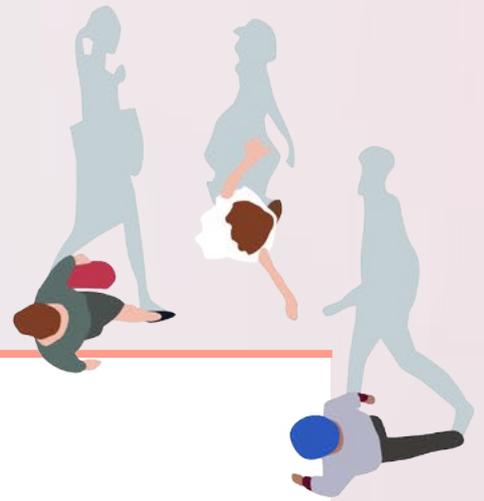




What Works for
**Children's
Social Care**



IMPROVING THE QUALITY OF DECISION MAKING AND RISK ASSESSMENT IN CHILDREN'S SOCIAL CARE: A RAPID EVIDENCE REVIEW

April 2022





What Works *for* Children's Social Care

Authors

Professor Rick Hood, Kingston University
Dr Simon Abbott, Kingston University
Dr Barry Coughlan, Cambridge University
Dr David Nilsson, Kingston University
Dr Robbie Duschinsky, Cambridge University
Dr Pamela Parker, Cambridge University
Ms Julia Mannes, Cambridge University

About the Independent Review of Children's Social Care

The Independent Review of Children's Social Care was announced in January 2021 and will report in Spring 2022. Josh MacAlister is leading the review which has a wide ranging and ambitious scope. The review is a chance to look afresh at children's social care. It will look at issues through the perspective of children and families throughout their interactions with children's social care, from having a social worker knock on the door, through to children being in care and then leaving care. What Works for Children's Social Care is supporting the review by producing and commissioning evidence summaries, rapid reviews and new analysis.

Funding and competing interests

This work was funded by What Works for Children's Social Care. There are no conflicts of interest to report.

About What Works for Children's Social Care

What Works for Children's Social Care seeks better outcomes for children, young people and families by bringing the best available evidence to practitioners and other decision makers across the children's social care sector. We generate, collate and make accessible the best evidence for practitioners, policy makers and practice leaders to improve children's social care and the outcomes it generates for children and families

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EXECUTIVE SUMMARY

Introduction

Assessment and decision-making (DM) in children's social care (CSC) is a challenging and complex area of practice, covering a wide range of needs and encompassing significant statutory duties and responsibilities. The high public profile and political sensitivity of child protection means there is considerable institutional anxiety about risk, which can lead to an emphasis on the regulatory and forensic aspects of the work. Practitioners often have to make judgements on crucial issues under conditions of uncertainty, under pressure in terms of time and workload, and on the basis of incomplete or rapidly changing information. This requires considerable professional expertise and an institutional environment able to promote effective decisions in partnership with families, professionals and other agencies.

Over the past decade, reviews of the literature on assessment and decision-making in CSC have sought to understand how agencies can best harness the complementary strengths of technical/actuarial approaches and cognitive/clinical approaches (Barlow et al., 2012; Bartelink et al., 2015; Vis et al., 2021), as well as investigating the potential of shared decision-making and family group conferencing to improve outcomes for children (Vis et al., 2011; McGinn et al., 2020; Toros, 2020). As yet there has not been a UK-focused review of the evidence on how to improve the quality and effectiveness of DM. As part of work undertaken to support the Independent Review of Children's Social Care, What Works for Children's Social Care

commissioned a rapid evidence review into this area to capture a growing evidence base and inform the recommendations of the Review.

Objectives

The aim of the review was to contribute to the knowledge base on how to improve the quality of decision making and risk assessment for children referred to statutory CSC services. The objectives were to answer the following research questions:

1. How are quality and effectiveness understood and operationalised in studies of decision-making in children's social care?
2. What factors affect the quality and effectiveness of decision-making?

Quality and effectiveness were not pre-specified outcomes, as the review aimed to examine how these concepts were explained and defined in the literature. It was hypothesised that definitions would include consensus between professionals (e.g. in coming to similar conclusions about a particular situation) but also the accuracy of assessments and decisions when compared with other information, such as the substantiation of abuse or neglect.

Methods

The review protocol was registered in advance on the OSF website: <https://osf.io/uv9e4/> and published on the WWCS



website. The study was a rapid evidence review undertaken using systematic methods. A keyword search was carried out on five electronic databases: Scopus, Cochrane, PubMed, PsychINFO, and Web of Science. Terms were selected in relation to five domains: 1) the population of children referred to or in receipt of CSC services, 2) the intervention of being subject to a decision from CSC, 3) the outcome of whether this decision was effective (defined in various ways), 4) the context of actual or potential abuse, neglect or maltreatment, and 5) the additional context of child protection and safeguarding. Citation searches were limited by date (2000-2021), language (English), and type (report or peer-reviewed journal article). The database search was supplemented by a manual search of other reviews and key websites. Other inclusion criteria were that the study should report on primary research and have been carried out either in the UK or certain other countries with a comparable child welfare system (Republic of Ireland, United States, Canada, Australia). Two stages of screening, first of titles/abstracts and second of full text articles, were undertaken in specialist software for collaborative reviews (Rayyan) using a decision-making flowchart to help standardise responses.

For the final sample of included full texts, the quality of research including potential sources of bias was appraised using two tools: the CASP Qualitative checklist (Critical Appraisal Skills Programme, 2020) and the McMaster University Critical Review Form for quantitative studies (Law et al., 1998). A pro-forma was used to extract data from each study and an adapted Framework method (Gale et al., 2013) was used to guide the analysis and synthesis of findings. Preliminary themes and definitions of quality were discussed by the review team and summarised in table format. Finally, quantitative and qualitative material were brought together and reported using a narrative approach (Elliott, 2005).

Results

Characteristics of included studies

Overall, 28 full text papers and reports were selected for inclusion in the review, consisting of 13 UK studies and 15 non-UK studies. The majority of UK studies was carried out in England, along with others from Northern Ireland and Scotland, and one comparative study including England, United States, Norway and Finland. The studies covered a range of decision points in the child welfare system, including response to referrals, CP investigations, substantiation of abuse, admission to care and reunification with birth parents. Just over half of the studies used qualitative methods, including ethnography, case file analysis, vignettes, and focus groups. The quantitative studies included some secondary analysis of LA administrative data, surveys, factorial vignettes, and an evaluation. The majority of non-UK studies was carried out in the United States, along with others from Canada and Australia. They also covered a range of decision points in the child welfare system. Almost all of them were quantitative, with the exception of one ethnographic study. Quantitative research mainly involved the secondary analysis of administrative data, some of which were obtained from national cohort studies.

Quality appraisal

Quality appraisal indicated that the quality of the studies was variable, both for UK and non-UK studies. Reporting of aims, research questions and justification of the study design was generally clear. Common limitations for UK qualitative studies were the use of small convenience samples and a lack of methodological detail, particularly around data analysis, ethical issues, and the researcher's own positionality. Limitations for UK quantitative studies included the risk of non-response bias for those using survey methods and inconsistent reporting of group differences in terms of statistical significance.



On the whole, the non-UK quantitative studies tended to be higher quality, being for the most part rigorously conducted analyses of large-scale national datasets, such as the Canadian Incidence Study (CIS), or state-wide administrative data in the US. The main limitations were a lack of methodological detail about missing data and how the quality of the administrative data itself had been verified. A further limitation of the studies exploring racial disparities was the use of very broad categories (e.g. black/white/Hispanic) which presumably masked important distinctions and differentiations within those groups. The two evaluation studies in the sample (one UK, one non-UK) had a low certainty of evidence due to limitations in the recruitment strategy and the outcome measures used.

Defining quality and effectiveness

Definitions of quality were sometimes explicitly stated but more often than not were implicitly assumed. Overall, five categories of definition were identified in the reviewed work:

- Accuracy refers to the extent to which decisions are corroborated by other knowledge obtained by CSC services about the child and their circumstances. For example, one study (Forrester, 2008) examined the decision not to act on a referral to CSC, in light of subsequent re-referrals with concerns about significant harm. Accuracy was more likely to be investigated in non-UK research.
- Consistency refers to the extent to which different professionals make a similar decision about a particular set of circumstances. For example, one study (Britner and Mossler, 2002) compared responses to a case study of physical abuse between different professional groups. Consistency was a common aspect of quality studied by UK and non-UK research.

- Outcomes refers to the consequences of a decision in terms of children's health and wellbeing at follow-up in research. For example, one study (Farmer and Lutman, 2014) carried out researcher ratings of children's wellbeing five years after they were reunified with their parents following an episode of care. This was the least examined aspect of quality across the reviewed studies.
- Practice refers to the professional conduct of judgement and decision-making, particularly in real-life settings. For example, one study used ethnographic methods to examine the implementation and use of structured decision-making tools in an Australian child welfare context (Gillingham and Humphreys, 2010). Much of the UK research focused on the quality of practice in decision-making.
- Equity refers to the expectation that children from different socio-demographic groups should have similar decisions made about them by child welfare professionals. For example, one study (Wittenstrom et al., 2015) examined the contexts in which racial disparities were most apparent in the timeliness of reunification from care. Only non-UK research examined equity as a quality issue in decision-making.

Factors affecting decision making

Drawing on Baumann et al.'s (2011) decision-making ecology (DME) model, the findings on factors affecting decision-making were broken down in terms of the decision threshold and the contextual domain, i.e. whether the influences on DM were to do with case characteristics, organisational factors, external drivers, and attributes of the decision-maker. Some non-UK studies used the DME itself as a theoretical framework and reported on a wide range of factors. UK



studies tended to focus on factors relating to the decision-maker and the organisation.

- Intake/response to referrals – referral decisions were found to be influenced primarily by case characteristics (demographic and risk factors) combined with organisational and external factors that might affect what action was taken at a particular level of assessed risk. Inconsistent agency responses were identified in relation to weekend referrals, team caseloads and referrals with insufficient information. Volume of demand, involvement of managers, and expertise of practitioners also had a bearing on the quality of practice and consistency of thresholds.
- Substantiation of maltreatment – substantiation decisions were again influenced primarily by case characteristics alongside other factors. Inaccurate substantiation decisions were linked to limited knowledge and information, as well as resource issues. One study (Berrick et al., 2016) found confidence in the quality of DM among CP practitioners to be lower in England compared to other countries (US, Finland and Norway). In the US, there was evidence of inequitable DM, with black children more likely to have a report of maltreatment substantiated (Font et al., 2012).
- Risk and needs assessment – good practice in risk assessment was linked to expertise in analytical skills such as hypothesis testing and argumentation, the ability of managers to probe workers' judgements, practitioners' confidence in expressing their views, as well as recognition of the impact of emotions and the power dynamics in interprofessional networks (O'Connor and Leonard, 2014; Helm, 2016; Whittaker, 2018).
- Admission to care – decisions to admit children to care were primarily influenced by case characteristics, particularly the risk assessment but also child characteristics such as age and ethnicity, as well as family income. Inconsistent DM could result from the multiple perspectives of professionals, while thresholds for placing children were not always aligned with the results of parenting assessments (Cyr et al., 2020). Caseloads and institutional support for DM affected rates of admissions, as did the prevailing organisational and practice culture and workers' prior hypotheses and value position (Dickens et al., 2007; Spratt et al., 2015).
- Reunification from care – one study found that the quality of reunification decisions was affected by 'inescapable errors' in social work practice, including confirmation bias, poor record-keeping, and a tendency to downgrade referrals from family members (Farmer and Lutman, 2014). More timely reunifications could be supported by great involvement of parents in decisions (Yampolskaya et al., 2017).

Conclusion

The complexity of decision-making in CSC means that there are different ways to understand and measure quality and effectiveness. Currently these distinctions are not well articulated in policy or practice, nor are they always clearly operationalised in research, particularly in the UK. A more substantial theoretical underpinning, particularly drawing on an ecological systems perspective, would help to establish different indicators of quality and investigate associations and trade-offs between them.



The evidence confirms that judgement and DM in this field are highly skilled activities, which require organisations to support and develop professional expertise. Inherent uncertainty and volatility in the DM environment undermine the binary approach to decisions as being either right or wrong, which is often assumed by accountability processes. The institutional context in England is particularly centralised and driven by procedures compared to other countries, which means that efforts to further standardise DM practice may have unintended consequences. The international evidence also highlights the importance of equity as a marker of quality in DM, which aligns with recent research into child welfare inequalities in the UK countries. Wider adoption of an ecological perspective may help to clarify that equity is a decision-making problem but also that DM is a systemic issue that goes beyond assessment templates and the exigencies of casework (important as these are).

It could also be argued that the principles of partnership and co-production of services mean that the extent to which children and families are directly involved in DM should itself be seen as a key indicator of quality. Crucial for both research and policy is a greater appreciation of the distinction between risk predictions and threshold decision, which has implications not only for efforts to improve DM but also for the wider issue of structural change and innovation in CSC. Moreover, there is relatively little knowledge about the consequences of decisions and subsequent outcomes for children. Addressing this gap will require new partnerships and mechanisms for developing tailored longitudinal datasets in an ethical way but also a commitment to create a more positive culture of learning within organisations and the sector as a whole.



1. INTRODUCTION

The quality of risk assessment and decision-making (DM) is a key concern within children's social care services. As part of work undertaken to support the Independent Review of Children's Social Care, What Works for Children's Social Care commissioned a brief evidence review into this area to capture a growing evidence base and inform the recommendations of the Review. The aim of the evidence review is to improve the quality of decision making and risk assessment for children referred to statutory children's social care (CSC) services.

1.1 Decision-making in CSC

CSC encompasses a range of statutory services designed to promote and safeguard the welfare of children. In England, such services are mainly provided by local government, referred to in this report as local authorities (LAs). CSC services include the assessment of need, care plans for children judged to be 'in need' of support, protective interventions and investigations, court work, and acting as corporate parent for children in public care (Hood and Goldacre, 2021a). Referrals to CSC can be made by members of the public or by other professional agencies

such as the police, schools and health services. The CSC system itself encompasses a number of thresholds and decision-points, from the point of referral through various stages of assessment and intervention up to admission to care and subsequent exit from care (see Section 4.2 for a full list of decision points covered by the review). Such decisions require the contribution of a range of stakeholders, including statutory and voluntary sector agencies, legal representatives, judges and magistrates, but also children, parents, family members and other people in the community. Practitioners and managers within CSC perform a key role in coordinating and implementing the decision-making process.

1.2 Complexity of decision-making

There are many reasons why DM in CSC is challenging and complex. The work carried out by practitioners and agencies covers a wide range of need and risk and significant statutory duties and responsibilities. This makes for a large number of decision-points, often associated with formal thresholds for action (Platt and Turney, 2014) as well as with mechanisms for rationing resources and screening eligibility for services (Hood et al., 2019). Decisions may invoke tension between the aim of supporting children and families, providing them with the help they need to thrive and achieve their potential in life, and the aim of investigating concerns about abuse and neglect and intervening to ensure children's safety (Bartelink, et al., 2015). The high public profile and political sensitivity of



child protection means there is considerable institutional anxiety about risk, which can lead to an emphasis on the regulatory and forensic aspects of the work. In turn, families' fear of child protection services can make it hard to engage them in the partnerships and working relationships that underpin assessment and decision making. At the same time, practitioners are having to make judgements on crucial issues in conditions of uncertainty, often under considerable pressure in terms of time and workload, and on the basis of information that is incomplete or may be changing rapidly. This puts an onus on the integration of formal and practical knowledge in clinical judgement as well as on 'fast and frugal' decision-making during periods of volatility or crisis (Gigerenzer and Gaissmaier, 2011). Such tasks are known to demand considerable professional expertise and may lapse into overly intuitive approaches, which carry the risk of bias, or

overly procedural approaches, which may be insensitive to contextual information.

Problems with DM can lead to a number of adverse consequences for children and families. Most obviously, there is the risk that children are not protected and continue to suffer abuse and neglect. Families may not receive services that are suitable for the problems they face, which may lead to those problems escalating or recurring. Furthermore, assessments and decisions that underplay the role of structural and situational factors in families' lives can contribute to the reproduction or exacerbation of social inequalities, as seen in the high social gradient of child protection plans and care admissions, as well as systematic variation in the 'interventionism' of local authorities (LAs) with differing levels of average deprivation (Hood and Goldacre, 2021b).



1.3 Existing reviews

DM and risk assessment in child protection have been extensively studied both in the UK and other countries. A number of reviews exist on the topic, many of which have sought to understand how agencies can best harness the complementary strengths of technical/actuarial approaches and cognitive/clinical approaches (Barlow et al., 2012; Bartelink et al., 2015; Vis et al., 2021). Some of this literature is summarised by Bartelink et al. (2015), who examined the evidence on methods of improving DM in relation to child maltreatment. They discuss the evidence in two main categories. First, there are methods focused on the content and structure of professional thinking processes, which largely consist of structured decision making (SDM) systems and actuarial risk assessment tools. The authors found that outside of the US/California, the impact of SDM 'seems limited' although it improves transparency and systematicity. They also found that while actuarial tools have been found to be 'slightly better' than consensus-based instruments, there was surprisingly little evidence of their superiority over clinical judgement in the specific context of child welfare (see also Barlow et al., 2012). The second category was focused on partnership working with families, specifically studies of participatory/shared DM and family group DM. The literature on shared DM seemed to show generally promising results, although there were concerns about the quality of some of this evidence. Family group DM was found to be effective for engaging families but there was less evidence that it improved outcomes for children (see also Dijkstra et al., 2016). Overall, Bartelink et al. (2015) conclude that the evidence on effective DM in this area is surprisingly limited but seems to point to a combination of methods, particularly structured and shared DM, as advisable when making decisions about child maltreatment.

How such methods would interact with each other, and whether they would be equally applicable to the full range of judgements and decisions in the child welfare system as a whole, is open to question.

1.4 Theoretical framework

In terms of theoretical frameworks, systems approaches have been influential in the literature on DM in child welfare. In the UK, the Munro Review of Child Protection drew on a socio-technical systems perspective to examine social work practice (Munro, 2011). The review argued that an overly procedural and technical-rational approach to assessment and decision-making was stifling professional expertise and undermining the ability of workers to build relationships with children and families and undertake the type of critical analysis that underpinned sound professional judgements and justifiable decisions (see also Munro, 2005). Munro's analysis, which emphasised the interaction between organisational and individual factors in creating the right conditions for effective DM, has been very influential for subsequent UK research in this area (see Section 5.2).

In the United States and Canada – and to some extent Australia – a widely used model is the Decision Making Ecology (DME) framework proposed by Baumann et al. (2011). Similar to Munro's approach, it uses human error as the starting point for understanding DM and argues that decisions need to be understood within the context in which they are made. Ecological influences on decisions are categorised as case factors, organisational factors, external factors and decision-maker factors. Caseworker decisions have three features: the range of decisions that can be made (the 'decision-making continuum'), the psychological process of DM, and the consequences of a decision. There are three aspects to the psychological



process of DM: the distinction between a judgement and a decision, the distinction between an assessment (i.e. of the level of risk) and the decision threshold (i.e. the level of risk needed for action to be taken), and the effect of a shift in this threshold on the DM process. Outcomes are generally seen from the perspective of the client (e.g. safety, or permanence) but must also consider the perspective of the decision-maker (e.g. effects on thresholds of elevated public scrutiny following a death from child abuse). Other theoretical frameworks, including utility vs value models and predictive risk modelling, are discussed by Benbenishty and Fluke (2020). In this review, the DME model contributed to the data analysis and synthesis stage (see Sections 3.3 and 4.4) and to the discussion of findings (Section 5.2).

1.5 Rationale for the review question

As yet there has not been a UK-focused review of the evidence on how to improve the quality and effectiveness of DM. There are several reasons why this is a crucial area for CSC. One is that decisions are made under conditions of uncertainty, so that

even decisions that are reasonable do not guarantee a good outcome. Another is that many risks in this field are affected by both institutional factors and external events. Over the past ten years, rates of child protection interventions and admissions to care have greatly increased, while decisions at any threshold are affected by the level of demand elsewhere in the system (Hood et al., 2019). Other factors include the ripple effect of court judgements and legal proceedings, and the fallout from public scandals about deaths from child abuse (Elliott, 2020). These conditions mean that the quality and effectiveness of decision making and risk assessment are socially contingent and so it is crucial to understand how they are understood and operationalised in practice. An evidence base that can specify the complex interplay between factors shaping effectiveness under different circumstances and conditions will also be helpful for operational purposes. The review outlined here will examine these two questions together to enable a synthesis of knowledge about how to improve the quality of decision-making in the current context of CSC.



2. OBJECTIVES

The aim of the review was to contribute to the knowledge base on how to improve the quality of decision making and risk assessment for children referred to statutory CSC services. The objectives were to answer the following research questions:

1. How are quality and effectiveness understood and operationalised in studies of decision-making in children's social care?
2. What factors affect the quality and effectiveness of decision-making?

Quality and effectiveness were not pre-specified outcomes, as the review aimed to examine how these concepts were explained and defined in the literature. It was hypothesised that definitions would include consensus between professionals (e.g. in coming to similar conclusions about a particular situation) but also the accuracy of assessments and decisions when compared with other information, such as the substantiation of abuse or neglect.



3. METHODS

3.1 Protocol registration

The review protocol was registered in advance on the OSF website: <https://osf.io/uv9e4/> and published on the What Works Centre website. Minor changes were made to this protocol in order to accommodate technical difficulties encountered during title-abstract screening: specifically, it was not possible to conduct an advanced search with all key terms on the JStor and Science Direct databases so these were omitted from the search.

3.2 Study eligibility criteria

Studies were included that addressed aspects of quality and effectiveness in decision-making for children involved with CSC services. The eligibility criteria were:

Study design:

- Empirical research (RCTs, observational studies, qualitative studies)
- Published between 2000-2021
- Published in English
- Published as peer reviewed journal article or report

Population:

- Children referred to CSC services
- Services either in the UK (England, Scotland, Wales, Northern Ireland) or some other countries (Republic of Ireland, United States, Canada, Australia)

Topic:

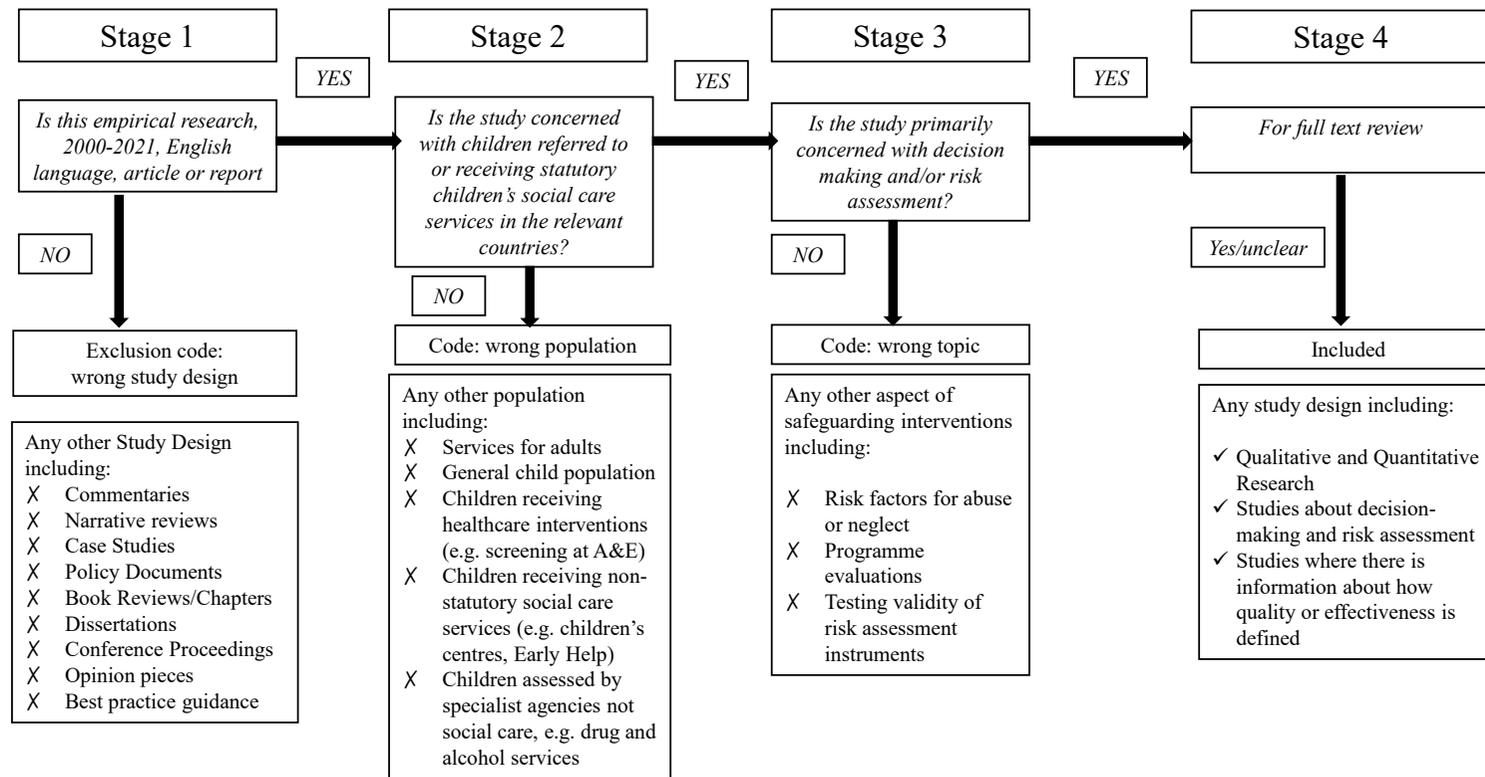
- Study primarily concerned with risk assessment and decision-making

Grey literature (i.e. reports not published in peer-reviewed academic journals) was included where it met the inclusion criteria. The criteria around geographical setting were designed to provide insights into contextual factors affecting decision-making in a range of child welfare systems, while maximising relevance by limiting these studies to countries with a similar 'child protection' orientation to England (Gilbert et al., 2012).

Some of these criteria (date, language and type) were added as electronic filters to the database search. The remaining criteria were grouped into categories: study design (i.e. reporting on primary research), population (i.e. children involved with CSC services in certain countries) and topic (addressing aspects of quality and effectiveness in decision-making) and added to a flowchart to assist with screening decisions. The flowchart is illustrated in Figure 1.



Figure 1 Screening and inclusion flowchart





3.3 Search strategy

In accordance with the PRISMA guidelines on preferred reporting items in evidence reviews, a systematic search was carried out on five electronic databases: Scopus, Cochrane, PubMed, PsychINFO, and Web of Science. Terms were selected in relation to five domains: 1) the population of children referred to or in receipt of CSC services, 2) the intervention of being subject to a decision from CSC, 3) the outcome of whether this decision was effective (defined in various ways), 4) the context of actual or potential abuse, neglect or maltreatment, and 5) the additional context of child protection and safeguarding. Specific terms within these domains are set out below in Table 1. Relevant citations were identified by entering these terms as title/abstract searches in the databases. Searches were carried out from 1-8 July 2021, limited by date (2000-2021), language (English), and type (peer-reviewed journal article). The database search was supplemented by a manual search of other reviews and key websites (Ofsted, the Department for Education, and the National Children's Bureau) to identify further articles and reports that met the inclusion criteria.

3.4 Study selection

Citation records from database and manual searches were imported into specialist software for collaborative reviews (Rayyan). After removal of duplicates, citations were screened using a decision-making flow chart to help standardise responses (see Figure 1). A 'pilot' screening exercise was carried out by all members of the review team with a sample of 100 citations and the results discussed in order to refine the flow chart and identify any systematic differences in coding. Title/abstract screening was then carried out by two reviewers, with the lead author (RH) screening all citations and other members of the team screening a batch of citations independently. A record of conflicts was kept and any conflicts were passed to a third reviewer or discussed by the project team. Once a provisional list of full text articles was identified, a further stage of screening took place to check that the full text was available and that inclusion criteria were met. In the case of multiple papers from the same study, publications were examined for their separate contribution and included if they were sufficiently differentiated in terms of the data collected and the analysis undertaken.

Table 1. Search terms

No.	Domain	Search terms
1	Population	Child* OR Adolesce* OR Unborn OR Infant* OR Baby or Babies* OR "Young people" OR Teenagers
2	Intervention	Decision* OR "Decision-making" OR "Decision making" OR "Risk Assessment"
3	Outcome	Quality OR Effectiveness OR Evaluat* OR Efficacy OR Success* OR Improve* OR Improving
4	Context	Maltreat* OR Abuse* OR Neglect* OR Exploit*
5	Context	Protection OR Safeguarding OR Thresholds OR Investigation OR Intervention OR Screening OR Intake



3.5 Data extraction

The following data was extracted from each study: author, year, aims, data collection and analysis, sample, follow-up period (if applicable), funding, main findings, ethics, strengths, and limitations. A pro-forma framework was used to record data specifically relevant to the research questions to assist with evidence synthesis. Data was extracted by one reviewer for each study in the final sample (n=28) and then checked by a second reviewer (RH). For quantitative studies, data included participants, intervention/programme, comparators and outcomes. For qualitative studies, data included participants, setting, themes, implications and recommendations. Specific data relating to the research questions was additionally recorded, i.e. how quality and effectiveness were understood and measured, and what factors were found to affect the quality of decision-making.

3.6 Quality appraisal

The quality of material included in the review was appraised using two tools: the CASP Qualitative checklist (Critical Appraisal Skills Programme, 2020) and the McMaster University Critical Review Form for quantitative studies (Law et al., 1998). Each study was appraised by a member of the review team and the completed tools shared with RH for a second view. Conclusions from the appraisal process were discussed in a meeting of the team and a summary table was produced and cross-checked by team members. Some of the included studies formed part of broader mixed methods research but reported primarily on either the quantitative or qualitative data. In these cases, either the CASP or McMaster tool was used for the appraisal. It is worth noting that several papers did not have enough information to respond definitively 'yes' or 'no' to some of the appraisal questions; unfortunately, there was no scope within



the rapid review timescale to correspond with the authors to obtain additional methodological details.

3.7 Data analysis and synthesis

An adapted six-stage Framework method (Gale et al., 2013) was used to guide the analysis and synthesis of findings from the final sample of full text articles. The first stage was familiarisation with the included publications. The lead reviewer (RH) read all the full texts and members of the review team were each allocated a batch of articles so that each was read independently by two people. The second stage was to extract data from each study using a template as described above (Section 3.5). Data extraction was done by each member of the review team for their allocated studies and then all the extracts were checked by the lead reviewer (RH). The template included two analytical categories which specifically addressed the relevance of findings to the respective research questions, i.e. how quality and effectiveness were conceptualised and measured within each study, and which factors were found to influence quality and effectiveness. The third stage was to use information gathered under the first analytical category in order to create a framework of definitions of quality across the included studies. The lead reviewer

(RH) carried out this part of the analysis inductively; the resulting framework was discussed in a research meeting and then cross-checked by other members of the team for their allocated articles.

The fourth stage was to use information gathered under the second analytical category to create a framework of factors influencing decision-making across the included studies. A-priori categories derived from Baumann et al.'s (2011) DME model were used for this part of the analysis, so that findings were broken down in terms of the continuum of DM, i.e. the threshold or part of the system where the decision is being made, and the systemic context, i.e. the different influences on DM in terms of case characteristics, organisational factors, external drivers, and attributes of the decision-maker. Again, this was undertaken by the lead reviewer and the results discussed in a meeting as well as cross-checked for each study by other members of the review team. The fifth stage was to summarise the findings in table format in order to facilitate the comparison between studies. Finally, quantitative and qualitative material were brought together and reported using a narrative approach (Elliott, 2005).



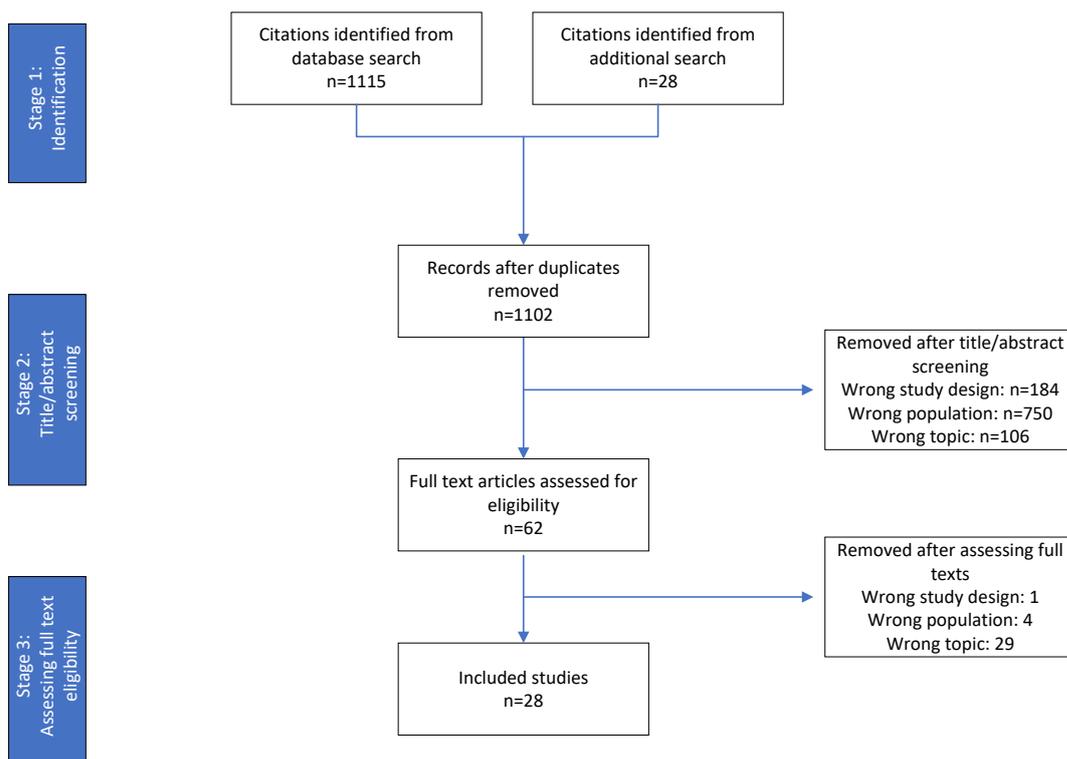
4. RESULTS

4.1 Search Results

The online database search yielded 1,115 results after filtering for year of publication, language and publication type. An additional 28 articles were identified through a website search and examination of reference lists from other reviews. 41 duplicate articles were removed, leaving 1,102 results for title/abstract screening. At this stage, 1040 studies were excluded, leaving 62 articles for full text review. In narrowing down the full text studies for inclusion, some topics were excluded on the basis of relevance to the review questions or if well-covered by existing reviews. In particular, studies primarily concerned with constructing actuarial risk

assessment tools, or comparing such tools with other types of risk assessment, were excluded as this evidence has been covered by existing reviews (see Section 1.3). Studies of family group decision-making were similarly excluded as having been covered by other reviews. Also excluded were studies of differential response, which is a specific approach to child maltreatment referrals that is implemented in some jurisdictions but not in the UK. One full text was unavailable and so was excluded on this basis. Overall, 28 publications were included in the current review. Figure 2 shows a PRISMA flow diagram for the screening and selection process, and an overview of the included material is provided in Tables 2 and 3.

Figure 2. PRISMA flow diagram





4.2 Characteristics of included studies

Overall, 28 studies were included in the review, consisting of 13 UK studies and 15 non-UK studies.

The characteristics of the UK studies are described in Table 2. The majority (8) was carried out in England, with 3 from Northern Ireland and one from Scotland, as well as one comparative study including England, United States, Norway and Finland. The studies covered a range of decision points in the child welfare system, including response to referrals (Forrester, 2008; Tupper et al., 2014; Helm, 2016; Saltiel, 2016), CP investigations (Helm, 2016; Saltiel, 2016), substantiation of abuse (Berrick et al., 2016; Devaney et al., 2017), admission to care (Spratt et al., 2015; Dickens et al., 2019; McCafferty and Taylor,

2020) and reunification from care (Farmer and Lutman, 2014; Spratt et al., 2015; Devaney et al., 2017). Three studies (Platt, 2011; O'Connor and Leonard, 2014; Whittaker, 2018) addressed risk assessment and decision-making in child and family social work in general. The most common study design was qualitative (7) featuring a range of methods including ethnography (Helm, 2016; Saltiel, 2016; Whittaker, 2018), case file analysis (Farmer and Lutman, 2014; Forrester, 2008), vignettes (McCafferty and Taylor, 2020), and focus groups (O'Connor and Leonard, 2013). There were 6 quantitative studies, which included some secondary analysis of LA administrative data (Dickens et al., 2019; Tupper et al., 2014), surveys (Berrick et al., 2016; Devaney et al., 2017), factorial vignette (Spratt et al., 2015) and an evaluation (Platt, 2011).



The key decision-points covered by these studies are:

- **Response to referrals** – the point of intake to CSC, when a decision must be made as to whether to accept a referral and carry out further assessment or investigation, or to divert to non-statutory services, or to take no further action.
- **Initiate CP investigation** – in England, the decision to carry out a CP investigation ('Section 47' inquiry) is made when services have reasonable grounds to believe a child is suffering or at risk of suffering significant harm. Other jurisdictions have similar processes for investigating concerns about child maltreatment.
- **Substantiation of maltreatment** – this refers to the outcome of a CP investigation. In some jurisdictions, such as the USA, 'substantiation' is a formal recorded outcome. In England, a CP investigation ('Section 47 inquiry') may result in a multi-agency CP conference, at which it is decided whether a CP plan is required – the latter is probably the nearest equivalent to substantiation in the US sense.
- **Risk and needs assessment** – this refers to judgements that are made during the course of a social work assessment, about the nature and degree of identified needs and risks. As set out by the DME model, such judgements are key to informing threshold decisions, i.e. what to do next.
- **Admission to care** – this refers mainly to court-mandated care entry rather than voluntary arrangements, which are not commonly used in the United States. The decision to initiate care proceedings, i.e. to seek a court order to remove a child from their birth family and place them in state care, is taken by statutory CP agencies in the jurisdictions considered here.
- **Reunification from care** – this refers to the decision to return children home after an episode of care. Generally reunification means children return home to live with their parents, as distinct from other types of kinship care arrangements.
- **Re-entry to care** – the decision to re-admit a child to care has particular significance because it may suggest a breakdown in the child's permanency plan from their previous episode of care.



Table 2. Characteristics of UK studies

Author and year	Study location	Aim	Design	Methods	Sample population	Decision types
Berrick et al., 2016	England, California, Norway, Finland	Examine cross-jurisdictional differences in DM as reported by child welfare practitioners in four countries (Finland, Norway, England, US)	Quantitative	Survey	772 child protection workers – 367 from Norway, 208 Finland, 102 England and 84 US (California). Online survey between Feb-June 2014 using single vignette.	Substantiation of maltreatment Admission to care
Devaney et al., 2017	Northern Ireland	Explore the ability of social workers to make decisions about individuals at risk, and to take appropriate action	Quantitative	Factorial survey	202 SW practitioners working with vulnerable children – agencies were statutory (73%) and voluntary (23%) 228 students enrolled on SW programme at one UK university	Substantiation of maltreatment Reunification from care
Dickens et al., 2007	England	Identify differences between local authorities in rates of admission to care and explore possible reasons for variations	Quantitative	Secondary analysis (administrative data) Survey	24 English LAs provided data. Questionnaires sent to social workers for children who started to be looked after during October 2000 – March 2001. 251 forms from 18 LAs received (individual response rate not specified).	Admission to care
Farmer and Lutman, 2014	England	Explore how the risks of children returning home after an episode of care are managed over time.	Qualitative	Case file analysis Interviews	7 English LAs, using a sub-sample of 110 children from an earlier study supplemented by 28 new cases. Children in the sample had all been neglected prior to entering care and then returning home.	Reunification and re-entry to care



Table 2. Characteristics of UK studies (continued)

Author and year	Study location	Aim	Design	Methods	Sample population	Decision types
Forrester, 2008	England		Qualitative	Case file analysis	3 London LAs. Consecutive sample of 400 referrals that were closed without allocation, between Jan-Feb 2000.	Response to referrals
Helm, 2013	Scotland	Describe and explore the methods by which social workers make sense of information in real-time practice situations	Qualitative	Ethnographic observation	Two social work teams in an urban Scottish LA. 27 social workers, senior SWs and SW assistants, 7 team leaders, 1 practice team manager	Response to referrals Initiating CP investigation
McCafferty and Taylor, 2020	Northern Ireland	To explore the barriers to knowledge acquisition and utilisation by social workers when making decisions.	Qualitative	Thinking aloud protocol Semi-structured interviews	17 social workers or managers within a child welfare team within one HSC trust (Northern Ireland)	Admission to care
O'Connor and Leonard, 2014	England	Explore similarities and differences between student and practitioner decision-making in children and family practice	Qualitative	Focus groups	11 students from one UK university (6 undergrad, 5 postgrad). 17 qualified social workers from a range of teams (not stated from how many LAs).	General
Platt, 2011	England	Evaluate a teaching and learning model designed to improve the analysis skills of children and family social workers.	Quantitative	Questionnaire Rating of assessment reports Comparison of assignment marks	Questionnaire: 51 qualified social workers undertaking post-qualifying award at Bristol university. Assessment report: 11 social workers/students Assignment: 23 social workers/students	Needs assessment



Table 2. Characteristics of UK studies (continued)

Author and year	Study location	Aim	Design	Methods	Sample population	Decision types
Saltiel, 2016	England	Describe and explore how social workers make decisions in situations of uncertainty and complexity	Qualitative	Ethnographic observations Interviews	One CP team in north England. Size of team not stated. Observations carried out over a 5 month period. No. of interviews not stated	Response to referrals Initiating CP investigation Substantiation of maltreatment
Spratt et al., 2015	Northern Ireland	Identify underlying hypotheses in how social workers interpret evidence in supporting decisions around admission to care and reunification.	Quantitative	Factorial vignette Content analysis	202 qualified child and family social workers from government and non-government agencies in Northern Ireland.	Admission to care Reunification from care
Tupper et al., 2017	England	Explore available data relating to social worker decision-making in CSC	Quantitative	Secondary analysis of administrative data Free text analysis of case files	123,131 episodes/contacts for approx. 49,000 children who were referred to CSC in three English LAs (1/7/2010 – 30/6/2014)	Response to referrals
Whittaker, 2018	England	Explore psychological processes underpinning how CP practitioners form judgements and make decisions in real-life situations.	Qualitative	Ethnographic observations Interviews	Two sites: urban LA office with four social work teams (18 days observation and 17 interviews), and an NHS multi-disciplinary team undertaking specialist assessments (22 days observation and 7 interviews).	Risk and needs assessment



Table 3. Characteristics of non-UK studies

Author and year	Study location	Aim	Design	Methods	Sample population	Decision types
Bolton et al., 2021	Australia	Examine differences between judgements of people who come in contact with families and those of CP professionals	Quantitative	Survey	34 staff from two govt agencies in New South Wales – 14 only returned partial data. Sample size of ratings was n=1624	Response to referrals
Britner and Mossler, 2002	USA	Study how different groups of child welfare professionals prioritize and use information to make placement decisions following instances of child abuse	Quantitative	Factorial survey	5 Virginia jurisdictions. 90 professionals including 6 judges and 8 guardians, 10 court-appointed special advocates, 43 social workers and CPS staff, and 23 mental health specialists. Overall response rate was 60%.	Admission to care
Cross and Casanueva, 2009	USA	Examine variation in substantiation rates on the basis of caseworker judgements and other factors.	Quantitative	Combined analysis of primary and administrative data	N=4,515 children investigated for maltreatment. Interviews and questionnaires carried out with caregivers and caseworkers. Sample size not specified.	Substantiation of child maltreatment
Cyr et al., 2020	Canada	Evaluate and compare parenting capacity assessment protocols based on i) attachment video feedback ii) psychoeducation	Quantitative	Randomized control trial	69 families (parents and children) with substantiated maltreatment reports – randomly assigned to one of two treatment groups.	Admission to care



Table 3. Characteristics of non-UK studies (continued)

Author and year	Study location	Aim	Design	Methods	Sample population	Decision types
DePanfilis and Girvin, 2004	USA	Explore barriers to worker decision-making based on a study of out-of-home investigations of child abuse and neglect in the state of New Jersey	Quantitative	Secondary analysis of cross-sectional archival case review	New Jersey youth and family services. N=158 case files (randomly selected from n=1295) – child abuse and neglect reports received and investigated between 1/1/1999 – 31/12/2002	Investigating child maltreatment in out-of-home care
Detlaff et al., 2011	USA	Explore the impact of race on child maltreatment decision-making when controlling for family income and risk	Quantitative	Secondary analysis (administrative data)	N=186,182 reports of alleged maltreatment with substantiation decisions from the Texas Department of Family and Protective Services (DFPS), 1/9/2003 – 28/2/2005	Substantiation of child maltreatment
Fallon et al., 2015	Canada	Exploring and explaining agency-level effects in placement decisions regarding Aboriginal children	Quantitative	Secondary analysis (administrative data)	Canadian Incidence Study data. Subsample of investigations in which maltreatment is substantiated (excluding cases involving domestic abuse). Final sample: n=1,710 of substantiated maltreatment investigations.	Admission to care
Font et al., 2012	USA	Examine differences between black and white families with regard to caseworker risk assessment and substantiation decisions	Quantitative	Secondary analysis (administrative data)	N= 1461 non- Hispanic black or white children subject to CPS investigations conducted by a non-Hispanic black or white caseworker, from a nationally representative (US) sample of 5,000 CP investigations	Substantiation of maltreatment



Table 3. Characteristics of non-UK studies (continued)

Author and year	Study location	Aim	Design	Methods	Sample population	Decision types
Gillingham and Humphries, 2010	Australia	Explore how practitioners use Supported Decision Making (SDM) tools in practice	Qualitative	Ethnographic observations Interviews Case file audit	Sites: 6 Child Safety Service Centres in Queensland. Observations: 2 weeks in each site Interviews: n=46 with social workers and managers Case file audit: n=51	Initiating CP investigation Risk assessment
Graham et al., 2015	Canada	Explore the inter-relationship between case, case worker and organisational factors on decision of placing a child into foster care.	Quantitative	Structural equation model	N=1,103 CPS investigative case workers in Texas surveyed between August and December 2007	Admission to care
Jantz et al., 2012	USA	Assess combined effect of child characteristics and level of community organisation on substitute care entry	Quantitative	Secondary analysis (administrative data) Latent profile analysis	134,172 unduplicated counts of child maltreatment investigations drawn from administrative data (Illinois DCFS)	Admission to care
Nofziger et al., 2019	USA	Determine if caseworker perceptions are consistent with experiences of physical victimisation reported by the child	Quantitative	Secondary analysis (caseworker interviews and child-self report) Descriptive and bi-variate analysis.	N=2,751 children referred to CPS from 97 counties across USA, from a national cohort study	Risk assessment (physical abuse)



Table 3. Characteristics of non-UK studies (continued)

Author and year	Study location	Aim	Design	Methods	Sample population	Decision types
Wells et al., 2004	USA	Examine the contribution made to agency screening by (1) sociodemographic factors, (2) roles and relationships with collateral community agencies, and (3) worker and supervisor characteristics.	Quantitative	Analysis of case abstracting forms Questionnaire	12 sites (CPS catchment areas) representing 24 cities and counties in 5 states (US) n=185 front line workers, n=82 supervisors and n=85 administrators	Initiate CP investigation
Wittenstrom et al., 2015	USA	Identify the contexts in which a race differential occurs between African American and Anglo children with regard to the speed of reunification from care.	Quantitative	Secondary analysis (administrative data)	N= 21,763 children with reported allegation of neglect, physical abuse or multiple abuse: African American or Anglo ethnicity, aged under 13 or in sibling group including children.	Reunification from care
Yampolskaya et al., 2017	USA	Examine the effect of efforts made by child welfare case managers to involve parents in case processes on reunification and the termination of parental rights.	Quantitative	Secondary analysis (administrative data)	1774 cases randomly selected by Florida DCF during year 2009-10.	Decision to seek termination of parental rights Reunification from care



The characteristics of the non-UK studies are described in Table 3. The majority (10) was carried out in the United States, with three from Canada and two from Australia. The studies covered a range of decision points in the child welfare system, including response to referrals (Gillingham and Humphreys, 2010; Bolton et al., 2021), CP investigations (Wells et al., 2004; Gillingham and Humphreys, 2010), substantiation of maltreatment (DePanfilis and Girvin, 2005; Cross and Casanueva, 2009; Dettlaff et al., 2011; Font et al., 2012), admission to care (Britner and Mossler, 2002; Jantz et al., 2012; Graham et al., 2015; Cyr et al., 2020) and reunification with birth parents (Wittenstrom et al., 2015; Yampolskaya et al., 2017). One study (Nofziger et al., 2019) examined risk assessment in relation to physical abuse. Almost all the studies were quantitative, with the exception of one ethnographic study in Australia (Gillingham). The quantitative studies mainly involved the secondary analysis of administrative data, sometimes in combination with primary data collected from surveys. There was only one study that evaluated an intervention (Cyr et al., 2020).

4.3 Quality appraisal

Results from the quality appraisal of included studies (using the CASP and McMaster tools) are summarised in Table 4. Overall the quality of the studies was variable, both for UK and non-UK studies. Reporting of aims, research questions and justification of the study design was generally clear. Common limitations for UK qualitative studies were the use of small convenience samples and

a lack of methodological detail, particularly around data analysis, ethical issues, and the researcher's own positionality. There was also a tendency in some studies to make fairly definitive conclusions and recommendations on the basis of exploratory evidence. Limitations for UK quantitative studies included the risk of non-response bias for those using survey methods and inconsistent reporting of group differences in terms of statistical significance. There was only one evaluation (of a training tool to improve the quality of analysis in assessments), which had a very low certainty of evidence due to limitations in the study design and the outcomes measures used.

On the whole, the non-UK quantitative studies tended to be higher quality, being for the most part rigorously conducted analyses of large-scale national datasets, such as the Canadian Incidence Study (CIS), or state-wide administrative data in the US. The main limitations were a lack of methodological detail about missing data, and indeed how the quality of the administrative data itself had been verified. A further limitation of the studies exploring racial disparities was the use of very broad categories (Black/White/Hispanic) which presumably masked important distinctions and differentiations within those groups. Again, there was only one evaluation (of an attachment-based parenting capacity assessment), which had a low certainty of evidence due to limitations in the recruitment strategy and the outcome measures used.



Table 4 Quality appraisal

Authors	Study type														
	All studies Screening questions	Qualitative ¹									Quantitative ²				
		Are the findings valid?				What are the results?			Will the results help locally?	Sample	Outcomes	Intervention	Results	Conclusion	
		3	4	5	6	7	8	9							
UK studies³															
Berrick et al., 2016	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	
Devaney et al., 2017										Green	Yellow	Grey	Yellow	Yellow	
Dickens et al., 2007										Green	Yellow	Grey	Yellow	Yellow	
Farmer and Lutman, 2014	Green	Green	Yellow	Yellow	Red	Green	Yellow	Green	Yellow						
Forrester, 2008	Green	Green	Green	Green	Green	Green	Green	Green	Green						
Helm, 2013	Green	Green	Yellow	Green	Green	Green	Yellow	Green	Yellow						
McCafferty and Taylor, 2020	Green	Green	Yellow	Green	Yellow	Yellow	Green	Yellow	Yellow						
O'Connor and Leonard, 2014	Green	Yellow	Green	Green	Green	Green	Yellow	Yellow	Yellow						
Platt, 2011										Yellow	Red	Yellow	Yellow	Red	
Saltiel, 2016	Green	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow						
Spratt et al., 2015										Green	Yellow	Grey	Yellow	Yellow	
Tupper et al., 2017										Yellow	Green	Grey	Yellow	Yellow	
Whittaker, 2018	Green	Green	Yellow	Green	Yellow	Green	Yellow	Green	Yellow						
Non-UK studies³															
Bolton et al., 2021										Green	Yellow	Grey	Green	Yellow	
Britner and Mossler, 2002										Red	Yellow	Grey	Green	Yellow	
Cross and Casanueva, 2009										Green	Green	Grey	Green	Green	
Cyr et al., 2020										Red	Yellow	Green	Green	Red	
DePanfilis and Girvin, 2004	Green	Green	Green	Yellow	Yellow	Yellow	Green	Yellow	Yellow						
Detlaff et al., 2011										Green	Green	Grey	Green	Green	
Fallon et al., 2015										Green	Green	Grey	Green	Green	
Font et al., 2012										Green	Yellow	Grey	Green	Green	

Notes: 1 Appraisal with the CASP tool for qualitative studies, 2 Appraisal with the McMaster tool for quantitative studies, 3 Red indicates a negative response ('no'), green a positive response ('yes'), orange indicates there was inadequate information provided in the study ('can't tell') and grey indicates the question was not applicable.



Table 4 Quality appraisal (continued)

Gillingham and Humphries, 2010															
Graham et al., 2015															
Jantz et al., 2012															
Nofziger et al., 2019															
Wells et al., 2004															
Wittenstrom et al., 2015															
Yampolskaya et al., 2017															

Notes: 1 Appraisal with the CASP tool for qualitative studies, 2 Appraisal with the McMaster tool for quantitative studies, 3 Red indicates a negative response ('no'), green a positive response ('yes'), orange indicates there was inadequate information provided in the study ('can't tell') and grey indicates the question was not applicable.



4.4 Synthesis of results

The findings from included papers are synthesised below with respect to the review's research questions.

4.4.1 How are quality and effectiveness understood and operationalised in studies of decision-making?

In the studies of decision-making considered here, definitions of quality and effectiveness

were sometimes explicitly stated but more often than not were implicitly assumed as part of the methodological approach and discussion of findings. Overall, five categories of definition were identified in the data extracted for analysis: accuracy, consistency, outcomes, practice and equity. Their distribution across the reviewed studies is summarised in Table 5 before reporting on definitions and operationalisation.

Table 5 Definitions of quality and effectiveness

UK studies	Definitions of quality and effectiveness				
	Accuracy	Consistency	Outcomes	Practice	Equity
Berrick et al., 2016				X	
Devaney et al., 2017		X			
Dickens et al., 2007	X	X			
Farmer and Lutman, 2014	X		X		
Forrester, 2008	X				
Helm, 2013				X	
McCafferty and Taylor, 2020				X	
O'Connor and Leonard, 2014				X	
Platt, 2011				X	
Saltiel, 2016				X	
Spratt et al., 2015		X			
Tupper et al., 2017		X			
Whittaker, 2018				X	
Non-UK studies					
Bolton et al., 2021		X			
Britner and Mossler, 2002		X			
Cross and Casanueva, 2009	X				
Cyr et al., 2020	X		X		
DePanfilis and Girvin, 2004	X				
Detlaff et al., 2011					X
Fallon et al., 2015					X
Font et al., 2012					X
Gillingham and Humphries, 2010	X	X		X	
Graham et al., 2015		X			
Jantz et al., 2012					X
Nofziger et al., 2019		X			
Wells et al., 2004		X			
Wittenstrom et al., 2015		X			X
Yampolskaya et al., 2017				X	



Accuracy

Accuracy refers to the extent to which a particular decision about a child is corroborated by other knowledge obtained by CSC services about the child and their circumstances. Three UK studies examined accuracy. Dickens et al. (2007) analysed variation in rates of admissions to care in 24 English LAs. In order to check whether unusually high rates of care entry might reflect overly low thresholds for intervention, the researchers sent a questionnaire about the children's needs and care plans to social workers for a sub-sample of children in the administrative dataset. They found no evidence of inappropriate admissions to care. However, since the paper contains little methodological detail on the survey element – such as the sample size and response rate – the validity of this finding is uncertain. Farmer and Lutman (2014) conducted interviews and case file analysis in relation to 138 children who had been in care because of neglect and later returned home to their parents. The decision to reunify was scrutinised in the light of subsequent re-abuse and re-entry to care. They found relatively high rates of unsuccessful reunifications, with 65% of returns breaking down within five years. Forrester (2008) studied the outcomes of referrals of CSC that did not result in allocation of a social worker. The decision not to provide a service was examined in the light of re-referrals involving concerns about actual or potential 'significant harm' in the 27 months after case closure. The study found that only a small minority (2.75%) of closed referrals were re-referred with such concerns.

Four non-UK studies examined accuracy. Cross and Casanueva (2009) analysed variation in substantiation rates on the basis of caseworker judgements and other factors. They found that in 73% of cases there was a straightforward match between the

substantiation decision and judgements of harm, risk and evidence; however in 9 out of 100 cases the reports were not substantiated despite moderate to severe harm. DePanfilis and Girvin (2004) explored caseworker decisions during investigations of child abuse and neglect in out-of-home placements in the state of New Jersey. 129 cases were reviewed using a coding procedure to assess the quality of professional practice in relation to four types of decision: (1) initial placement; (2) case finding; (3) removal of children from their out-of-home care setting; and (4) licensing and corrective action. The reviewers disagreed with the agency decision in a substantial number of cases, including 58% of non-substantiations. Cyr et al. (2020) evaluated and compared parenting capacity assessment protocols based on i) attachment video feedback and ii) psychoeducation. They found that use of the attachment-based protocol was associated with improvements in parent-child interaction post-test and was predictive of child re-reports of maltreatment in the year following assessment.

Consistency

Consistency refers to the extent to which different practitioners, either within the same profession/organisation or across different ones, make a similar decision about a particular set of circumstances. Four UK studies examined consistency. Devaney et al. (2017) used a factorial survey based on a case vignette to compare DM about child maltreatment between practitioners with different levels of experience, finding that newly qualified social workers made significantly different decisions from students and experienced practitioners. Dickens et al. (2007), sought to establish the basis for explicable and reasonable variation in rates of care admissions between 24 English LAs. They found the main sources of variation to be relative need (in the



community), availability of resources and support for children and families, the degree of management control and the prevailing organisational/practice culture. Spratt et al. (2015) used a factorial vignette to examine how social workers interpreted evidence to support DM around admission to care and reunification, finding that respondents' approach to DM was underpinned by underlying hypotheses or value positions about the role of state intervention in family life. Tupper et al. (2018) explored patterns of DM emerging from the secondary analysis of administrative data in three English LAs. They found evidence of inconsistencies, such as a lower likelihood of referrals progressing to further action when received at the weekend.

Eight non-UK studies examined consistency. Some of this research used surveys based on vignettes and case studies. Bolton et al. (2021) analysed differences in the judgements of CP professionals in relation to 285 practice-near scenarios. A survey based on the scenarios was completed by 34 staff from two governmental agencies in New South Wales. The results suggested a moderate level of overall consensus, with lower rates of agreement for low risk cases. Britner and Mossler (2002) analysed interprofessional responses to four case studies of child physical abuse. A questionnaire based on the case studies was completed by 90 child welfare professionals from five professional groups. The results suggested that these groups relied on different types of information to make decisions about admission to care. Gillingham and Humphries (2011) conducted an ethnographic study of how child welfare professionals in Queensland, Australia, used Supported Decision Making (SDM) tools in practice. The perception among caseworkers was that the tools tended to over-simplify practice, i.e. reduce complex situations to a binary question of whether or not there was abuse. Some practitioners admitted to

manipulating the tool to reflect a decision that had already been made. However, since these tools were not formally tested, the findings relate more to the way tools were implemented rather than to any predictive flaws.

Other studies, particularly in the US, made use of large administrative datasets to examine the factors affecting DM. Graham et al. (2015) developed a structural equation model to analyse the inter-relationship between case, case worker and organisational factors on the decision of placing a child into foster care. The model tested the effects of different factors in the DME model, finding that case-level factors were the most important but that organisational and external factors – such as the proportion of Hispanic families on workers' caseloads – also influenced decisions. Nofziger et al. (2019) carried out a secondary analysis of administrative data on 2,751 children from a US national cohort study to determine if caseworker perceptions of physical abuse were consistent with children's self-reports of victimisation. They found a high degree of overlap between caseworker assessments and children's self-reports. However they also identified important discrepancies, with over 60% of cases where children reported acts of physical violence being considered by caseworkers as causing 'no harm' to the child. Wells et al. (2004) collected data from case-abstracting forms, agency staff surveys, and community surveys in order to examine the contribution made to agency screening decisions by different factors in the DME model. Similarly to Graham et al., (2015), they found that while decisions were certainly affected by case-level factors, other ecological factors, including community reporting behaviour and worker characteristics, also played a significant role.



Outcomes

Outcomes refer to the consequences of a decision in terms of the child's health, wellbeing and developmental pathway at follow-up, as assessed by researchers rather than CSC. This differs from accuracy as the outcome of a decision is tracked beyond the record of involvement, intervention or inaction on the part of the child welfare agency. This was the least researched aspect of effectiveness, addressed by only two of the included studies. Farmer and Lutman's (2014) study of neglected children who had been in care and then returned home (see above) also included researcher ratings of children's overall wellbeing at five years' follow up. Ratings showed that 29% of the children had a 'good' and one third a 'satisfactory' level of wellbeing, but also that 38% had a 'poor/very poor' level of wellbeing. However, a lack of methodological detail on how ratings were calculated and triangulated means the validity of these results is uncertain. Cyr et al.'s (2020) evaluation of an attachment-based parenting capacity assessment examined changes in parent-child interaction in the year following assessment. Greater improvements were found in this outcome compared to the control group, although limitations around attrition and small sample size mean that further research would be needed to confirm this result.

Practice

Practice refers to the professional conduct of judgement and decision-making, often linked to notions of reasonableness and justifiability but also to the complexity and constraints of 'real-life' child protection work. Quality of practice was addressed by seven UK studies and was particularly a feature of those with qualitative designs. Berrick et al. (2016) explored cross-jurisdictional differences in DM as reported by child welfare practitioners

in four countries (Finland, Norway, England, US). They sent a vignette-based survey to 772 child protection workers across these countries, in order to compare respondents' confidence in the quality of decision-making and other factors such as institutional support and the time available for deliberation. Results suggested that practitioners in England were less confident in their own decisions and those of their managers; they also worked in the most tightly regulated and highly proceduralised system. McCafferty and Taylor (2020) reported on a study in Northern Ireland that used vignette-based interviews to explore barriers to knowledge acquisition and utilisation by social workers when making placement decisions. They found that participants were more confident about using legal concepts than formal theory and research evidence to inform their decisions, and this was linked to various organisational and institutional factors. O'Connor and Leonard (2014) carried out four focus groups to explore differences in DM between student and qualified social work practitioners. The findings highlight the power dynamics underlying whose voice is heard in DM and how this may be linked to expertise and experience but also to status differences between professional groups, as well as between service users and professionals. Platt (2011) evaluated a teaching and learning model designed to improve the analysis skills of children and family social workers, using a combination of data from questionnaires, case file examinations and assignment grades. Some improvements were found in practitioners' ability to define key steps and demonstrate conceptual understanding, although limitations in the evaluation design mean that firm conclusions about efficacy cannot be made.

Three UK studies used an ethnographic approach to examine the practice of DM in a naturalistic setting. Helm (2013) carried out an



observation-based ethnographic study in two social work teams in an urban Scottish LA, aiming to explore and describe how social workers made sense of information in real-time practice situations. The findings drew attention to the role of emotional responses in the initial 'framing' of a situation, as well as the process of 'satisficing', i.e. the search for the right information to make a 'good enough' judgement in real-time situations. Saltiel (2016) carried out five months of observations and interviews as part of an ethnographic study in a single statutory CP team in north England, aiming to explore how social workers made decisions in situations of uncertainty and complexity. The findings highlighted some of the operational constraints on DM in fast-paced CP teams, such as the pressure of constant referrals and the tension between the need to make quick decisions and time it took to gather and check information. Whittaker (2018) conducted ethnographic interviews and observations in social work teams in an urban LA as well as in an NHS multi-disciplinary assessment team, aiming to explore the psychological processes underpinning judgements and DM in real-life situations. The findings highlighted the interplay between emotionally-informed intuitive processes and more analytical processes, with experience playing an important role in developing the skills needed to analyse and evaluate complex information.

Practice issues were also addressed in two non-UK studies. Arguably, the findings discussed already from Gillingham and Humphries (2010) also fall into this category because they concern the implementation and use of SDM tools in a particular practice context. Yamposkaya et al. (2017) examined the effect of efforts made by child welfare case managers to involve parents in case processes on reunification and the termination of parental rights. They analysed

1774 cases randomly selected by statutory child welfare services in Florida, finding that efforts to involve parents in services, activities and decisions about their child were associated with timelier reunification (with parents) and a lower risk of termination of parental rights for mothers (but not fathers).

Equity

Equity may be regarded as a particular form of consistency, which refers to the extent to which different groups of service users in similar circumstances can expect to have similar decisions made about them by child welfare professionals. Interestingly, none of the UK studies on DM considered equity but it was quite a common topic in US and Canadian research in this field. These studies relied on the quantitative analysis of large-scale administrative datasets. Detlaff et al. (2011) explored the impact of race on child maltreatment decision-making when controlling for family income and risk. They analysed administrative data on 186,182 reports of alleged maltreatment with substantiation decisions from child welfare services in Texas. A key feature of the analysis was the distinction between threshold decisions and risk assessment. Race was not found to be a significant factor in the substantiation decision after controlling for family income; however, the threshold for action varied systematically between black and white children after controlling for the caseworker's assessment of risk.

Font et al. (2012) also examined differences between black and white families with regard to caseworker risk assessment and substantiation decisions. Their study looked at 1461 non-Hispanic black or white children subject to CPS investigations conducted by a non-Hispanic black or white caseworker, extracted from a nationally representative (US) sample of 5,000 CP investigations. The



analysis yielded some unexpected findings about racial disparities in substantiation decisions. Children in general, and black children in particular, were assessed to be at greater risk of harm and were more likely to have a substantiation decision when the assessment or decision was carried out by a black caseworker. Nonetheless, differential treatment by caseworkers was much less important than differences in family and case circumstances in accounting for disparities in outcomes between black and white children. Jantz et al. (2012) sought to assess the combined effect of child characteristics and level of community organisation on substitute care entry. A latent profile analysis of county-level community measures was used to create a three-class typology of social organisation. These latent classes were then included with individual child demographic variables in a regression model with the outcome of entering substitute care (or not). The results showed that decreasing levels of social organisation were generally associated with a higher likelihood of children entering care, with African American children in less organised communities having the highest risk of removal. Unlike Font et al. (2012), this study did not find that caseworkers' own ethnicity had any influence on decision outcomes.

In a Canadian study, Fallon et al. (2015) explored agency-level effects in placement decisions regarding Aboriginal children. The dataset was from the 2008 Canadian Incidence Study, which collected a wide range of information from a representative sample of 112 child welfare sites including Aboriginal-managed organisations authorised to conduct child welfare investigations. Analysis of key clinical and organisational variables showed that investigations were more likely to result in out-of-home placements in agencies serving large proportions of Aboriginal children. Finally,

Wittenstrom et al. (2015) aimed to identify the contexts in which timescales for reunification of African American children differed most widely from those of Anglo children. They analysed administrative data from child protection services in Texas concerning 21,763 children who entered care for the first time with a follow-up period of 20 to 51 months. A proportional hazards model was used to identify significant main effect variables on rates of exit from care. Interactions were then explored using a case profile composed of different child characteristics. The results showed that the amount of racial disparity in reunification decisions varied greatly depending on the particular combination of case and external factors present in a case, e.g. when an infant was placed in a kin placement, African American children were reunified 68% more slowly than similarly placed Anglo children.

4.4.2 What factors affect the quality and effectiveness of decision-making?

Having examined how quality and effectiveness were understood and operationalised in the reviewed studies, this section will describe the findings on factors affecting DM. Drawing on the decision-making ecology (DME) model developed by Baumann et al. (2011), the findings are broken down in terms of the continuum of DM, i.e. the threshold or part of the system where the decision is being made, and the systemic context, i.e. the different influences on DM in terms of case characteristics, organisational factors, external drivers, and attributes of the decision-maker. Some of the papers reported on the practice of assessment and DM in a more general sense and these are presented in the middle of the DM continuum. The findings are summarised in Table 6 and discussed below.



Intake/response to referrals

A number of studies examined DM at the start of children's involvement with CSC services, which also included decisions about whether to initiate a CP investigation. Case factors included demographic characteristics, such as children's age or ethnicity, identified needs, such as disability or a type of abuse or neglect, and parental risk factors, such as substance misuse. Some of these factors were associated with inaccurate decisions. For example, referrals where there had been prior involvement with services, if closed with no further action, were more likely to be re-referred with concerns about significant harm, particularly when the initial referral was about physical abuse and parental alcohol misuse (Forrester, 2008). Other factors were associated with potential inequity, as in Tupper et al's (2017) finding that referrals of children from non-white backgrounds were more likely to be referred for further action and to receive a statutory intervention; however, their study was not able to identify whether this was because of DM bias, higher levels of need, or other factors not included in the analysis. Bolton et al. (2021) found that professional consensus was higher for scenarios involving child neglect than for those about pre-natal risk and emotional abuse, and that scenarios identified as having insufficient information also produced less agreement.

Certain case-level factors seemed to be associated with inconsistent DM. For example, Tupper et al. (2017) found that referrals received at the weekend were less likely to be acted on than those received during the week. Wells et al. (2004) found that which local office received the report was one of the most influential factors predicting a screening decision. Both Tupper et al. (2017) and Wells et al. (2004) found that reports from family members were the least likely to proceed to further action and referrals from

professionals were the most likely. Again this might point to unconscious bias on the part of the worker handling the referral or to other factors, e.g. that information is presented more clearly in professional referrals.

Organisational factors affected DM in a number of ways, often with implications for consistency. The pressure of handling a high volume of referrals with limited resources was noted in Saltiel's (2015) ethnographic study, which observed a tension between the need to make quick decisions and the time it took to gather and check information. Wells et al. (2004) had a sample of 12 sites from 5 states (in the US) and found that jurisdictions with higher rates of screening (out) had a longer average time span between the initial contact and the investigative decision, i.e. higher rates of screening were not associated with faster DM. Tupper et al. (2017), with a sample of three LAs, found that team caseloads affected the likelihood of referrals being acted on but the direction of the effect differed between LAs. Saltiel (2016) observed the importance of the team manager's role in shaping practice around DM and particularly the threshold for further action and investigation. In another ethnographic study, Gillingham and Humphreys (2015) observed how the complex world of everyday practice shaped the organisation's efforts to improve the quality of DM by introducing a SDM tool. In their analysis, application of the tool was essentially determined by the ways in which practitioners found it useful (or a hindrance) in dealing with the messy reality of CP work.

External factors were investigated in a couple of studies. Wells et al. (2004) found that a number of community factors were associated with higher odds of investigation, including more families with children under 18, lower median income, higher proportion of contacts alleging neglect, and positive relationships between CP services and allied



community professionals. The importance of multi-agency processes was also observed by Saltiel (2016), particularly the problems caused by referrals with insufficient information and high volumes of police notifications about incidents of domestic violence where a child was living in the home.

Finally, characteristics of decision-makers (i.e. CSC practitioners) were found to affect the quality of screening decisions, although the evidence for this comes from ethnographic studies and so may not be generalisable. In Helm's (2013) study, good practice in judgement and DM was found to require emotional intelligence and communication skills in frontline workers, backed up by supervisors who made themselves available for consultation and were prepared to exercise 'methodical doubt', i.e. challenge the initial framing of practitioners' judgements when necessary. Saltiel (2016) observed that the fast-paced work of intake teams required the ability to make quick decisions on the basis of sufficient information, prioritise high risk cases, and build relationships with referrers and parents. The pressure of constant referrals could lead to workers using bureaucratic methods to try and transfer cases quickly to other teams before enough information had been gathered. Gillingham and Humphreys (2010) observed a different kind of bureaucratic manipulation, in this case using an SDM tool retrospectively to 'confirm' decisions that had already been taken.

Substantiation of maltreatment

Substantiation decisions were a particular focus of studies in the United States, where this terminology is commonly used. The equivalent in the UK context may be when an investigation leads to a child being made subject to a CP plan or placed on a CP register. In relation to case characteristics, Cross and Casanueva (2009) found that child gender and age were each significantly related to substantiation independently of caseworker judgements about harm, risk and evidence. Specifically, boys' cases were more likely to be substantiated than girls' and children aged 6-10 more likely than younger or older age groups. For the 9 out of 100 cases where children were judged to have suffered moderate to severe harm but were not substantiated, this was linked to insufficient evidence in 4 out of the 9. In Depanfilis and Girvin's (2004) study of investigations of abuse in out-of-home care, inaccurate DM was identified in 58% of non-substantiations and was linked to limited knowledge and information, e.g. about the child's history and significance for caregiving capacity. Dettlaff et al. (2011) studied inequities in substantiation decisions connected to race and income, finding that the threshold for action varied systematically between black and white children after controlling for the caseworker's assessment of risk.



Table 6. Factors affecting decision-making across different decision thresholds

Decision type	Factors found to affect decision making			
	Case	Organisational	External	Decision-maker
Response to referrals / initiate CP investigation	<p>Some risk factors associated with re-referrals involving concerns about significant harm, where prior referral was closed with no further action – particularly prior involvement with services combined with physical abuse and parental alcohol abuse (Forrester, 2008)</p> <p>Some child characteristics affected whether a referral was acted on, such as age, ethnicity or disability status, referral source, timing of referral (weekend or weekday), form of referral (email or phone call) (Tupper et al., 2017)</p> <p>Some case characteristics affected the level of agreement on appropriate action, e.g. professional consensus greater for neglect than for pre-natal risk and emotional abuse. Consensus also less likely for scenarios identified as having insufficient info (Bolton et al., 2021)</p> <p>Case-related factors associated with higher odds of investigation: local office receiving the report, presence of injury, allegation of sexual abuse, and source of report (Wells et al., 2004).</p>	<p>DM affected by limited resources and pressure of constant referrals, importance of manager’s presence and role, and construction of ‘collegial competence’ within SW teams (Saltiel, 2016)</p> <p>Team caseloads affected likelihood of referrals being acted on – but not in the same way in all LAs (Tupper et al., 2017)</p> <p>Implementation of SDM tools in an Australian CP department had unintended consequences for practice and was not found to improve quality of DM (Gillingham and Humphreys, 2010).</p> <p>Jurisdictions with higher rates of screening had a longer average time span between the initial contact and the investigative decision (Wells et al., 2004).</p>	<p>DM affected by multi-agency processes and approach to referrals from other agencies (e.g. ‘flood’ of police notifications re. domestic abuse), and amount of information included in referrals (Saltiel, 2016)</p> <p>Community-related factors associated with higher odds of investigation: more families with children under 18, lower median income, higher proportion of contacts alleging neglect, and positive relationships between CPS and allied community professionals (Wells et al., 2004).</p>	<p>Emotional intelligence and communication skills (in frontline workers); supervisors able to challenge framing when necessary (‘methodical doubt’) and accessible for consultation (Helm, 2013)</p> <p>Capacity to make quick decisions while gathering sufficient info, ability to prioritise, build relationships with referrers and parents, pressure to ‘get rid’ of referrals via bureaucratic means, (Saltiel, 2016)</p> <p>Practitioners often used SDM tools retrospectively to ‘confirm’ decisions they had already taken, and found the tools too restrictive and simplistic to address the complexity of situations requiring a decision (Gillingham and Humphreys, 2010)</p>



Table 6. Factors affecting decision-making across different decision thresholds

Decision type	Factors found to affect decision making			
	Case	Organisational	External	Decision-maker
Substantiation of maltreatment	<p>Substantiation decision depended on judgements of harm, future risk and evidence, with evidence playing the largest role. Child gender and age also affected likelihood of substantiation independently of caseworker judgement (Cross and Casanueva, 2009)</p> <p>Limited knowledge and information, e.g. about the child's history and significance for caregiving capacity (Depanfilis and Girvin, 2005)</p> <p>Thresholds for action varied systematically (across different ethnic categories) on the basis of a particular level of risk as assessed by CPS workers (Detlaff et al., 2011)</p>	<p>Resource issues, e.g. shortage of foster homes putting pressure on workers to place children, or high workloads decreasing the thoroughness of investigations (Depanfilis and Girvin, 2005)</p>	<p>Differences between jurisdictions in relation to workload, degree of proceduralisation and central managerial control, and legalistic systems (Berrick et al., 2016)</p> <p>Even after accounting for caseworker race, disparities in CPS case decisions for black and white children were primarily explained by differences in family and case circumstances rather than differential treatment (Font, 2012)</p>	<p>Transition from student to NQSW may affect quality of DM before expertise is built up (Devaney et al., 2017)</p> <p>Ability of workers to consider complexity of case situations, evaluate information, use systematic process for analysis, maintain quality of record-keeping, communicate risks to supervisors/administrators effectively, and counter the risk of bias and 'tunnel thinking' (Depanfilis and Girvin, 2005)</p>



Table 6. Factors affecting decision-making across different decision thresholds

Decision type	Factors found to affect decision making			
	Case	Organisational	External	Decision-maker
General risk/needs assessment	Case worker assessments of harm, risk, and physical abuse were generally consistent with children's self-reports but substantial number of children who reported victimisation not viewed by the caseworker as being at risk or harmed; discrepancies more likely for young children and teenagers (Nofziger et al., 2019)	<p>Role of managers in probing practitioners' judgement, e.g. with analytical questions (Whittaker, 2018)</p> <p>Degree to which training is close to practice (Platt, 2011)</p>		<p>Impact of emotions, confidence (linked to expertise and experience) to express own views and challenge those of others, status differences, e.g. between students and qualified workers, or SWs and medical professionals (O'Connor and Leonard, 2014)</p> <p>Ability to define key steps and understand key concepts for analysis, skills such as hypothesising and argumentation (Platt, 2011)</p> <p>Ability to integrate intuitive and analytical judgement, e.g. by testing hypotheses, draw on previous experience to spot cues and recognise patterns, manage volume of info to avoid cognitive overload, triangulate evidence from multiple sources (Whittaker, 2018)</p>



Table 6. Factors affecting decision-making across different decision thresholds

Decision type	Factors found to affect decision making			
	Case	Organisational	External	Decision-maker
Admission to care	<p>Different professional groups assign different weights to case characteristics (Britner and Mossler, 2002)</p> <p>Courts more likely to recommend child stays at home when parents rated as capable using an attachment-based assessment (Cyr et al., 2020)</p> <p>Case features (e.g. family income, ethnicity, and risk assessment) the most influential factors for admission to care (Graham et al., 2015).</p> <p>Individual factors of race, age and allegation were associated with the decision to place in substitute care (Jantz et al., 2012).</p>	<p>Prevailing organisational and practice culture, degree of managerial control (Dickens et al., 2007)</p> <p>Access to training, organisational expectations around knowledge acquisition, caseloads (McCafferty and Taylor, 2020)</p> <p>The higher the proportion of investigations of Aboriginal children carried out by an agency, the more likely placement was to occur for any child. Risk of child being placed also greater in government-run agencies compared to agencies with a more autonomous structure (Fallon et al., 2015)</p> <p>Caseworker perceptions of having a manageable caseload and of lower levels of organisational support (for decision-making) associated with higher rates of removals (Graham et al., 2015)</p>	<p>Relative need in the community, availability of resources and support for children and families (Dickens et al., 2007)</p> <p>More families on low incomes on workers' caseloads increased rates of admission to care (Graham et al., 2015).</p> <p>Lower levels of social organisation in the community were associated with higher odds of entry into care, with African American children in relatively disorganised communities experiencing the greatest risk of removal (Jantz et al., 2012).</p>	<p>Work pressure, ability and confidence in using theory and research, particularly in court reports, time to develop tailored knowledge for each case (McCafferty and Taylor, 2020)</p> <p>Prior hypotheses or attitudes affecting how evidence is interpreted (child rescue, kinship defence, or 'hedged' position) (Spratt et al., 2015)</p> <p>Different professional groups assign different weights to case characteristics and may disagree about what kind of services should be offered to families (Britner and Mossler., 2002)</p> <p>Conclusions drawn by parenting capacity evaluators guided placement decisions by social workers and judges, but placement rates nonetheless lower than what was suggested by evaluators (Cyr et al., 2020)</p> <p>Caseworker factors, including workers' own race/ethnicity, not found to directly influence placement decisions, although could have a mediating effect (Graham et al., 2015).</p>



Table 6. Factors affecting decision-making across different decision thresholds

Decision type	Factors found to affect decision making			
	Case	Organisational	External	Decision-maker
Reunification from care	Degree of racial disparity in reunification decisions depends on the combination of case and external factors, e.g. presence of drugs in a case may only lead to a disparity when other factors are present, such as single parenthood and kin placements (Wittenstrom et al., 2015).	Quality of DM on reunification affected by record of monitoring and progress, marginalisation of neglect / lack of follow-through on referrals (Farmer and Lutman, 2014)	Kinship placements played out very differently in African American and Anglo cases involving single parents and drugs, with African American children tending to exit more slowly in such cases (Wittenstrom et al., 2015).	<p>Quality of DM affected by 'inescapable errors' in social work practice, e.g. fixed view of cases and inability to consider later contrary information, habituation and de-sensitization associated with medium-to-long term work, over-identification with parents, downgrading referrals from neighbours or relatives (Farmer and Lutman, 2014)</p> <p>Prior hypotheses or attitudes affected how evidence was interpreted (child rescue, kinship defence, or 'hedged' position) (Spratt et al., 2015)</p> <p>Efforts by caseworkers to involve parents in DM associated with more timely reunification decisions (Yampolskaya et al., 2017)</p>



Organisational factors were analysed by DePanfilis and Girvin (2005), who found that resource issues could affect DM; for example, a shortage of foster homes made it hard to find placements for children and may have put pressure on workers to accommodate children in homes where there had been previous concerns about maltreatment. The study also found evidence of high workloads and other incentives to investigate quickly and avoid the need to consider placement alternatives. Jurisdictional differences were examined by Berrick et al. (2016), who found that CP workers in England and California were under much tighter time pressure to reach decisions than in Finland and Norway. Institutional support for DM was characterised as vertical in England, California and Norway, with staff largely reliant on supervisors, managers and lawyers to approve their decisions. This contrasted with the more horizontal process in Finland, where a wide range of professionals as well as parents and children were involved in DM. Workers in England stood out as having the least confidence in their own and others' decisions, which was linked by the authors to this country having the most tightly regulated and proceduralised CP system. In the United States, Font et al. (2012) examined disparities in substantiation decisions for black and white children in a national sample of CP cases. They found that such disparities were primarily explained by differences in family and case circumstances rather than caseworker bias, although this did not mean that discrimination was absent from the CP system. Their results suggested that the key drivers of black-white gaps in CP outcomes were the geographic context in which families lived and caseworkers operated, and the role of structural factors that meant black families were disproportionately affected by maltreatment-related risk factors.

In relation to decision-maker characteristics, DePanfilis and Girvin (2005) found that professionally reasonable decisions were associated with workers who were able to evaluate information in complex case situations, use a systematic process for analysis, communicate risks to supervisors/administrators effectively, and counter the risk of bias and 'tunnel thinking.' In their study of social workers with different levels of expertise and experience in Northern Ireland, Devaney et al. (2017) found evidence that newly qualified social workers tended to make different decisions from students and experienced practitioners, whose decisions were similar. They speculate that this 'beginner's dip' in consistency may have to do with the transition and socialisation process involved in becoming a professional, which has been explored in some of the literature on expertise.

Risk and needs assessment

Some studies focused in a general way on risk and needs assessment. Nofziger et al.'s (2019) analysis of caseworker perceptions and children's self-reports of physical abuse found that discrepancies were more likely for young children and teenagers. Whittaker's (2018) ethnographic study in London highlighted the role of managers in probing practitioner's judgement, for instance through analytical questions. His findings suggested that effective DM required social workers to be able to integrate intuitive and analytical judgement, e.g. by testing hypotheses, drawing on previous experience to spot cues and recognise patterns, managing high volumes of information to avoid cognitive overload, and triangulating evidence from multiple sources. Whittaker's findings are similar in some respects to Helm's (2013) observations of CP workers in a Scottish LA (see above). O'Connor and Leonard (2014) found that students



and qualified social workers emphasised the impact of emotions and confidence in practitioners' ability to express their views and challenge those of others. This was linked to expertise and experience but also to status differences (e.g. between students and qualified workers, or between social workers and medical professions). Platt (2011) investigated the impact of training in helping social workers understand key concepts for analysis and skills such as hypothesising and argumentation, although the evidence for improvement was limited.

Admission to care

As with the substantiation of maltreatment, the evidence reviewed suggests that the decision to admit a child to care is primarily influenced by case features, particularly the risk assessment (Graham et al. 2015) but

also child characteristics such as age and ethnicity (Graham et al., 2015; Jantz et al., 2012) as well as family income (Graham et al., 2015). Different professional groups were found by Britner and Mossler (2002) to assign different weights to case characteristics in vignettes of child physical abuse. Whereas social workers and mental health practitioners relied on information about the nature and severity of the abuse, and about any prior involvement with services, judges and guardians ad litem tended to weigh up the reliability of the child's disclosure and the likelihood of reoccurrence. The presence of multiple perspectives have implications for the consistency of DM involving different professional groups. The distinction between risk assessment and threshold decisions may also have an interprofessional basis; for example, Cyr et al. (2020) found that the conclusions of parenting capacity evaluators



did guide placement decisions by social workers and judges, but that placement rates were nonetheless lower than what was suggested by evaluators.

In their study of variations in care admissions across 24 LAs, Dickens et al (2007) found that rates of intervention were influenced by the prevailing organisational and practice culture, and to a lesser extent the degree of managerial control. Organisational factors were also found to be important in Fallon et al.'s (2015) study of placement decisions in Canada, with rates of care admission found to be higher in agencies that had a higher proportion of investigations of Aboriginal children, as well as in government-run agencies. In the United States, Graham et al. (2015) found that higher rates of admissions in Texas were associated with caseworker perceptions of having a manageable caseload, although the authors note this result was at odds with findings from other studies. They also found lower levels of organisational support for DM to be associated with higher admission rates. US studies have also found external factors play a role in rates of care admission, which were found to be higher when workers' caseloads had more families on low income (Graham et al., 2015) and when levels of social organisation in the community were lower (Jantz et al., 2012). Similarly in the UK, levels of relative need in the community accounted for 40% of variation in rates of children entering care during the year ending 31 March 2001 (Dickens et al., 2007).

In relation to the quality of practice, McCafferty and Taylor (2020) investigated some of the barriers to practitioners using theory and evidence to inform their assessments and decisions. Barriers reported by participants included limited access to training and the constant pressure of work, which restricted the time available for

applying tailored knowledge to individual assessments. Spratt et al. (2015) found that prior hypotheses or value positions held by practitioners affected how evidence was interpreted; practitioners who worked from a 'child rescue' position tended to make different decisions from those working from a 'kinship defence' position. This was also the case for reunification decisions, which are discussed below.

Reunification from care

Reunification decisions were analysed for racial disparities in Wittenstrom et al.'s (2015) study, which found that certain combinations of case characteristics and external factors were associated with higher levels of disparity. For example, cases involving parental drug misuse only led to disparity between African American and 'Anglo' cases when other factors were present, such as single parenthood and kin placement. Farmer and Lutman (2014) examined the consequences of reunification for children who had an episode of care because of neglect; they found DM in this area to be affected by what they term 'inescapable errors' in social work practice, including the tendency to adopt a fixed view of cases and an inability to consider later contrary information. For practitioners working with families in the medium-to-long term, the authors considered there to be a risk of habituation and desensitization, although this was not well evidenced in the results. They also observed a tendency to downgrade referrals from neighbours or relatives, which tallies with the findings from Tupper et al. (2017) and Wells et al. (2004). Finally, Yampolskaya et al. (2017) found that efforts by caseworkers to involve parents in DM were associated with more timely reunification decisions.



5. DISCUSSION

5.1 Summary of findings

Following a systematic search of electronic databases and key websites, a total of 28 empirical studies were included in the review. They comprised 13 UK studies and 15 non-UK studies. Among the UK studies, eight were carried out in England, three in Northern Ireland and one in Scotland, along with one comparative international study. The papers considered a range of decision points in the child welfare system. There was a split between qualitative and quantitative designs and a range of research methods were used. Among the non-UK studies, ten were carried out in the United States, three in Canada and two in Australia. These papers also covered a range of decision points. With one exception, they were all quantitative designs, with a particular focus on the secondary analysis of administrative data. Only two of the included studies concerned an intervention to improve decision-making.

Appraisal of the studies using the CASP and McMaster tools showed the quality of research to be variable. The non-UK studies tended to be more robust in their design and included more methodological description. The UK evidence was constrained in its validity by small sample sizes, a lack of detail about data collection and analysis, and (for quantitative studies) some inconsistent reporting of missing data and the significance of group differences. Certainty of evidence from the two evaluation studies was relatively low.

Findings are summarised in relation to how quality and effectiveness were defined and operationalised in research, and the factors that were found to affect DM at different points in the system.

Defining quality and effectiveness

Definitions of quality were sometimes explicitly stated but more often than not were implicitly assumed as part of the methodological approach and discussion of findings. Overall, five categories of definition emerged from the data extracted for analysis: accuracy, consistency, outcomes, practice and equity.

- **Accuracy** refers to the extent to which decisions are corroborated by other knowledge obtained by CSC services about the child and their circumstances. Three UK studies and four non-UK studies considered aspects of accuracy in their analysis. For example, Forrester examined the decision not to act on a referral to CSC, in light of subsequent re-referrals with concerns about significant harm. Farmer and Lutman (2014) examined reunification decisions for children in care who had been neglected, in light of whether they subsequently experienced maltreatment after returning home.
- **Consistency** refers to the extent to which different professionals make a similar decision about a particular set of circumstances. Four UK studies and eight non-UK studies considered aspects of consistency in their analysis.



For example, Devaney et al. (2017) compared responses to a factorial survey among social workers with varying levels of professional experience, while Britner and Mosler (2002) compared responses to a case study of physical abuse between different professional groups.

- **Outcomes** refers to the consequences of a decision in terms of children's health and wellbeing at follow-up in research. Only two studies examined outcomes beyond the record of service involvement. Farmer and Lutman's (2014) study of reunification, included researcher ratings of children's wellbeing five years after they returned home. Cyr et al.'s (2020) evaluation of an attachment-based parenting capacity assessment examined changes in parent-child interaction in the year following assessment.
- **Practice** refers to the professional conduct of judgement and decision-making, particularly in real-life settings. This was a particular focus of UK studies, some of which conducted ethnographic research to explore the nature of judgement and decision-making in real-time practice situations and examine the role of organisational context (Helm, 2013; Saltiel, 2016; Whittaker, 2018). Only two non-UK studies addressed practice issues, one of which (Gillingham and Humphries, 2010) again used ethnographic methods to examine the implementation and use of SDM tools in an Australian child welfare context.
- **Equity** refers to the expectation that children from different socio-demographic groups should have similar decisions made about them by child welfare professionals. This was

only examined in non-UK studies of decision-making. This body of research was concerned with racial disparities and was based on the quantitative analysis of large-scale administrative datasets. For example, Wittenstrom et al. (2015) examined the contexts in which African American and Anglo children experienced disparities in the speed of reunification from care.

Factors affecting decision making

Drawing on Baumann et al.'s (2011) decision-making ecology (DME) model, the findings on factors affecting DM were broken down in terms of the decision threshold and the systemic context, i.e. whether the influences on DM were to do with case characteristics, organisational factors, external drivers, and attributes of the decision-maker. Some non-UK studies used the DME itself as a theoretical framework and reported on a wide range of factors. UK studies tended to focus on factors relating to the decision-maker and the organisation.

- **Intake/response to referrals** – referral decisions were found to be influenced primarily by case characteristics (demographic and risk factors) combined with organisational and external factors that might affect what action was taken at a particular level of assessed risk (Wells et al., 2004; Bolton et al., 2021). A small number of referral characteristics were potentially more likely to give rise to 'false negative' decisions (Forrester, 2008). Inconsistent agency responses were identified in relation to weekend referrals (Tupper et al., 2017), team caseloads (Tupper et al., 2017) and referrals with insufficient information (Bolton et al., 2021). High volumes of demand could impair the quality of practice and consistent



application of thresholds, with team managers performing a vital moderating role (Saltiel, 2016). Implementation of SDM tools was hindered by operational constraints and the complexity of the work (Gillingham and Humphreys, 2010). Effective DM required considerable expertise, with practice experience helping professionals to develop analytic, reflective and communication skills (Helm, 2013; Saltiel, 2016).

- **Substantiation of maltreatment**

– substantiation decisions were again influenced primarily by case characteristics alongside other factors. Inaccurate substantiation decisions were linked to limited knowledge and information (Depanfilis and Girvin, 2004), insufficient evidence (Cross and Casanueva, 2009), as well as resource issues (Depanfilis and Girvin, 2004). Inconsistent DM was linked to the transition stage from student to newly qualified worker (Devaney et al., 2017), while confidence in the quality of DM among CP practitioners was found to be lower in England compared to three other countries (US, Finland and Norway). In the US, there was evidence of inequitable DM, with black children more likely to have a report of maltreatment substantiated (Dettlaff et al., 2011; Font et al., 2012).

- **Risk and needs assessment** –

good practice in risk assessment was linked to expertise in analytical skills such as hypothesis testing and argumentation (Whittaker, 2018; Platt, 2011), the ability of managers to probe workers' judgements (Whittaker, 2018), practitioners' confidence in expressing their views (O'Connor and Leonard, 2014), as well as recognition of the impact of emotions and the

power dynamics in interprofessional networks (O'Connor and Leonard, 2014). Discrepancies in risk assessment of physical abuse, compared to child self-reports, were found to be more likely for young children and teenagers (Nofziger et al., 2019).

- **Admission to care** – decisions to admit children to care were primarily influenced by case characteristics, particularly the risk assessment (Graham et al. 2015) but also child characteristics such as age and ethnicity (Graham et al., 2015; Jantz et al., 2012) as well as family income (Graham et al., 2015). Inconsistent DM could result from the multiple perspectives of professionals, who tended to assign different weights to different kinds of information (Britner and Mossler, 2002). Thresholds for placing children were not always aligned with the results of parenting assessments (Cyr et al., 2020). Caseloads and institutional support for DM affected rates of admissions, as did the prevailing organisational and practice culture (Dickens et al., 2017) and whether an agency was government-run or autonomous (Graham et al, 2015). Decisions could be influenced by a workers' prior hypotheses and value position (Spratt, 2015), but social workers were also found to have little confidence in their use of theory and evidence in judgements and decisions (McCafferty and Taylor, 2020).
- **Reunification from care** – the quality of reunification decisions was affected by 'inescapable errors' in social work practice, including confirmation bias, poor record-keeping, and a tendency to downgrade referrals from family members (Farmer and Lutman, 2014).



More timely reunifications were supported by efforts to involve parents in DM (Yampolskaya et al., 2017). Racial inequities in reunification decisions were found to be higher with certain combinations of case characteristics (Wittenstrom et al., 2015).

5.2 Discussion of findings

Decision-making in children's social care is a complex area of practice. The statutory guidance for child safeguarding in England states that decisions should be made 'with the best interests of the child in mind, informed by the evidence available and underpinned by knowledge of child development' (Department for Education, 2018, p.31). It goes on to discuss the importance of critical reflection, good supervision, awareness of cognitive bias, and the need to focus on outcomes. Moreover, the principle of partnership working means that children and families should be fully involved in the decisions affecting them. In such a multifaceted domain, definitions of quality and effectiveness are correspondingly hard to pin down. The review found that in many of the included studies such definitions were implicitly assumed rather than explicitly set out. This appears to be characteristic of the field. For example, in their review of methods to improve DM in child maltreatment, Bartelink et al. (2015) divide the literature into studies of the 'content' of DM, meaning the way risk assessments or DM systems are structured to guide practitioners' thinking, and 'process', meaning the way in which families are treated and involved. This gives rise to a range of terms used to indicate quality, such as transparency, consistency, discrepancy, recurrence of maltreatment, children's safety and wellbeing, and parenting outcomes. The authors even include one study in which the superiority of actuarial risk assessment over practitioner judgements is investigated

without clearly explaining what the criteria are for (un)successfulness. Arguably, the evidence base on DM is muddled by such unexamined heterogeneity of measurement. It would be worth knowing, for example, if there were associations or trade-offs between different indicators of success, e.g. between consistency and accuracy or the quality of practice. It is also puzzling, given its significance as a core principle of practice, that the extent to which children and families are directly involved in DM is not itself seen as a marker of quality, rather than a specialist form of DM requiring evaluation to establish its effectiveness.

The criteria used by researchers to evaluate the quality of DM may align with but also differ from those of professionals. In part this relates to the 'messiness' of real-life child protection work, the operational constraints that shape everyday practice (Wilson, 1989) and the uncertainty and volatility of the situations that practitioners are making judgements about. This context is described by the ethnographic studies of Helm (2013), Saltiel (2016) and Whittaker (2015) in the UK, and by Gillingham and Humphreys (2010) in Australia. In such environments, it may not be feasible to consider DM in binary terms, i.e. as people making a 'right' or 'wrong' decision, even if prevailing norms of professional and organisational accountability would seem to require it. However the quality of DM is understood and measured, practice is partly driven by the awareness of decision-makers that poor quality decisions can have extremely serious consequences (Munro, 2004; Jones, 2014). Consequently, it may be difficult to distinguish between actions designed to improve the quality of DM from actions designed to defend DM from post-hoc binary judgements, i.e. the perception that the 'wrong' (inaccurate, inconsistent, inequitable, unsafe, etc.) decision has been made.



A key concept here is 'justifiability', which can be taken to mean that decisions taken by social care workers should be rational, ethical and reasonable, as well as compliant with relevant statutory duties and institutional procedures (Taylor, 2017b). Often the approach to such issues has been to examine the relative merits of actuarial prediction vs clinical judgement, or technical approaches (SDM, predictive analytics) vs cognitive approaches (critical analysis, reflective practice, and so on) (Damman et al., 2020; Munro, 2020). Elsewhere, researchers such as Helm (2016) and Taylor (2017a) have sought to establish a basis for professional judgement based on the concepts of bounded rationality (Simon, 1955) and 'satisficing' or 'fast and frugal' reasoning (Gigerenzer and Goldstein, 1996). These psychosocial models offer a way of understanding how risks are assessed in real-life situations, where information (and time) are usually limited and professionals have to make a 'good enough' decision to address immediate concerns.

A potential question about satisficing as an approach to DM is whether it is robust enough to withstand the accountability pressures in CSC, which are freighted with the tragic history of deaths from child abuse and a long line of public inquiries (Munro, 2004; Laming, 2009). In the UK, the so-called 'Bolam Test' refers to case law precedent that suggests a professional cannot be found guilty of negligence if she or he has acted in accordance with a practice accepted as proper by a 'responsible body of professionals skilled in that particular art'. This recalls the concept of 'consistency', which underpinned much of the research examined earlier. However, subsequent case law arguably raised the bar for justifiability, suggesting that professionals should also be able to give a rationale for their decisions based on research evidence or an appropriate theoretical framework (Taylor et al., 2015). Such considerations are likely to

have influenced the work of McCafferty and Taylor (2020), included in this review, on the acquisition and use of knowledge by social workers. Concern with the justifiability of professional practice in DM is understandable given the institutional anxiety about child welfare decisions (Whittaker and Havard, 2016; Hood and Goldacre, 2021a) and relatively low levels of confidence in the quality of DM (Berrick et al., 2016). Yet the risk is that other aspects of DM are overlooked, such as information about outcomes, the role of external factors, and the extent to which children and families are involved in the DM process.

In this respect, the DME framework (Baumann et al., 2011) employed by several of the included US and Canadian studies has the advantage of encouraging a holistic approach to DM so that a range of contextual factors are considered. In contrast, only a few of the UK studies on DM explicitly articulated a theoretical framework (e.g. Helm, 2013). Perhaps as a result, they tended to focus on a narrower range of factors – typically either case characteristics or decision-maker attributes, with the latter often examined together with organisational factors. Indeed, it is noticeable how much of the UK research in this field over the past decade has been concerned with the conditions of practice and how social workers' institutional context facilitates but sometimes also hinders the expertise needed to analyse information and make judgements in complex situations. Such preoccupations can be traced to the influential Munro Review of child protection (Munro, 2011), whose 'socio-technical' systems approach took human error as the starting point for understanding DM (Benbenishty and Fluke, 2020). The Munro review stimulated interest in the latent conditions for error, including the way services were organised and delivered but also broader institutional drivers, such as the



role of inspections, the culture of audit and performance management, and the impact of public inquiries into deaths from child abuse. These factors continue to exert influence on the practice and management of DM within CSC (Hood et al., 2020).

The Munro review has been a significant reference point for UK research in this field. Nonetheless, the evidence from this review suggests that a wider ecological perspective is necessary to understand Munro's recommendations in relation to DM. Expanding the scope of analysis beyond professional practice and its organisational context is important for two reasons. One is to counter the natural tendency to see decisions in binary terms, which fuels blame culture and inhibits organisational learning. Awareness of the full context of DM – including the wider factors shaping risk assessments and threshold decisions – is essential if accountability processes are to act on the latent conditions for error (Fish, 2008). The second reason is to align efforts to improve DM with strategic planning to fulfil the broader remit and purpose of CSC. The dilemmas and trade-offs involved in the latter are equally relevant to the former, and so require attention to be paid to the contextual factors driving demand and shaping the institutional context of provision.

In this respect, international research drawing on the DME framework points to some key areas for consideration. One is the significance of social and structural factors, such as racial disparities, family poverty, neighbourhood deprivation and community organisation, which were embedded in some of the US and Canadian studies but absent from the included UK literature on DM. This is not because such issues are not studied in the UK – on the contrary, the international emergence of a child welfare inequalities perspective owes much to

research carried out in the UK (Morris et al., 2018; Bywaters et al., 2020; Webb et al., 2020). Rather, it is because the UK findings on welfare inequalities have not always been directly framed in terms of DM (although Bywaters, 2020, does do this), while research specifically into DM has tended to focus either on practitioners and their immediate organisational context, or on the case factors associated with a particular kind of decision (Damman et al., 2020). The international evidence helps to confirm that equity is a decision-making problem, but also that DM itself is a systemic issue. This in turn suggests that achieving more equitable decisions will require more than – for example – training practitioners to be less biased in their judgements (see Font et al., 2012), although of course that might be expected to help. A similar point was made by recent BASW guidance on 'poverty-aware practice' in social work, which noted that 'individual practices alone are insufficient to change wider systemic patterns and the consequences of economic policies' (BASW, 2019: 17).

A second issue, highlighted particularly by US/Canadian researchers, was the need for studies to operationalise the distinction between risk assessment (or caseworker perceptions of risk) and threshold decisions (see Cross and Casanueva, 2009; Font et al., 2012). In other words, there is a difference between what services assess as being the problem (and how bad it is) and what they then decide to do about it. In the UK studies, a theoretical contrast was sometimes drawn between judgements and decisions, but in practice there was little scope for distinguishing the two in terms of data collection and analysis. This is partly due to the quality of data – professionals interviewed within qualitative studies may conflate assessment and DM, for example, while the administrative datasets available in the UK currently lack the level of detail contained



in national cohort studies such as the CIS (Trocmé et al., 2003). Nonetheless, the international studies show the distinction to be fundamental to various aspects of quality including accuracy (Cross and Casanueva, 2009), consistency (Nofziger et al., 2019) and equity (Font et al., 2012).

In the UK/English context, the question arises as to whether efforts to improve the quality of risk assessment, such as encouraging more systematic use of research evidence or consensus-based frameworks, will necessarily have the expected effect on threshold decisions. Similarly, efforts to align DM with predictive risk models that do not take into account the complex relationship between the two are likely to have unintended consequences, as Gillingham and Humphreys (2010) observed in their study of SDM implementation (see also Barlow et al., 2012). Hood et al. (2019) note that thresholds are designed not only to comply with the legislation and statutory guidance (i.e. on what action is appropriate at a particular level of risk) but also to manage demand, define eligibility for assistance, and target interventions at those who most need them. As such, they are sensitive to the pressures of demand and the resources available to meet that demand, as well as to workforce stability, regulatory scrutiny, relationships with partner agencies, political pressure, and public confidence. Many of these factors were alluded to in the ethnographic work discussed earlier but have been more systematically explored elsewhere (Tupper et al., 2014; Wijedasa et al., 2018; Mason et al., 2020; Hood and Goldacre, 2021a).

A final point for discussion relates to the paucity of research into the accuracy of DM and longer-term outcomes for children whose involvement (or lack of it) with services is the result of one or multiple decisions at different thresholds. The lack of good data

on outcomes is a general issue in the field, not limited to the UK evidence base, and has led to efforts in recent years to develop a better outcomes framework for CSC (La Valle et al., 2019). Another inhibiting factor is the sector's embrace of performance-based accountability (Friedman, 2001), which means that only 'service-level' indicators are routinely collected for quality assurance purposes (see Hood, 2019). CSC services also have a degree of functional specialisation, i.e. interventions at different thresholds are undertaken by different workers in separate teams and service areas. This makes it harder for information about the outcome of decisions to flow 'back' to the decision-maker at earlier points in the system, except in the rare and distressing instance of a serious case review. The lack of such feedback mechanisms naturally directs attention to the examination of risk factors leading to a decision, for which the administrative data is relatively well suited, rather than exploring the consequence of a decision, for which further data is often required.

5.3 Strengths and limitations of the review methods

This rapid review was undertaken using systematic search and selection methods, quality appraisal of all included full texts, and a theoretically-informed analytical approach to summarise and synthesise the findings. The studies included in the review covered a range of child welfare systems including three of the four UK countries (Wales being the exception) and three international jurisdictions (US, Canada and Australia). However, the methodology did have certain limitations compared with a full systematic review. Search and selection were undertaken collaboratively by a group of six reviewers and this may have affected the reliability of inclusion and exclusion



decisions. Quality assessment could have been reinforced if the appraisal tool for each study had been independently completed by multiple reviewers. While the review was able to compare UK and non-UK studies to some extent, restricting the sample to 'child protection oriented' child welfare systems meant that potential learning from systems less similar to the UK's (e.g. in northern Europe) could not be discussed. Finally, the scope of this evidence review meant that studies of shared DM and family group DM were excluded, being already covered by existing reviews, as well as the validation and comparison of actuarial assessment frameworks and evaluations of structured DM and differential response systems. These are all part of the evidence base on DM and should be considered alongside the literature included here.

5.4 Strengths and limitations of available evidence

The research questions addressed by UK studies often differed from their non-UK counterparts, although there were some areas of overlap. The UK evidence was relatively strong on the quality of practice in judgement and DM, with attention paid to cognitive skills, reflection and supervision, operational constraints, the organisational context, the importance of emotions, and the complexity and uncertainty of everyday practice. Much of this evidence was qualitative and quality appraisal suggested that some studies either had methodological limitations or reported insufficient information to judge aspects of reliability and validity. Nonetheless, in combination these studies arguably constitute a good picture of how DM is experienced by professionals. Another focus of the UK evidence is on the consistency of DM, with attention paid to inter-group differences and organisational factors.

Much of this evidence relies on vignette-based methods, which may be criticised in terms of their ecological validity and (in some cases) drawing conclusions from fairly small and unrepresentative samples. In contrast, the non-UK research tended to be based on the quantitative analysis of large, administrative datasets, although not all of these were nationally representative. The international evidence also engaged with the question of consistency, sometimes applying an ecological perspective to explore a wider range of factors than was the case with UK studies. There was more emphasis on examining the accuracy of decisions, particularly with regard to substantiation of maltreatment. A notable strength of the international research was the study of racial inequities in DM. Some further gaps in the evidence base are discussed below (Section 5.6).

5.5 Implications for practice and policy

Decision-making in CSC has long been a key issue for policymakers, particularly since serious case reviews and public inquiries into deaths from child abuse and neglect have tended to highlight poor decisions as a contributing factor to these tragic outcomes (Laming, 2003; Brandon et al., 2020; Child Safeguarding Review Panel, 2020). An equally long-standing dilemma for the sector has been how to incorporate the lessons from such tragedies into what Munro (2019) called a 'just and learning culture', rather than a system mired in defensive practice and preoccupation with institutional risk (Rothstein et al., 2006). The question of how to improve DM is therefore less about eradicating flaws in individual judgements than it is about addressing those systemic issues in the sector, which make such flaws more likely. As pointed out by Brandon et al.



(2020), this is partly about the institutional context of practice: lack of a clear vision of purpose, limited resources, high caseloads and high levels of staff turnover. It is also about the wider social context in which families live and the conditions that make abuse and neglect more likely: poverty, unemployment, homelessness, poor housing conditions, insufficient networks of support, and a lack of community assets. Recent research has shown that the interaction between these kinds of demand and supply factors are implicated in inequitable application of decision thresholds (Bywaters et al., 2020) but also in unequal outcomes of provision (Hood and Goldacre, 2021b). In this context, the discussion of findings raised a number of implications for policy and practice, which include:

- The need to establish clear definitions of quality and effectiveness and gather appropriate data to monitor associations and trade-offs between them. This would also require a more substantial theoretical underpinning for DM in policy and practice than is currently the case in the UK.
- Consideration as to whether the involvement of children and families in DM should itself be seen as an indicator of quality, given the principle of partnership working and co-production in CSC. Models of shared DM and family group DM are generally evaluated as separate interventions, so that the default mode of DM is one dominated by professionals.
- Acknowledgement that DM in this field is a highly complex and skilled activity that requires organisations to support and develop professional expertise. Efforts to further proceduralise and standardise practice, for example through the introduction of SDM frameworks, may be counterproductive in this respect, or have unintended consequences.
- The importance of the psycho-social context of DM in everyday practice. Fast-and-frugal models offer promise in this respect but more research is needed to explore their application across the continuum of decisions in CSC.
- The link between quality and accountability in CSC. This tends to emphasise consistency (e.g. in the application of thresholds) but may also require professionals (and agencies) to be able to justify the empirical and theoretical basis for their decisions. Again, there is a challenge in terms of how this can be embedded within a positive learning culture.
- The influence of the Munro review in stimulating interest in the latent conditions for error in DM, which include organisational factors as well as other institutional drivers, such as the role of inspections, the culture of audit and performance management, and the impact of public inquiries into deaths from child abuse.
- The need to address the issue of equity and the role of structural factors in the communities and neighbourhoods served by CSC. Wider adoption of an ecological perspective to DM may help in this regard. The international evidence shows that equity is a decision-making problem, but also that DM itself is a systemic issue.
- The distinction between risk assessment and threshold decisions and the need to operationalise this distinction, not only in research but also in the design and implementation of policies to



improve DM. Efforts to improve workers' judgements about risk also need to consider the wider influences on thresholds, including demand, resources, workforce issues, regulatory pressures and relationships with partner agencies.

- More emphasis on the consequences of decisions and subsequent outcomes for children. This is currently inhibited both by the sufficiency of administrative data but arguably also by institutional preoccupation with performance management and blame culture.

5.6 Implications for research

Priorities for research follow on from the policy and practice implications discussed above. There is a need for more theoretical underpinning of research in the UK context as well as clearer definitions of quality and effectiveness. In this review, the DME has been advanced as a model that has been successfully developed and applied to child welfare research internationally, mainly in the US and Canada but also in other jurisdictions such as New Zealand (Keddell, 2021). Of course, many other theories of DM exist and have been applied successfully to child protection, including models of utility and value (Munro, 2020), bounded rationality (Taylor, 2017a) and the Judgements and Decision Processes in Context (JUDPiC) Model (Benbenishty et al., 2015). The advantage of the DME – similar to the JUDPiC model – is an ecological perspective that reaches beyond the cognitive processes of the decision-maker to take account of a broad range of contextual influences on DM. While much UK research over the past decade has focused on the caseworker and the problem of DM under conditions of uncertainty and complexity, there arguably needs to be greater consideration of factors that shape the institutional response to particular types of demand under certain conditions.

A related point is the need for comprehensive and tailored datasets that are amenable to this broader research agenda. Although the availability and reliability of administrative data in England has improved greatly over the past decade, there remains a dearth of good measures of the quality of outcomes (Hood, 2019; La Valle et al., 2019) as well as a limited capacity to link data about provision to demographic and socio-economic data about the children who receive services. This hampers investigation of patterns of relative need, the study of complex effects, and the accumulation of evidence about what works for whom in what circumstances in CSC. In this respect, some of the international papers included in this review demonstrate the insights that can be gained from representative national cohort studies such as the CIS, including the emergence of inequalities in intervention. Alternatively, there is potential in linking the administrative datasets held in various government silos (e.g. education, health, employment and social care) but also ethical concerns about their operational use for predictive analytics and implications for citizen consent and compliance with data protection regulations (Leslie et al., 2020).

Finally, the evidence base on DM is sparse. We know little about DM for specific groups of children and categories of need, and there is very limited knowledge of outcomes. It would seem important to know more about the role of practitioner-service user relationships in assessment and DM. This means not only the degree to which the nature of these relationships might affect the quality of decisions but conversely whether the extent to which DM is shared with services users itself helps to create a culture conducive to relationship-based social work. It would also be worth studying the effect on DM of the various social work practice models that have been adopted by



many English LAs to improve their provision of CSC services over recent years (Stanley, 2019). Some of these models, such as Signs of Safety, have been independently evaluated (Baginsky et al., 2017; Sheehan et al., 2018) while others have been designed and implemented by individual LAs to fit with local conditions and priorities (Hood et al., 2020). Moreover, given that safely reducing the high numbers of children entering care has become a key policy issue in many parts of the country (Hodges and Bristow, 2019), specific consideration of DM might become an important component of programme evaluations, particularly those using rates of care proceedings or care admissions as an outcome measure.

5.7 Conclusion

The complexity of decision-making in CSC means that there are different ways to understand and measure quality and effectiveness. Currently these distinctions are not well articulated in policy or practice, nor are they clearly operationalised in research, particularly in the UK. A more substantial theoretical underpinning, particularly drawing on ecological systems perspectives, would help to establish different indicators of quality and investigate associations and trade-offs between them.

The evidence confirms that judgement and DM in this field are highly skilled activities, which require organisations to support and develop professional expertise. Inherent uncertainty and volatility in the DM environment undermine the binary approach to decisions as being either right or wrong, which is often assumed by accountability processes. The institutional context in England is particularly centralised and driven by procedures compared to other countries, which means that efforts to further standardise DM practice may have unintended consequences. The international

evidence also highlights the importance of equity as a marker of quality in DM, which aligns with recent research into child welfare inequalities in the UK countries. Wider adoption of an ecological perspective may help to clarify that equity is a decision-making problem but also that DM is a systemic issue that goes beyond assessment templates and the exigencies of casework (important as these are).

It could also be argued that the principles of partnership and co-production of services mean that the extent to which children and families are directly involved in DM should itself be seen as a key indicator of quality. Crucial for both research and policy is a greater appreciation of the distinction between risk predictions and threshold decision, which has implications not only for efforts to improve DM but also for the wider issue of structural change and innovation in CSC. Moreover, there is relatively little knowledge about the consequences of decisions and subsequent outcomes for children. Addressing this gap will require new partnerships and mechanisms for developing tailored longitudinal datasets in an ethical way but also a commitment to create a more positive culture of learning within organisations and the sector as a whole.



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7. APPENDICES

Appendix 1: Example search strategy

Web of Science search, 1 July 2021

# 7	730	#5 AND #4 AND #3 AND #2 AND #1 Refined by: PUBLICATION YEARS: (2021 OR 2013 OR 2005 OR 2020 OR 2012 OR 2004 OR 2019 OR 2011 OR 2003 OR 2018 OR 2010 OR 2002 OR 2017 OR 2009 OR 2001 OR 2016 OR 2008 OR 2000 OR 2015 OR 2007 OR 2014 OR 2006) Indexes=SCI-EXPANDED, SSCI, ESCI Timespan=2000-2021	
# 6	730	#5 AND #4 AND #3 AND #2 AND #1 Indexes=SCI-EXPANDED, SSCI, ESCI Timespan=2000-2021	Edit
# 5	4,096,025	TS=(Protection OR Safeguarding OR Thresholds OR Investigation OR Intervention OR Screening OR Intake) Indexes=SCI-EXPANDED, SSCI, ESCI Timespan=2000-2021	Edit
# 4	637,069	TS=(Maltreat* OR Abuse* OR Neglect* OR Exploit*) Indexes=SCI-EXPANDED, SSCI, ESCI Timespan=2000-2021	Edit
# 3	10,838,578	TS=(Quality OR Effectiveness OR Evaluat* OR Efficacy OR Success* OR Improve* OR Improving) Indexes=SCI-EXPANDED, SSCI, ESCI Timespan=2000-2021	Edit
# 2	911,977	TS=(Decision* OR "Decision-making" OR "Decision making" OR "Risk Assessment") Indexes=SCI-EXPANDED, SSCI, ESCI Timespan=2000-2021	Edit
# 1	1,902,694	TS=(Child* OR Adolesce* OR Unborn OR Infant* OR Baby or Babies* OR "Young people" OR Teenagers) Indexes=SCI-EXPANDED, SSCI, ESCI Timespan=2000-2021	Edit



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