

This is a repository copy of *Potential value of systematic reviews of qualitative evidence in informing user-centred health and social care: findings from a descriptive overview*.

White Rose Research Online URL for this paper:

<https://eprints.whiterose.ac.uk/id/eprint/133760/>

Version: Accepted Version

---

**Article:**

Dalton, Jane orcid.org/0000-0001-8939-2925, Booth, Andrew, Noyes, Jane et al. (1 more author) (2017) Potential value of systematic reviews of qualitative evidence in informing user-centred health and social care: findings from a descriptive overview. *Journal of Clinical Epidemiology*. pp. 1-33. ISSN: 0895-4356

<https://doi.org/10.1016/j.jclinepi.2017.04.020>

---

**Reuse**

This article is distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs (CC BY-NC-ND) licence. This licence only allows you to download this work and share it with others as long as you credit the authors, but you can't change the article in any way or use it commercially. More information and the full terms of the licence here: <https://creativecommons.org/licenses/>

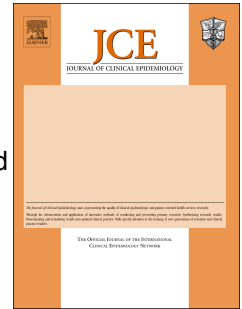
**Takedown**

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing [eprints@whiterose.ac.uk](mailto:eprints@whiterose.ac.uk) including the URL of the record and the reason for the withdrawal request.

# Accepted Manuscript

Potential value of systematic reviews of qualitative evidence in informing user-centred health and social care: findings from a descriptive overview

Jane Dalton, Andrew Booth, Jane Noyes, Amanda J. Sowden



PII: S0895-4356(16)30303-1

DOI: [10.1016/j.jclinepi.2017.04.020](https://doi.org/10.1016/j.jclinepi.2017.04.020)

Reference: JCE 9385

To appear in: *Journal of Clinical Epidemiology*

Received Date: 2 August 2016

Revised Date: 16 March 2017

Accepted Date: 18 April 2017

Please cite this article as: Dalton J, Booth A, Noyes J, Sowden AJ, Potential value of systematic reviews of qualitative evidence in informing user-centred health and social care: findings from a descriptive overview, *Journal of Clinical Epidemiology* (2017), doi: 10.1016/j.jclinepi.2017.04.020.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

# Potential value of systematic reviews of qualitative evidence in informing user-centred health and social care: findings from a descriptive overview

**Jane Dalton<sup>1</sup>, Andrew Booth<sup>2</sup>, Jane Noyes<sup>3</sup>, Amanda J Sowden<sup>1</sup>**

<sup>1</sup>Centre for Reviews and Dissemination, University of York, York, YO10 5DD, United Kingdom. [jane.dalton@york.ac.uk](mailto:jane.dalton@york.ac.uk); [amanda.sowden@york.ac.uk](mailto:amanda.sowden@york.ac.uk)

<sup>2</sup>School of Health and Related Research (SchHARR), University of Sheffield, Regent Court, 30 Regent Street, SHEFFIELD S1 4DA, United Kingdom. [A.Booth@sheffield.ac.uk](mailto:A.Booth@sheffield.ac.uk)

<sup>3</sup>School of Social Sciences, University of Bangor, Bangor, Gwynedd LL57 2DG, United Kingdom [jane.noyes@bangor.ac.uk](mailto:jane.noyes@bangor.ac.uk)

Corresponding author:

Jane Dalton, Centre for Reviews and Dissemination, University of York, York, YO10 5DD, United Kingdom. Telephone: (0044) 1904 321056  
[jane.dalton@york.ac.uk](mailto:jane.dalton@york.ac.uk)

**Abstract**

**Objective:** Systematic reviews of quantitative evidence are well-established in health and social care. Systematic reviews of qualitative evidence are increasingly available, but volume, topics covered, methods used and reporting quality are largely unknown. We provide a descriptive overview of systematic reviews of qualitative evidence assessing health and social care interventions included on the Database of Abstracts of Reviews of Effects (DARE).

**Study design and setting:** We searched DARE for reviews published between 1<sup>st</sup> January 2009 and 31st December 2014. We extracted data on review content and methods, summarised narratively and explored patterns over time.

**Results:** We identified 145 systematic reviews conducted worldwide (64 in the UK). Interventions varied, but largely covered treatment or service delivery in community and hospital settings. There were no discernible patterns over time. Critical appraisal of primary studies was conducted routinely. Most reviews were poorly reported.

**Conclusion:** Potential exists to use systematic reviews of qualitative evidence when driving forward user-centred health and social care. We identify where more research is needed and propose ways to improve review methodology and reporting. Word count: 175.

Running title: Qualitative evidence syntheses of health and social care

interventions: descriptive overview

**Keywords: evidence synthesis; qualitative research; systematic review; overview**

What is new?

Key findings

- We describe the focus and methods used in systematic reviews of qualitative evidence published on DARE over a five year period. Reviews were conducted worldwide, with 44% originating in the UK. Interventions were diverse. There were no discernible patterns over time. Quality assessment of primary studies was conducted routinely but reviews were generally poorly reported.

What this adds to what is known

- This is the first overview of systematic reviews of qualitative evidence. The number of systematic reviews of qualitative evidence in health and social care is growing and they cover a wide topic range. Methodological quality is improving, but there is a need for standardised use of quality assessment tools and better reporting.

What is the implication and what should change now?

- Potential exists to use systematic reviews of qualitative evidence to inform user-centred health and social care.
- Future systematic reviews might usefully focus on community-based and service delivery interventions as well as residential and hospice settings.
- Existing and emerging reporting guidelines should help to address reporting deficits identified in our selection of reviews.

## 1. Introduction

Systematic reviews of effectiveness are well-established in health and social care. They aim to identify, evaluate, and synthesise the findings of all relevant studies (typically quantitative) relating to a particular question using methods that are transparent and objective, in order to minimize bias. Increasingly they are used to inform health care decision-making.

The contribution of systematic reviews of qualitative evidence (also known as qualitative evidence syntheses) to decision-making is also increasingly recognised. The research questions addressed by qualitative evidence synthesis often relate to people's experiences of a health condition, receiving a health or social care intervention, or factors that enhance or hinder the implementation of an intervention. They are particularly helpful in exploring peoples' experiences of interventions, and are increasingly being used for this purpose [1]. When carried out alongside reviews of effectiveness, they help to explore variations in outcomes and can increase understanding of why interventions work or do not work[2]. Integrated reviews combining qualitative and quantitative evidence are also used for this purpose.

The number of qualitative evidence syntheses in health and social care has grown steadily over recent years, with a significant uplift occurring between 2001 and 2010[3]. Deficiencies in the reporting and conduct of such reviews have been highlighted and discussed[4-6].

At the end of 2013, the international Cochrane Collaboration achieved an important milestone in publishing its first systematic review of qualitative research[7]. This qualitative evidence synthesis was published separately from a companion effectiveness review on the use of lay health workers in primary and community healthcare for maternal and child health[1, 8]. This represented the culmination of sustained methodological work within the Cochrane

Collaboration[9], reflected in a chapter in the Cochrane Handbook[10] and methods innovation funding to produce supplementary guidance[11].

A search of the Cochrane Database of Systematic Reviews in December 2015, using the search strategy employed to populate and update the Cochrane Qualitative and Implementation Methods Group study register, revealed a total of 18 relevant records (6 reviews and 12 protocols) (see Web Appendix A). The titles were registered across 11 Cochrane Review Groups with the Effective Practice and Organisation of Care (5 titles), Consumers and Communication (3) and Public Health (2) Review Groups recording more than one title each. Six of the identified titles included the designation ‘qualitative evidence synthesis’ and two specified that they were ‘mixed methods reviews’. The remainder appeared to use qualitative data to enhance an effectiveness review or did not specify their design.

Although increasing in volume, the number of qualitative evidence syntheses available, the topics covered, the methods used and the quality of reporting is largely unknown. To fill this gap in knowledge we identified, quantified, and described systematic reviews of qualitative evidence focusing on health and social care interventions published over a six-year period (2009 to 2014). We assessed patterns over time in relation to selected review characteristics, determined whether reviews explicitly stated that they had followed reporting guidelines, and identified gaps in the evidence base.

## **2. Methods**

### **2.1 Search Strategy**

To identify reviews of qualitative evidence for this overview, we searched the Database of Abstracts of Reviews of Effects (DARE) produced by the Centre for Reviews and Dissemination (CRD), University of York. DARE includes

systematic reviews from around the world that focus on the effects of health and social care interventions, including the delivery and organisation of services. The DARE process includes screening, selection and quality appraisal according to pre-determined criteria using a robust and transparent process involving two independent reviewers with disagreements resolved by consensus. Full details of the DARE process are available[12] including the search strategies developed to identify systematic reviews for inclusion on DARE (Web Appendix B).

As producers of DARE we were able to use the internal tagging system to identify reviews of qualitative evidence on the database (see Web Appendix B). Use of this tagging system cannot be replicated from outside CRD, University of York. We began adding these reviews to DARE on the 1<sup>st</sup> January 2009 and stopped on the 31<sup>st</sup> December 2014 (due to non-continuation of funding). Results were loaded into Endnote X7.

## 2.2 Inclusion criteria

We included systematic reviews of qualitative evidence. As UK-based authors we were particularly interested in the profile of and trends within systematic reviews conducted in the UK.

## 2.3 Data extraction/Synthesis

One reviewer extracted the data into an Excel spreadsheet and a second reviewer checked a random sample. We collected data on country of origin, setting, population, interventions and outcomes, along with selected methodological characteristics of the review including search, quality assessment, approach to synthesis, and evidence of adherence to reporting guidelines. We summarised the data narratively and explored patterns over time.



### 3. Results

We included 145 reviews. Web Appendix C summarises the 145 included reviews by publication year, country of origin, intervention type (treatment, diagnostic, prevention, service delivery), setting and by patient, family/carer or health professional perspective. All bibliographic references for the included reviews are listed in Web Appendix D.

The number of reviews by publication year is shown in Fig.1

Fig. 1. Systematic reviews of qualitative evidence accepted for DARE 2009-2014

#### 3.1 Nature of the evidence

##### 3.1.1 *Country of origin*

Sixty-four reviews originated in the United Kingdom. Fifteen reviews originated in Australia; fourteen from European countries other than the UK (including Scandinavia); eight in Canada; six in the United States; two in Brazil; two in New Zealand; one in Singapore; and one in Hong Kong. Thirty-one reviews were collectively authored across more than one country. It was not possible to determine the country of origin for one review.

The primary studies included in the reviews were conducted worldwide, though there was a concentration in northern Europe, North America, and Australasia. Approximately 80% of reviews contained studies across multiple countries and 84% of reviews included at least one primary study from the UK. It was not possible to determine the location of primary studies in nineteen reviews. Six reviews included primary studies originating from one country only and in all of these reviews except one, country was specified as part of the inclusion criteria. Authors of all six single-country reviews were from the country in which the

included studies were conducted. Where reported, the included studies were published between 1969 and 2014.

### *3.1.2 Settings*

Fig. 2. Systematic reviews by setting and publication year

As illustrated in Fig. 2 reviews were split almost equally between community-based care (including primary care) (64 reviews) and hospital-based care (including inpatient, outpatient and acute care) (71 reviews). Many reviews covered more than one setting. A small number of reviews focused on residential care (five reviews). Others (not shown in Fig 2.) focused on hospice care (one review); the workplace (two reviews); and prisons (two reviews). Twenty-five reviews failed to provide sufficient detail to determine the setting.

### *3.1.3 Types of intervention*

One hundred and thirteen reviews focused on treatment based interventions. Service delivery and related initiatives were the focus in 42 reviews. Preventive care was covered in 12 reviews and diagnostic/screening interventions were the focus in 11 reviews. The included reviews covered a vast range of specific interventions with no discernible patterns. Some reviews covered more than one intervention type.

We compared the intervention focus in our sample of systematic reviews of qualitative evidence with systematic reviews of effectiveness (quantitative studies) published between 2009 and 2014 and included on DARE. The focus on treatment based interventions is similar but reviews of quantitative studies were notably less focused on service delivery (Fig.3.).

Fig. 3. Comparing systematic reviews of qualitative and quantitative evidence

TR= treatment; DG=diagnostic; SD=service delivery; PR=prevention

#### *3.1.4 Populations, perspectives, phenomena and outcomes measured*

Different perspectives were explored. Where reported, single perspectives were adopted in over half of the reviews, with 46% (66 reviews) focusing on the experiences of patients; 12% (18 reviews) on the perspectives of health professionals and 4% (6 reviews) on family members. Other reviews (23%) adopted a dual perspective, for example patients and health professionals (12 reviews); patient and family members or caregivers (8 reviews); family members and health professionals (3 reviews). Fourteen reviews (10%) combined more than two perspectives. Six reviews failed to clearly define their population and where this was the case, we applied the term ‘public’ as the most appropriate descriptor.

Outcomes typically related to experiences of health or social care. Terms used to describe “experience” varied and included attitudes, views, beliefs, perceptions, perspectives, barriers and facilitators. Outcome data were generated through interviews, focus groups, questionnaires with open ended questions (where this was part of a mixed methods review), observation techniques, diaries, drawings, fieldwork, and case notes.

### 3.2 Review methodology

#### *3.2.1 Search dates and language restrictions*

Methods for locating qualitative research have improved over time and guidance on systematic searching is now available[13]. It is generally accepted that some form of sampling can, if appropriate, be applied to the search and selection of studies for qualitative evidence syntheses. The debate remains as to if and when sampling should be comprehensive or purposive[14] and how sampling criteria are applied to address the research question. The latest

priorities for the search methodology research agenda have recently been published[15].

Qualitative research is often found in the grey literature, via organisational websites, and through consultation with topic experts[3]. It is important that the rationale for decisions about searching is clearly reported, including the justification for approach, description of the data sources and inclusion of the search strategy[3].

In our sample of reviews, search dates ranged from 1806 to 2014. Several reviews reported search dates beginning in the early 1800's and from early to mid-1900's onwards. Eighty-two reviews reported both start and end dates (seven of these included start dates from database inception); 51 reviews provided the end date only and one review stated only the start date. Four reviews had no date limits and it was not possible to determine the search dates in eight reviews.

If the aim of the review is to identify all relevant evidence, then in principle there should be no language restrictions[16]. However, this approach may increase the yield of studies to an extent that data extraction and synthesis of the evidence is beyond the resources available. There is little empirical evidence on the impact of language or publication bias for qualitative evidence syntheses.

Fig. 4. Systematic reviews of qualitative evidence: number of languages included

Fifty-six per cent (82) of reviews applied English language only restrictions to the search. From 2012 onwards studies published in languages other than English became more prominent within reviews, most notably French (five reviews), German (six reviews), Spanish (seven reviews), Portuguese (two reviews), and Norwegian (two reviews). In 13 reviews there were no language

restrictions and twenty-eight reviews failed to report whether language restrictions were applied (Fig.4.).

### 3.2.2 *Quality appraisal*

Quality appraisal of qualitative studies is still debated. For example, those who reject the idea propose that qualitative research cannot be meaningfully appraised[6]. Others have acknowledged the need to assess whether research is “good enough” to be included in an evidence synthesis, or to guide practice[17, 18]. In 2003 a methodological review of existing quality standards in qualitative evaluation was published, which included a critique of 29 quality assessment frameworks[19]. This review led to the development of a further framework[20]. The focus then turned to the importance of clear reporting in syntheses of qualitative research[3-6], specifically the need to justify the rationale for a chosen approach to quality appraisal, description of the tools used, how the appraisal was carried out (including number of reviewers), and presentation of the quality appraisal findings including the relative contribution or subsequent exclusion of studies[3]. Current approaches to quality appraisal place an emphasis on identifying methodological limitations and transparency in terms of the relative contribution and quality of studies; i.e., on taking steps to assess the level of confidence in review findings to help inform decisions and shape policies[21].

Fig. 5. Systematic reviews of qualitative evidence: Quality assessment tools

Quality assessment of primary studies was reported in most reviews in our sample (92%; 133 reviews). Some reviews used more than one quality assessment tool and 30 references were made to different tools. The most frequently reported tools were the Critical Appraisal Skills Programme (CASP) checklist[22] (49 reviews), and the Joanna Briggs Institute Qualitative Review

and Assessment Instrument (JBI QARI)[23] (18 reviews). Used to a lesser extent were criteria provided by the National Institute for Health and Care Excellence (NICE)[24-26](4 reviews), Walsh & Downe[27](4 reviews), and Dixon-Woods[28-30] (7 reviews) (Fig.5.). Of the most frequently used tools, only CASP was listed in the review of existing frameworks published in 2003[19]. In six reviews, it was clear that quality assessment had been carried out, but the authors failed to specify the tool used. Four reviews reported that quality assessment was not carried out and in eight reviews it was not possible to determine whether studies had been quality assessed.

In 37 reviews using ‘other’ assessment approaches (i.e., those other than the five approaches already mentioned above), nine reviews used tools that had been adapted or combined by the review authors before use. In 28 reviews, single tools formed the basis for assessment. Web Appendix E summarises the 37 reviews showing 33 sets of criteria used as the basis for quality assessment. The table illustrates that six of the approaches (or versions of these by the same authors) were listed among the 29 quality assessment frameworks reviewed by Spencer et al[19]. Two reviews used the actual framework developed by Spencer et al[20] arising from their own methodological review of existing frameworks[19]. All bibliographic references for the included reviews are listed in Web Appendix D.

In those reviews where quality assessment was carried out, 18% (26 reviews) of authors used the findings to determine whether studies were included in the review or the synthesis. Of these, eight reviews used JBI QARI and six reviews used CASP. Where reported, tools were used to exclude studies prior to synthesis but the specific conditions for exclusion were inconsistent across the tools and the reviews.

### *3.2.3 Methods of synthesis*

Guidance [31] on selecting methods of qualitative evidence synthesis issued by the Cochrane Collaboration Qualitative Methods Group in 2011 suggested that methods were still evolving but choice should be guided by:

- the type of research question (exploratory or focused)
- the nature of the included evidence
- the extent to which findings are aggregated or interpreted
- the expertise and resources available to the research team.

To date, Cochrane reviews of qualitative evidence (Web Appendix A) have used thematic synthesis (8 reviews), framework synthesis (5 reviews), narrative summary (1 review) and narrative synthesis (1 review) as well as more quantitative approaches including qualitative comparative analysis (1 review) and content analysis (1 review).

Others have reported that qualitative evidence synthesis methods rarely fall into one category[32]. Amalgamation of methods is common, and there is confusion as to how the various methods compare and also in the terms used to describe the different methods[3]. For example, a recent review of 32 studies found that the term ‘meta-ethnography’ was applied and reported in many different ways[4].

In our selection of reviews, terminology used to describe the approach to synthesis varied, with some reviews using more than one term. Meta-ethnography, meta-synthesis, and thematic synthesis/thematic analysis (the latter terms potentially include a range of different approaches with shared principles) were the most frequently reported, and the popularity of these terms appeared to increase from 2011. It was noticeable amongst the other terms used, that many appeared to be variants of the main three methods (for example, meta-study, meta-summary, or combinations (for example, thematic meta-ethnography and thematic meta-synthesis). Many other terms were used to



describe the approaches to analysis and/or synthesis, such as content analysis, constant comparative approach, framework synthesis, interpretive description, narrative synthesis, and more.

### *3.2.4 Quality of reporting in reviews*

Calls have been made for standardisation of reporting in qualitative research[33-35]. Reporting standards exist for related types of research; for example, the PRISMA statement[36] for systematic reviews of effects; the RAMESES publication standard for realist synthesis and meta-narrative reviews evaluating complex interventions[37, 38]. A new standard (eMERGE) is being developed for reporting meta-ethnographies[39].

A framework for reporting the synthesis of qualitative studies was developed in 2012: ENTREQ (Enhancing transparency in reporting the synthesis of qualitative research)[3]. It comprises 21 items grouped into five domains (introduction, methods and methodology, literature search and selection, appraisal, and synthesis of findings). ENTREQ encourages researchers to improve both the conduct and reporting of syntheses of qualitative studies and clarifies some of the overlapping concepts and terms used. ENTREQ is best suited for reporting less complicated methods that do not entail highly complex synthesis processes.

We assessed whether reviews included in our summary referred to the use of any reporting tool or guideline. PRISMA was reported in seven reviews and four reviews published between 2013 and 2014 reported that ENTREQ guidelines had been followed. Examining the reviews that did not use a reporting guideline revealed that whilst some aspects of reporting were good (e.g., all reviews gave a clear description of the intervention), other aspects were poor. For example, some reviews failed to describe the setting in which the interventions were delivered, others did not clearly define their population of



interest (i.e., we defined as “public”) and some did not report the location of primary studies.

#### **4. Discussion**

##### 4.1 Nature of the evidence

We identified a steady increase in the number of systematic reviews of qualitative studies published between 2009 and 2014 and included on DARE. This is similar to what has been reported for the years 2001 to 2010[3]. The reason for this upward trend is unclear, but it might reflect the increasing importance given to patient experiences of health and social care, which are best explored using qualitative methods. In the context of the United Kingdom NHS and social services, a greater voice for patients is called for in the Health and Social Care Act[40]. A key objective in the Government’s mandate to NHS England (2014-2015)[41] is to measure and understand how people feel about the care they receive with the “Friends and Family Test”[42] providing opportunities for patients and families to give feedback on the services received.

Given the emphasis in the UK on patient experiences of health and social care, it is not surprising that 44% of the systematic reviews were carried out by UK-based authors with consistency across the six- year timeframe. Comparatively few reviews originated in the United States, perhaps reflecting a greater emphasis on the use of quantitative research methods. Authorship of a single review often spanned several countries, as is the case with reviews of effects (quantitative studies).

Reviews of interventions in the community setting appeared to grow rapidly over time. Findings from these reviews are likely to be useful in understanding patient experience of care in the context of policy, within the UK and other countries, that seeks to transform health care services out of acute care and into the community[43]. We found few reviews focusing on residential or hospice

care. Current UK policy to improve standards in care homes[44] and the renewed focus on good end of life care[43, 45] may drive further synthesis activities in these areas.

Although a number of included reviews focused on delivery of care, the strong policy focus in the UK on improving standards following the Francis enquiry into serious failings in care at the Mid Staffordshire NHS Foundation Trust [46] and other present directives for health service system change[43, 47], suggests that more reviews addressing delivery of care may be warranted.

Overall, many different interventions were studied and the only discernible patterns over time or by country of review authors were those relating to new measures or novel interventions, such as Patient Reported Outcome Measures (PROMs) in the UK, influences on shared-decision making, family-centred models of hospital care, computer-based nursing records and mindfulness-based interventions. Reviews of these interventions featured towards the latter part of the six year timescale, possibly linked to timing of implementation in practice.

A variety of terms were used to describe outcomes relating to “experiences” with no discernible patterns over time. More standardised use of terms to describe service user experience may be warranted. Not all reviews provided sufficient detail to determine the setting and this should be a feature of future reporting.

#### 4.2 Review methodology

Search dates were well reported in most of the reviews, but the rationale for these was rarely given. It is unclear why many reviews have search dates going back to the early 1800's, or from early to mid-1900. Given that context is often an important feature of qualitative evidence syntheses, not all available primary studies may be temporally relevant. Therefore, choice of search dates should

typically be linked to when a particular intervention or policy was introduced [48].

Over half of the reviews had English language only restrictions and there is a theoretical justification for restricting inclusion to English language to minimise the potential for translational bias (misinterpretation of the raw data and the context in which it was generated). Resource limitations may also necessitate language restrictions. Our analysis shows that since 2012 reviews have tended to include non-English language as well as English language studies. The reason for this is unclear and warrants further investigation. Nearly 20% of included reviews did not state whether language restrictions were applied and it is unclear whether this reflects an absence of studies in languages other than English, non-use of other than English database sources or whether non-English language studies were excluded. This aspect should be clearly reported in future reviews. The number of identified (but not included) non-English language papers should be documented in future reviews[2].

Critical appraisal now seems to be common within systematic reviews of qualitative evidence[5]. Therefore, the debate appears to have shifted from *whether* quality assessment should be performed, to *how* it should be carried out and used within the synthesis[49]. There seems little agreement on standard criteria to assess individual study quality and selection may be a matter of choice according to context of the review and the perspective and expertise of the reviewer[18, 34].

Most of the included reviews reported carrying out some form of quality assessment and, where quality assessment tools were used, they were clearly specified in most cases. Many different tools were applied, including some that were developed by review authors for a specific purpose. Six approaches to quality assessment in our included reviews were identified in the 29 frameworks

reviewed in 2003[19]. A further 30 unique references were found in our analysis, indicating substantial growth, and a lack of consensus, in the use of other criteria or adapted tools. More standardised use of quality assessment tools may be warranted.

Study quality and identification of methodological limitations can be difficult to assess because studies are often poorly reported and not necessarily poor quality. The findings from studies that are poorly reported[17] often contribute less to the overall synthesis[50]. We found that only 18% of reviews excluded studies from the review or the synthesis on the basis of quality. This indicates that filtering for quality was not a prime consideration in the reviews we analysed over the six year time period.

A variety of methods and approaches to the synthesis of qualitative research have been reported in our selection of reviews, using many different terms. Rarely was the rationale reported for decisions and choices in relation to these. It was often unclear as to whether the chosen approach achieved what it set out to do, or whether the process reflected accurately any guidance set out in the methodological literature. These concerns are echoed in an article by France et al [4]. Others have highlighted the need for pragmatic guidance on the synthesis of evidence from different study designs including qualitative studies [51, 52] and a call for international collaboration to clarify emerging approaches to synthesis has been made[53]. Future systematic reviews that include qualitative evidence would benefit from clear reporting of rationale for choice of approaches and synthesis methods.

Despite repeated calls for improved reporting of reviews of qualitative studies, we found that fewer than 8% of reviews published and included on DARE between 2009 and 2014 followed any reporting guideline. However, given that ENTREQ has only been available since 2012, use of this guideline was not an

option up until that date. Future reviews would benefit from improved reporting and adherence to existing and emerging reporting standards.

#### 4.3 Funding sources in UK reviews

Thirty (47%) of the 64 reviews conducted by UK authors were supported by external research funding perhaps reflecting the growing interest in understanding patient experiences of health and social care. Fourteen reviews were funded by the National Institute for Health Research (NIHR); three reviews by the National Institute for Health and Care Excellence (NICE); three reviews by Hospital Foundation Trusts; and ten reviews were funded by other organisations, including charities and medical condition-specific groups. Some reviews received more than one source of funding.

#### 4.4 Strengths and limitations of our approach

We provide a descriptive overview of systematic reviews of qualitative evidence published between 2009 and 2014 identified via DARE. We highlight where evidence is currently available and where more research may be needed. Poor reporting of many systematic reviews limits the detail we could provide.

The use of DARE to identify reviews brings with it several strengths. DARE is a repository of quality-assessed systematic reviews of interventions relating to health and social care. The broad search strategy used to identify reviews for inclusion on DARE was developed originally to capture all systematic reviews of interventions and the search terms allow ample opportunity to retrieve systematic reviews of qualitative evidence. DARE criteria means that the included systematic reviews have met a pre-specified quality standard and all reviews were selected for inclusion independently by two reviewers[12]. DARE has been used previously to assist with analysing methods or reporting quality

in systematic reviews of (for example) network meta-analyses[54], adverse events[55], and diagnostic tests[56].

We acknowledge that DARE is a distinct sample of systematic reviews of qualitative evidence and may not represent fully the wider collection available in other sources, such as MEDLINE. We began adding this type of review to DARE in January 2009 and continued up until December 2014 (after which the database ceased to be updated). Therefore, this is not a comprehensive overview of systematic reviews of qualitative evidence, but a reliable snapshot of those published between 2009 and 2014 and included on DARE.

Whilst DARE offers international coverage of systematic reviews, as UK-based review authors we were particularly interested in the profile of, and trends within, UK-based systematic reviews of qualitative evidence. The number of UK outputs within our selection of reviews suggests that the interaction between health and social care policy, research priorities and research synthesis activity in the UK may offer an informative exemplar for other countries that are pursuing patient focused health systems. Indeed, many of the topics, characteristics, and methodological issues found in UK-based reviews were also seen in reviews produced by authors in the USA, Canada, other European countries, and (specifically) those from the Joanna Briggs Institute in Australia.

## **5. Conclusions/Implications**

The number of systematic reviews of qualitative evidence in health and social care continues to grow across a wide topic range. Future reviews might usefully focus on community-based and service delivery interventions as well as residential and hospice settings to fill identified gaps in the evidence base. Methodological quality is improving, but we identified a need for standardised use of quality assessment tools and better reporting. Existing and emerging reporting guidelines should help to address reporting deficits. Ongoing

developments which should provide further refinements include methods for cross-language interpretative synthesis and integration of qualitative syntheses with corresponding reviews of intervention effectiveness.

### **Authors' contributions**

**Jane Dalton (Research Fellow, CRD)** selected reviews for inclusion, carried out the data extraction, analysis, and write up of the report.

**Andrew Booth (Reader in Evidence Based Information Practice, ScHARR, University of Sheffield)** and **Jane Noyes (Professor of Health and Social Services Research and Child Health, University of Bangor)** commented on final drafts of the report and provided expert opinion on review methodology.

**Amanda Sowden (Deputy Director, CRD)** contributed to all stages of the review, commented on drafts of the report and took overall responsibility for the project.



## Acknowledgements

We thank Gill Norman (former Research Fellow, CRD) for her assistance at the initial stages of data extraction and mapping; Kate-Lewis Light (former Information Specialist, CRD) and Melissa Harden (Information Specialist, CRD) for searching, retrieval of studies and reference management. We also thank Claire Khouja for producing the graphics included in this report.

## References

- [1] Glenton C, Colvin CJ, Carlsen B, Swartz A, Lewin S, Noyes J, et al. Barriers and facilitators to the implementation of lay health worker programmes to improve access to maternal and child health: qualitative evidence synthesis. *Cochrane Database Syst Rev* 2013;Issue 10:Art. No.: CD010414. DOI: 10.1002/14651858.CD010414.pub2.
- [2] Centre for Reviews and Dissemination. *Systematic Reviews: CRD's guidance for undertaking systematic reviews in health care*. York: Centre for Reviews and Dissemination, University of York; 2009.
- [3] Tong A, Flemming K, McInnes E, Oliver S, Craig J. Enhancing transparency in reporting the synthesis of qualitative research: ENTREQ. *BMC Med Res Methodol* 2012;12:181.
- [4] France EF, Ring N, Thomas R, Noyes J, Maxwell M, Jepson R. A methodological systematic review of what's wrong with meta-ethnography reporting. *BMC Med Res Methodol* 2014;14:119.
- [5] Hannes K, Macaitis K. A move to more systematic and transparent approaches in qualitative evidence synthesis: update on a review of published papers. *Qualitative Research* 2012;12:402-42.
- [6] Dixon-Woods M, Booth A, Sutton AJ. Synthesizing qualitative research: a review of published reports. *Qualitative Research* 2007;7:375-422.
- [7] Gulmezoglu AM, Chandler J, Shepperd S, Pantoja T. Reviews of qualitative evidence: a new milestone for Cochrane [editorial]. *Cochrane Database of Systematic Reviews* 2013;11:10.1002/14651858.ED000073.
- [8] Lewin S, Munabi-Babigumira S, Glenton C, Daniels K, Bosch-Capblanch X, van Wyk BE, et al. Lay health workers in primary and community health care for maternal and child health and the management of infectious diseases. *Cochrane Database Syst Rev* 2010;Issue 3:Art. No.: CD004015. DOI: 10.1002/14651858.CD004015.pub3.
- [9] Hannes K, Booth A, Harris J, Noyes J. Celebrating methodological challenges and changes: reflecting on the emergence and importance of the role of qualitative evidence in Cochrane reviews. *Syst Rev* 2013;2:84.
- [10] Noyes J, Popay J, Pearson A, Hannes K, Booth A. Chapter 20: Qualitative research and Cochrane reviews. In: Higgins JPT, Green S, editors. *Cochrane Handbook for Systematic Reviews of Interventions* Version 5.10 (updated March 2011): The Cochrane Collaboration; 2011.
- [11] Cochrane Qualitative and Implementation Methods Group. Supplemental handbook guidance. <http://qim.cochrane.org/supplemental-handbook-guidance>; 2011 [accessed 23.12.15].
- [12] Chambers D, Wade R, Wilson P. *Training manual for selecting reviews and writing abstracts for the Database of Abstracts of Reviews of Effects (DARE)*. York: Centre for Reviews and Dissemination, University of York; 2012.



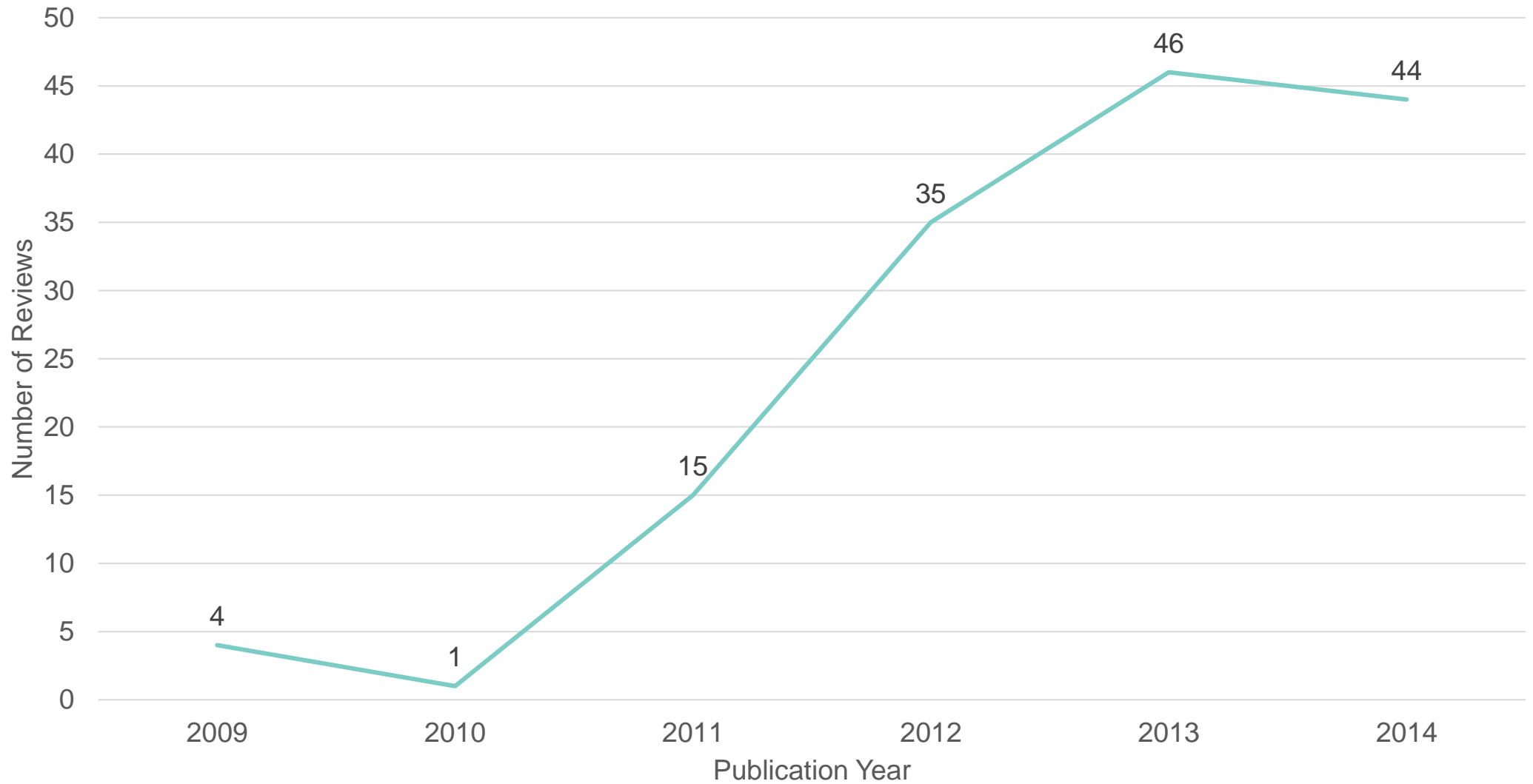
- [13] Booth A. "Brimful of STARLITE": toward standards for reporting literature searches. *J Med Libr Assoc* 2006;94:421-9.
- [14] Manning N. Chapter 8 - Conclusion. In: Hannes K, Lockwood C, editors. *Synthesizing qualitative research: choosing the right approach*. London: Wiley-Blackwell; 2011, p. 161-72.
- [15] Booth A. Searching for qualitative research for inclusion in systematic reviews: a structured methodological review. *Syst Rev* 2016;5:74.
- [16] Centre for Reviews and Dissemination. *Systematic reviews: CRD's guidance for undertaking reviews in health care*. York: Centre for Reviews and Dissemination, University of York; 2009.
- [17] Campbell R, Pound P, Pope C, Britten N, Pill R, Morgan M, et al. Evaluating meta-ethnography: a synthesis of qualitative research on lay experiences of diabetes and diabetes care. *Soc Sci Med* 2003;56:671-84.
- [18] Toye F, Seers K, Allcock N, Briggs M, Carr E, Andrews J, et al. 'Trying to pin down jelly' - exploring intuitive processes in quality assessment for meta-ethnography. *BMC Med Res Methodol* 2013;13:46.
- [19] Spencer L, Ritchie J, Lewis J, Dillon L. *Quality in qualitative evaluation: a framework for assessing research evidence*. London: Government Chief Social Researcher's Office; 2003. p. 1-167.
- [20] Spencer L, Ritchie J, Lewis J, Dillon L, National Centre for Social Research. *Quality in qualitative evaluation: a framework for assessing research evidence*. London: Government Chief Social Researcher's Office; 2003.
- [21] Lewin S, Glenton C, Munthe-Kaas H, Carlsen B, Colvin CJ, Gulmezoglu M, et al. Using qualitative evidence in decision making for health and social interventions: an approach to assess confidence in findings from qualitative evidence syntheses (GRADE-CERQual). *PLoS Med* 2015;12:e1001895.
- [22] CASP. *Qualitative critical appraisal tool*. 2012 [accessed 12th December 2012].
- [23] The Joanna Briggs Institute. *Joanna Briggs Institute reviewers' manual*. Adelaide: The Joanna Briggs Institute; 2008.
- [24] National Institute for Health and Clinical Excellence. *Methods for development of NICE public health guidance*. London: National Institute for Health and Clinical Excellence; 2006.
- [25] National Institute for Health and Clinical Excellence. *Methods for the Development of NICE Public Health Guidance*, 2nd edn. London, UK: National Institute for Health and Clinical Excellence; 2009.
- [26] NICE. *Methodology checklist: qualitative studies.*; 2007 [accessed
- [27] Walsh D, Downe S. Appraising the quality of qualitative research. *Midwifery* 2006;22:108-19.
- [28] Dixon-Woods M, Shaw RL, Agarwal S, Smith JA. The problem of appraising qualitative research. *Qual Saf Health Care* 2004;13:223-5.
- [29] Dixon-Woods M, Sutton A, Shaw R, Miller T, Smith J, Young B, et al. Appraising qualitative research for inclusion in systematic reviews: a quantitative and qualitative comparison of three methods. *J Health Serv Res Policy* 2007;12:42-7.
- [30] Dixon-Woods M, Booth A, Sutton AJ. *Synthesising qualitative research: a review of published reports*. *Qualitative Research* 2007;7:375-422.
- [31] Noyes J, Lewin S. Chapter 6: Supplemental guidance on selecting a method of qualitative evidence synthesis, and integrating qualitative evidence with Cochrane intervention reviews. In: Noyes J, Booth A, Hannes K, Harden A, Harris J, Lewin S, et al., editors. *Supplementary guidance for inclusion of qualitative research in Cochrane systematic reviews of interventions Version 1 (updated August 2011)* Cochrane Collaboration Qualitative Methods Group; 2011.
- [32] Paterson BL. "It looks great but how do I know if it fits?": an introduction to meta-synthesis research. In: Hannes K, Lockwood C, editors. *Synthesising qualitative research: choosing the right approach*. Chichester: BMJ Books Wiley-Blackwell; 2012.
- [33] Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *Int J Qual Health Care* 2007;19:349-57.
- [34] Garside R. Should we appraise the quality of qualitative research reports for systematic reviews, and if so, how? *Innovation: The European Journal of Social Science Research* 2013;27:67-79.

- [35] Salzmann-Erikson M. IMPAD-22: a checklist for authors of qualitative nursing research manuscripts. *Nurse Educ Today* 2013;33:1295-300.
- [36] Moher D, Liberati A, Tetzlaff J, Altman DG. Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *BMJ* 2009;339:b2535.
- [37] Wong G, Greenhalgh T, Westhorp G, Buckingham J, Pawson R. RAMESES publication standards: realist syntheses. *BMC Med* 2013;11:21.
- [38] Wong G, Greenhalgh T, Westhorp G, Buckingham J, Pawson R. RAMESES publication standards: meta-narrative reviews. *BMC Med* 2013;11:20.
- [39] eMERGE. Meta-ethnography Reporting Guidelines. <https://www.stir.ac.uk/emerge/>; [accessed 17.12.15].
- [40] Health and Social Care Act 2012. Chapter 7. London: The Stationery Office; 2012.
- [41] Department of Health. The Mandate. A mandate from the Government to NHS England: April 2014 to March 2015. London: Department of Health; 2014.
- [42] Introduction to the Friends and Family Test. [accessed 30th January 2015].
- [43] Five year forward view. NHS England; 2014.
- [44] Care Quality Commission. What standards you have a right to expect from the regulation of your care home. Newcastle upon Tyne: Care Quality Commission; 2012.
- [45] NHS England. Actions for end of life care: 2014-16. Leeds: NHS England; 2014.
- [46] Francis R. Report of the Mid Staffordshire NHS foundation trust public inquiry. Executive summary. London: The Stationery Office; 2013.
- [47] NHS England. The forward view into action: planning for 2015/16. NHS England; 2014.
- [48] Brunton G, Stansfield C, Thomas J. Finding relevant studies. In: Gough D, Oliver Y, Thomas J, editors. *An introduction to systematic reviews*. London: SAGE; 2012.
- [49] Carroll C, Booth A. Quality assessment of qualitative evidence for systematic review and synthesis: is it meaningful, and if so, how should it be performed? *Research Synthesis Methods* 2015;6:149-54.
- [50] Morton RL, Tong A, Howard K, Snelling P, Webster AC. The views of patients and carers in treatment decision making for chronic kidney disease: systematic review and thematic synthesis of qualitative studies. *BMJ* 2010;340:c112.
- [51] Petticrew M, Rehfuess E, Noyes J, Higgins JP, Mayhew A, Pantoja T, et al. Synthesizing evidence on complex interventions: how meta-analytical, qualitative, and mixed-method approaches can contribute. *J Clin Epidemiol* 2013;66:1230-43.
- [52] Petticrew M, Anderson L, Elder R, Grimshaw J, Hopkins D, Hahn R, et al. Complex interventions and their implications for systematic reviews: a pragmatic approach. *J Clin Epidemiol* 2013;66:1209-14.
- [53] Tricco AC, Soobiah C, Antony J, Cogo E, MacDonald H, Lillie E, et al. A scoping review identifies multiple emerging knowledge synthesis methods, but few studies operationalize the method. *J Clin Epidemiol* 2016;73:19-28.
- [54] Bafeta A, Trinquart L, Seror R, Ravaud P. Analysis of the systematic reviews process in reports of network meta-analyses: methodological systematic review. *BMJ* 2013;347:f3675.
- [55] Zorzela L, Golder S, Liu Y, Pilkington K, Hartling L, Joffe A, et al. Quality of reporting in systematic reviews of adverse events: systematic review. *BMJ* 2014;348:f7668.
- [56] Mallett S, Deeks JJ, Halligan S, Hopewell S, Cornelius V, Altman DG. Systematic reviews of diagnostic tests in cancer: review of methods and reporting. *BMJ* 2006;333:413.
- [57] Ames HM, Glenton C, Lewin S. Parents' and informal caregivers' views and experiences of routine early childhood vaccination communication: qualitative evidence synthesis. *Cochrane Database of Systematic Reviews* 2015;Issue 7:Art. No.: CD011787. DOI: 10.1002/14651858.CD011787.
- [58] Aslam RhW, Hendry M, Carter B, Noyes J, Rycroft MJ, Booth A, et al. Interventions for preventing unintended repeat pregnancies among adolescents. *Cochrane Database of Systematic Reviews* 2015;Issue 1:Art. No.: CD011477. DOI: 10.1002/14651858.CD011477.

- [59] Harris KM, Kneale D, Lasserson TJ, McDonald VM, Grigg J, Thomas J. School-based self management interventions for asthma in children and adolescents: a mixed methods systematic review. *Cochrane Database of Systematic Reviews* 2015;Issue 4:Art. No.: CD011651. DOI: 10.1002/14651858.CD011651.
- [60] Jordan J, Rose L, Dainty KN, Noyes J, Blackwood B. Factors that impact on the use of mechanical ventilation weaning protocols in critically ill adults and children: a qualitative evidence-synthesis. *Cochrane Database of Systematic Reviews* 2015;Issue 7:Art. No.: CD011812. DOI: 10.1002/14651858.CD011812.
- [61] Munabi-Babigumira S, Glenton C, Lewin S, Fretheim A, Nabudere H. Factors that influence the provision of intrapartum and postnatal care by skilled birth attendants in low- and middle-income countries: a qualitative evidence synthesis. *Cochrane Database of Systematic Reviews* 2015;Issue 2:Art. No.: CD011558. DOI: 10.1002/14651858.CD011558.
- [62] Odendaal WA, Goudge J, Griffiths F, Tomlinson M, Leon N, Daniels K. Healthcare workers? perceptions and experience on using mHealth technologies to deliver primary healthcare services: qualitative evidence synthesis. *Cochrane Database of Systematic Reviews* 2015;Issue 11:Art. No.: CD011942. DOI: 10.1002/14651858.CD011942.
- [63] Lins S, Hayder-Beichel D, Rücker G, Motschall E, Antes G, Meyer G, et al. Efficacy and experiences of telephone counselling for informal carers of people with dementia. *Cochrane Database of Systematic Reviews* 2014;Issue 9:Art. No.: CD009126. DOI: 10.1002/14651858.CD009126.pub2.
- [64] Hurley M, Dickson K, Walsh N, Hauari H, Grant R, Cumming J, et al. Exercise interventions and patient beliefs for people with chronic hip and knee pain: a mixed methods review. *Cochrane Database of Systematic Reviews* 2013;Issue 12:Art. No.: CD010842. DOI: 10.1002/14651858.CD010842.
- [65] Glenton C, Colvin CJ, Carlsen B, Swartz A, Lewin S, Noyes J, et al. Barriers and facilitators to the implementation of lay health worker programmes to improve access to maternal and child health: qualitative evidence synthesis. *Cochrane Database of Systematic Reviews* 2013;Issue 10:Art. No.: CD010414. DOI: 10.1002/14651858.CD010414.pub2.
- [66] Horey D, Kealy M, Davey M-A, Small R, Crowther CA. Interventions for supporting pregnant women's decision-making about mode of birth after a caesarean. *Cochrane Database of Systematic Reviews* 2013;Issue 7:Art. No.: CD010041. DOI: 10.1002/14651858.CD010041.pub2.
- [67] Mischke C, Verbeek JH, Job J, Morata TC, Alvesalo-Kuusi A, Neuvonen K, et al. Occupational safety and health enforcement tools for preventing occupational diseases and injuries. *Cochrane Database of Systematic Reviews* 2013;Issue 8:Art. No.: CD010183. DOI: 10.1002/14651858.CD010183.pub2.
- [68] Rashidian A, Shakibazadeh E, Karimi SA, Glenton C, Noyes J, Lewin S, et al. Barriers and facilitators to the implementation of doctor-nurse substitution strategies in primary care: qualitative evidence synthesis. *Cochrane Database of Systematic Reviews* 2013;Issue 2:Art. No.: CD010412. DOI: 10.1002/14651858.CD010412.
- [69] Sartore G, Lagioia V, Mildon R. Peer support interventions for parents and carers of children with complex needs. *Cochrane Database of Systematic Reviews* 2013;Issue 6:Art. No.: CD010618. DOI: 10.1002/14651858.CD010618.
- [70] Thomson H, Thomas S, Sellstrom E, Petticrew M. Housing improvements for health and associated socio-economic outcomes. *Cochrane Database of Systematic Reviews* 2013;Issue 2:Art. No.: CD008657. DOI: 10.1002/14651858.CD008657.pub2.
- [71] Turley R, Saith R, Bhan N, Rehfuess E, Carter B. Slum upgrading strategies involving physical environment and infrastructure interventions and their effects on health and socio-economic outcomes. *Cochrane Database of Systematic Reviews* 2013;Issue 1:Art. No.: CD010067. DOI: 10.1002/14651858.CD010067.pub2.

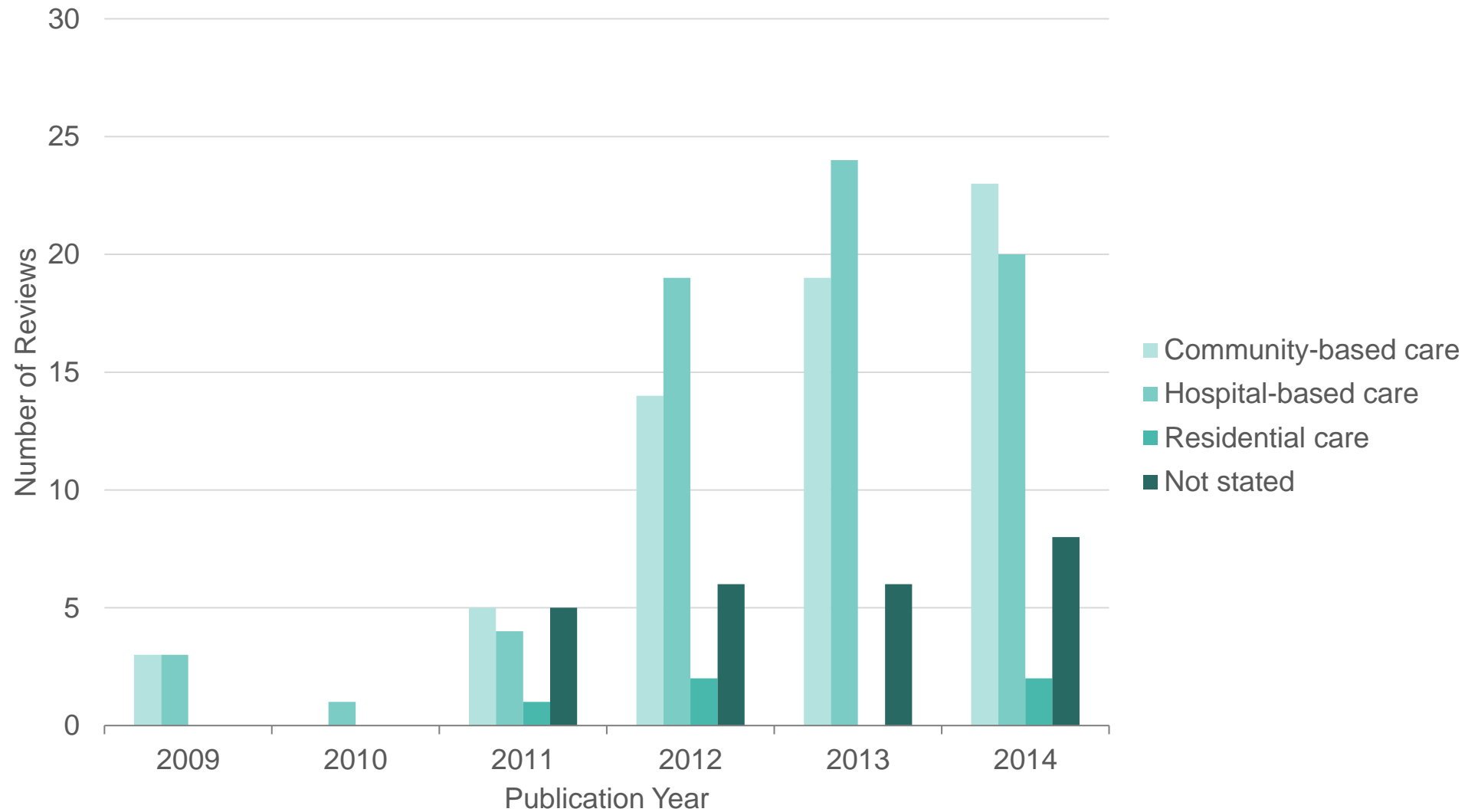
- [72] Campbell F, O'Neill PM, While A, McDonagh J. Interventions to improve transition of care for adolescents from paediatric services to adult services. *Cochrane Database of Systematic Reviews* 2012;Issue 4:Art. No.: CD009794. DOI: 10.1002/14651858.CD009794.
- [73] Leiknes KA, Berg RC, Smedslund G, Jarosch-von SL, Øverland S, Hammerstrøm KT, et al. Electroconvulsive therapy for depression. *Cochrane Database of Systematic Reviews* 2011;Issue 5:Art. No.: CD009105. DOI: 10.1002/14651858.CD009105.
- [74] Ryan R, Hill S, Lowe D, Allen K, Taylor M, Mead C. Notification and support for people exposed to the risk of Creutzfeldt-Jakob disease (CJD) (or other prion diseases) through medical treatment (iatrogenically). *Cochrane Database of Systematic Reviews* 2011;Issue 3:Art. No.: CD007578. DOI: 10.1002/14651858.CD007578.pub2.

## Systematic reviews of qualitative evidence accepted for DARE by publication year



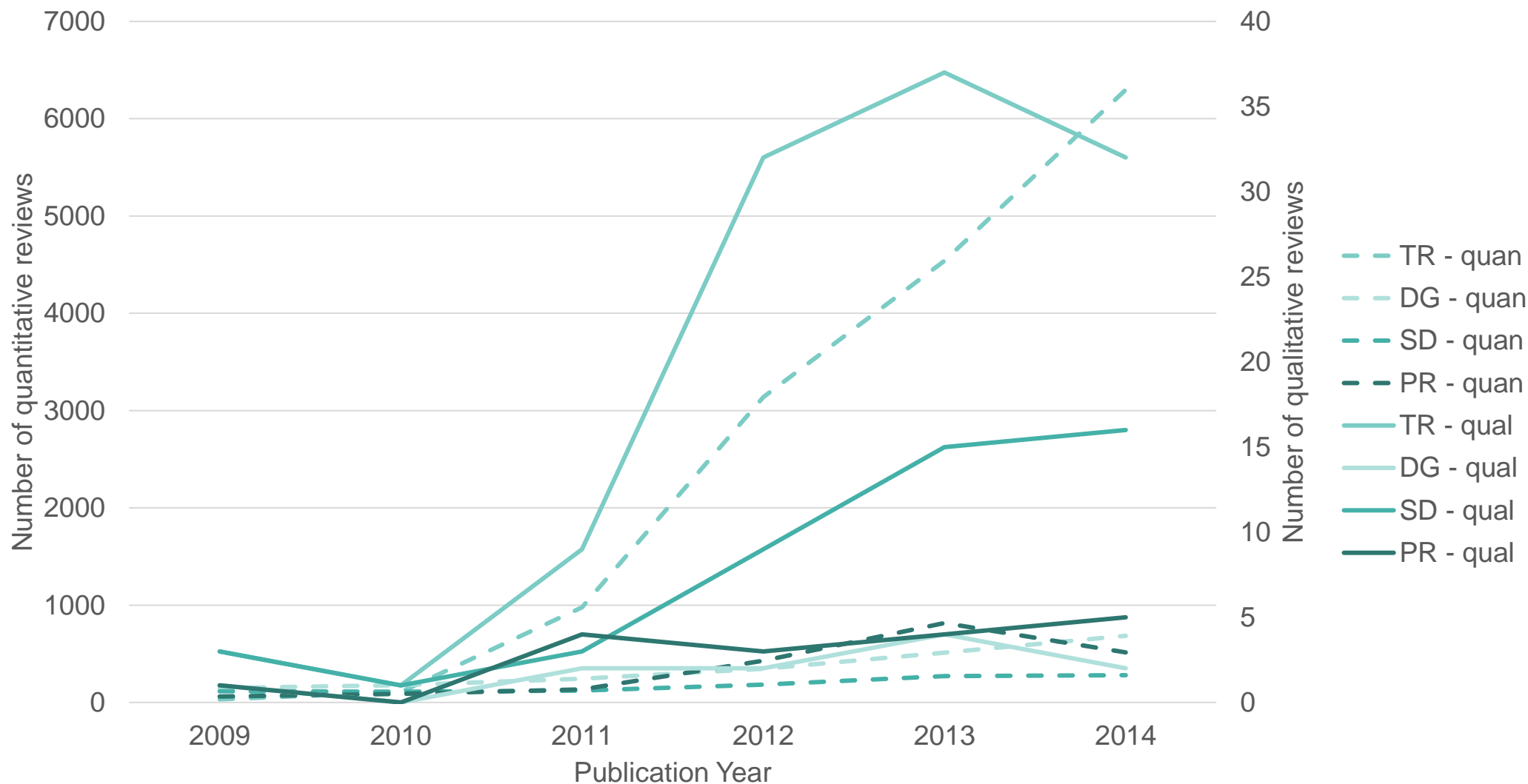
# Systematic reviews of qualitative evidence

## Setting by publication year



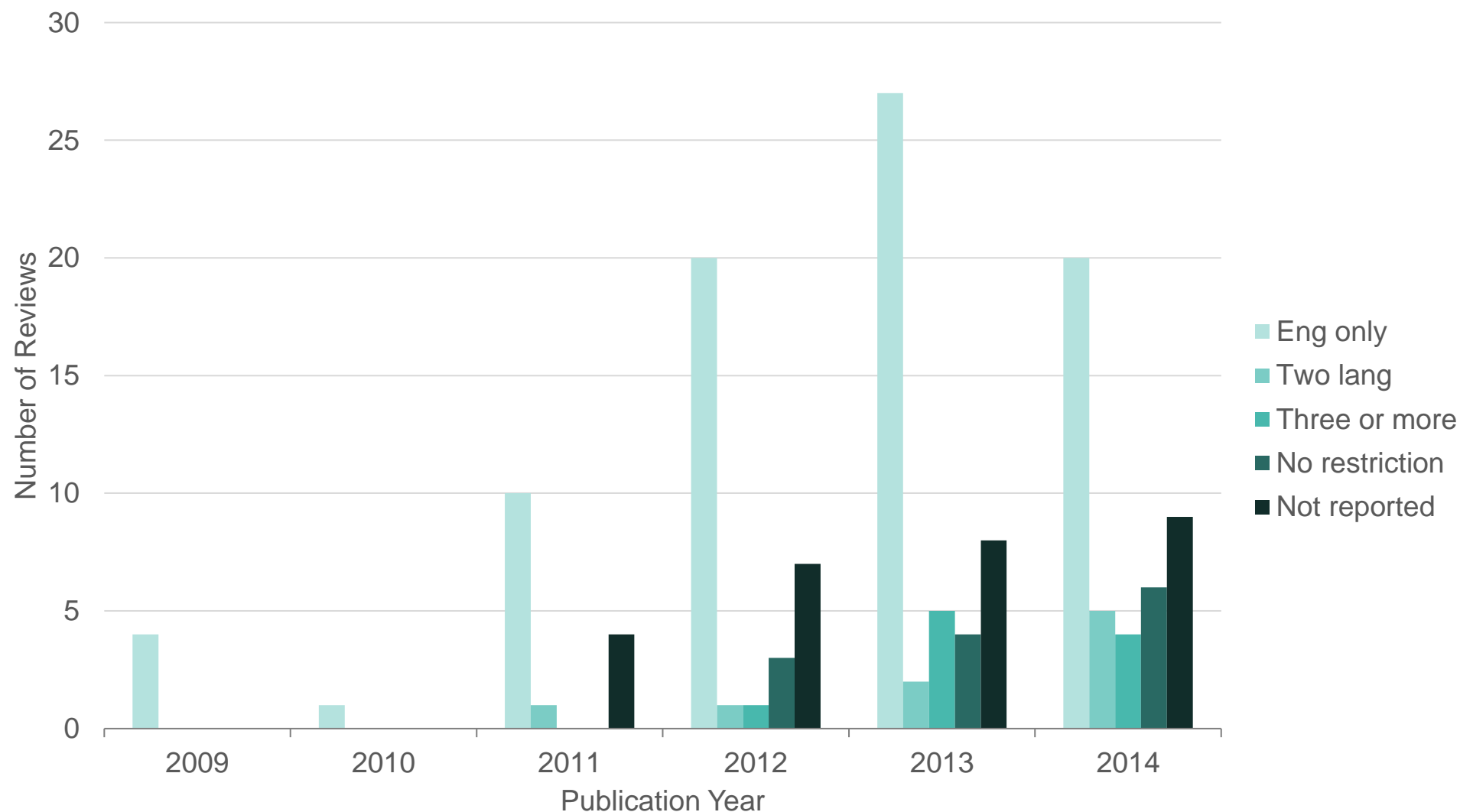
# Systematic reviews of qualitative and quantitative evidence

## Type of intervention by publication year



# Systematic reviews of qualitative evidence

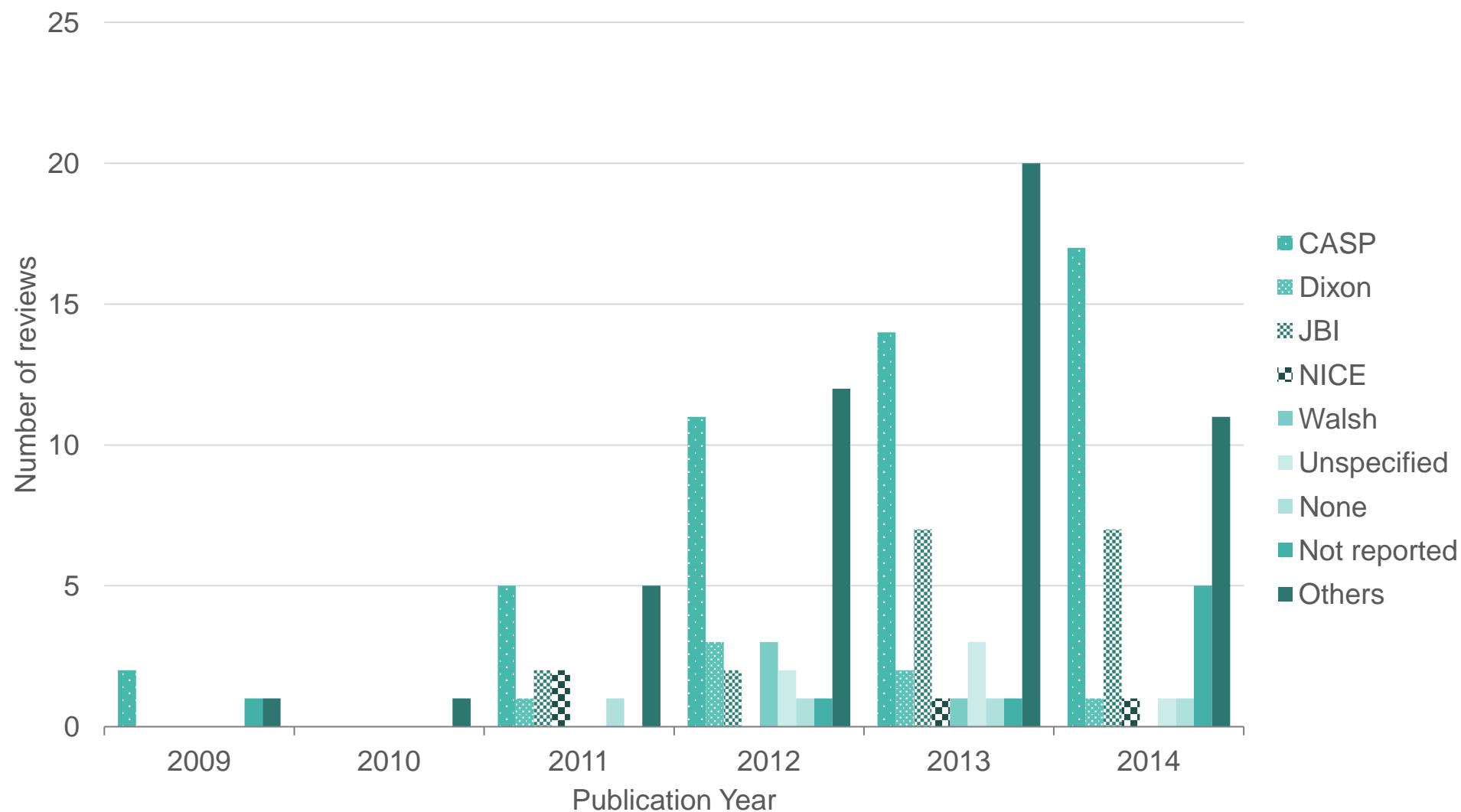
## Number of languages included by publication year





# Systematic reviews of qualitative evidence

## Quality assessment tool by publication year



## Highlights file

## What is new?

## Key findings

- We describe the focus and methods used in systematic reviews of qualitative evidence published on DARE over a five year period. Reviews were conducted worldwide, with 44% originating in the UK. Interventions were diverse. There were no discernible patterns over time. Quality assessment of primary studies was conducted routinely but reviews were generally poorly reported.

## What this adds to what is known

- This is the first overview of systematic reviews of qualitative evidence. The number of systematic reviews of qualitative evidence in health and social care is growing and they cover a wide topic range. Methodological quality is improving, but there is a need for standardised use of quality assessment tools and better reporting.

## What is the implication and what should change now?

- Potential exists to use systematic reviews of qualitative evidence to inform user-centred health and social care.
- Future systematic reviews might usefully focus on community-based and service delivery interventions as well as residential and hospice settings.
- Existing and emerging reporting guidelines should help to address reporting deficits identified in our selection of reviews.