!, um, approach, is that it’s, it’s no sort of bells and whistles, it’s all built on very, very clear, um, and very, very simple work that can be done. It’s not about having lots of money and having all the best toys and you know, it’s not about having, you know, buckets and buckets of free time, after a long day working, or you know. It’s something that’s a very small portion of the day, to make that time for the young person and their parent, you know, and it can be done in a very varied way.” (1502)

“Yes, I think because parents find it so helpful. For the parents it works with, it works really well, and it’s so simple, in its outlay and approach, that it’s a really good tool that anybody could use, with the right training.” (0201)

Barriers

Family capacity and readiness

Practitioners describe barriers to implementation of Watch Me Play! where there are complex needs, balancing other/ongoing input required and preparing families to take part.

“I think if ... if you’ve got a very vulnerable adult or carer, who is ... whose needs or understanding are ... they need their needs met perhaps more or alongside this, because this is very much completely child focused, it’s child led, and ... and ... and for some parents/carers, to have that confidence to just let the child get on with something, I think would be very ... would be quite a challenge.” (1501)

“So when they talk about preparation, they’re talking more about preparing the families for ready for Watch Me Play! So it’s sort of like a family readiness.” (0302)

Staffing capacity

Capacity was a recurring theme within the data from sites and practitioners. This included capacity to undertake additional research related tasks and administration. Practitioners highlighted the demands on services and capacity of staff to schedule and deliver Watch Me Play! with current caseloads/referrals. Scheduling and attendance were also factors impacting staff capacity.

“Um, and then for, for me, I guess, yeah, I think it, I s’pose I knew I could do one um, family, but then it does end up becoming bigger than, and I s’pose I did sort of know that, but you end up, you end up having to do maybe a few more sessions and then after I complete this, I’m probably gonna offer a little bit to this boy with his dad, because it, it wouldn’t have been, it wouldn’t have really been helpful, to put all of them together. So, it ends up being a bit more work, I guess than what I expected at the beginning.” (0202)



“... so they generally see families fortnightly, and in the home, whereas Watch me Play! works better if you can do it weekly for this pilot anyway. So ... so for her that’s almost an additional workload, because she’s going to be seeing ... But she obviously has to write up about the family, when she sees them face to face, then she’ll be having to write up about the Watch me Play! one, online one, and then ... so for her it is an additional sort of amount of work to do, as being part of this project.” (1501)

“... we’d offer the Watch Me Play!, um, the actual sort of, 20 minutes, and given how the children were, you couldn’t then have a conversation afterwards, with the care, with the carer. So, for me, what ended up happening, was that there would be a brief conversation and then a bit of more playing, that wasn’t Watch Me Play!, and you know, um, and then I would have a separate conversation with um, the, um, carer later, to kind of, think about the Watch Me Play!, cos often in the session, it just wasn’t possible, you know, they’re very young children um, that, that participated. Err, and I, I think I, it doubled the amount of appointments then that I needed to offer.” (0101)

Intervention fit with services

As noted earlier, TAU is situated within a complex ecosystem and further work is needed to understand how Watch Me Play! fits across services with diverse care pathways and families with complex/high needs.

Suggestions for improvements from sites relate to study processes and include a clarification of roles, what to expect and when. The timeline of activity was particularly important for managing workload and families accessing services. The most significant barrier affecting implementation in this study was the delays experienced by sites after coming onboard and time lag in opening to recruitment. The delays resulted in a short recruitment window and squeezed delivery time frame. This then impacted practitioner capacity and capability to recruit and deliver to consecutive families.

“... so, I don’t know whether that, there could have been an opportunity to kind of, meet with, you know, meet as, you know, participating clinicians from the Trust. To just go through things, you know, just, what’s necessary, what isn’t, what, you know, what do you really need to look at ...” (0101)

“I think there was, there was a gap, there was a long gap and I think maybe um, whether I, I could have um, something was kind of, went a little bit, I don’t know, it, it didn’t come alive until the study started again you know.” (0101)

“And also, because we lost a lot of time in terms of being able to recruit I think. But cos I think by the time we were able to, the window was so small.” (0103)

“Um, well, so, I s’pose there was some, um, challenges in identifying families because of, just because of the process of research, as it is, it’s kind of, when, when we would need them for, you know, the deadlines, kind of got shifted and things like that. So, it was, we weren’t know, we didn’t know exactly when we would need to start the piece of work.” (0202)



Intervention mechanisms

Intervention mechanisms: Qualitative data from interviews with parent/carers and delivery staff on how they experienced the process of WMP and perceived impacts.

The interviews with parents/carers and practitioners provide a rich narrative on how intervention delivery and receipt were experienced. Practitioners provided examples of how they worked with parents/carers engaging with the intervention model and facilitating mechanisms of change. And equally parents/carers reported how they engaged with the principles of Watch Me Play! and what they did in the sessions.

As noted in the recruitment of parents/carers interviewed they expressed an initial hesitancy about Watch Me Play! and being observed; however, any initial anxiety diminished as sessions progressed reporting positive outcomes from the intervention.

“I had some doubts about the programme, um, you know, how it could, you know, help him? How it would um work?” (P0203)

“Yeah, it was, the first session I was a little bit nervous, cos I didn’t really know what to expect, obviously, it’d all been explained to us. Um, but you don’t know till you get in there kind of, thing, um, but it was honestly, nothing to be worried about, it was absolutely fine.” (P0102)

Practitioners talked about explaining the model to parents/carers clearly in the introductory session and how it can often take a few sessions into delivery for the parent to start to understand and begin to appreciate that Watch Me Play! is an intervention for both parent and child.

“Erm, we did have a follow-up phone call where I explained it again ... to her that. I think it. I’m not sure. I don’t know if I didn’t explain it well enough ... or she just didn’t quite understand ... erm. It took a while for her to (laughs) kind of grasp what it was.” (0602)

“I think what’s different is including the parent as a joint partner, so we both observing the play, and commenting and talking about it. Which some parents find much easier than others, because a lot ... it’s very difficult if you’re used to teaching a child, or asking them to find you the yellow thing, or the blue thing.” (0201)

“And, it was more time for me and [child’s name] as well, to have that time together and kind of, let [child’s name] take control and things, and she really enjoyed that.” (P0102)

“So, it was really nice, and now I know that like, child, child led plays, are really, really important, because I used to just like, teach them, and I led the play, yeah.” (P0203)

The one-to-one time and undivided attention facilitated within the intervention was valued by parents/carers and their children. But it was the intentional nature and focus of that time together that seemed to provide a special quality to the interaction and engagement; an active ingredient promoting a shared delight, attunement and bonding. It was clear from parents/carers’ narrative that Watch Me Play! was very much a shared experience.



"I think it was special that like, we made an effort to have you know, one on one time, like, just two of us." (P0203)

"So, the whole process, has been quite a big one for us, unlearning what we'd learnt before, and learning to be more free, and just playful with him." (P0602)

"Err, so, we noticed that he's more close to us ..." (P0601)

"I just get quality time with them and like, I say, it's hard when I've got, when you've got more than one child. To, kind of, focus that attention, just on that one." (P0102)

Parents/carers are guided in the intervention to engage in child-led play often requiring a shift in thinking and practitioners described how redirecting parents requires care.

"Err, I didn't know that that was what I was supposed to do in the beginning, you know, like oh, let [participating child's name] lead, let [participating child's name] lead, and like okay, like okay, I will just lay back and watch and I felt like, oh I'm not doing anything you know, but over the sessions, I learnt that I can interact, you know, as long as he's leading." (P0203)

"It's quite hard connecting that ... quite hard for different parents, and I think with the training of Watch Me Play!, we're taught to be very gentle about how we sort of redirect. So you're not so, not like that, you can do ... you know, isn't it difficult, isn't it hard to not teach, which is really helpful most of the time, but just for this special time, we ... we'll do it this way." (P0201)

There are a breadth of outcomes from engagement in Watch Me Play! reported by both parents/carers and practitioners including improved relationships, reduced stress, improved social skills, imagination, speech and language, and a better understanding of the child's perspective.

"It's like, it's just shown us so much more, that my child is, what she needs help with, what she struggles with and like it's helped massively." (P0102)

"Um, I would just, with, our interaction with [child's name] has changed so much, um, it's just, it's a much nicer way of, I think he prefers us being involved, whereas, before, we were just kind of, sitting quietly and I think he probably, I think it must have been weird for him [chuckling] that we weren't interacting with him at all. Um, so, it's just been a really nice way to um, yeah, just be more present with him and more interactive and he likes that we're getting involved in the play with him. So, yes, it's just been a massive change, it's been a good one." (P0602)

"So, the difference, the difference is that we're, we're definitely closer and it's not as frustrating as before that." (P0601)

"Before he couldn't really tell us what he wanted, um, but now, he's able to, like, he can tell us what he wants, and stuff, so, that's good." (P0203)

"Um, so, yeah, definitely closeness, and much, a bit more communication, non-verbal still, right. Um, a bit more communication." (P0601)



There was evidence of an everyday embodiment of the principles of Watch Me Play! engaged in by parents/carers that extend beyond intervention delivery. Parents/carers report ongoing engagement in Watch Me Play! embedding its activity into a family routine, applying the approach with their child outside of child-led play in other settings as well as using the approach with other children within the family.

“So, I’ve gone took from doing it with just [child’s name], to kind of, all of us have that time now, doing Watch Me Play!, with each other and I let them choose what they want to do and I just kind of, follow their lead and they really enjoy it.” (P0102)

“While eating, while we’re playing, it’s not about just Watch Me Play!, it’s about watch me and I will watch you guys back [chuckling].” (P0602)

Parents/carers also expressed an increased confidence and understanding of their child and were applying this new knowledge in other settings.

“Um, I think, I’m more like, happy to um, let him make his own decisions, because I know it’s important.” (P0203)

“Well, to be fair, without Watch Me Play!, I wouldn’t have had much information for Educational Psychologist, because Watch Me Play!, I’ve noticed a lot more of [child’s name]’s struggles. So, I’ve been able to go to them, and say, kind of, look, I understand now what school say.” (P0102)

Treatment as usual

Treatment as usual (TAU) description: Descriptive data from early years and family services on the named interventions (manualised intervention packages) they offer to families of 0–8-year-old children referred for support over the past 12 months. Data from the interviews with staff to describe how WMP interacts with or is delivered in relation to TAU, so as to define the most appropriate comparator for a definitive trial.

A summary of treatment as usual across study sites is provided in the Appendix (see Table A3). In qualitative interviews, practitioners described how they worked within multidisciplinary teams that interacted with numerous agencies and referral pathways. WMP was therefore being introduced into a complex system, both in terms of how existing services operated, and how best to integrate a new intervention:

“... we’re a small team of varied professions, of health visitors and social workers and psychologists, and another child psychotherapist, and a trainee psychologist. ... we work directly with families but also offer consultations to professionals, mostly health visitors, sometimes GPs, paediatricians, sometimes parents, ... early years workers, nurseries, reception teachers in schools, so we have a wide range of ... of clients.” (0201)

Referral pathways might have several stages which linked organisations:

“... this may be kind of a crucial thing. In regards to kind of, early identification, is that often there’ll be referrals come in from agencies, you know, home, family home, schools, different people, referring to the Child Advice and Children’s Service, with you know, areas of concern, and then a decision is made around threshold in the universal services, Family



Support, children who have you know, a social worker, and so on. And, it's at that point, where a decision is made by threshold with Family Support has been met and the duty social worker, who makes that decision, will already have a kind of, idea around different areas of concern, they'll start a kind of, hypothesis about you know, attachments and sort of, behaviour, and what those worries are. That's then passed over to my Manager, who then has their own allocation to pass on to the practitioner." (1502)

An important aspect of delivering WMP was deciding when to offer it to parents/carers, particularly in relation to their 'journey' through support services. WMP was clearly seen as an intervention which could be offered to parents/carers while they were waiting to receive support from a service. However, practitioners suggested that it was not always possible to offer it as an immediate 'first line' intervention, as they needed to engage with families to understand their needs and how WMP might sit alongside other support.

"... but one thing I was just thinking is, 'cause of course, we could have just said, right, we'll send out an email to everybody, that you know, in the service, this is what we're offering, would you like to take part? Something like that. ... I think we thought quite carefully about that, 'cause I guess some families might say, oh, yeah, we want to do that, and, then actually, clinically, um, if we felt like perhaps something, they need something else." (0202)

"... it's just trying to figure out where it fits and that it doesn't ... obstruct or impact the child's journey through the service. ... depending on where they're at, in their journey, it's been helpful either alongside something or um just before something, and it's just, I think it's have those conversations to see where that, for them, the broader kind of, scheme of um, what they were doing in the service." (0103)

Some practitioners described offering WMP to parents/carers alongside other support they were already offering, rather than using it as a 'holding' intervention.

"... potentially, we could offer it to new referrals. But ... we felt more comfortable with offering it to people that we already knew, that we felt like ... things like um, assessments and things, felt like were more appropriate for new referrals. So, I think that's perhaps why we haven't, offered it to just new, new people that have come into the service." (0202)

Several practitioners described how, once they began offering WMP, an ongoing relationship with families was formed, and that this engagement needed to continue:

"And, then after the end of the Watch Me Play!, one can't just sort of say, well, actually it's finished now and, and I need to sort of, you know, sort of um, stop and we, you know, pass you over. Um, so, I think um, from my perspective, that it, I, I realised that ... I was taking a family on and they would remain on my caseload, as well, and, yeah, it wasn't just a kind of case of, well, actually, we're finished now and, and I can, I can pass you onto somebody else. It's, it's kind of, something had been established and even at the beginning, when you, you give a family, the, the literature." (0101)

"And I think any interventional programme, ... if it's going to have the impact you want on it, it's ... you have to be mindful that if you have been working with those families, weekly, and then you just stop, that can



*sometimes have worse effects than never even starting in the first place.”
(1501)*

To some extent therefore, providing WMP marked the start of an ongoing relationship with families – not an isolated interaction while they were waiting to access other services which a team would deliver. This in turn had implications in terms of staff capacity.

Health economic results

The aim of the health economic analysis was to estimate the cost of WMP intervention and assess the feasibility of conducting a full economic evaluation in a future definitive effectiveness trial.

The objectives were:

- To analyse health-related quality of life using EQ-5D-5L index values at baseline and at follow-up, calculate quality-adjusted life years (QALYs), and report completeness of EQ-5D-5L responses. EQ-5D-5L is a commonly used questionnaire to assess respondent's HRQL. It is a measure preferred by the National Institute for Health and Care Excellence (NICE) (NICE, 2022). It is a five-domain (mobility, self-care, usual activity, pain/discomfort, and anxiety/depression) five-level questionnaire scored from 1 (no problem in a particular domain) to 5 (extreme problems). Value set specific for the UK was used to calculate quality of life scores based on the responses to EQ-5D-5L that in turn were used to calculate QALYs (Devlin et al., 2018)). The quality of life scores range from 0 (death) to 1 (perfect health).
- To analyse purpose-designed Child and Adolescent Service Use Schedule (CA-SUS) questionnaire that is used to collect data on healthcare resource use at baseline and follow-up and report completeness of CA-SUS responses. CA-SUS questionnaire included questions on parents/carers use of primary care (GP visits/phone calls, nurse visits/phone calls), community care (speech and language therapist, physiotherapist, Child and Adolescent Mental Health services, etc.), parental groups attendance and emergency care (NHS 111, Accident and Emergency (A&E) visits). To estimate cost of WMP from provider perspective, the cost of training and cost of supervision sessions.

All costs are reported in 2021/22 Great British Pounds (GBP). All unit costs are reported in Appendix C.

Cost of WMP

Sixteen practitioners from seven sites participated in the study. There were two to three practitioners per site and they each provided one to two interventions.

We estimated the cost of training. Cost of training was calculated based on practitioner's time spent on training and facilitator's time spent on providing training sessions and preparation. Training sessions were provided online, therefore no other costs were included. Each practitioner had to attend two online workshops lasting three hours each. We costed practitioners' time using their NHS band (Jones et al., 2023). In total the facilitator provided six workshops lasting three hours each, therefore facilitator's time was 18 hours in total and four hours were spent on preparation. The total cost of training 16 practitioners was £7,986. The cost of training per practitioner was £499.1.



Practitioners were expected to attend four supervision meetings per intervention, each supervision meeting lasted 75 minutes. The meetings were conducted online. Practitioners were free to attend additional meetings if they had any questions. The log of attendance of supervision meetings showed the variation in attendance from 1 meeting to 11 meetings. The average attendance was five meetings (SD 3.2). Facilitator provided 37 supervision meetings and spent two hours in total on preparation for these meetings and administrative duties. The total cost of supervision meetings was £10,645. The cost of supervision meetings per practitioner was £665.

If we assume that all practitioners attended supervision meetings 'per protocol' implying that those, who provided one intervention attended four meetings and those, who provided two interventions attended eight meetings, total cost would be £10,473. The cost of supervision meetings per practitioner in this scenario was £654.

The cost of providing the intervention was based on the time spent by practitioners on providing facilitated sessions. Each practitioner provided one introductory session and five facilitated sessions, each lasting for one hour. The delivery mode varied by practitioner. The options included:

- All facilitated sessions online
- All facilitated sessions as home visits
- All facilitated sessions in clinic
- A combination of online and clinic visits (typically three online, three in clinic).

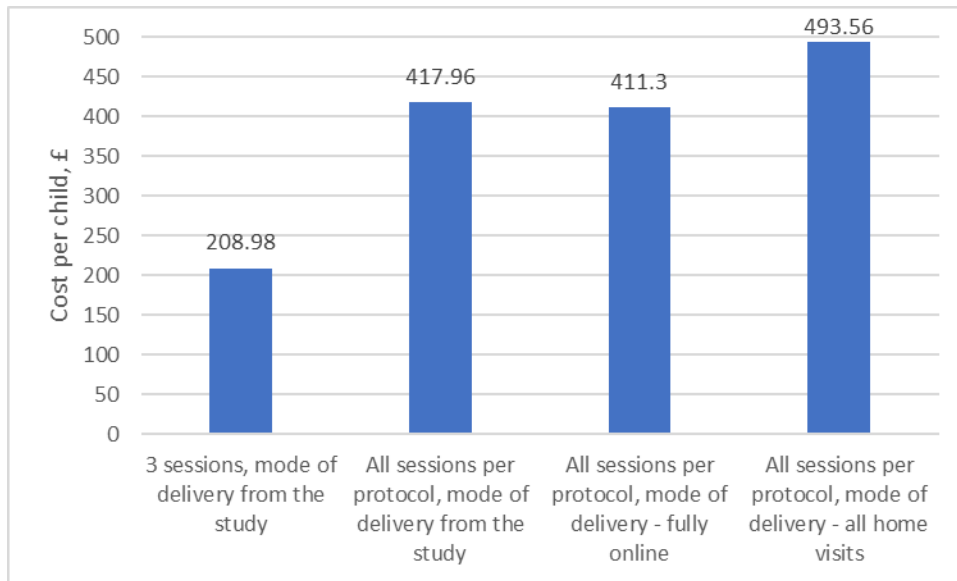
As the cost analysis is from the provider's perspective, online and clinic visits were costed as one-hour sessions, whereas home visits assumed longer duration to account for travel time. We did not record travel time per practitioner per visit. We obtained average travel time from Curtis and Burns (2015) that are based on the General Practice Workload Survey conducted in 2006/07 that is equal to 12 minutes per visit. As reported above, not all participants completed the session questionnaire. If we assume that all participants attended all facilitated sessions 'per protocol' and account for the mode of delivery, total cost of delivering the WMP was £8,359. The intervention was provided to 20 children, therefore the cost per child was £418.

Based on the session questionnaire, participants' attendance varied between three and six facilitated sessions. We assumed that all participants' attend three sessions out of six and obtained the lower-level estimate. Total cost of delivering the WMP in this scenario was £4,179. The cost per child was £209. Therefore, the likely cost of providing facilitated sessions per child will lie between £209 and £418 depending on attendance.

As the cost also depends on the mode of delivery, we estimated the cost assuming different modes of attendance. The different scenarios are shown in Figure 4 below.



Figure 4. Cost of providing facilitated sessions per child for different scenarios



The cost per child is likely to be between £209 and £494 depending on session attendance and mode of delivery.

Cost of healthcare resource use

Healthcare resource use is usually collected for the purpose of economic evaluation of a new intervention in addition to the cost of the intervention. The information on healthcare resource use is often collected by using participant-completed resource use measures. It is important to design the questionnaire to ensure high-level of completion, high-quality data and reduce burden on participants. This feasibility study provided the opportunity to design the questionnaire and test it in the small group of parents/carers. The learning from this study will improve the questionnaire that will be used for the full RCT. Based on the mechanism of the WMP intervention and expected outcomes, we can expect to see the difference in healthcare resource use in the intervention and control group after the intervention due to improved children's mental health outcomes.

Parents/carers completed the CA-SUS questionnaire at baseline and at three-month follow-up. The questionnaire included questions about the use of the following services in the last three months:

- Primary and community care services
- Parental groups
- Emergency care
- Parents/carers support.

The questionnaire was completed by ten (50%) participants at both baseline and follow-up, two (10%) participants completed the questionnaire only at baseline, two (10%) participants completed it only at follow-up, and six (30%) participants did not complete it at all.



The descriptive statistics for primary and community care are shown in Table 14. The table reports the number and proportion of participants who used a service during the past three months and how many contacts they had and type of contact (clinic visit, phone call, or home visit).

Table 14. Descriptive statistics for primary and community care resource use (previous 3 months)

Primary/community care service	Baseline n=12	Follow-up n=12
GP (yes/no)	5 (42%)	5 (42%)
Clinic visits	1	6
Phone calls	1	7
Home visits	2	6
Missing	0	0
Practice nurse (yes/no)	4 (33%)	4 (33%)
Clinic visits	3	4
Phone calls	1	0
Home visits	1	0
Missing	0	0
Social worker (yes/no)	1 (8.3%)	2 (17%)
Clinic visits	0	0
Phone calls	10	9
Home visits	0	9
Missing	0	0
Health visitor (yes/no)	5 (42%)	3 (25%)
Clinic visits	1	2
Phone calls	5	3
Home visits	4	1
Missing	0	0
Perinatal services (yes/no)	0	0
Child and Adolescent Mental Health services (yes/no)	2 (17%)	5 (42%)
Clinic visits	1	11
Phone calls	2	4
Home visits	0	0
Missing	0	0
Speech and Language Therapist (yes/no)	2 (17%)	2 (17%)
Clinic visits	2	2
Phone calls	1	1
Home visits	0	0



Missing	0	0
Physiotherapist (yes/no)	0	2 (17%)
Clinic visits	0	3
Phone calls	0	0
Home visits	0	0
Missing	0	0
Clinical Psychologist (yes/no)	1 (8.3%)	0
Clinic visits	0	0
Phone calls	1	0
Home visits	0	0
Missing	0	0
Educational Psychologist (yes/no)	3 (25%)	2 (17%)
Clinic visits	1	0
Phone calls	0	1
Home visits	0	0
Missing	2	1
Child Psychiatrist (yes/no)	3 (25%)	1 (8.3%)
Clinic visits	1	1
Phone calls	1	0
Home visits	0	0
Missing	1	0
Special Educational Need (SEN) co-ordinator/Early Years co-ordinator (yes/no)	7 (58%)	7 (58%)
Clinic visits	6	72
Phone calls	0	4
Home visits	0	0
Missing	1	1
Play therapist (yes/no)	2 (17%)	4 (33%)
Clinic visit	12	18
Phone calls	0	0
Home visits	0	3
Missing	0	0
Art/Music/Drama therapist (yes/no)	0	0
Occupational therapist (yes/no)	1 (8.3%)	3 (25%)
Clinic visit	0	3
Phone calls	0	1
Home visits	0	0
Missing	0	1



The participants most commonly saw their child's SEN/early years co-ordinator and GP both at baseline and follow-up. Most services were provided on the NHS, except for one participant, who reported paying privately for sessions with play therapist at baseline and at follow-up and one participant, who reported paying privately for a session with educational psychologist at follow-up.

One parent/carer (5%) reported attending a parental group at baseline. They attended six sessions in the last three months. It was provided by the NHS. Three parents/carers reported attending a parental group at follow-up. All were provided by the NHS. Emergency care included calling 111, visit to walk-in clinics, and A&E departments. Descriptive statistics are reported in Table 15.

Table 15. Descriptive statistics of emergency care use

Service	Baseline (n=12)	Follow-up (n=12)
Phones NHS Direct or 'call 111' for your child	1 (8.3%)	4 (33.3%)
Number of contacts	2	5
Visit to walk-in clinic	0	0
Visit to minor injury clinic/urgent care centre	1 (8.3%)	0
Number of contacts	missing	0
Visit to non-24-hour A&E department	1 (8.3%)	1 (8.3%)
Number of contacts	1	2
Visit to hospital A&E department but not admitted	1 (8.3%)	2 (16.7%)
Number of contacts	1	3
Visit to A&E and admitted overnight	0	0
Admitted to hospital as an inpatient but not via A&E	0	0

Four participants (20%) reported having used services for their own support at baseline. One participant used counselling that they paid for privately, one participant used early attachment service, one participant reported contacting health visitor and one participant had school family support.

Three participants (15%) reported having used services for their own support at three-month follow-up. One participant used counselling that they paid for privately and two participants contacted health visitor that was provided by the NHS.

We costed the resource use using national published sources (Jones et al., 2023; NHS England, 2023). The costs are reported in 2021/22 GBP.



Table 16. Descriptive statistics of resource use costs

Cost component	Baseline (n=12)	Follow-up (n=12)
Mean cost of primary and community care, mean (SD)	£309 (364)	£763 (834)
Mean cost of emergency care, mean (SD)	£37 (127)	£96 (252)
Mean total cost, mean (SD)	£346 (432)	£859 (906)

Notes: SD = standard deviation.

Parents/carers' HRQL and QALYs

EQ-5D-5L questionnaire is a widely used questionnaire to assess HRQL. Participants completed EQ-5D-5L questionnaire at baseline and at three-month follow-up. At baseline 13 (65%) of participants completed the questionnaire. At follow-up, 12 (60%) participants completed the questionnaire. Index values range from 0 to 1, where 0 means 'death' and 1 means 'perfect health'.

QALY is a concept that incorporates both quantity and quality of life. It takes into account how long a person lives in a particular health state that is described using a quality of life score ranging from 0 (death) to 1 (perfect health). 1 QALY means one year spent in perfect health. We calculated QALYs using the quality of life scores obtained from EQ-5D-5L. As the follow-up was three months, maximum QALYs implying three months in perfect health is 0.25. Descriptive statistics are reported in Table 17.

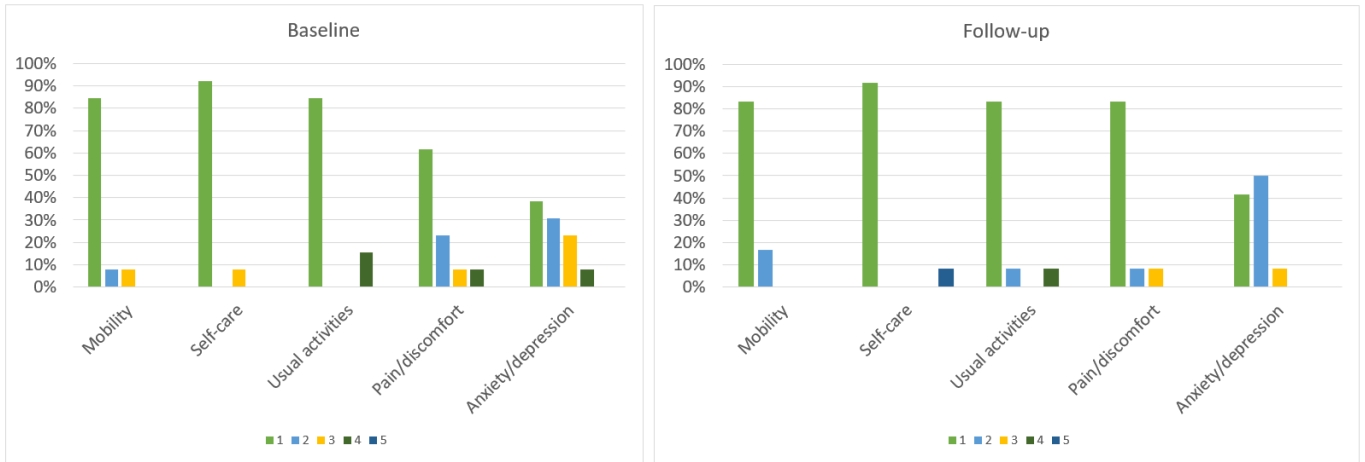
Table 17. Descriptive statistics of quality of life scores and QALYs

	Baseline n=13	Follow-up n=12
EQ-5D-5L index value, mean (SD)	0.85 (0.22)	0.89 (0.09)
QALY, mean (SD)	0.23 (0.01)	

Average HRQL at baseline was 0.85 (SD 0.22) and at three-month follow-up – 0.89 (SD 0.09). Average QALYs were 0.23 (SD 0.01). Therefore, participants had quite high quality of life. EQ-5D-5L includes five domains (mobility, self-care, usual activities, pain/discomfort, and anxiety/depression). The distribution of the responses by domain are shown in Figure 5.



Figure 5. EQ-5D-5L descriptive system



Participants reported no problem with most domains, but the most variation was in the domain 'anxiety/depression'.

Safety

No adverse events were reported.



Limitations

Recruitment challenges

Recruitment for the study experienced significant delays due to complications in obtaining governance approval to commence participant enrolment. A major contributing factor was the extended time taken to determine if the study qualified for inclusion in the National Institute for Health and Care Research (NIHR) portfolio. This uncertainty led to many Research & Development (R&D) departments withholding their approval to proceed. Consequently, sites that trained practitioners in study procedures faced lengthy periods before they could begin recruiting participants, leading to the need for retraining and extra efforts to re-engage local intervention delivery teams. As mentioned earlier, staff turnover in the period between staff training and site recruitment led to a significant loss in the number of sites participating in the study with only 7 of the 16 trained teams entering the study as a site.

Moreover, the delay in achieving NIHR portfolio status impacted the number of NHS sites recruited, resulting in fewer sites than expected. Most of the sites involved were new to research, necessitating additional guidance from the study team to navigate the regulatory requirements inherent to studies of this nature.

Limitations in participant outreach and recruitment scope

Another challenge arose from the study's limited outreach and advertising capabilities. As highlighted in thematic analysis of interview data, many participating services only engaged with families already known to them, focusing on those they believed would be most receptive to the intervention. Given that the intervention was intended for a broader demographic, including parents/carers on referral and waiting lists, this targeted approach hindered the ability to gauge wider interest and restricted the overall pool of potential participants. It is difficult to draw meaningful conclusions about representativeness given the relatively small sample size. However, any future study would need to work closely with Patient and Public Involvement partners to explore challenges to participation in the intended population, actively seeking to recruit parents/carers with a broad range of demographic characteristics, ensuring enough time and resource is allocated to support this. Although the option of face-to-face delivery was included once recruitment had started for pragmatic reasons and to facilitate engagement, any future study could offer both modes of delivery to minimise the risk of digital exclusion.

Issues with data collection and parent/carer engagement

Additionally, the research data collection process posed several issues. The requirement to gather information remotely through various platforms, created complications for participants. Specifically, using multiple data collection platforms meant that participants had



to complete questionnaires via different links at each designated timepoint. This complexity likely contributed to 'completion fatigue', with a noticeable decline in response rates as participants moved through the study's questionnaires. This drop-off in engagement highlighted the need to streamline not only data collection methods but also the range of measures used to maintain participant interest and ensure comprehensive data acquisition. A further limitation with regards to engagement is that we only captured the views of parents/carers who took part in the study. Interviews carried out with those who declined may have helped to highlight aspects of process and implementation to target for improvement in a future trial. However, we had limited time and resource to conduct interviews and so prioritised the views of those who participated.

Limitations related to implementation of WMP

Practitioner fidelity checklists weren't completed and returned as fully as anticipated, largely due to resource/time constraints: site/service leads acknowledged the volume of work and additional administration involved in taking part in a future study, the checklist would benefit from being an electronic form that could be easily completed and immediately available to the study team. Furthermore, many of the practitioners who took part were already familiar with WMP and/or the research team: a future study would need to address the feasibility of scaling up training to new sites unfamiliar with the intervention.



Discussion

Recruitment and retention

The current study was the first to evaluate the feasibility of WMP across a range of early years and family services in England. Recruitment challenges resulted in not meeting anticipated targets with regard to the number of sites and participants. Delays with ethical and governance approvals and NIHR portfolio adoption resulted in approximately halving the planned recruitment period with an ensuing reduction (to approximately half again) in the number of sites and participants recruited. However, the study was successful in recruiting a substantial proportion of families who had contact with social care (35%) and families with a child with a developmental disability (65%). The funder (WWCSC) was very interested that we ensure our recruitment from these services included families of children who had contact with social care and families of children with neurodevelopmental conditions so as to produce evidence that would be relevant to these families. Findings suggest that our study resulted in successful recruitment of a substantial number of families whose children had a developmental condition or were in contact with social care. Recruitment resulted in some variability in child ethnicity (50% from a non-White majority background), parent/carer disability (35%), educational level (55% below university degree level). However, as noted in the Limitations chapter above, a future trial should focus on maximising inclusion and actively targeting participants across a broad range of demographic characteristics. Retention to the study was very good with 67% of parents/carers remaining engaged at three-month follow-up.

Adherence and fidelity

Adherence was excellent with 80% of respondents indicating they had achieved the expected 10 out of 15 sessions, including the five facilitated ones. It is important to note, however, that only 42% of recruited participants reported on their session completion, therefore data cannot provide firm evidence on the feasibility of high levels of adherence for future studies.

Fidelity was assessed using checklists completed by practitioners, and results from those completed are suggestive of good fidelity (median score of 13; score of 10 or above indicates high fidelity). However, checklists were not completed for all families and there was a reasonably high rate of missing data.

Acceptability, implementation, and mechanisms

A large number of services expressed an interest in the study initially and approximately 40 staff were put forward for the initial training. Only 16 (40%) of those ended up delivering Watch Me Play! to families by the time the study started recruiting participants. Sites and trained staff were lost between initial training and participant recruitment because of delays with regulatory approvals and staff turnover. For a future study, the research team would need to consider increased and/or alternative methods of contact with sites and practitioners



to maximise engagement throughout. However, data from interviews with service managers/practitioners indicated a really high level of buy-in as an important facilitator to site and staff recruitment. Additional facilitators (good fit with family needs, delivery format enabling good access for parents/carers) alongside WMP's fit with other TAU suggest that WMP is a good match for these services, despite the fact services were a relatively diverse group both geographically but also in terms of their remit (see TAU description in Appendix C). Reported barriers focused mostly on parent/carer readiness and staff capacity. Staff capacity to deliver a (new) intervention in parallel to existing workloads emerges as one of the most frequent barriers in health service evaluations, even for group-based interventions (Segrott et al., 2017). High levels of staff and service buy-in underscore the need to continue investigating the potential of WMP as an intervention to be offered in early years or family services. Future evaluations need to consider the timing of training and delivery more carefully (ensuring they are temporally closer) while also exploring ways to increase capacity in terms of training and supervision availability, assuming a larger number of practitioners will need to be recruited and trained. The offer of training and supervision for this new intervention acted as a facilitator of site and staff recruitment as indicated by service provider data.

Findings on the format of WMP delivery suggested that about half the facilitated sessions were delivered remotely (i.e. via an online video platform) and about half were delivered face-to-face. The inclusion of face-to-face delivery was a pragmatic decision, but the intention had been to deliver WMP online only. Notwithstanding the limitations arising from the small number of parents/carers reporting this data, current findings suggest that a hybrid format of WMP delivery is feasible and acceptable. *On average*, parents/carers suggested that remote facilitation increased access, while staff tended to prefer face-to-face delivery, interview data indicated that access to WMP was facilitated by having the option of receiving it remotely while at the same time having the option for a face-to-face session enabled staff to build rapport with families. Data highlighted that this flexibility in the delivery format acted as an important facilitator. One of the most important aspects of facilitation was the customising of the delivery format to whatever suited the family and child on each occasion. This was particularly important for families of children with neurodevelopmental conditions. Flexibility and personalisation are important features of good service provision according to parents/carers of children with complex needs (Stanford et al., 2020) WMP has been delivered in combination of remote (online) and face-to-face format from its outset (at the time necessitated by COVID-19 restrictions) which makes it particularly suitable for 'hard to reach' populations.

The focused attention facilitated within the intervention was valued by parents/carers and their children and appears to be a key mechanism promoting a shared delight, attunement, and bonding, Perceived benefits of engagement in Watch Me Play! reported by both parents/carers and practitioners including improved relationships, reduced stress, improved social skills, imagination, speech and language, and a better understanding of the child's perspective. Overall, interview data confirm hypothesised mechanisms of action and do not suggest any modification to the logic model is required.

Staff preference for offering WMP to families they already know and restriction of the offer for families on waitlists or referral lists has implications for WMP training and how staff are



supported to engage with WMP's theory of change within their services' other offer. Watch Me Play! is an observational-based programme that can be used as a first-line intervention, as introduction to the approach can facilitate engagement with families (Wakelyn, 2012). As such, WMP could be of great value to families on referral and waiting lists. Waiting list interventions show promise and are increasingly being taken up by child mental health services (especially interventions addressing the parent/carer) in an effort to address long waiting lists (Valentine et al., 2024).

Acceptability and feasibility of data collection procedures

We had variable rates of measure completion with rates low (at or below 50%) for the two measures captured by external software (namely, VABS and PSI which are copyrighted by their publishers who do not permit integration into our own software). This resulted in a large number of survey links being emailed to parents/carers with a request to complete them over a one-week period, resulting in low completion rates for some measures (i.e. Vineland Adaptive Behavior Scales (VABS); Child–Parent Relationship Scale (CPRS)) and a sense of being overwhelmed as indicated by the qualitative data and the amount of support required by the research team to participants working their way through measures. Modifications in the number of measures and the method of data capture are needed in future evaluations. In particular, a smaller number of measures should be captured in, preferably, a single online survey. Given the complexity of presentation in recruited children the VABS would be a valuable tool for a future evaluation, but it might need to be completed during an interview with the parent/carer which requires specific training for research staff. This format can address parent/carer concerns noted in the present study. Where used as an interview in other feasibility studies it was found to be acceptable by parents/carers (Coulman et al., 2021). It is also possible that some measures are less acceptable to parents/carers if, for example, they highlighted difficulties in their relationship with their child (e.g. CPRS).

Intervention costs and feasibility of conducting a full economic evaluation

Watch Me Play! cost an average of £209 per family/child in this study with the cost ranging between this value and a maximum cost of £494 for a per protocol implementation face-to-face (cost reduces for online delivery). Comparability with similar interventions is difficult given differences in cost estimation and cost reporting across various studies; however, recent estimates of an individual intervention with a similar theory of change targeting child mental health indicated much higher delivery costs (£1,466 per family; (O'Farrelly et al., 2021)), providing further evidence for the potential of WMP to be a valuable addition in early years/family services. Future studies need to investigate cost–benefit from WMP implementation.



Treatment as usual (TAU) and identification of a primary outcome for a future trial

We sought to describe treatment as usual (TAU) in order to identify a comparator for a future trial. Practitioners described working within multidisciplinary teams that interacted with numerous agencies and referral pathways. WMP was therefore introduced into a complex system but could be offered to families either in addition to, or while waiting for TAU services. TAU is likely therefore to be sufficiently different from WMP to serve as an appropriate comparator in a future trial.

With regard the determination of a likely primary outcome for a future evaluation, levels of data capture for the three candidate measures were excellent to good (100% for videos, 69% for the CBCL, and 65% for the SDQ). However, emerging evidence from qualitative interviews about case complexity, parent/carer support needed, and the intersection between WMP and other support offered by these Tier III services (i.e. the starting point for specialist mental health services in the UK, including the services that participated in the current study) suggests that the most likely outcome in future evaluations might be the SDQ, a well-validated mental health screener widely used in clinical services and research that is brief and normed across a wide age range (2 to 17 years old). Evaluations of play-based interventions with a similarly aged group have also used the SDQ (O'Farrelly et al., 2021).

Summary

The diversity of sites recruited to the current study (in terms of geography, aim of clinical service, and population served) gives confidence that a future evaluation of WMP might appeal to a wide range of early years and family services across England and Wales. There is an outstanding question regarding the feasibility of recruiting families from services' referral lists and waiting lists. In addition to changes in WMP's training content, future evaluations need to diversify further in terms of delivery sites – i.e. include a wider range of non-NHS sites (we only had one in the current study), for example more education sites, social care, and/or third-sector organisations. The feasibility of recruiting across a wider range of delivery sites (non-NHS in particular) remains to be established in a future feasibility study. We propose that the next step is a further feasibility study given current findings, including findings of relative research inexperience across participating sites and the lack of data on the feasibility of randomisation. A future study needs to address these gaps by conducting a feasibility randomised controlled trial across NHS, social care, or integrated early years and family services, schools, or education settings, and third-sector organisations (Home-Start is interested in WMP and already training some of its staff). In conclusion, this first evaluation of Watch Me Play! in early years/family services found that services and families enjoyed delivering and participating in the intervention and see value in it. Difficulties with site and participant recruitment may be addressed in future evaluations drawing on our improved understanding of barriers and facilitators. We have information to adapt WMP training so as to increase its offer to parents/carers at an earlier stage of contact with the service. We have gained insight on how to adapt the research evaluation to make it more compatible with the needs of the parents/carers and the delivery sites who support the evaluation. The feasibility of a health economics evaluation was supported and the



preliminary costing of Watch Me Play! shows promise. Our proposal for a hybrid mode of delivery (families supported most remotely with the option of face-to-face sessions depending on family need and practitioner recommendation) was received very well by parents/carers and services with initial evidence of improved acceptability by staff following their experience. Remaining questions on the acceptability of randomisation and the feasibility of recruitment across a wider range of early years and family services need to be addressed in a feasibility randomised controlled trial.



Conclusions

There were valuable lessons learned from this study of Watch Me Play! While we are not in a position to warrant progression to a full-scale effectiveness trial, we do feel there are further feasibility questions that can be posed and answered in a future randomised feasibility trial of WMP. There is considerable interest and appetite for this intervention.

Findings from the semi-structured interviews indicate parents/carers would value access to support including interventions such as WMP as early as possible. Future feasibility work could look at addressing whether this study utilised the right services to offer WMP. There may be the potential to expand delivery of WMP to other sites such as through schools or charities.

In summary, a future randomised feasibility study could focus on the following key objectives:

1. Maximising reach and inclusivity in participating families
2. Feasibility of scaling up training to include services/practitioners with no previous experience of WMP
3. Expansion/recruitment of non-specialist services
4. Exploration of mode of delivery (face-to-face/online)
5. Tailoring intervention 'dose' (number of sessions) according to need
6. Willingness to be randomised
7. Fewer outcome measures, streamlined delivery of online assessments, and inclusion of a minimum data for non-responders
8. Defined progression criteria for recruitment, retention, adherence, and fidelity.



References

Abidin, R., Flens, J. R. & Austin, W. G. (2006). The Parenting Stress Index. In R. P. Archer (Ed.), *Forensic uses of clinical assessment instruments* (pp. 297–328). Lawrence Erlbaum Associates Publishers.

Academy of Medical Sciences. (2020). *Mental health research goals 2020–2030*. <https://acmedsci.ac.uk/more/news/mental-health-research-goals> (accessed 16 June 2024).

Achenbach, T. M. (2011). Child Behavior Checklist. In *Encyclopedia of clinical neuropsychology* (pp. 546–552). Springer New York. https://doi.org/10.1007/978-0-387-79948-3_1529

Ayling, P. & Stringer, B. (2013) Supporting carer-child relationships through play: A model for teaching carers how to use play skills to strengthen attachment relationships. *Adoption & Fostering*. 37 (2): 130–143. <https://doi.org/10.1177/0308575913490383>

BBC. (2021a). Child mental health waiting times ‘deeply disturbing.’ <https://www.bbc.co.uk/news/uk-scotland-56257753> (accessed 16 June 2024).

BBC. (2021b). Children face ‘agonising’ waits for mental health care. <https://www.bbc.co.uk/news/health-58565067> (accessed 16 June 2024).

Braun, V. & Clarke, V. (2022). Thematic analysis: A practical guide. *QMIP Bulletin*. 1 (33). <https://doi.org/10.53841/bpsqmip.2022.1.33.46>

Broadhead, P. (2004) *Early years play and learning: Developing social skills and cooperation*. Routledge.

Byford, S., Barrett, B., Roberts, C., Wilkinson, P., Dubicka, B., Kelvin, R. G., White, L., Ford, C., Breen, S. & Goodyer, I. (2007). Cost-effectiveness of selective serotonin reuptake inhibitors and routine specialist care with and without cognitive-behavioural therapy in adolescents with major depression. *British Journal of Psychiatry*. 191 (6): 521–527. <https://doi.org/10.1192/bjp.bp.107.038984>

Care Leaver Covenant. (2018). Care leaver covenant. <https://mycovenant.org.uk/wp-content/uploads/2020/01/CLC-Intro-Leaflet-Branded-Low.pdf> (accessed 16 June 2024).

Children’s Commissioner. (2021). *The state of children’s mental health services 2020-21*. <https://www.childrenscommissioner.gov.uk/wp-content/uploads/2021/01/cco-the-state-of-childrens-mental-health-services-2020-21.pdf> (accessed 16 June 2024).

Colizzi, M., Lasalvia, A. & Ruggeri, M. (2020). Prevention and early intervention in youth mental health: Is it time for a multidisciplinary and trans-diagnostic model for care? *International Journal of Mental Health Systems*. 14 (1): 23. <https://doi.org/10.1186/s13033-020-00356-9>



Coulman, E., Gore, N., Moody, G., Wright, M., Segrott, J., Gillespie, D., Petrou, S., Lugg-Widger, F., Kim, S., Bradshaw, J., McNamara, R., Jahoda, A., Lindsay, G., Shurlock, J., Totsika, V., Stanford, C., Flynn, S., Carter, A., Barlow, C. & Hastings, R. P. (2021). Early Positive Approaches to Support (E-PAtS) for families of young children with intellectual disability: A feasibility randomised controlled trial. *Frontiers in Psychiatry*. 12.

<https://doi.org/10.3389/fpsy.2021.729129>

Craig, P., Matthews, L., Moore, L., Simpson, S. & Skivington, K. (2018). *Developing and evaluating complex interventions*. Draft of updated guidance.

Crenna-Jennings, W. & Hutchinson, J. (2020). *Access to children and young people's mental health services*. Education Policy Institute. <https://epi.org.uk/publications-and-research/access-to-child-and-adolescent-mental-health-services-in-2019/> (accessed 16 June 2024).

Curtis, L. & Burns, A. (2015). *Unit costs of health and social care 2015*. Personal Social Services Research Unit, University of Kent.

Department for Children, Schools & Families [DCSF]. (2009). *The national strategies. Early years: Learning, playing and interacting. Good practice in the early years foundation stage*. https://dera.ioe.ac.uk/id/eprint/2412/7/85679136be4953413879dc59eab23ce0_Redacted.pdf (accessed 16 June 2024).

Department of Health and Social Care [DHSC]. (2017). *A framework for mental health research*. <https://www.gov.uk/government/publications/a-framework-for-mental-health-research> (accessed 16 June 2024).

Department of Health and Social Care [DHSC]. (2021). *The best start for life: A vision for the 1,001 critical days*. <https://www.gov.uk/government/publications/the-best-start-for-life-a-vision-for-the-1001-critical-days> (accessed 16 June 2024).

Devlin, N. J., Shah, K. K., Feng, Y., Mulhern, B. & Van Hout, B. (2018). Valuing health-related quality of life: An EQ-5D-5L value set for England. *Health Economics*. 27 (1): 7–22. <https://doi.org/10.1002/hec.3564>

Dozier, M., Lindhiem, O., Lewis, E., Bick., J. Bernard, K. & Peloso, E. (2009). Effects of a foster parent training program on young children's attachment behaviors: Preliminary evidence from a randomized clinical trial. *Child and Adolescent Social Work Journal*. 26, 321–332. <https://doi.org/10.1007/s10560-009-0165-1>

Driscoll, K. & Pianta, R. C. (2011). Mothers' and fathers' perceptions of conflict and closeness in parent-child relationships during early childhood. *Journal of Early Child and Infant Psychology*. 7, 1–24. <https://psycnet.apa.org/record/2013-00755-001>

Fabian, H. & Mou, C. (2009). *Development & learning for very young children*. Sage.



Goodman, R. (2001). Psychometric properties of the strengths and difficulties questionnaire. *Journal of the American Academy of Child & Adolescent Psychiatry*. 40 (11): 1337–1345. <https://doi.org/10.1097/00004583-200111000-00015>

Haskett, M. E., Ahern, L. S., Ward, C. S. & Allaire, J. C. (2006). Factor structure and validity of the Parenting Stress Index-Short Form. *Journal of Clinical Child & Adolescent Psychology*. 35 (2): 302–312. https://doi.org/10.1207/s15374424jccp3502_14

Herdman, M., Gudex, C., Lloyd, A., Janssen, M. F., Kind, P., Parkin, D., Bonsel, G. & Badia, X. (2011). Development and preliminary testing of the new five-level version of EQ-5D (EQ-5D-5L). *Quality of Life Research*. 20 (10): 1727–1736. <https://doi.org/10.1007/s11136-011-9903-x>

Johnston, C. & Mash, E. J. (1989). A measure of parenting satisfaction and efficacy. *Journal of Clinical Child Psychology*. 18 (2): 167–175. https://doi.org/10.1207/s15374424jccp1802_8

Jones, K. C., Weatherly, H., Birch, S., Castelli, A., Chalkley, M., Dargan, A., Forder, J., Gao, M., Hinde, S., Markham, S., Ogunleye, D., Premji, S. & Roland, D. (2023). *Unit costs of health and social care 2022*. <https://kar.kent.ac.uk/100519/> (accessed 16 June 2024).

Jones, K. & Burns, A. (2021). *Unit costs of health and social care 2021*. Personal Social Services Research Unit, University of Kent.

McPin Foundation. (2018). *Research priorities for children and young people's mental health: Interventions and services*. <https://www.ila.nihr.ac.uk/priority-setting-partnerships/Mental-health-in-children-and-young-people/downloads/Mental-Health-in-Children-and-Young-People-PSP-Main-Report.pdf> (accessed 16 June 2024).

Mental Health Taskforce. (2016). *The five year forward view for mental health*. <https://www.england.nhs.uk/wp-content/uploads/2016/02/Mental-Health-Taskforce-FYFV-final.pdf>

National Institute for Health and Care Excellence [NICE]. *NICE health technology evaluations: The manual*. <https://www.nice.org.uk/process/pmg36> (accessed 16 June 2024).

National Youth Advocacy Service. (2019). *Looked after minds: Prioritising the mental health of care-experienced children and young people*. <https://www.nyas.net/wp-content/uploads/NYAS-looked-after-mind-report.pdf> (accessed 16 June 2024).

NHS England. (2023). 2021/22 National cost collection data publication. <https://www.england.nhs.uk/publication/2021-22-national-cost-collection-data-publication/> (accessed 16 June 2024).

Oates, J., Gervai, J., Danis, I., Lakatos, K. & Davies, J. (2018). Validation of the mothers' object relations scales short-form (MORS-SF). *Journal of Prenatal and Perinatal Psychology and Health*. 33, 38–50. https://www.researchgate.net/publication/328233041_Validation_of_the_Mothers'_Object_Relations_Scales_Short-Form_MORS-SF (accessed 16 June 2024).



O'Farrelly, C., Barker, B., Watt, H., Babalis, D., Bakermans-Kranenburg, M., Byford, S., Ganguli, P., Grimås, E., Iles, J., Mattock, H., McGinley, J., Phillips, C., Ryan, R., Scott, S., Smith, J., Stein, A., Stevens, E., Ijzendoorn, M. Van, Warwick, J., ... Ramchandani, P. (2021). A video-feedback parenting intervention to prevent enduring behaviour problems in at-risk children aged 12-36 months: The healthy start, happy start rct. *Health Technology Assessment*. 25 (29). <https://doi.org/10.3310/HTA25290>

Panksepp, J. (2007). Can PLAY diminish ADHD and facilitate the construction of the social brain? *Journal of the Canadian Academy of Child and Adolescent Psychiatry*. 16 (2): 57–66. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2242642/> (accessed 16 June 2024).

Public Health England [PHE]. (2019). *Universal approaches to improving children and young people's mental health and wellbeing: Report of the findings of a Special Interest Group*. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/842176/SIG_report.pdf (accessed 16 June 2024).

Randell, E., Nollett, C., Henley, J., Smallman, K., Johnson, S., Meister, L., McNamara, R., Wilkins, D., Segrott, J., Casbard, A., Wakelyn, J., McKay, K., Bordea, E., Totsika, V. & Kennedy, E. (2024). Watch Me Play!: Protocol for a feasibility study of a remotely delivered intervention to promote mental health resilience for children (ages 0–8) across UK early years and children's services. *Pilot and Feasibility Studies*. 10 (1): 55. <https://doi.org/10.1186/s40814-024-01491-7>

Segrott, J., Murphy, S., Rothwell, H., Scourfield, J., Foxcroft, D., Gillespie, D., Holliday, J., Hood, K., Hurlow, C., Morgan-Trimmer, S., Phillips, C., Reed, H., Roberts, Z. & Moore, L. (2017). An application of Extended Normalisation Process Theory in a randomised controlled trial of a complex social intervention: Process evaluation of the Strengthening Families Programme (10–14) in Wales, UK. *SSM - Population Health*. 3. <https://doi.org/10.1016/j.ssmph.2017.01.002>

Simkiss, D. E., MacCallum, F., Fan, E. E., Oates, J. M., Kimani, P. K. & Stewart-Brown, S. (2013). Validation of the mothers object relations scales in 2–4 year old children and comparison with the child–parent relationship scale. *Health and Quality of Life Outcomes*. 11 (1): 49. <https://doi.org/10.1186/1477-7525-11-49>

Slade, A. (1994). Making meaning and making believe: Their role in the clinical process. In A. Slade & D. Wolf (Eds.), *Children at play: Clinical and developmental approaches to meaning and representation*. Oxford University Press.

Sparrow, S. & Cicchetti, D. (2016). *Vineland adaptive behaviour scales*. Pearson.
Stanford, C. E., Totsika, V. & Hastings, R. P. (2020). 'Above and beyond': The perceptions of mothers of children with autism about 'good practice' by professionals and services. *Research in Autism Spectrum Disorders*. 77. <https://doi.org/10.1016/j.rasd.2020.101615>

Sunderland, M. (2007). *What every parent needs to know. The incredible effects of love, nurture and play on your child's development*. Dorling Kindersley.



Totsika, V. (2015). *Child-parent activity index*. Centre for Educational Development, Appraisal and Research, University of Warwick.

Turner, J., Knowles, E., Simpson, R., Sampson, F., Dixon, S., Long, J., Bell-Gorrod, H., Jacques, R., Coster, J., Yang, H., Nicholl, J., Bath, P., Fall, D. & Stone., T. (2021). Impact of NHS 111 Online on the NHS 111 telephone service and urgent care system: A mixed-methods study. *Health Services and Delivery Research*. 9 (21).
<https://doi.org/10.3310/hsdr09210>

Valentine, A. Z., Hall, S. S., Sayal, K. & Hall, C. L. (2024). Waiting-list interventions for children and young people using child and adolescent mental health services: A systematic review. *BMJ Mental Health*. 27 (1). <https://doi.org/10.1136/bmjment-2023-300844>

Wakelyn, J. (2012). Observation as a therapeutic intervention for infants and young children in care. *Infant Observation*. 15 (1). <https://doi.org/10.1080/13698036.2012.654655>

Wakelyn, J. (2018) *A Watch Me Play! Manual: Part 1 - Introduction; Part 2- Further Information*. Unpublished manual.

Wakelyn, J. & Katz, A. (2020). *Watch Me Play! Manual for Parents, Version 2*. Tavistock and Portman NHS Foundation Trust. <https://tavistockandportman.nhs.uk/watch-me-play> (accessed 16 June 2024).

Yogman, M., Garner, A., Hutchinson, J., Hirsh-Pasek, K., ... & Smith, J. (2018). The power of play: A pediatric role in enhancing development in young children. *Pediatrics*. 142 (3): e20182058. <https://doi.org/10.1542/peds.2018-2058>

York, W. & Jones, J. (2017). Addressing the mental health needs of looked after children in foster care: The experiences of foster carers. *Journal of Psychiatric and Mental Health Nursing*. 24 (2–3): 143–153. <https://doi.org/10.1111/jpm.12362>



Appendices

Appendix A: Watch Me Play! Checklist

**Watch
Me Play!**

WMP checklist for practitioners

Practitioner name: ...

Session date: ...

Parent and child initials: ...

Age of child: ...

1. Preparation:

Guiding parents or carers to select up to 6 age-appropriate toys; asking parents or carers to put away electronic and battery toys, screens, phones away and turn TV off; sitting with parents or carers on or near the floor; encouraging parents or carers to help the child to prepare for the end of the play session.

Achieved **2** Partially achieved **1** Not yet achieved **0**

Explored with caregiver? Yes **1** No **0**

2. Baby or child-led play:

Supporting the parent or carer to allow the baby or child to take the lead and play freely, and to join in if invited to by the child, but still following the child's lead; encouraging and guiding the parent to avoid teaching, correcting, directing or tidying up during the WMP time.

Achieved **2** Partially achieved **1** Not yet achieved **0**

Explored with caregiver? Yes **1** No **0**

3. Watching the baby or child play:

Supporting the parent or carer to give their undivided attention to whatever their baby or child chooses to do, encouraging the parent or carer to watch their baby or child and see how they respond, giving the baby or child time to respond and find their own way in play



Achieved **2** Partially achieved **1** Not yet achieved **0**
Explored with caregiver? Yes **1** No **0**

4. Talking with the baby or child about their play:

Describing what the baby or child does and encouraging the parent or carer to do the same; with a baby, echoing their sounds and vocalisations and encouraging the parent or carer to do the same; guiding and encouraging the parent to talk with their baby or child about their play using simple language or sounds

Achieved **2** Partially achieved **1** Not yet achieved **0**
Explored with caregiver? Yes **1** No **0**

5. Talking with another adult about the child's play:

Talking with the parent or carer the child's play in the last play session - what they noticed, any changes or lack of change, and reflecting on how it feels to be with their child while they are playing; sharing their own observations about moments of connectedness, developments and difficulties, linking with the parent or carer's goals, if these have been agreed; problem-solving with parents or carers about what is difficult for them in WMP and what could help

Achieved **2** Partially achieved **1** Not yet achieved **0**
Explored with caregiver? Yes **1** No **0**

Was this session online or in-person?

Date case last discussed in supervision/work discussion:

Comments /observations:

Fidelity Score for this session:

If the Fidelity Score is less than 10, please re-read the WMP Short Guide, Manual for Parents and Further Information.



Appendix B: Health economics tables

Table A1. Practitioners' grades and cost per working hour

N	Band	Cost per working hour, GBP	Source
1	4	37	Jones et al. (2023)
2	6	55	Jones et al. (2023)
3	4	37	Jones et al. (2023)
4	8c	106	Jones et al. (2023)
5	8a	75	Jones et al. (2023)
6	7	66	Jones et al. (2023)
7	8c	106	Jones et al. (2023)
8	8a	75	Jones et al. (2023)
9	4	37	Jones et al. (2023)
10	7	66	Jones et al. (2023)
11	4	37	Jones et al. (2023)
12	8c	106	Jones et al. (2023)
13	6	55	Jones et al. (2023)
14	7	66	Jones et al. (2023)
15	7	66	Jones et al. (2023)
16	7	66	Jones et al. (2023)
Facilitator	8a	75	Jones et al. (2023)

Table A2. Unit costs

Service	Unit cost, 2021/22 GBP	Source	Basis
GP clinic visit	41	Jones et al. (2023) , page 70	per consultation
GP phone call	8.8	Jones et al. (2023) , page 72	per phone call
GP home visit	103.4	Jones et al. (2023) , page 70	per home visit
Practice nurse clinic visits	13.4	Jones et al. (2023) , page 68	per visit
Practice nurse phone calls	5.7	Jones et al. (2023) , page 68	per phone call
Practice nurse home visits	52	Jones et al. (2023) , page 68	per home visit
Social worker phone calls	5.2	Jones & Burns (2021)	per phone call
Social worker home visits	47.3	Jones & Burns (2021)	per home visit



Health visitor clinic visits	165.4	NHS Reference costs 2021/22, CHS HVM, N03E	per care contact
Health visitor phone calls	50.3	NHS Reference costs 2021/22, CHS HVM, N03J	per care contact
Health visitor home visits	94.3	NHS Reference costs 2021/22, CHS HVM, N03G	per care contact
CAMHS clinic visits	257	NHS Reference costs 2021/22, CAMHSCC	per care contact
CAMHS phone calls	257	NHS Reference costs 2021/22, CAMHSCC	per phone call
Speech and language therapist clinic visits	143.2	NHS Reference costs 2021/22, A13C1	per care contact
Speech and language therapist phone calls	143.2	NHS Reference costs 2021/22, A13C1	per care contact
Physiotherapist clinic visits	132.2	NHS Reference costs 2021/22, A08C1	per care contact
Clinical psychologist phone calls	202.1	NHS Reference costs 2021/22, WF01C	per phone call
Educational psychologist clinic visits	202.1	NHS Reference costs 2021/22, WF01C, assume same as clinical psychologist	per care contact
Educational psychologist phone calls	202.1	NHS Reference costs 2021/22, WF01C, assume same as clinical psychologist	per phone call
Child psychiatrist clinic visits	81.3	NHS Reference costs 2021/22, WF01A	per care contact
Child psychiatrist phone calls	173.1	NHS Reference costs 2021/22, WF01C	per care contact
SEN clinic visits	18.3	National Careers GOVUK, assumed 38,000 a year salary, 52 weeks, 40 hours a week working	per hour
SEN phone calls	18.3	National Careers GOVUK, assumed 38,000 a year salary, 52 weeks, 40 hours a week working	per hour
Play therapist clinic visits	16.1	National Careers GOVUK, assumed 31,000 a year salary, 52 weeks, 40 hours a week working	per hour
Occupational therapist clinic visits	167.9	NHS Reference costs 2021/22, CHS, A06C1	per care contact
Occupational therapist phone calls	167.9	NHS Reference costs 2021/22, CHS, A06C1	per care contact



NHS Direct	12.3	Turner et al (2021)	per phone call
Minor injury clinic/urgent care centre	159.6	NHS Reference costs, Emergency medicine, T03NA	per care contact
non-24-hour A&E visit	159.6	NHS Reference costs, Emergency medicine, T03NA	per care contact
A&E visit but not admitted	257.9	NHS Reference costs, Emergency medicine, T01NA	per care contact



What Works *for*
**Children's
Social Care**



Coming together as What Works
for Early Intervention & Children's Social Care

CONTACT

info@whatworks-csc.org.uk
@whatworksCSC
whatworks-csc.org.uk