# HMCTS Reform Evaluation

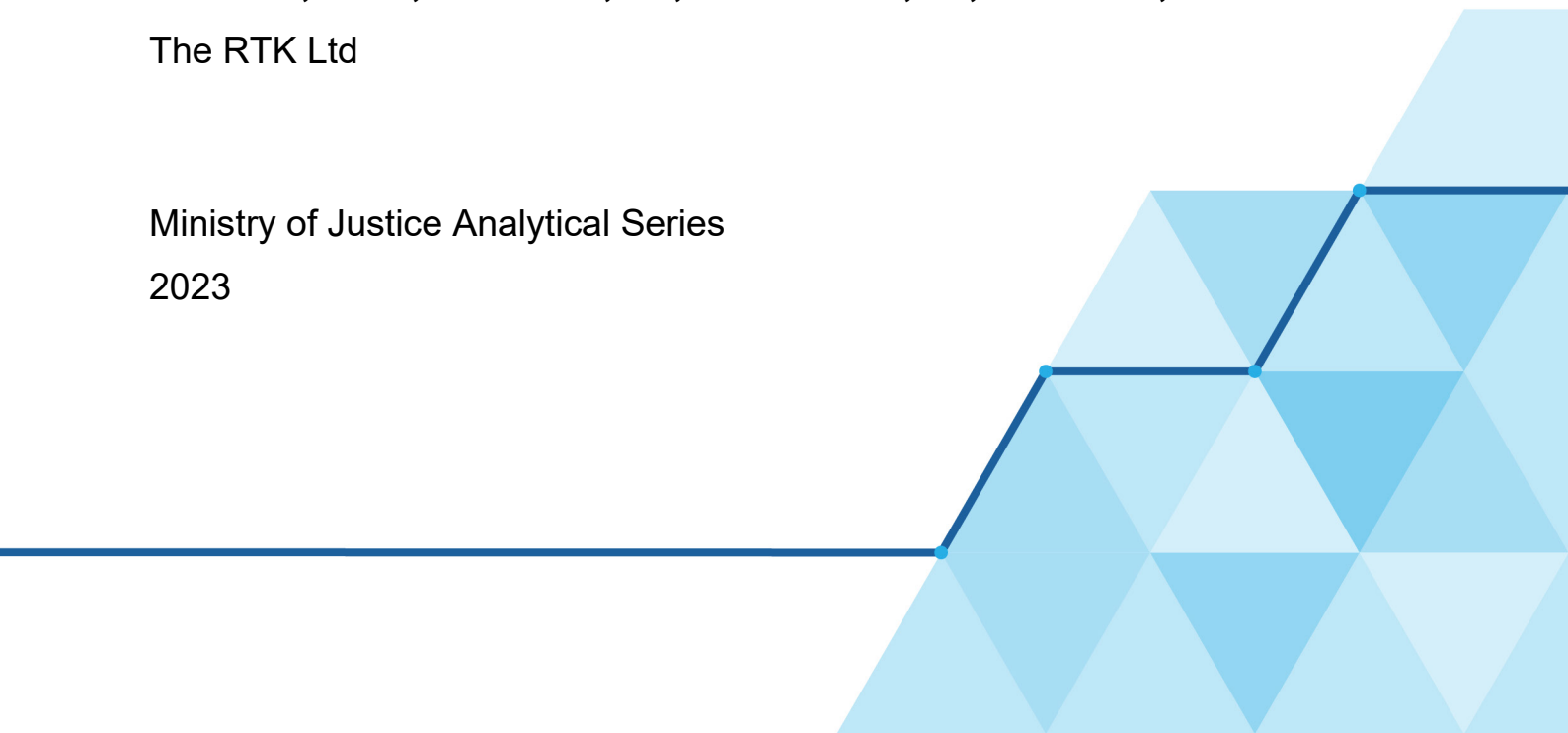## Rapid Evidence Assessments: Technical Appendix

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The RTK Ltd

Data and Analysis exists to improve policy making, decision taking and practice by the Ministry of Justice. It does this by providing robust, timely and relevant data and advice drawn from research and analysis undertaken by the department's analysts and by the wider research community.

## Acknowledgements

## The authors

Dr Tony Munton, Miriam Antcliffe, Alan Gomersall, and Dr Emma Carter. Dr Tony Munton authored the final report and provided oversight for the project. Alan Gomersall developed search strings and conducted searches, citation chases and grey literature searches. Miriam Antcliffe led on data extraction and quality appraisal of the papers. Dr Emma Carter was project manager and led on reference management.

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# 1. Introduction

In 2016, HM Courts & Tribunals Service (HMCTS) set out the vision to modernise the justice system through an ambitious programme of change. The HMCTS reform programme aims to bring modern technology and new ways of working to the courts and tribunals system.

HMCTS reform is a complex transformation portfolio with over forty projects. Centred on the principle that the system should be designed around its users, the programme aims to improve the accessibility and efficiency of the justice system. Reform provides the opportunity to change and modernise, digitising, simplifying, and improving services to reflect users' needs and expectations, saving them time and increasing efficiency. The programme aims to make greater use of virtual working, reduce paperwork, duplication, and errors, by re-designing the way the system works.

The MoJ is conducting an evaluation of the HMCTS reform programme to ensure that the effects of reform can be identified and assessed. This evaluation will help identify if the reform programme has met its aims and what effects it had, for whom and why. The evaluation focuses on the impact of the HMCTS reform programme upon access to justice, for both the general population and among vulnerable groups. Further information on HMCTS reform can be found at the HMCTS reform webpage,[1] and the MoJ's evaluation of the reform programme at the evaluation's webpage.[2]

Considering the existing evidence base is an important stage in the evaluation process.[3] The MoJ therefore commissioned a suite of evidence assessments, to generate a clear understanding of the current evidence base, and to identify any evidence gaps.

The MoJ have created a theory of change to explain how the activities of HMCTS reform are anticipated to contribute to the intended aims and outcomes of the programme.

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[1]  The HMCTS Reform Programme - GOV.UK (www.gov.uk)
[2]  HMCTS Reform Overarching Evaluation: Research - GOV.UK (www.gov.uk)
[3]  HM Treasury (2020) Magenta Book: Central Government guidance on Evaluation. Available: HMT_Magenta_Book.pdf (publishing.service.gov.uk)

Within the theory of change, the activities of the reform programme have been grouped into four themes:[4]

1. Adding new channels (routes to services) and redesigning existing channels around user needs

2. Using remote hearing technology in more hearings

3. Consolidating the court estate and investing in court infrastructure

4. Introducing new support services.

Four Rapid Evidence Assessments (REA) have been conducted (one for each thematic area) to understand the evidence base for these four themes of the reform programme's activity. In line with the MoJ's overarching evaluation, the four REAs have focused on understanding what is known in the evidence base regarding how certain types of activity may impact access to justice.

Acknowledging that activity similar to that of HMCTS reform may be utilised in areas beyond the justice sector, with applicable learnings, the REAs include evidence from beyond the justice sector. Where preliminary results indicated it was necessary and useful, evidence was sought from the wider public sector, the private sector, and third sectors. In addition to research published through traditional channels, grey literature was also included in the REA searches.

The remainder of this document is divided into seven further chapters. These are:

- **Chapter 2:** Database descriptions.
- **Chapter 3:** Search results.
- **Chapter 4:** Data extraction and assessment.
- **Chapter 5:** Full inclusion and exclusion criteria.
- **Chapter 6:** Evidence base assessments.
- **Chapter 7:** Reporting.
- **Chapter 8:** Included papers.

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[4]  HMCTS Reform, MoJ Evaluation: Progress Report (publishing.service.gov.uk)

# 2. Database descriptions

This chapter provides descriptions of the nine databases used to search for papers to be considered for inclusion in the REAs.

**Table 1. Descriptions of databases**

| Database | Description |
| --- | --- |
| **ASSIA** | Applied Social Sciences Index and Abstracts (ASSIA) is an indexing and abstracting tool covering health, social services, psychology, sociology, economics, politics, race relations and education. It provides a comprehensive source of social science and health information that is updated monthly. ASSIA currently contains over 375,000 records from over 500 journals published in 16 different countries, including the UK and US. |
| **Criminology Collection** | This collection includes 41 peer-reviewed journals published by SAGE and participating societies, encompassing over 38,337 articles. Criminology Collection covers such subjects as Corrections, Criminal Justice, Family and Domestic Violence, Forensic Psychology, Juvenile Delinquency, Juvenile Justice, Penology, and Policing. |
| **IBSS** | The International Bibliography of the Social Sciences (IBSS) is an online resource for social science and interdisciplinary research. IBSS includes over two million bibliographic references to journal articles and to books, reviews and selected chapters dating back to 1951. It is unique in its broad coverage of international material and incorporates over 100 languages and countries. Over 2,800 journals are regularly indexed, and some 7,000 books are included each year. |
| **Psych Info** | Psych Info, formerly Psychological Abstracts, is an abstracting and indexing database un by the American Psychological Association (APA). It contains more than 3 million records devoted to research literature in the behavioural sciences and mental health including peer-reviewed journals, books, and dissertations. The database contains more than 57 million cited references, including almost 3 million from the period 1920 to 1999. |

| Database | Description |
|---|---|
| **Social Policy and Practice** | Social Policy and Practice (SPP) is a specialist bibliographic database covering the social care, education, health and support sectors. It combines the unique databases of four major UK organisations active in social policy: Age info – Centre for Policy on Ageing; Child Data- National Children's Bureau; Planex- IDOX Information Service; Social Care Online – Social care Institute for Excellence. SPP contains over 300,000 bibliographic records and abstracts dating from 1981; over 24,000 new records are added each year. It includes documents and publications from national and regional government departments, local authorities, public agencies, third-sector organisations, consultancy and professional bodies, academic think tanks and research departments. |
| **Sociological Abstracts** | Sociological Abstracts provides abstracts from the international literature in sociology and related disciplines in the social and behavioural sciences. It covers journal articles and citations to book reviews drawn from over 1,800 journals, as well as providing abstracts of books, book chapters, dissertations, and conference papers. It draws abstracts from a variety of sources including journal articles, conference papers, books, dissertations, and conference papers, plus citations to important book reviews related to the social sciences. A back file begins in 1952 with records published by the then print version of Sociological Abstracts; 40% of the provided content is published outside of North America. Areas of coverage include culture and social structure, economic development, evaluation research, family and social welfare, health, medicine and law, methodology and research technology, and substance abuse and addiction. The database is updated monthly, with approximately 30,000 records added per year. |
| **Sociology Collection** | Content includes 191 active full-text non-open access journals, 180 active full-text, peer-reviewed, non-open access journals, 285 active indexed and abstracted journals, and 269 active indexed and abstracted peer-reviewed journals. Sociological Collection provides an indispensable source of content pertaining to sociology and its related areas of study. It covers a broad range of subjects relevant to sociology and its related disciplines including social behaviour, human tendencies, interaction, relationships, community development, social and cultural structure and more. |

| Database | Description |
|---|---|
| **Social Services Abstracts** | Social Services Abstracts provides bibliographic coverage of current research focused on social work, human services, and related areas, including social welfare, social policy, and community development. The database abstracts and indexes over 1,300+ serials publications and includes abstracts of journal articles and dissertations, and citations to book reviews. Major areas of coverage include community and mental health services, family and social welfare, poverty and homelessness, professional issues in social work, social and health policy, social work practice, and violence, abuse, and neglect. The database is updated monthly with approximately 5,500 records added per year. |
| **Web of Science** | Previously known as Web of Knowledge, Web of Science is an online subscription-based scientific citation indexing service that gives access to multiple databases referencing cross-disciplinary research. Web of Science has indexing coverage from the year 1900 to the present. The multidisciplinary coverage of the Web of Science encompasses over 50,000 scholarly books, 12,000 journals and 160,000 conference proceedings. The coverage includes the sciences, social sciences, arts, and humanities, and goes across disciplines. The Web of Science platform includes over 159 million records. The citation service indexes around 65 million items per year, earning it the description of the largest accessible citation database. |

# 3. Search results

This chapter presents the search results in PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) flow charts for each REA.

## REA1 Number of texts included

Searches identified 1,290 unique records. After screening on abstract, the review team identified 220 for full text retrieval. Of those 220, the team were able to obtain 188 full texts. Another nine papers were provided by MoJ colleagues, of which two were included. The team excluded 69 on reading the full texts, leaving 121 publications included for data extraction and quality assessment. The team included another eight papers from other REAs, giving an overall total of 129 records assessed for REA1. The figure below summarises key details using the PRISMA flow chart template.[5]

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[5] Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., ... & Moher, D. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *Bmj*, *372*.

**Figure 1. PRISMA 2020 flow diagram REA1: Online services and access to justice**
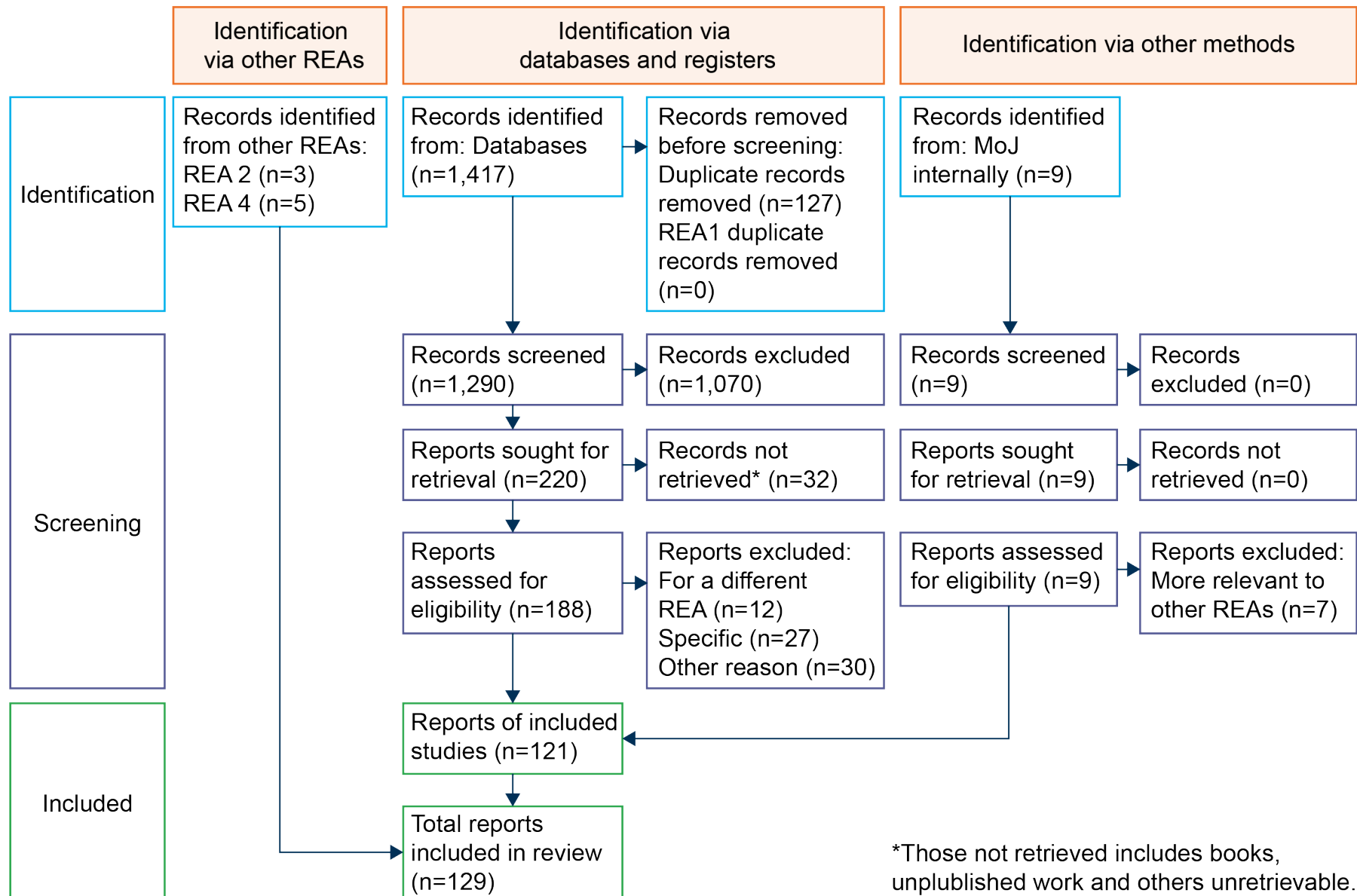
# REA2 Number of texts included

Searches identified 28 unique records. After screening on abstract, the review team identified 17 for full text retrieval. Of those 17, the team were able to obtain 15 full texts. They excluded a further seven on reading the full texts, leaving eight publications for data extraction and quality assessment. The team screened an additional 10 papers identified by MoJ colleagues, of which five were included. In addition to those 13 papers, the team included 27 papers identified from other REAs, giving a total of 40 records assessed for REA2.

**Figure 2. PRISMA 2020 flow diagram REA2: Remote hearings and access to justice**



*Those not retrieved includes books, unplublished work and others unretrievable.
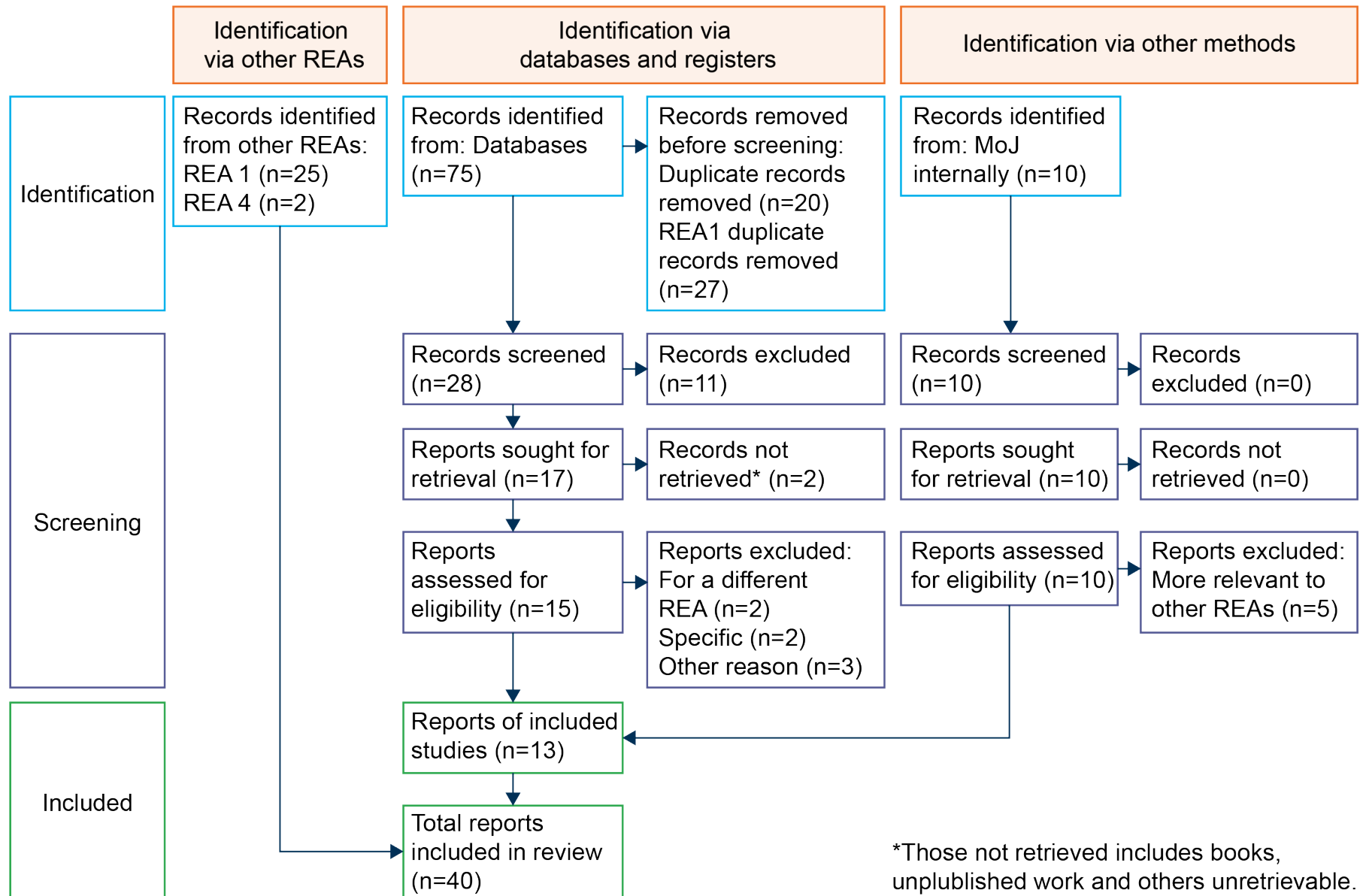
# REA3 Number of texts included

Searches identified 28 unique records. After screening on abstract, the review team identified 25 for full text retrieval. Of those, the team were able to obtain 24 full texts. They included all 24 publications for data extraction and quality assessment. The team added two papers provided by MoJ colleagues, and five from other REAs, giving a total of 31 records assessed for REA3.

**Figure 3. PRISMA 2020 flow diagram REA3: Centralising the workforce and access to justice**
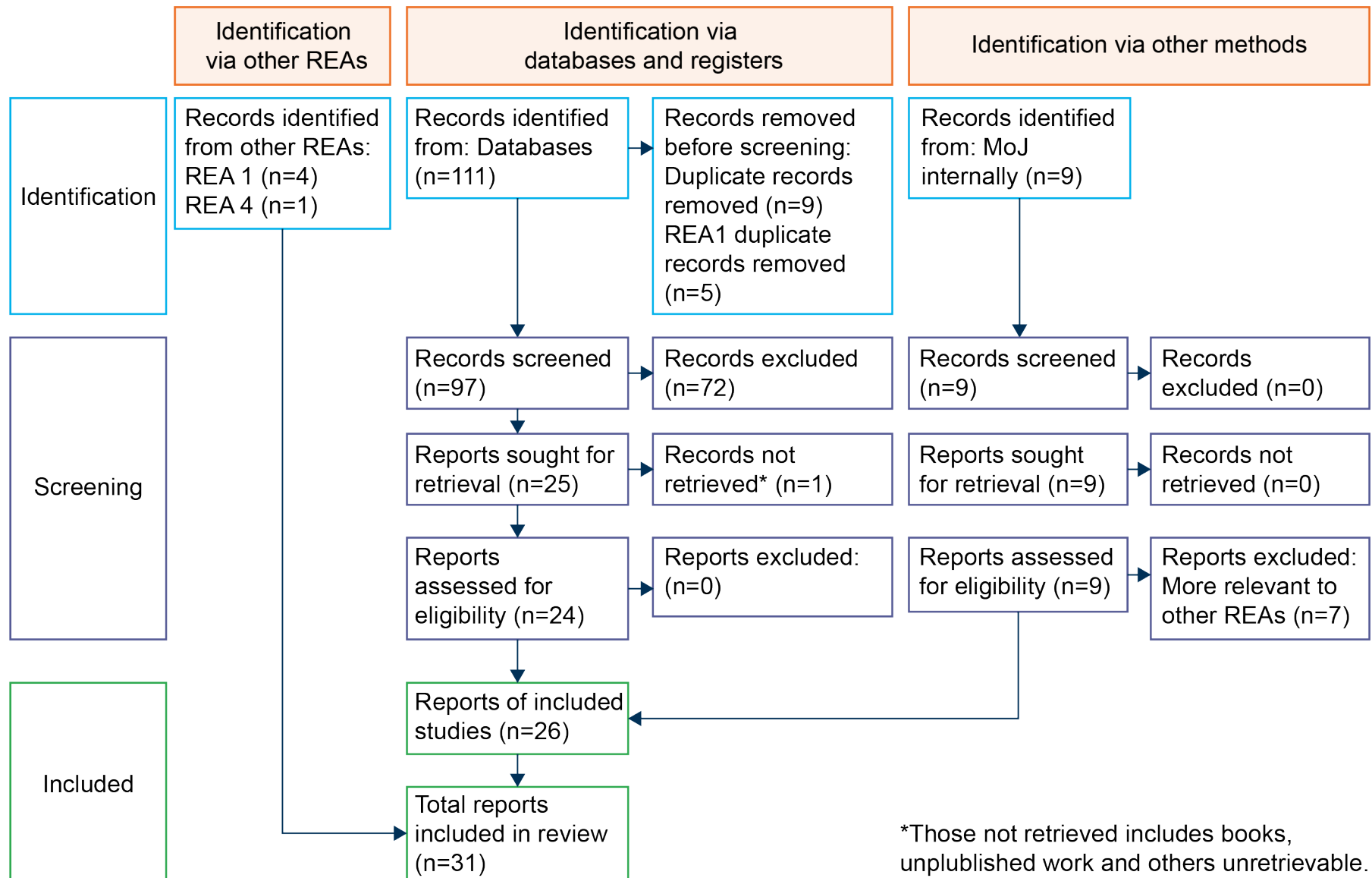
# REA4 Number of texts included

Searches identified 607 unique records. After screening on abstract, the review team identified 29 for full text retrieval. Of those 29, the team were able to obtain 24 full texts. They excluded a further 19 on reading the full texts, leaving five publications for data extraction and quality assessment. The team screened an additional nine papers, resulting in three additional included sources. The team included 15 papers identified from other REAs, giving a total of 23 records assessed for REA4.

**Figure 4. PRISMA 2020 flow diagram REA4: Online service users support and access to justice**
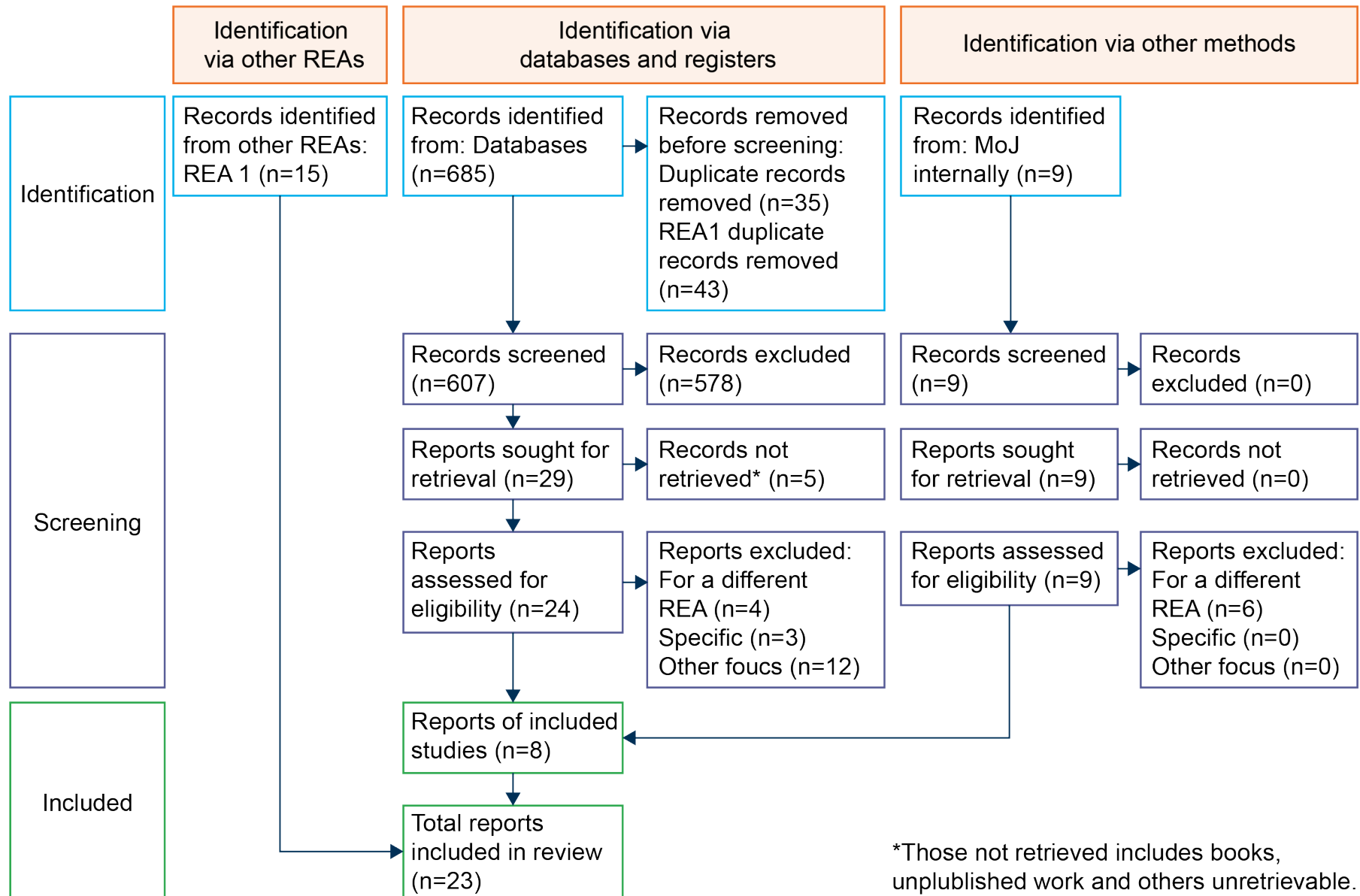
# 4. Data extraction and assessment

This chapter sets out the process used to assess the publications identified in the searches.

Three different data extraction tools were used depending on type of publication: evidence reviews; primary research evaluating interventions; and grey literature. Table 2 below lists the criteria that the different types of publication were assessed against.

**Table 2. Publication assessment criteria**

| Criteria | Reviews | Empirical research | Grey literature |
|---|---|---|---|
| 1 | Review method | Research rationale | Authority |
| 2 | Search strategy | Research design | Purpose |
| 3 | Data collection (sift) | Sampling | Publication and format |
| 4 | Quality appraisal | Data collection | Relevance |
| 5 | Data analysis/ synthesis (quantitative) | Data analysis | Date of publication |
| 6 | Qualitative synthesis | Interpretation and reporting of results | Documentation |
| 7 | Interpretation and reporting of results | Credibility of conclusions | |
| 8 | Credibility of conclusions | | |

The seven criteria to assess the quality of empirical research studies are based on the Critical Appraisal Skills Programme (CASP) checklists[6] that cover eight research designs, methodological rigour, data analysis and validity of conclusions.

In addition, the assessment tool includes the widely used Maryland Scientific Methods Scale[7] to categorise experimental research designs of impact evaluations.

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[6] Critical Appraisal Skills Programme (n.d.). CASP Checklists. https://casp-uk.net/casp-tools-checklists/

[7] Guide to scoring methods using the Maryland Scientific Methods Scale (whatworksgrowth.org)

The six criteria used to assess the quality of grey literature are based on the widely used authority, accuracy, coverage, objectivity, date, significance (AACODS) checklist[8] for the evaluation of grey literature. The AACODS scale is recommended for the evaluation of grey literature by multiple university library services, the National Institute for Clinical Excellence, and the US National Institute of Health.

Two review team members took a random sample of 10 papers and extracted data independently. The sample was weighted to include examples of all three publication types. Quality assessment scores were compared, and an acceptable level of inter-rater reliability (in excess of 80%) achieved. The remaining papers were divided equally, with quality assessment undertaken independently. All assessment data was then entered on to the reference management software.

Multiple publications from the same study were treated as separate papers only if post hoc analysis used different data set elements.

The ratings of the quality assessment for each paper can be found in Chapter 8.

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[8]   Tyndall, J. (2010). The AACODS checklist. Flinders University.

# 5.   Full inclusion and exclusion criteria

This chapter includes full details of the inclusion and exclusion criteria for each REA. The criteria was utilised to determine whether papers identified from searching the databases listed in Chapter 2 were included in the REAs.

**Table 3. Inclusion and exclusion criteria (REA1)**

| | |
|---|---|
| **Inclusion criteria** | Date: 2010 onwards |
| | Language: English |
| | Country: UK (including devolved administrations), Singapore, EU, Scandinavia, USA, Canada, Ireland, Australia, New Zealand. |
| | Study type: Selected range of evaluations from the SCIE review guidelines[9] – from RCTs, QEDs and process evaluations, descriptive studies including organisational and expert intelligence. In the first instance we will search for systematic reviews. |
| | Population: People who use online services that function to provide legal remedy or support the access and use of public services. |
| **Exclusion criteria** | • Studies published prior to 2010 <br> • Single case study designs <br> • Research specifically focussed on video hearings (these are covered in a separate review) <br> • Studies that do not draw on outcomes or experiences of service users <br> • Studies in contexts which are not relevant to courts or tribunals such as private online platforms like eBay <br> • Papers not published in English <br> • Papers conducted in countries outside of those specified for inclusion |

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[9]   Rutter, D., Francis, J., Coren, E. and Fisher, M. (2010). *SCIE Research resource 1: SCIE systematic research reviews: guidelines (2nd edition)* SCIE Research resource 1: SCIE systematic research reviews: guidelines

**Table 4. Inclusion and exclusion criteria (REA2)**

| Inclusion criteria | Date: 2010 onwards<br><br>Language: English<br><br>Country: UK (including devolved administrations), Singapore, EU, Scandinavia, USA, Canada, Ireland, Australia, New Zealand.<br><br>Study type: Selected range of evaluations from the SCIE review guidelines[10] – from RCTs, QEDs and process evaluations, descriptive studies including organisational and expert intelligence. In the first instance we will search for systematic reviews.<br><br>Population: Members of the public, legal professionals and members of the judiciary who access services via audio or video technology. |
|---|---|
| Exclusion criteria | • Studies published prior to 2010<br>• Single case study designs<br>• Studies that do not draw on outcomes or experiences of service users<br>• Studies in contexts which are not relevant to courts or tribunals such as private online platforms like eBay<br>• Papers not published in English<br>• Papers conducted in countries outside of those specified for inclusion |

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[10] Rutter, D., Francis, J., Coren, E. and Fisher, M. (2010). *SCIE Research resource 1: SCIE systematic research reviews: guidelines (2nd edition)* SCIE Research resource 1: SCIE systematic research reviews: guidelines

**Table 5. Inclusion and exclusion criteria (REA3)**

| Inclusion criteria | Date: 2010 onwards |
|---|---|
| | Language: English |
| | Country: UK (including devolved administrations), Singapore, EU, Scandinavia, USA, Canada, Ireland, Australia, New Zealand. |
| | Study type: Selected range of evaluations from the SCIE review guidelines[11] – from RCTs, QEDs and process evaluations, descriptive studies including organisational and expert intelligence. In the first instance we will search for systematic reviews. |
| | Population: People who attend physical premises, including staff including back-room roles. |
| Exclusion criteria | <ul><li>Studies published prior to 2010</li><li>Single case study designs</li><li>Studies that do not refer to the physical court estate or the workforce</li><li>Studies in contexts which are not relevant to courts or tribunals such as private online platforms like eBay</li><li>Papers not published in English</li><li>Papers conducted in countries outside of those specified for inclusion</li></ul> |

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[11] Rutter, D., Francis, J., Coren, E. and Fisher, M. (2010). *SCIE Research resource 1: SCIE systematic research reviews: guidelines (2nd edition)* SCIE Research resource 1: SCIE systematic research reviews: guidelines

**Table 6. Inclusion and exclusion criteria (REA4)**

| Inclusion criteria | Date: 2010 onwards |
|---|---|
| | Language: English |
| | Country: UK (including devolved administrations), Singapore, EU, Scandinavia, USA, Canada, Ireland, Australia, New Zealand. |
| | Study type: Selected range of evaluations from the SCIE review guidelines[12] – from RCTs, QEDs and process evaluations, descriptive studies including organisational and expert intelligence. In the first instance we will search for systematic reviews. |
| | Population: People who access support services to access online public services. |
| Exclusion criteria | • Studies published prior to 2010<br>• Single case study designs<br>• Papers that refer to support services which occur prior to people accessing services such as support to advise them on whether or not they have a relevant problem.<br>• Research into support provided for processes unchanged by the introduction of online services.<br>• Studies in contexts which are not relevant to courts or tribunals such as private online platforms like eBay<br>• Papers not published in English<br>• Papers conducted in countries outside of those specified for inclusion |

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[12] Rutter, D., Francis, J., Coren, E. and Fisher, M. (2010). *SCIE Research resource 1: SCIE systematic research reviews: guidelines (2nd edition)* SCIE Research resource 1: SCIE systematic research reviews: guidelines

# 6. Evidence base assessment

This chapter contains a summary of the strength of the evidence base for each REA. This is assessed for quality, quantity, consistency, and context in addition to an assessment of the cumulative strength of the evidence.

## Strength of the evidence base

The data extracted using standardised forms was used to assess the cumulative strength of evidence identified in each of the reviews. Strength of evidence was against four essential characteristics as described by the Department for International Development (DfID).

- The quality of individual articles or papers.
- The quantity (number) of papers that make up the body of evidence.
- The consistency of the findings from studies.
- The context in which the available evidence has been collected: how well the evidence collected in a particular context can be generalised to another.

The DfID approach to assessing the cumulative strength of evidence is particularly well-suited to summarising studies typical of social research. It is informed by both the GRADE framework (designed for assessing the quality of medical evidence), and CASP checklists.[13,14]

The DfID cumulative strength of evidence scale has five levels:

**Very strong** - High quality body of evidence, large in size, consistent, and closely matched to the specific context of the business case.

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[13] Guyatt, G.H., Oxman, A.D., Kunz, R., Vist, G.E., Falck-Ytter, Y., Schünemann, H.J. (2008). What is "quality of evidence" and why is it important to clinicians? *British Medical Journal*, 336:995. What is "quality of evidence" and why is it important to clinicians? | The BMJ

[14] Critical Appraisal Skills Programme (n.d.). CASP Checklists. CASP CHECKLISTS - CASP - Critical Appraisal Skills Programme (casp-uk.net)

**Strong** - High quality body of evidence, large or medium in size, generally consistent, and matched to the specific context of the business case.

**Medium** - Moderate quality studies, medium size evidence body, generally consistent, which may or may not be relevant to the specific context of the business case. Also covers limited number of high-quality studies.

**Limited** - Moderate or low-quality studies, small or medium size body, inconsistent, not matched to specific context of the business case.

**No evidence** - No studies or impact evaluations exist.

**Table 7. Strength of the evidence base across all four REAs**

| Evidence strength | Rapid Evidence Assessment | | | |
|---|---|---|---|---|
| | **REA1** | **REA2** | **REA3** | **REA4** |
| **Quality** | Moderate | Good (primary research) / Low (reviews) | Moderate (primary research) / Low (reviews) | Moderate (primary research) / Low (reviews) |
| **Quantity** | Medium | Medium | Medium | Low |
| **Consistency** | Good | Good | Good | Good |
| **Context** | Relevant | Relevant | Relevant | Relevant |
| **Cumulative strength** | **Medium** | **Medium** | **Limited** | **Limited** |

# 7.  Reporting

This chapter contains a brief description of the narrative synthesis used to report the findings of the review and a summary of the limitations of these REAs.

## Narrative synthesis

Of all publications included in the review, fewer than half reported empirical evaluations of interventions. In such circumstances, Cochrane guidelines specify using a narrative synthesis to report review findings.

The defining characteristic of this method is that it uses text to tell the story of the findings from the included studies. A narrative synthesis includes four key elements: (i) Developing a theory of how an intervention works, why and for whom; (ii) Developing a preliminary synthesis of findings of included studies; (iii) Exploring relationships in the data; and (iv) Assessing the robustness of the synthesis.

## Limitations of the REA methodology

Despite the comprehensive approach taken, there are limitations to conducting Rapid Evidence Assessments. Time restrictions mean the rapid review methodology has recognised limitations compared with a full systematic review. For example, although the review conducted rigorous critical appraisal of all included publications, only a sample of publications were double coded. Additionally, as is common with rapid reviews, the review used narrative synthesis to produce a largely qualitative descriptive summary of data.

As with any evidence review, there is a risk of publication bias. Due to the lack of robust data on effect sizes, a meta-analysis of empirical research papers was not conducted. Consequently, the review was not able to conduct standardised tests, such as funnel-plot-based methods, to test and adjust for publication bias. However, the review did seek to minimize potential publication bias by searching for empirical studies published in grey literature (e.g., theses, etc.).

# 8.   Included papers

This chapter contains details of each paper included in each REA. This includes: the reference; the area of author expertise; the publication format (print or online or both); whether sources were cited; and the relevance and the key implications of the study. The last column includes a rating of the quality of the study.

## 8.1    REA1 Characteristics of included studies

Characteristics of included reports (grey literature) (N=5); listed alphabetically to facilitate identification)

**Table 8. Characteristics of included reports (REA1)**

| Reference (first author and year) | Area of author expertise | Publication format | Sources cited | Relevance/key implications | Quality score (max. 12) |
|---|---|---|---|---|---|
| CEDEFOP (2019) | Experts in career development | Online | No | Tech is used for self-service to find opportunities, assess skills and personality traits and match to job opportunities. Even games can be used to assess skill level and enhance skills - AI and machine learning can use dynamic algorithms and pattern recognition to make the best recommendations for users. But if users have low skill levels it isn't as useful, they need a flexible combination of channels to best support users. | 5 |
| Centre for Ageing Better | People aged over 50 | Online | Yes | Rapid increase in people over 55 using online services but still age remains the biggest predictor of people being excluded from online services. Key principles for supporting people aged over 55 to use online services: flexibility and relevance, support delivered at the right pace, time for repetition and reflection, the right language avoiding technical phrases, one to one support, time to build relationships, ongoing support, co-design of support. | 8 |
| Northern Ireland Criminal Justice Inspectorate | Criminal Justice | Print/online | Yes | One of the key difficulties found by Inspectors was the identification of vulnerable and intimidated witnesses by investigators. Even on conservative estimates, fewer than half of all vulnerable and intimidated witnesses are identified as such by the criminal justice system agencies. | 9 |

| Reference (first author and year) | Area of author expertise | Publication format | Sources cited | Relevance/key implications | Quality score (max. 12) |
|---|---|---|---|---|---|
| Turner (2020) | Freelance journalist | Online | Yes | Practitioners regularly cite IT infrastructure as a source of stress, and that councils were at very different stages in terms of the quality and stability of their technology, with employee confidence in using systems similarly variable. Shorter formats for child protection conferences and other multi-agency forums had been to the benefit of all participants, not only families. | 7 |
| Wales Cooperative Centre | Digital inclusion in Wales | Print/online | No | Reaching out to new users, identifying ways to include them in service development and improving their own skills remains a vital task for the future. | 10 |

Characteristics of included primary research studies (N=45; listed alphabetically to facilitate identification)

**Table 9. Characteristics of included primary research (REA1)**

| Reference (first author and year) | Data collection methods | Setting | Country | Sample | Key findings | Quality score (max. 14) |
|---|---|---|---|---|---|---|
| Abedi (2019) | Mixed methods - qualitative semi-structured interviews then online survey | Legal | Australia | Interviews with 6 people and then online survey | Key issues for ODR are security, privacy and authentication. | 9 |

| Reference (first author and year) | Data collection methods | Setting | Country | Sample | Key findings | Quality score (max. 14) |
|---|---|---|---|---|---|---|
| Adam (2011) | Qualitative interviews | Employment | UK | 80 face-to-face interviews with benefit claimants, 35 with Jobcentre Plus staff and five with external digital partners | Claimants varied considerably in their 'distance' from using the internet, the amount of support needed and amount of time before they become digitally active. This is likely to require strategies that operate over the short, medium and longer term. | 8 |
| Bay (2021) | Non-experimental, mixed methods | Social work training | Australia | 154 students enrolled in a first-year course in the Masters of Social Work | Some of the online limitations outlined by social work educators previously were overcome by the synchronous teaching on Zoom. | 9 |
| Bernhard (2021) | Online survey | Psychology | US | Two groups of forensic psychologists - 4 months before covid and during covid restrictions (n=235) | Motivations to use tele-health included accessibility, gathering collateral information, necessity, convenience, because it was mandated, workplace, for testimony, cost effectiveness, time saving and crisis management. | 12 |
| Bild (2021) | Participants played audio clips then participants completed tasks and answered questions | Law | Australia | n=593 | Experiment 1: when audio was difficult to hear, witnesses were rated less favourably independent of testimony credibility. Experiment 2: People were much better at remembering facts of the case when the audio was clearer Experiment 3: clearer audio was again judged more favourably, and this also effected guilt ratings. | 13 |

| Reference (first author and year) | Data collection methods | Setting | Country | Sample | Key findings | Quality score (max. 14) |
|---|---|---|---|---|---|---|
| Brownlee (2010) | Semi-structured interviews | Social work | Canada | 37 social work practitioners | IT addressed some problems of rural social work using telehealth and email. | 8 |
| Chung (2022) | Online survey with quantitative and qualitative elements | Psychology | Australia | 81 staff members at a hospital who deliver psychological interventions | Virtual reality-based treatments had issues with: technical problems, clinical risk and safety. Enablers: Perceived clinical and practical benefits, safe environment for clients to try things before the real world, and it does not require extensive training. | 11 |
| Creutzfeldt (2021) | Survey with quantitative and qualitative questions | Social welfare and law | UK | 138 social welfare service providers | 81% felt well placed to deliver online services. 89.3% felt their online services were very effective. Impact on clients was the limited ability to form a relationship, to provide relevant documents, accessibility, for clients to understand, to action information provided and to be able to tell their story. | 9 |

| Reference (first author and year) | Data collection methods | Setting | Country | Sample | Key findings | Quality score (max. 14) |
|---|---|---|---|---|---|---|
| Day (2012) | Action research – questionnaires and interviews | Health | New Zealand | 511 patients, 17 companions, 25 clinicians over 109 clinics. | The patient and clinician experiences indicate that there is a place for telemedicine in outpatient specialist clinics. The difficulty arose when booking appointments, ensuring the availability of the telehealth clinic rooms, and the business aspects of embedding telehealth clinics into everyday outpatient clinic routines. | 8 |
| Denvir 2022 | Quasi experimental – reviews and survey data | Law | England and Wales | First sample 10,038, comparative sample 278 survey responses | The perceived accessibility of justice and the perceived fairness of legal outcomes play a key role in shaping the legal norms that govern public behaviour and that frame the informal resolution of legal problems via settlement – digitalisation can widen access and democratise justice. | 13 |
| Delieghere 2018 | Qualitative interviews | Social work | Belgium | 17 professionals | Procedures used in electronic information systems can help structure practice, workarounds to offer individualised practice need to be understood in a nuanced way. | 7 |

| Reference (first author and year) | Data collection methods | Setting | Country | Sample | Key findings | Quality score (max. 14) |
|---|---|---|---|---|---|---|
| Dodsworth 2013 | Mixed methods - survey and focus groups | Social work | UK | 205 survey responses. 27 foster cares and 18 social workers in focus groups | The evaluation indicated that the fostering internet service had the potential to improve services and communication to and between foster-carers, but a number of important factors needed to be in place to realise this fully. | 10 |
| Dumoulin 2016 | Qualitative interviews and observations | Law | France | 60 depth interviews and 15 observations | Remote hearings were used to handle a specific problem in Canada without French judges having to travel halfway across the world, they were then endorsed in certain situations. It is used as a cheap, practical response to problems. Main benefits seem to be economic, but this was not the initial reason why it was used. | 7 |
| Gillingham 2014 | Ethnographic research – observations and interviews | Social work | Australia | Observed 20 meetings, interviewed staff (n=60) | Increased input from professionals who will use electronic information systems will allow for the design of services which are more user-led. | 9 |
| Gillingham 2016 | Ethnographic | Social work | Australia | Specific numbers not stated | Changes to information systems need to go beyond technology and understand the uses and beliefs behind the work. | 9 |

| Reference (first author and year) | Data collection methods | Setting | Country | Sample | Key findings | Quality score (max. 14) |
|---|---|---|---|---|---|---|
| Gillingham 2019 | Ethnographic | Social work | Australia | Specific numbers not stated | Social welfare agencies have little to no choice over which systems they use, agencies have been sold IS which is not fit for purpose or have functionality which far exceeds their needs. | 9 |
| Gillingham 2018 | Qualitative | Social work | Australia | 7 depth interviews | There can be unintended consequences of adopting IT systems and the costs of doing so can be high; technology should not lead organisational change but should be used to support it. | 7 |
| Good things foundation 2020 | Mixed methods | Voluntary sector | UK | Review of data 2017-2020 | Support services delivered to 782 people. In many cases these people would need support whether online or on paper. Support services are delivered in a variety of ways, funding must be considered to cover each. | 7 |
| Graham 2020 | Mixed methods – interviews and documentary analysis | Health | US | N=200 patients | IoT and AI offer almost endless opportunities to deploy and deliver healthcare via telehealth, especially for people living in rural areas or disabled patients. | 11 |
| Harker 2022 | Qualitative – 3 surveys at different times either over the phone or face to face | Law | UK | First (n=932), Second(n=1306), Third (n=3219), | Important to include a range of perspectives as court systems change as we evaluate them. | 11 |

| Reference (first author and year) | Data collection methods | Setting | Country | Sample | Key findings | Quality score (max. 14) |
|---|---|---|---|---|---|---|
| Hartsell | Qualitative interviews and observations | Law | USA | Observed team meetings (n=65) Court hearings (n = 67), interviews with team members (n = 17), and interviews with a few drug court participants (n = 10). | Judge demeanour matters, e.g. showing compassion when people had difficulty with IT or were ill with covid, fewer transportation barriers, zoom was convenient for team members, other logistical challenges occurred which are not apparent in face to face, distractions were difficult, environment of courtroom was lost, and the judges seemed to respond differently to people. | 8 |
| Heard 2022 | Interviews and survey | Law | Australia | Survey (n=469), 42 client interviews | There is an unforeseen opportunity to develop a service model featuring multiple delivery options to suit different clients and different cases. | 12 |
| Heitplatz 2022 | Qualitative – content analysis and semi-structured interviews | Disability | Germany | 24 caregivers and 50 people with intellectual disabilities | Positive about the disabled peoples' use of the internet and how it improves accessibility but concerned around Facebook and the risks of cyberbullying. | 8 |
| Hutchinson 2021 | Qualitative – observations and interviews | Criminal Justice | Australia | 35 observations and 40 interviews | When video link is used for child victims/witnesses there are a range of protections, but these are stripped away for child defendants. | 9 |
| James 2022 | Ethnography | Social welfare | Australia | Not stated | IT in social welfare needs to consider ethics in AI. The ethics of AI use need to be central to its implementation. | 4 |

| Reference (first author and year) | Data collection methods | Setting | Country | Sample | Key findings | Quality score (max. 14) |
|---|---|---|---|---|---|---|
| Jeretina 2018 | Qualitative (limited description) | Consumer Law | Austria | Not stated | ODR can increase access to justice and ensure greater legal certainty by reducing the costs and time required by reaching a consensual e-settlement. | 3 |
| Lamont (2022) | Semi structured interviews | Health | USA | 9 | Although telehealth sessions were overall not as effective as in-person sessions, it was better than no therapy and could be particularly useful as a hybrid set-up in conjunction with in-person visits. A multitude of issues meant the services were inaccessible and this was not just the patients' visual impairments. | 9 |
| Licoppe 2017 | Observations | Social science | France | 200 hours of video footage | When mutual visibility is mediated by cameras and screens, new choices are made regarding when and how it is relevant to capture participants with the camera and to show them on screen: visual ecologies have to be managed with an eye to how courtroom interaction does and should unfold. | 5 |
| Mackrill 2018 | Action research – field notes, observations and interviews | Social work | Denmark | Not stated | Each person must reflect on their use of technology, it is developing and changing so fast it is important for it to work for them. | 5 |

| Reference (first author and year) | Data collection methods | Setting | Country | Sample | Key findings | Quality score (max. 14) |
|---|---|---|---|---|---|---|
| McKay 2018 | Semi-structured interviews | Criminal justice | Australia | 31 prisoners | While the basic content of legal procedure by video link may be the same as physical proceedings, the trend towards prisoners appearing by video link from prison is problematic. | 8 |
| Mishna 2012 | Focus groups | Social work | Canada | 15 practitioners | Tech is part of everyday life and need to respect client preferences but also it can blur boundaries between professional and personal. | 9 |
| Mishna 2021 | Survey | Social work | Canada | 4354 survey responses | While it is not clear how social work will be changed over the long term, the pre-COVID use of informal ICTs exposes the need to educate and prepare social workers to use ICTs in practice. ICT use can provide flexible options to augment face-to-face sessions when appropriate and can offer consistency and continuity of service when physical proximity is not possible. | 10 |

| Reference (first author and year) | Data collection methods | Setting | Country | Sample | Key findings | Quality score (max. 14) |
|---|---|---|---|---|---|---|
| Mishna 2014 | Interviews and focus groups | Social work | Canada | 42 participants | IT useful for scheduling appointments, therapeutic benefits of texts and emails as they could let people know they were thinking of them outside of normal working hours, some seamlessly integrated technology into their practice, managers wanted people to be flexible but not available 24/7. There were variations in policies and practices and some ethical grey areas. | 7 |
| Mishna 2022 | Semi structured interviews | Social work | Canada | 27 practitioners and 27 clients | This is an opportunity to develop client-centered models of service delivery that enable more options of access. Concurrently, it is critical to develop policies and supports for practitioners to maintain boundaries and wellbeing. | 7 |
| Moyer 2022 | Case study – observations | Social work | USA | Not stated | Domestic abuse services shifted online – benefitted users in rural areas, didn't have to worry about childcare or other limitations to attending in person. Barriers were obtaining equipment and software. | 3 |

| Reference (first author and year) | Data collection methods | Setting | Country | Sample | Key findings | Quality score (max. 14) |
|---|---|---|---|---|---|---|
| Nir 2022 | Qualitative - observations | Law | USA | Journals of 44 court watchers | Concerns about online hearings: people couldn't represent themselves well with poor lighting, no eye contact, defendants were not given enough opportunity to speak. | 8 |
| Parkin 2017 | Content analysis | Law | USA | 50 state judiciary websites | Increased online access is significantly associated with lower levels of incarceration, a more favourable opinion of the states' tort liability system, and a greater commitment of state resources to civil legal assistance. These results suggest that online access to state court information is linked to important policy and practical outcomes—that is, it is related to broader, practical consequences. | 10 |
| Porter 2020 | Non-experimental survey | Children's social care | Scotland | N=276 | Recommendations include ensure equitable access for all; Strengthen panel chairing and facilitation; Provide a participant list; Ensure accessible, Appropriate and timely distribution of panel papers; Enable private communication between participants. | 10 |

| Reference (first author and year) | Data collection methods | Setting | Country | Sample | Key findings | Quality score (max. 14) |
|---|---|---|---|---|---|---|
| Rickard 2022 | Qualitative – mixed methods | Justice | USA | Content analysis of emergency orders, technologies and data on internet use | Report identified three key steps courts could take to realize the full potential of improvements in technology-driven tools:<br><br>1. Combine technological tools with process improvements to better facilitate resolution of legal problems.<br><br>2. Before adopting new tools, test them with and incorporate feedback from intended users.<br><br>3. Collect and analyse data to help guide decisions on the use and performance of the tools. | 11 |
| Ryan 2020 | Qualitative consultation survey | Law | England and Wales | 1300 | It is clear that many professionals are working extremely hard to make the system work well. Plenty of examples of good practice and suggestions for improvements in practice were provided by respondents. There is a willingness to continue to improve the experience of all those involved. There are also some elements of the system that are clearly under particular strain. | 9 |

| Reference (first author and year) | Data collection methods | Setting | Country | Sample | Key findings | Quality score (max. 14) |
|---|---|---|---|---|---|---|
| Ryan 2020b | Online survey and interviews | Law (family courts) | England and Wales | Well over 1000 | Concerns about fairness of remote hearings. Video thought to be more effective, concerns about appropriate technology for all parties, remote working negatively affected health and wellbeing. | 9 |
| Ryan 2021 | Qualitative online survey | Family courts | England and Wales | Over 3,200 professionals, parents and family members | Overall, there was support for remote 'administrative' hearings (subject to certain caveats) such as case management hearings (CMH), first hearing dispute resolution appointments (FHDRA) and also for initial and/or ex parte applications for non-molestation/ occupation orders. There was much less support for remote fact-finding hearings, hearings involving contested applications for interim care or contact orders, or final hearings. | 9 |

| Reference (first author and year) | Data collection methods | Setting | Country | Sample | Key findings | Quality score (max. 14) |
|---|---|---|---|---|---|---|
| Sanders 2021 | Qualitative interviews and focus groups | Social care | UK | Focus groups with 12 LAs | Multi-agency safeguarding during Covid-19 had demonstrated the benefits of information sharing and closer working relationships. Increased communication and information sharing between multi-agency partners is something which should be rolled out and maintained in the future. Local authorities should also consider ongoing flexibility over the format of visits, depending on the needs and best interests of the family, whether this be virtual, in the home, or at another location. | 8 |
| Sela 2018 | Experimental 2x2 factorial design | Law | US | 86 students | The task ahead is to develop a particularistic understanding of the actual operation and effect of specific ODR technologies and process designs. Results confirm the proposition that the degree of autonomy and decision-control that an ODR technology possesses interact to affect disputants' experiences of procedural justice. | 13 |

| Reference (first author and year) | Data collection methods | Setting | Country | Sample | Key findings | Quality score (max. 14) |
|---|---|---|---|---|---|---|
| Summers 2019 | Non-experimental survey with 3 groups – online chat, phone call and walk in clinic | Family law courts | US | 2923 respondents | Given the differences in service delivery and in the finding that blended instruction is most effective, legal self-help service providers may wish to consider what information is communicated as a function of setting. Service providers may wish to consider how remote and in-person help can be used to complement each other. | 8 |
| Yamagata 2017 | Quasi experimental case study | Justice sector | US | 115 cases were selected for case analysis | Few courts appear to be using videoconferencing in DV case-related proceedings. Even more infrequent are studies that empirically evaluate the use of videoconferencing in those cases. The present study, though limited to one local court's experience, attempts to address this need to better understand the use of technology in courtrooms as it relates to procedural consistency. | 13 |

Characteristics of included evidence reviews (N=70; listed alphabetically to facilitate identification)

**Table 10. Characteristics of included evidence reviews (REA1)**

| Reference (first author and year) | Review type | Search sources stated | Search terms reported | Quality appraisal | Number of papers | Key implications | Quality score (max. 16) |
|---|---|---|---|---|---|---|---|
| Afrouz 2021 | Scoping review | Yes | No | No | 18 | Findings confirmed many benefits of online education for students and showed similar performances and satisfaction for off-campus and on-campus students. | 7 |
| Alessa 2022 | Literature review | No | No | No | Not stated | AI research and implementation starts with optimistic predictions, followed by a recalibration of expectations once the realities of the technology become apparent. Ultimate benefit of AI in ODR will be the creation of highly supportive systems which will uncork bottlenecks in the judicial system and replace red tape and litigation with a process that is even more efficient than traditional ADR models. | 6 |
| Anderson 2019 | Literature review | No | No | No | Not stated | New ODR-ADR milieu raises questions about whether procedural justice has diminished or is merely experienced differently. Opportune moment to reconceptualise and enhance access to justice. | 5 |
| Assy 2017 | Literature review | No | No | No | Not stated | Changing the balance between accuracy and resources is not a matter of accepting "second-class justice". We might legitimately prefer less accurate judgments that are cheaper and faster to achieve. This is a paradigm shift that could lead to the acceptance of the Briggs reform as highly valuable and so open up new routes for improved access to justice. | 5 |

| Reference (first author and year) | Review type | Search sources stated | Search terms reported | Quality appraisal | Number of papers | Key implications | Quality score (max. 16) |
|---|---|---|---|---|---|---|---|
| Bandes 2020 | Literature review | No | No | No | Not stated | The sudden prevalence of virtual legal proceedings offers a kind of forced natural experiment and hence an unprecedented opportunity to revisit what we value about adjudication in public courtrooms, and to think about how best to ensure that court proceedings, whatever form they may take, reflect and reaffirm those values. | 6 |
| Barnett 2018 | Critical review | No | No | No | 19 | 3 key areas on dispute resolution – consumer, judicial and corporate. AI and blockchain will have a profound effect on litigation and will help people decide whether or not to litigate. | 3 |
| Bannon 2021 | Literature review | No | No | No | Not stated | COVID-19 pandemic has forced unprecedented agility and creativity, including the embrace of remote court in many contexts. This Essay is part of an initial effort to detail some of the factors that should guide longer-term policymaking. | 7 |
| Blashchuk 2020 | Critical review | No | No | No | Not stated | Positives of online mediation: confidentiality, decision making, time saving, both parties influence the outcome, maintain normal relations in future, privacy, balance of interests, resolve conflict. Problems: lack of support, low level regulation, confidentiality, lack of legal awareness, poor technical support. | 4 |

| Reference (first author and year) | Review type | Search sources stated | Search terms reported | Quality appraisal | Number of papers | Key implications | Quality score (max. 16) |
|---|---|---|---|---|---|---|---|
| Carneiro 2011 | Critical review | No | No | No | Not stated | ODR should use information from human-centred approaches to maximise effectiveness. | 3 |
| Carneiro 2014 | Critical review | No | No | No | Not stated | Fully autonomous ODR systems are not achievable yet and they may not even be desirable, but there are many simple tasks that could be automated, releasing experts for a different work. | 2 |
| Carneiro 2017 | Critical review | No | No | No | Not stated | Information gathered from AI can be used in machine learning to select cases and gather data on information such as body language and emotions. | 2 |
| Cashman 2019 | Critical review | No | No | No | Not stated | ODR offers quick, just and cost-effective access to justice. To be applied to high value, low volume cases it needs to be tailored to the needs of more complex cases. It cannot be one size fits all. | 2 |
| Chan 2018 | Critical review | Yes | Yes | Yes | 13 | ICT has enhanced the effectiveness of youth social work in specific aspects. Proper understanding about the potentials and limits of different types of ICT may be an essential professional competence enabling social work practitioners to make informed choices when working with young digital natives. To this end, further practice and research are indeed necessary. | 14 |

| Reference (first author and year) | Review type | Search sources stated | Search terms reported | Quality appraisal | Number of papers | Key implications | Quality score (max. 16) |
|---|---|---|---|---|---|---|---|
| Chiodo 2020 | Critical review | No | No | No | Not listed | For online hearings to work effectively they need to be designed from scratch rather than trying to fit technology to existing ways of doing things. Start small, pilot it, use new and bespoke methods and be willing to be flexible and anyone involved in the hearings should participate voluntarily. | 6 |
| Cortes 2017 | Critical review | No | No | No | Not listed | Regulatory changes of ADR in the EU are institutionalising and professionalising the field of consumer ADR by turning best practices into minimum standards for certified ADR entities. Design should account for parties with poor IT skills and incorporate cost incentives. | 2 |
| Cortes 2015 | Critical review | No | No | No | Not listed | What is needed to improve ODR: new legal standards, raise awareness, due process standards of expertise, transparency, effectiveness, fairness, liberty and legality. Platforms should be accessible, user friendly and use electronic translation. With more formal regulation and standards, ODR can be more user friendly and accessible for all. | 2 |
| Donoghue 2017 | Critical review | No | No | No | Not listed | Digital justice in itself will not improve access to justice, especially as it has been introduced at the same time as legal aid being significantly curtailed. | 3 |

| Reference (first author and year) | Review type | Search sources stated | Search terms reported | Quality appraisal | Number of papers | Key implications | Quality score (max. 16) |
|---|---|---|---|---|---|---|---|
| Engstrom 2021 | Critical review | No | No | No | Not listed | There are, in short, profound risks and rewards on all sides. Managing those risks, and realizing those rewards, will require a rich mix of old-fashioned thinking about procedural rules, a heavy dose of methodological innovation, and clear-eyed thinking at all levels of abstraction about what type of civil justice system we want to build as new technologies sweep into it. | 2 |
| Exon 2017 | Critical review | No | No | No | Not listed | To date, no specific ethical standards have been developed for ODR or ICT other than the suggested principles in the Online Dispute Resolution Standards of Practice and the newly developed Ethical Principles for Online Dispute Resolution. Neither set of principles binds mediators, ODR/ICT platforms, or the designers, programmers, and service providers of those platforms. Need ethical standards. | 2 |

| Reference (first author and year) | Review type | Search sources stated | Search terms reported | Quality appraisal | Number of papers | Key implications | Quality score (max. 16) |
|---|---|---|---|---|---|---|---|
| Foster 2015 | Critical review | No | No | No | Not listed | In family law accusations of invasions of privacy often arise - reading each other's emails or installing spyware. Software can support lawyers to do perceptive searches of emails to quickly find the records, electronic trials can collect and file numerous electronic documents this is separate from an electronic hearing because it includes all of the documentation leading up to a hearing, as demand increases and changes to how we use the internet continue, lawyers need to be aware of how these changes impact the types of evidence, how people access the justice system and how hearings occur. | 3 |
| Frade 2020 | Critical review | No | No | No | Not listed | The introduction of new information and communication technologies has been an important aid in broadening access to law and justice in two ways: as a tool to achieve more efficient performance of judicial courts; and as a tool for measuring and assessing the level of compliance with stated policy objectives. Many of the current administration activities don't fit with IT so it needs to be designed from scratch. | 2 |

| Reference (first author and year) | Review type | Search sources stated | Search terms reported | Quality appraisal | Number of papers | Key implications | Quality score (max. 16) |
|---|---|---|---|---|---|---|---|
| Garcia 2015 | Critical review | No | No | No | Not listed | Deals with online tax returns. The advantages of online communication with the Spanish tax authorities include reductions in compliance costs, in the tax authority's administrative workload, in the time taken to process returns, and in the time taken to process and detect the evolution of economic variables. | 2 |
| Gentry 2019 | Systematic Review | Yes | Yes | Yes | 40 | Deals with group-based telehealth treatments compared to face to face. Telehealth well received and feasible though patients would like some element of face to face. | 14 |
| Gerry 2018 | Critical review | No | No | No | Not listed | In some ways online court would benefit trafficking victims because they don't have to present in court, which is often termed secondary victimisation as it is quite traumatic for people, but on the other hand there are concerns that this could put them at a disadvantage as they couldn't be seen face to face and the lawyers etc are not all face to face. | 6 |
| Gingras 2021 | Critical review | No | No | No | Not listed | AI is an inevitable development within the court system and could be really helpful, but we need more data to use it effectively. | 5 |

| Reference (first author and year) | Review type | Search sources stated | Search terms reported | Quality appraisal | Number of papers | Key implications | Quality score (max. 16) |
|---|---|---|---|---|---|---|---|
| Groshong 2015 | Critical review | No | No | No | Not listed | Records stored on a computer should have encryption. Communication using tech whether by text, videoconferencing etc runs the risk of breaching confidentiality, communicating with clients on social media blurs boundaries between the personal and private. | 5 |
| Haigh 2020 | Critical review | No | No | No | Not listed | Canadian courts went online due to the pandemic. This highlighted a need for a thorough review of court processes and the need to embrace new ideas. | 3 |
| Herath 2020 | Critical review | No | No | No | Not listed | Critical review: about the use of tech in a variety of different fields during covid, just describes how tech was used. | 2 |
| Hodgson 2022 | Critical review | No | No | No | Not listed | AI has the potential to be used as a social justice tool because it has no prejudice whereas humans do. | 2 |
| Hodson 2019 | Critical review | No | No | No | Not stated | Benefits of tech in family justice: greater standardisation which saves time, and cost of transportation, vulnerable victims give testimony in less intimidating settings, AI has the potential to increase fairness. The issue is about not having enough data to use it in these circumstances- need the investment to be able to gather and analyse the data. | 3 |

| Reference (first author and year) | Review type | Search sources stated | Search terms reported | Quality appraisal | Number of papers | Key implications | Quality score (max. 16) |
|---|---|---|---|---|---|---|---|
| Honeyman 2016 | Literature review | No | No | No | Not stated | Benefits of tech in healthcare - save time and money and more accessible, data captured by tech could improve service delivery, IT is critical to integrated patient care, can help deliver efficiency improvements. Barriers include investment, engagement, senior buy in and digital exclusion. | 5 |
| Jone 2019 | Critical review | No | No | No | Not stated | For taxpayers who have internet access and requisite skills to navigate online channels it offers an additional access point for dispute resolution and choose their preferred process. Online channels may reduce telephone and face to face by some degree but not dramatically. | 3 |
| Kamber 2022 | Critical review | No | No | No | Not listed | The accused should be able to waive the right to be physically present and also waive the right to appear via video link. Use of online is not irreconcilable with the guarantees of the right to a fair trial but going online does affect justice and does have potential adverse consequences. | 3 |

| Reference (first author and year) | Review type | Search sources stated | Search terms reported | Quality appraisal | Number of papers | Key implications | Quality score (max. 16) |
|---|---|---|---|---|---|---|---|
| Larson 2019 | Literature review | No | No | No | Not stated | Good practice for adapting ODR for disabled users. Accessible websites and mobile apps must provide captions for people with hearing impairments, people with visual impairments can hear videos but may not be able to find the video to play it so there should be accessible alternative text on all points of the website, voice recognition software for people who cannot use a mouse, consider adjustments for colour-blindness - colour contrast requirements, no flashing content. Designate a digital accessibility coordinator when building the process. | 6 |
| Lee 2019 | Scoping review | Yes | Yes | Yes | 15 | Most studies used grades as the major outcome for some studies there was no significant difference and for others online courses were associated with lower grades, students tended to have less interaction with classmates or lecturer on online courses, online students were more comfortable than face to face students in using a computer. | 10 |
| Legg 2016 | Critical review | No | No | No | Not stated | AI can significantly replace the role of humans in courts. Technology can reconfigure the court, so it doesn't have to be a single physical space. Could mean people pursue cases which don't have merit because they don't have legal advice. | 3 |

| Reference (first author and year) | Review type | Search sources stated | Search terms reported | Quality appraisal | Number of papers | Key implications | Quality score (max. 16) |
|---|---|---|---|---|---|---|---|
| Luxton 2018 | Literature review | No | No | No | Not stated | The reliability of forensic evaluation via video conference - seems to be reliable and feasible. | 5 |
| Magrath 2018 | Critical review | No | No | No | Not stated | Courts moving online means there will be less transparency. | 2 |
| Menashe 2017 | Critical review | Yes | No | No | Approx 50 | Advantages of online courts outweigh the disadvantages. A desirable model must be initially based on simple, low-cost procedures. Likely that new tools will need to be developed to account for technological development. | 6 |
| National Institute of Justice 2020 | Critical review | No | No | No | Not stated | During covid courts had to move online but without proper evaluation. Key research is needed for: a better understanding of the impact of telepresence technology on court outcomes and actors, creation of technical standards for uniform court application and identification of potential areas for expansion. | 2 |
| Penate 2012 | Literature review | No | No | No | Approx 40 | Online interventions provide additional advantages that are essential for patients because they are their only practical possibility. It is therefore important to improve these resources in the future. | 7 |
| Peters 2021 | Critical review | No | No | No | Approx 45 | Paper explores the regulatory landscape of the European Union (EU) using the United Kingdom and Estonia to illustrate the key advancements and shortcomings of the supranational strategy. | 6 |

| Reference (first author and year) | Review type | Search sources stated | Search terms reported | Quality appraisal | Number of papers | Key implications | Quality score (max. 16) |
|---|---|---|---|---|---|---|---|
| Prince 2020 | Literature review | No | No | No | Approx 70 | Paper argues that, for everyday low-value civil disputes, ADR processes should be at the core of any design for an effective system because a litigation process that is intentionally designed around reaching an adversarial hearing will be increasingly inappropriate in an era driven by digitally driven services. Modernising the law to shift the focus to be less adversarial and more conciliatory is one way to provide a more inclusive legal system. | 6 |
| Rabinovich-Einy 2017 | Critical review | No | No | No | Approx 80 | Describes rise of ADR and the emergence of a dispute resolution landscape in which private and public co-exist but are also in tension with one another. Describes the impact of digital technology on dispute resolution, as evidenced in the rise of ODR, which offers a new set of tools and systems for addressing conflict through the application of online, automated processes. | 5 |
| Rajendra 2022 | Literature review | Yes | Not stated | Not stated | Approx 120 | Literature review on use of AI in ADR. Good descriptions of ADR and options for use. Evaluates the extent to which the deployment of AI systems may augment the efficiency and productivity of legal services in ADR and to highlight the proposed recommendations. | 6 |
| Reamer 2015 | Critical review | No | No | No | Not listed | Highlights need to revisit practice considering changes that digital client meetings bring to social work relationships with clients. | 4 |

| Reference (first author and year) | Review type | Search sources stated | Search terms reported | Quality appraisal | Number of papers | Key implications | Quality score (max. 16) |
|---|---|---|---|---|---|---|---|
| Reamer 2013 | Critical review | No | No | No | Not listed | Need to revisit practice and ethical guidelines to accommodate change to digital practice. | 4 |
| Reamer 2013 | Critical review | No | No | No | Not listed | E-training of social workers. | 4 |
| Reamer 2019 | Critical review | No | No | No | Not listed | Technology has transformed the nature of social work education. Whether it is used to supplant or supplement face-to-face instruction, social worker educators must keep pace with rapidly developing standards of practice and related ethical standards. | 3 |
| Redden 2020 | Literature review | No | No | Not stated | Approx 60 | AI has the potential to transform many aspects of the court system in the years to come. AI-enabled tools are already being used in various applications relevant to the court system. They may address pressing needs within the court system – including managing staffing and resources, processing digital information, improving court operations, managing cases, maintaining accountability, and creating partnerships and collaboration. | 5 |
| Robles 2019 | Critical review | No | No | No | Not listed | Looks at issues around blending principles of the Dignified and Positive Ageing model (DPA) with the technological tools and social robotics as an area of innovation. | 4 |

| Reference (first author and year) | Review type | Search sources stated | Search terms reported | Quality appraisal | Number of papers | Key implications | Quality score (max. 16) |
|---|---|---|---|---|---|---|---|
| Rossner 2021 | Literature Review | No | No | No | Approx 70 | Virtual procedures can help maintain court rituals e.g., having clear signage of who everyone is especially the judge. Everyone appearing on screen in set places as in court. Respect can elicit better testimony. We need deep reflection on how best to do this. | 6 |
| Rossner 2021 | Literature review | No | No | No | Approx 70 | Raises the issue of whether virtual court proceedings need to happen in court settings. | 5 |
| Salter 2017 | Literature review | No | No | No | Not listed | Civil resolution tribunal is intended to empower people to resolve their problems in a manner that respects their dignity, their autonomy, and their lived reality. Intends to increase access to justice. | 5 |
| Scherer 2020 | Literature review | No | No | No | Approx 100 | Very thorough review of remote arbitration processes. Advocates a case-by-case approach and sees the widespread increasing use of remote arbitration as an opportunity to gather more data. | 6 |
| Schmitz 2019 | Literature review | No | No | No | Over 100 | Includes the International Center for Online Dispute Resolution (ICODR) standards for ODR for courts to consider as they digitize to ensure fairness, due process, transparency and efficiency. | 5 |

| Reference (first author and year) | Review type | Search sources stated | Search terms reported | Quality appraisal | Number of papers | Key implications | Quality score (max. 16) |
|---|---|---|---|---|---|---|---|
| Schmitz 2020 | Literature review | No | No | No | Approx 100 | ODR holds great promise for advancing Access to justice but only if properly deployed, improved, and monitored. This depends on research, along with transparency, to help inform best practices and means for monitoring. | 5 |
| Schmitz 2021 | Literature Review | No | No | No | Approx 100 | Updating the development of the ethical infrastructure of the field is necessary. The further development of ODR standards and ODR best practices to advance its implementation is a charge that we must embrace to ensure that ODR is to be performed with the highest ethicality. | 5 |
| Sourdin 2020 | Literature review | No | No | No | Approx 145 | Changes need to last beyond covid – need to evaluate practices during covid and design user-centred approaches which are sustainable. | 6 |
| Swiercynski 2019 | Critical review | No | No | No | 43 | New Council of Europe guidelines properly follow the structure of principles developed in the jurisprudence of the European Court of Human Rights under Articles 6 and 13 of the Convention. The time of its adoption is correct as the digitalisation of courts have now crucial importance for access to the justice. | 5 |

| Reference (first author and year) | Review type | Search sources stated | Search terms reported | Quality appraisal | Number of papers | Key implications | Quality score (max. 16) |
|---|---|---|---|---|---|---|---|
| Tan 2019 | Literature review | No | No | No | Over 100 | It is important that a public ODR platform is transparent and capable of improving judicial and court or tribunal accountability. The questions of how much technology should be used in dispute resolution, in what circumstances, and at what cost, must also continue to be explored. Technological innovation should not result in the erosion of fundamental values of civil justice including accessibility, transparency, legal validity and accountability. | 5 |
| Townend 2021 | Critical review | No | No | No | Not stated | Technology presents an opportunity for better 'information transparency' of court proceedings (the ability to capture, store and analyse data about proceedings) and physical courts may offer greater 'real time transparency' (the ability to see what is going on at the time). | 5 |
| Troke-Barriault 2015 | Literature review | No | No | No | Approx 30 | To level the playing field between autistic and neurotypical parties, ODR processes that are tailored towards these types of disputes should incorporate software and hardware that consider the individual needs of the disputants. | 5 |
| Vitello 2021 | Critical review | No | No | No | 35 | It is important to develop practice guidelines and resources to educate psychiatrists and attorneys about the appropriate use of videoconferencing technology for its use in court. | 5 |

| Reference (first author and year) | Review type | Search sources stated | Search terms reported | Quality appraisal | Number of papers | Key implications | Quality score (max. 16) |
|---|---|---|---|---|---|---|---|
| Ward 2015 | Literature review | No | No | No | Approx 70 | 'Swift justice' is not necessarily fair justice, and 'procedural due process' might be challenged by objectives of economics and speed. Police in prosecutorial decisions and virtual courts fundamentally challenge due process. | 5 |
| Warner 2020 | Critical review | No | No | No | Not stated | Family Court Community: transition from traditional to virtual courts. Impact on children when courts go virtual. Impact on parents when courts go virtual. Procedural justice virtually. | 4 |
| Wasser 2021 | Literature review | No | No | No | Approx 95 | ODR is particularly applicable to divorce negotiations, potential to radically democratize access to the legal system, but that may come at a cost to the quality of service. Need to assess various ADR. | 5 |
| Wing 2021 | Critical review | No | No | No | 29 | Consideration of the ethical challenges raised by ODR as it develops. | 6 |
| Zeleznikow 2021 | Literature review | No | No | No | 70 | Human-centered design is a process that emphasises the need to develop solutions that rely upon the needs and wants of users. A six stage model could be helpful (1) Case management, (2) Triaging, (3) The provision of Advisory tools, (4) Communication tools, (5) Decision Support Tools and (6) Drafting software and Agreement Technologies. It is highly unlikely that any individual dispute will be required to use all six processes to resolve the issue at stake. | 6 |

## 8.2    REA2 Characteristics of included studies

Characteristics of included primary research studies (N=7; listed alphabetically to facilitate identification)

**Table 11. Characteristics of included primary research (REA2)**

| Reference (first author and year) | Data collection methods | Setting | Country | Sample | Key findings | Quality score (max. 14) |
|---|---|---|---|---|---|---|
| Clarke 2020 | Mixed methods – survey and interviews | Justice | UK | 8328 survey responses, 180 qualitative interviews | Across all jurisdictions and key demographic groups, public users who attended hearings remotely had an equal or better experience with their hearing than those who attended in-person. Those attending via audio had less positive an experience than those attending via video. More can be done to improve the experiences of public user groups less satisfied with their overall experience, including those with vulnerable characteristics. | 12 |
| Equality and Human Rights Commission 2020 | Mixed methods - qualitative interviews, survey, mapping exercise and desk based research | Law | UK | 39 interviews and 246 survey responses | Limited evidence on how disabled people access video hearings. Should ensure defendants have information explaining their right to raise issues, that professionals consider disabled peoples' needs, support services to make recommendations on cases, consider use of intermediaries and use recorded hearings to evaluate remote hearings. | 10 |

| Reference (first author and year) | Data collection methods | Setting | Country | Sample | Key findings | Quality score (max. 14) |
|---|---|---|---|---|---|---|
| Fielding 2020 | Quasi experimental pre and post-test observations. Semi-structured interviews | Law | UK | 631 observations and 46 interviews | Introduction of booking tool – still no certainty about when a case would be heard, it did reduce the number of disruptions. Audio and visual equipment must be improved for remote hearings. | 12 |
| Lange 2011 | 3x3 design, manipulated contextual bias and level of degradations of audio recordings | Psychology | US | 145 | Poor quality audio can lead to misinterpretations by listeners especially if they are bias in any way by the context. Participants judged those with poor audio less favourably. | 13 |
| Rossner 2020 | Mixed methods process evaluation – observations, interviews and documentation | Law | UK | 40 observations and 69 interviews | Guidance needed about effective lighting and framing, external microphones, indications about who is speaking and clear layout. | 12 |
| Terry 2010 | Mixed methods: observations interviews and survey | Justice | UK | 120 | Video link between police station and court could be successfully used to conduct a first court hearing but it isn't suited to all cases - most notably those with additional language needs. A system that makes significant cost savings is likely to be a challenge. The impact on judicial processes and outcomes is complex. | 12 |

| Reference (first author and year) | Data collection methods | Setting | Country | Sample | Key findings | Quality score (max. 14) |
|---|---|---|---|---|---|---|
| Thorley 2019 | Quantitative 3 stage replication – recreated data set with more recent data. | Law | US | 60,000 | Relative to respondents who have to appear before an immigration judge through a video feed, in-person respondents are advantaged throughout the removal process. | 13 |

Characteristics of included evidence reviews (N=6; listed alphabetically to facilitate identification)

**Table 12. Characteristics of included evidence reviews (REA2)**

| Reference (first author and year) | Review type | Search sources stated | Search terms reported | Quality appraisal | Number of papers | Key implications | Quality score (max. 16) |
|---|---|---|---|---|---|---|---|
| Doughty 2020 | Critical review | No | No | No | Not stated | The guidance developed from the case Re:A was used to develop guidance on whether family hearings should be held remotely or face to face. | 2 |
| Easton 2020 | Critical review | No | No | No | Not stated | One way of ensuring fair and effective participation is for the judiciary, acting as independent arbiters, to retain discretion over when video link technology can be used within a criminal process. | 2 |
| Fekete 2021 | Critical review | No | No | No | Not stated | The use of online video platforms serves the effectivity of court operations and increases the accessibility of justice but interferes with the fairness of trial. | 3 |

| Reference (first author and year) | Review type | Search sources stated | Search terms reported | Quality appraisal | Number of papers | Key implications | Quality score (max. 16) |
|---|---|---|---|---|---|---|---|
| Regenbrecht 2015 | Literature review | No | No | No | Not stated | Mutual gaze is important to achieve eye contact in video conferencing. Available evidence suggests that achieving this can enhance the quality of interactions and make them more like face-to-face interactions. Important things to enhance mutual gaze are highlighted in the research and include life sized upper body positioning, the positioning of the camera, 2d and 3D techniques - no one software solution has been found to be effective. Mutual gaze impacts interest and trust, level of feedback and communication, interaction patterns and presence. | 5 |
| Rossner 2021 | Critical review | No | No | No | 2 | The design of the remote spaces, the backdrops, the journey into a hearing, and the placement of people on a screen bring a certain interpretation of the courtroom experience. | 2 |
| Rossner 2018 | Literature review | No | No | No | Not stated | Gallery view important, refine the design to give each participant their own place on the screen and keep this constant, an immersive environment with multiple screens would further improve this. Have a choice of background. | 5 |

## 8.3 REA3 Characteristics of included studies

Characteristics of included reports (grey literature) (N=20); listed alphabetically to facilitate identification)

**Table 13. Characteristics of included reports (REA3)**

| Reference (first author and year) | Area of author expertise | Publication format | Sources cited | Relevance/key implications | Quality score (max. 12) |
|---|---|---|---|---|---|
| Davies 2022 | Scrutiny | Print/online | Yes | Examines how the Cabinet Office maintains, oversees and manages central government property. Considers change since 2017; progress on the property programmes included in the 2018 government estate strategy; key challenges for central government property management; and long-term planning and priorities. | 12 |
| Department of Health 2005 | Estate management | Print/online | Yes | A well thought-out estate strategy is essential to the provision of safe, secure, high-quality healthcare buildings capable of supporting current and future service needs. An estate strategy cannot be developed in isolation. Rather, it is an integral part of service planning. This guidance gives best practice advice on developing a robust estate strategy. It includes example strategies in the form of case studies. | 12 |
| Department of Justice NI 2016 | Government minister | Online | Yes | Political statement on rationalisation. | 6 |
| Government Property Agency 2021 | Estate management | Print/online | Yes | Good steer on strategic property management. Identifies key priorities including improving the experience of the workplace; enabling increased working across departmental boundaries within the public sector; taking a locality planning approach to optimise the government estate; and improving the sustainability and condition of the estate. | 12 |

| Reference (first author and year) | Area of author expertise | Publication format | Sources cited | Relevance/key implications | Quality score (max. 12) |
|---|---|---|---|---|---|
| Government Property Agency 2022 | Estate management | Print/online | Yes | Government Workplace Design Guide providing guidance and baseline standards for all buildings within the Government Hubs and Whitehall Campus Programmes, and for all central government office estate. | 11 |
| Government Property Unit 2013 | Government policy on estate reduction | Online | No | Cabinet Office policy statement. | 8 |
| Health Research Authority 2021 | Estate management | Print/online | Limited | Sets out key strategic objectives for effective estate management including enabling collaboration and smarter working; reliable, mobile and secure technology available; support health, well-being and connection; estates are efficient, affordable and where possible, shared; sustainability and environmental performance are prioritised; user needs, including equality, diversity and inclusion are at the heart of all workplace design. | 12 |
| HIE Scottish Government | Scrutiny | Print/online | Yes | Takes a place-based approach. Accommodation needs to support growing sectors and industries including energy, the blue economy, tourism, food and drink, and space. Work collaboratively with stakeholders to identify opportunities, promote innovation and support the delivery of projects which meet people's needs. | 11 |
| Isle of Wight NHS Trust 2022 | Estate management | Online | No | Assessment of estate performance considers factors including: physical condition; functional suitability; space utilisation; and environmental management. Outcome of assessments inform investment priorities and estate masterplan. | 9 |

| Reference (first author and year) | Area of author expertise | Publication format | Sources cited | Relevance/key implications | Quality score (max. 12) |
|---|---|---|---|---|---|
| Leeds City Council 2021 | Estate management | Print/online | No | Estate Management Strategy provides the basis for decisions about use of land and buildings, how the estate will be managed, and how to make best use of assets to deliver transformational services and reduce operational costs whilst increasing income. | 9 |
| MACE 2017 | Commercial, public sector and property management | Print/online | No | Home Office: estates strategy contains steps toward meeting government standards for cost, space and sustainability targets. Becomes part of the business plan by working alongside workforce and skills planning. | 9 |
| Ministry of Housing, communities and local government 2021 | Estate management | Print/online | Yes | National Design Guide addresses the question of how to recognise well-designed places, by outlining and illustrating the Government's priorities for well-designed places in the form of ten characteristics. | 11 |
| Morse 2017 | Scrutiny | Print/online | Yes | NAO report focussing on three questions: what progress has been made in reducing the estate since 2012; how effectively the GPU has overseen and coordinated departments' estates; and how well has the GPU designed and implemented its two major estates programmes. | 12 |
| Northern Ireland Courts and Tribunals Service 2015 | NICTs | Print/online | Yes | Response and recommendations on proposals for the rationalisation of the court estate. | 2 |

| Reference (first author and year) | Area of author expertise | Publication format | Sources cited | Relevance/key implications | Quality score (max. 12) |
|---|---|---|---|---|---|
| Scottish Government 2020 | Scrutiny | Print/online | Yes | Strategic Management Plan establishes Crown Estate Scotland to manage property assets, ensuring a smooth transfer for staff, tenants and other stakeholders and reforming the overall framework for management of the assets through the Scottish Crown Estate Act 2019. | 11 |
| Select Committee on Defence 2007 | Select committee on defence | Print/online | Yes | Property management accounts for a substantial proportion of annual expenditure. A failure to invest in maintaining property is a false economy, leading to greater expenditure in the longer-term. | 10 |
| Trafford Council 2021 | Estate management | Online | No | The key principles of the Council's approach to property include: to have a sustainable and fit for purpose portfolio of assets; to improve utilisation; to reduce maintenance and running costs; to minimise expenditure on private sector rented accommodation; to support energy efficiency and the drive for carbon neutrality; to have clear agreements relating to any third-party occupation of Council space. | 7 |
| US General Services Administration 2015 | Scrutiny | Print/online | No | National Strategy employs a three-step policy framework to improve the efficiency and cost effectiveness: freezes growth in the real property footprint; measures the costs and utilization of individual real property assets to support more efficient use of space; identifies opportunities to reduce and promote the more efficient use through asset disposals and better space utilization. | 10 |
| Welsh Government 2021 | Corporate asset management | Print/online | Yes | Asset Management Strategy provides an overview of land and property estate, together with main priorities for managing and developing that estate over the next five years. | 12 |

| Reference (first author and year) | Area of author expertise | Publication format | Sources cited | Relevance/key implications | Quality score (max. 12) |
|---|---|---|---|---|---|
| White 2018 | Commercial property | Online | No | Comment on policy document from the Government Property Unit. (2013). *Government's Estate Strategy: Delivering a modern estate*. London: Cabinet Office. | 6 |

Characteristics of included primary research studies (N=5; listed alphabetically to facilitate identification)

**Table 14. Characteristics of included primary research (REA3)**

| Reference (first author and year) | Data collection methods | Setting | Country | Sample | Key findings | Quality score (max. 14) |
|---|---|---|---|---|---|---|
| Avis 2004 | Qualitative interviews | NHS property management | UK | 3 | The first is the process by which the property is identified and declared "surplus" and the second is the procedure for managing such property effectively until disposal finally takes place. Several key characteristics of good strategic management of surplus property can be highlighted. These are: the identification and declaration of surplus real estate, management practice, capital charging, capital and revenue split in the public sector, performance measurement, strategic plan, and managing the surplus real estate. | 10 |

| Reference (first author and year) | Data collection methods | Setting | Country | Sample | Key findings | Quality score (max. 14) |
|---|---|---|---|---|---|---|
| Budai 2020 | Survey | Public services research | Hungary | 3000 | A wide range of online mobile applications do not appear in municipal administration; this is not a generational issue. The digital divide is reproducing itself. The reason is that outdated and cumbersome municipal services are more an economic, infrastructural, and social issue than an unresolved ICT shortage issue. In the NE, SW and SE peripheries of Hungary, where the flow of capital is small, the road network is insufficient and social segregation and deviance are a problem, web applications are not used in the operation of local governments and public administration is not being modernised in a large extent. | 11 |
| Economics IFF research and frontier 2021 | Quasi-experimental – looked at data, surveys and interviews before and after a pilot | Court services | England | 78 court staff, 124 public users in the pilot, 453 public users before the pilot and 24 who opted out of the pilot. | If additional judicial and staff resource is put into flexible hearing times, then this will enable more cases to be heard within existing court rooms; and this is likely to be a more convenient option for some members of the public and individual legal professionals. However, there are indications that the FOH sessions created additional childcare issues for some court staff, professionals and members of the public; and legal professionals were of the opinion that this scenario risks placing disproportionate burden among women and junior barristers within the legal profession. | 9 |

| Reference (first author and year) | Data collection methods | Setting | Country | Sample | Key findings | Quality score (max. 14) |
|---|---|---|---|---|---|---|
| Houghton 2018 | Qualitative – 4 surveys and diary records | Public services | Australia | 47 | Benefits of the flexible work pilot included: increased productivity; reduced traffic and worker commute times; promoting community; supporting local centres and economies and providing better work–life balance. | 9 |
| Rahim 2013 | Qualitative process evaluation – interviews, group discussions | Justice | England and Wales | 176 | The findings point to a number of elements that would be essential to the delivery of flexible courts if they were to be rolled out more widely:<br>• Dedicated partnership working, with cohesive planning and strong communication within and across agencies.<br>• The ability for models to develop over time and take account of local needs.<br>• Case volumes sufficient to justify implementation of extended hours.<br>• The targeting of the most appropriate cases for flexible schemes.<br>• Access to information, including paperwork, IT and support systems.<br>• Adequate supply of staff and equitable incentives for participating personnel. | 9 |

# 8.4 REA4 Characteristics of included studies

Characteristics of included evidence reviews (N=5; listed alphabetically to facilitate identification)

**Table 15. Characteristics of included evidence reviews (REA4)**

| Reference (first author and year) | Review type | Search sources stated | Search terms reported | Quality appraisal | Number of papers | Key implications | Quality score (max. 16) |
|---|---|---|---|---|---|---|---|
| Farrell 2015 | Literature review | No | No | No | 45 | Telephone services provide less favourable outcomes for non-English speakers, those with lower levels of education, unemployed clients, clients with complex or time-consuming legal problems, clients with learning disabilities, mental health conditions or limited communication skills. | 2 |
| Greacen 2019 | Critical review | No | No | No | Not stated | Design websites to be mobile first, allow customers to upload documents, enable people to appear by video if they wish, feature with a map to show the location of a courtroom. | 2 |
| Hynes 2021 | Critical review | No | No | No | Not stated | If HMCTS reforms are to maintain or improve access to justice, then Digital Support must fulfil its role, not simply as a safety net for the 16% of the UK population who are unable to participate in a digital society', but as a vital backbone to the whole reform agenda. | 6 |
| Morison 2019 | Critical review | No | No | No | Not stated | ODR is important to handle increasing numbers of cases, if cases are to be handled with AI these need to be very sophisticated. Many people believe that decision making will one day be replaced by AI, but it is argued some cases are so complex they need human decision making. | 5 |

| Reference (first author and year) | Review type | Search sources stated | Search terms reported | Quality appraisal | Number of papers | Key implications | Quality score (max. 16) |
|---|---|---|---|---|---|---|---|
| White 2021 | Scoping review | Yes | Yes | Yes | 54 | Recommend: using intermediaries, augmentative and alternative communication such as braille, frequent breaks, offer to appear via video link. Experts to advise on individual needs. | 12 |

Characteristics of included primary research studies (N=3; listed alphabetically to facilitate identification)

**Table 16. Characteristics of included primary research (REA4)**

| Reference (first author and year) | Data collection methods | Setting | Country | Sample | Key findings | Quality score (max. 14) |
|---|---|---|---|---|---|---|
| Citizens Advice | Survey | Voluntary sector | UK | 3000 | Face-to-face clients are twice as likely to lack basic digital skills as people in the UK showing that our clients are those most in need of digital support to avoid exclusion, they are more likely to lack internet access, less likely to have each digital skill, internet access and digital skills are interrelated, clients over 65 were less likely to have access to the internet. | 10 |
| Good things Foundation | Mixed methods | Court services | England | 32 interviews with service users and desk review | Need good relationships with relevant local organisations, effective triage, case management processes, expertise in digital forms and staff who are able to use ICT. Going forwards, need end-to-end digital support so that people are supported far beyond application stages. | 9 |

| Reference (first author and year) | Data collection methods | Setting | Country | Sample | Key findings | Quality score (max. 14) |
|---|---|---|---|---|---|---|
| Rhinesmith 2022 | Qualitative – interviews and observations | Community development | US | Not stated | 1. Bringing national policymakers and advocates together with community leaders is powerful and transformative.<br>2. Digital inequality is a social, not a technological problem.<br>3. Community leaders need access to a shared platform and to each other to create change. | 9 |