

Integrated Primary Care and Social Services for Older Adults With Multimorbidity in England: A Scoping Review

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Abstract

Background: As the prevalence of older adults with multimorbidity increases, greater integration of services is necessary to manage the range of physical and social needs of the population. The aim of this study is to describe and summarise current evidence, clinical provision and progress towards integrated primary care and social services for older adults with multimorbidity in an English context.

Methods: A scoping review was conducted which included a systematic electronic search of Medline, EMBASE, The Cochrane Library, Web of Science, the Cumulative Index to Nursing and Allied Health Literature, Science and Social Science Citation Indices and Opengrey from data inception until the 16th June 2020. Articles were screened and extracted in duplicate by two independent reviewers. Data were extracted onto a charting sheet and thematic synthesis used to summarise findings.

Results: Our search yielded 7656 papers of which 84 papers were included. Three themes were identified: (1) diverse focus on individual level services rather than multi-level or multi-sector integration, with an increasing emphasis on the need to consider broader determinants of population health as critical to integrated care in multimorbidity; (2) time was needed for integration to embed to allow new structures and relationships to develop and mature; and (3) we identified inherent tension between top-down and bottom-up driven approaches to integrated care that requires a whole-systems structure while allowing for local flexibilities.

Conclusions: There is limited evidence of multi-level and multi-sector integration of services for older adults with multimorbidity in an English context. The literature increasingly acknowledges wider determinants of population health that are likely to require integration beyond primary care and social services. Improving clinical care in one or two sectors may not be as effective as simultaneously improving the organisation or design across services as one single system of provision. This may take time to establish and will require local input.

Introduction

Closer health and social care integration has been a key policy goal of successive UK governments for 40 years but the advancement of this agenda has not been achieved at the pace required to meet the demands of an increasingly ageing population with higher levels of multimorbidity.[1, 2] Recent prediction forecasting of care dependency profiles suggests that 80% of the ageing population will require medium or high dependency care due to multimorbidity.[3] In this context, it is essential that primary care is capable of working closely with social services and wider community care providers to harness collective capacity, which can address the range of behavioural, social, and physical health care needs of the population. This requires more careful consideration of the organisation, structures, systems and funding across providers to identify specific opportunities for successful integration. Drawing on Leutz's definition, we understand integration 'as the search to connect the healthcare system (acute, primary medical and skilled) with other human service systems (e.g. long-term care, education and vocational and housing services) to improve outcomes (clinical, satisfaction and efficiency)'. [4]

Given the substantial funding provided for integration pilots including a variety of testbeds, and the extensive research and evaluation in practice that has already been conducted,[8] it is valuable to learn from these to understand current progress and anticipate future challenges to successful implementation. Whilst previous reviews have been conducted, these have mainly been limited to searches of the published literature, which may not adequately capture efforts in private or voluntary sector care organisations, where most social care is provided.[9, 10, 11, 12] Moreover, few earlier studies have specifically examined the literature related to England in order to consider the contextual factors of this setting. There is also a relative paucity of evidence that considers integration in relation to primary care, where most care of older adults with multimorbidity occurs.[13, 10] To address these gaps in the evidence base we conducted a scoping review to describe and summarise current evidence, clinical provision and progress towards integrated primary care and social services for older adults with multimorbidity in an English context.

Methods

Review approach and conceptual framework

Our study follows the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines for scoping reviews.[14] We used a scoping review as it allows rapid mapping out of key existing work and progress in this field. Conceptually, we framed the review using the Rainbow Model of Integrated Care; a framework that permits better definition and understanding of integrated care from a primary care perspective.[5] This multi-level conceptual framework describes dimensions that play interconnected roles on the macro- (system integration), meso- (organisational and professional integration) and micro-level (clinical, service and personal integration), alongside dimensions (functional and normative integration) that enable the integration between different levels within a health system.[15] The model promotes the provision of continuous, comprehensive and coordinated care to the individual and population.[5]

Search strategy

We conducted a systematic electronic search in Medline, EMBASE, The Cochrane Library, Web of Science, the Cumulative Index to Nursing and Allied Health Literature, and Science and Social Science Citation Indices from database inception until the 16th June 2020. For searches of electronic databases, text and MeSH terms were limited to primary care, social services and older adults. Detailed search terms are available in supplementary file 1. Unpublished literature was searched for in Opengrey and through the websites of Clinical Commissioning Groups, GP federations, the Department of Health and Social Care, third sector bodies and private organisations who deliver social care. We hand searched the bibliographies of included works and relevant systematic reviews for any additional relevant data. We also sought the views of topic experts and service users to source further data. All articles identified were imported into Rayyan software for screening.

Inclusion/exclusion criteria

Articles were eligible for inclusion if published in the English language and related to primary care, social care and multimorbidity in older adults in England. Due to the broad aim of this scoping review, we adopted flexibility in study designs including newsletters, discussion papers, government reports, company reports, blogs, working papers, policy recommendations, webinars and dissertations. Quality assessment is not a priority for scoping reviews, so we did not exclude papers on this basis.

Study selection and data extraction

Titles and abstracts were screened with each article assessed for relevance according to the inclusion criteria. Full-text papers were retrieved. Both screening and data extraction were carried out independently by two reviewers. A data charting form was used, designed according to the study conceptual framework described above. We examined the level of integration within each included article in line with our conceptual framework (i.e. macro, meso or micro-level and vertical/horizontal integration), article characteristics and key findings.

A list of data extracted on the charting form is summarised in Fig. 1 below. Any disagreement between reviewers about data was resolved by discussion.

Summarising and analysis

We used counts to summarise article characteristics, and the charting technique to iteratively synthesise and interpret findings by sifting and sorting material.[16, 17] We repeatedly referred to the study conceptual framework during this process. Thematic synthesis was employed in which key excerpts of extracted text were first coded by three members of the team (HDM, GS and SH). We used deductive analysis in deriving a conceptual framework from the research aims and theory, while also seeking to inductively identify codes and themes from the synthesis of included papers. Initial codes were refined into themes. Members of the team experienced in systematic reviewing who had not previously been engaged in the coding process, were involved in the final stages of the analysis. This provided an additional perspective on the analytical process to strengthen both the quality and validity of our findings.

Results

A total of 7656 papers were identified including 6426 from electronic databases, 1118 via Opengrey and 112 from websites and experts. After title and abstract screening, 809 articles underwent full-text screening, which resulted in a final 84 papers being included in the review. A flowchart of the study selection process, including the reasons for exclusion, is shown in Fig. 2.

Characteristics of included studies

The 84 included articles represented multiple locations across England, including regions in the south-west, northeast, north-west and Greater London. These were from a range of sectors; primary care, secondary care, social care, voluntary sectors, local government, local authority and public health. The most common sector was primary care (32%) and most frequent study design was qualitative (20%). There was substantial heterogeneity that included mixed-methods (14%), analysis/commentaries (14%), systematic/scoping/evidence reviews (12%), randomised controlled trials (11%), policy documents (8%), quantitative studies (8%), thesis (5%), editorials (2%) and books/book reviews (2%). Included articles were published between 1996 and 2020. The characteristics of included articles have been summarised in Fig. 3.

Level of integration

We counted the number of studies that considered integration at each level as set out by our conceptual framework (i.e. macro, meso or micro-level). There were 7% of studies that considered integration at the macro-level, 5% at meso-level and 30% at micro-level. Thirty-five per cent considered integration at all three levels. However, the combined number of studies focused on either one or both of micro and meso levels was 52%.

Summary of themes amongst included studies

We identified three themes from the analysis to summarise current research and progress on integrated primary care and social services for older adults with multimorbidity in England: (1) diverse focus on multi-level vs. multi-sector integration; (2) time needed for integration to embed; and (3) seeking structural integration while applying local flexibility. Each of these is described in turn below.

1. Multi-level and multi-sector integration

Several articles described previous research and clinical provision in primary care or social services for older adults with multimorbidity in England.[18, 19, 20 21]. These were often concerned with particular sectors (e.g. primary care) or scales of integration (e.g. clinical level), rather than whole-systems, as described by our conceptual framework.[22, 23, 24, 25, 26, 27, 28]. Studies focused on improving specific dimensions of integration such as leadership,[29, 30, 18] care models[23, 31, 32, 33, 34] or considered integrated working from the perspective of one or two levels of integration,[35, 36, 37, 38] most frequently the micro-scale or the micro/meso-scales together. Studies from 1996 onwards repeatedly stressed the need for more multi-level, systemic and comprehensive integration, [39, 40] although we found limited evidence of significant progress in achieving this ambition over the last two decades. A prevalent theme was the urgent requirement to mitigate or remove long-standing barriers such as incompatible record sharing systems and inadequate information sharing processes between sectors [41, 42, 43, 44, 45]; 'siloes' thinking in service provider organisations [46, 47, 48]; poor communication among health and social care professionals, both internally within their organisations and across sectoral boundaries.[49, 50, 51] There was an increasing emphasis on the need to tackle wider determinants of population health with suggestions that to achieve this, it is necessary to go beyond primary care and social services to include hospitals, GP community services, voluntary sectors and local government partners.[6, 7, 13, 34, 50] We observed a growing recognition in more recent literature that improving clinical care in one or two sectors may not be able to be as effective as simultaneously improving the organisation or design across services as one system of provision.[45] Solutions that were proposed emphasised the need for system-wide leadership across all scales, alongside a shared vision of integrated working across sectors.[52, 53, 54, 55] There was evidence highlighting the importance of the quality and style of organisational leadership, both in terms of delivering change and maintaining an integrated approach to service delivery.[12,29,56. We found very few examples of where this approach had led to individual and local successes, and widespread evaluation and evidence of application was very limited.[49, 57, 36, 33]

2. Time for integration to embed

A number of studies highlighted that integration requires time to allow new structures and relationships to develop and bed-in. Integrated care programmes take years to establish and need sufficient time to allow new care models to fully mature.[20, 58, 59, 60] Effective and enduring integration is 'the result of a long-term process, facilitated by key local leaders, during which the capability and legitimacy of new ways of working is built up over time'.[6] The King's Fund report of the Vanguardians concluded that the most successful models of integrated care are built on 'trusting relationships and collaborative organisational cultures, often

developed over time,' which enable 'clinical teams as well as key organisational leaders to work together effectively' - where 'success' was defined in terms of perceptions of process.[31] Some studies suggest that the answer may lie in persistence and perseverance over several years to enable integrated care programmes to achieve their 'objectives and become self-sustaining.'[53, 61, 62] This appeared to be influenced by the sustained commitment of key partners and the 'longevity of the senior leadership.'[57] The challenge in the next phase of integrated care reform is 'building clinical collaboration and system leadership in a statutory context' that is 'not designed for this purpose',[31] alongside policymakers providing the necessary time for integrated care programmes to 'evolve and mature',[63] rather than moving onto the next new policy initiative.

3. Structure with flexibility

We identified inherent tensions between top-down and bottom-up driven approaches to integrated care, in particular, having in place a single comprehensive 'whole-systems' structure combined with local flexibilities. Studies suggested that integration should be implemented within a clear framework and a set of higher-level principles that allows for both macro-level systems-wide strategic management and oversight, combined with local autonomy and flexibility, described as 'structured flexibility'. [64, 65, 66, 20 67] The benefit of holistic systems-wide approaches is that they 'tend to be more strategic with clearer paths for scaling up, compared to 'bottom-up' approaches driven by highly motivated individuals at the micro-level.'[56] Nevertheless, a whole-systems strategy requires a twin-track approach [55], with 'leadership from the bottom up' driven by staff who are 'empowered to integrate services where they see the need.'[53] Mechanisms for horizontal integration (mechanisms, structures and practices that connect care across the same level in the system)[5] were also seen as essential 'at each organisational level (for example whole systems, community and individual levels). Vertical mechanisms (mechanisms, structures and practices which link together services up and down the different scales of the system) are also necessary 'to integrate the various levels.'[39, 44] Successful examples of integrated care in the NHS indicate that when this is 'pursued at all levels', it could 'overcome the risks of fragmentation, and of 'service users falling between the cracks' of care.[68] Critically however, the studies included in the review suggested that any programme of integrated care must be based on an understanding that 'as barriers to integration are systemic in organisations designed for separation rather than integration and the historic paradigms of building bridges and tearing down walls is inherently flawed, and of limited effectiveness: a better metaphor is one of weaving integration into the fabric of organisational life.'[39]

Discussion

This scoping review aimed to summarise current evidence, clinical provision and progress on integrated primary care and social services for older adults experiencing multimorbidity in England. Our findings highlight a paucity of research evidence and clinical practice pursuing multi-level or multi-sector integration across services. Existing works are often limited to individual sectors. The value of considering primary care and social services alongside local government, third sector and secondary care organisations in tackling the broader determinants of population health was frequently emphasised. In addition, several studies highlighted that integration requires time to allow new structures and relationships to evolve and reach a stage of maturity. We also identified inherent tensions between top-down and bottom-up driven dimensions of integrated care reform, which requires whole system structures, while allowing for local flexibilities.

This study was scoping in nature, thus allowing us to rapidly capture a broad range of information on integration between primary care and social services in older adults with multimorbidity. We did not aim to answer a strictly defined research question and as a result broad inclusion criteria were adopted, allowing us to include a wide-range of study designs and grey literature to permit a higher-level overview of this research area and the related clinical provision. As much of social care delivery takes place outside of the NHS and there is a relative paucity of research in this area, our approach was necessary to capture the range of existing work in the field. There were high levels of heterogeneity amongst the study designs and settings which is a strength of this work but also challenging to collate and summarise comprehensively. We also did not assess the quality of the evidence presented and excluded papers that were not written in the English language. Although, as our study was focused in England it is unlikely that non-English language papers would have substantially altered our results.

To our knowledge, this is the first review to examine the literature on integration between primary care and social services with a particular focus on the English context. Our findings are consistent with previous evidence outside of primary care which highlights the need for greater consideration of wider health determinants in managing the increasingly diverse needs of older

adults with multimorbidity.[69, 70] Earlier reviews on integrated care have also emphasised the need for more multidisciplinary and multi-sector co-operation within a single over-arching system.[71] We highlight that this system must incorporate traditional health and social care services, alongside voluntary, private and government organisations. Further, the value of time in allowing integrated care to embed was emphasised in our findings. Although some previous reviews and policy calls suggest that a more rapid and urgent pace is needed for integration due to rising demand, our review suggests that the slow progress of change is perhaps necessary to permit successful and long-lasting implementation at the local level.[10] This has been highlighted by a previous scoping review although it was not specific to primary care or social services.[62, 71, 6, 59] Finally, the tensions identified between top-down and bottom-up integrated care reform and related calls for whole system structures of integration allowing for local flexibilities has been articulated in government policy but not yet operationalised. To support this, the next steps will need to go beyond a scoping review towards more robust service evaluation and trials of whole-system multi-sector and multi-level integration interventions that address both clinical and social need.

Conclusions

We present a scoping review to summarise current evidence, clinical provision and progress towards integrated primary care and social services for older adults with multimorbidity in an English context. We found studies describing individual sectors, largely of process improvements, but there was limited evidence of improved outcomes or resource use, nor evidence of provision or progress towards multi-level and multi-sector integration across services for older adults with multimorbidity in an English context. Wider determinants of population health are important, so integration that goes beyond primary care and social services to encompass a truly whole system approach across sectors is likely to be necessary to effectively address the needs of older adults with multimorbidity. This may take time to establish and will require local input. Further research evidence is required to support operationalising this approach and to examine the feasibility of implementing such a system within existing structures.

Declarations

Ethical Approval: Ethical approval was not required for this scoping review.

Consent to participant: Not applicable

Availability of data: Data used during the current study are available from the corresponding author on reasonable request.

Competing Interests: None to declare

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Author Contribution: HDM conceived the study idea, developed the study design, wrote the analysis plan, conducted the analysis, drafted and revised the paper. GS contributed to the drafting and revision of the paper, and contributed to the data analysis. LH and DO contributed to the screening of studies. MS contributed to the design of the study, advised on data analysis and revised the paper. PL, HE and PR revised the paper. HDM is guarantor.

Declaration: The lead author affirms that the manuscript is an honest, accurate, and transparent account of the study being reported; that no important aspects of the study have been omitted. The opinions, results, and conclusions reported in this article are those of the authors and are independent from the funding sources.

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Figure 3

Due to technical limitations, figure 3 is only available as a download in the Supplemental Files section.

Figures

- Title
- Author
- Year
- Study design (RCT, Scoping Review or Case Study etc)
- Geographical Location (Manchester, Norfolk or London, etc)
- Setting (Social care, primary care or care home etc)
- Sample type (GP, patient, social worker or relative, etc)
- Source of data (Primary research, secondary analysis or commentary, etc)
- Primary aim of study, research or document (As set out in study abstract)
- Method (Questionnaire, semi-structured interviews or scoping review, etc)
- Key findings/themes (As set out in study abstract)
- Examples of integrated care provided (Any examples of integrated care practice, initiatives, structures, models, etc, e.g. Case Management Model, Chronic Care Model; Social Prescribing)
- Clinical or practice integration (micro-level), e.g. the extent to which staff, management and patient records etc, are integrated
- Organisational integration (meso-level), e.g. the extent to which integration of services has been achieved across different organisations
- System integration (macro-level), e.g. the degree of alignment of rules and integration of policies within a system

Figure 1

Summary of data charting form

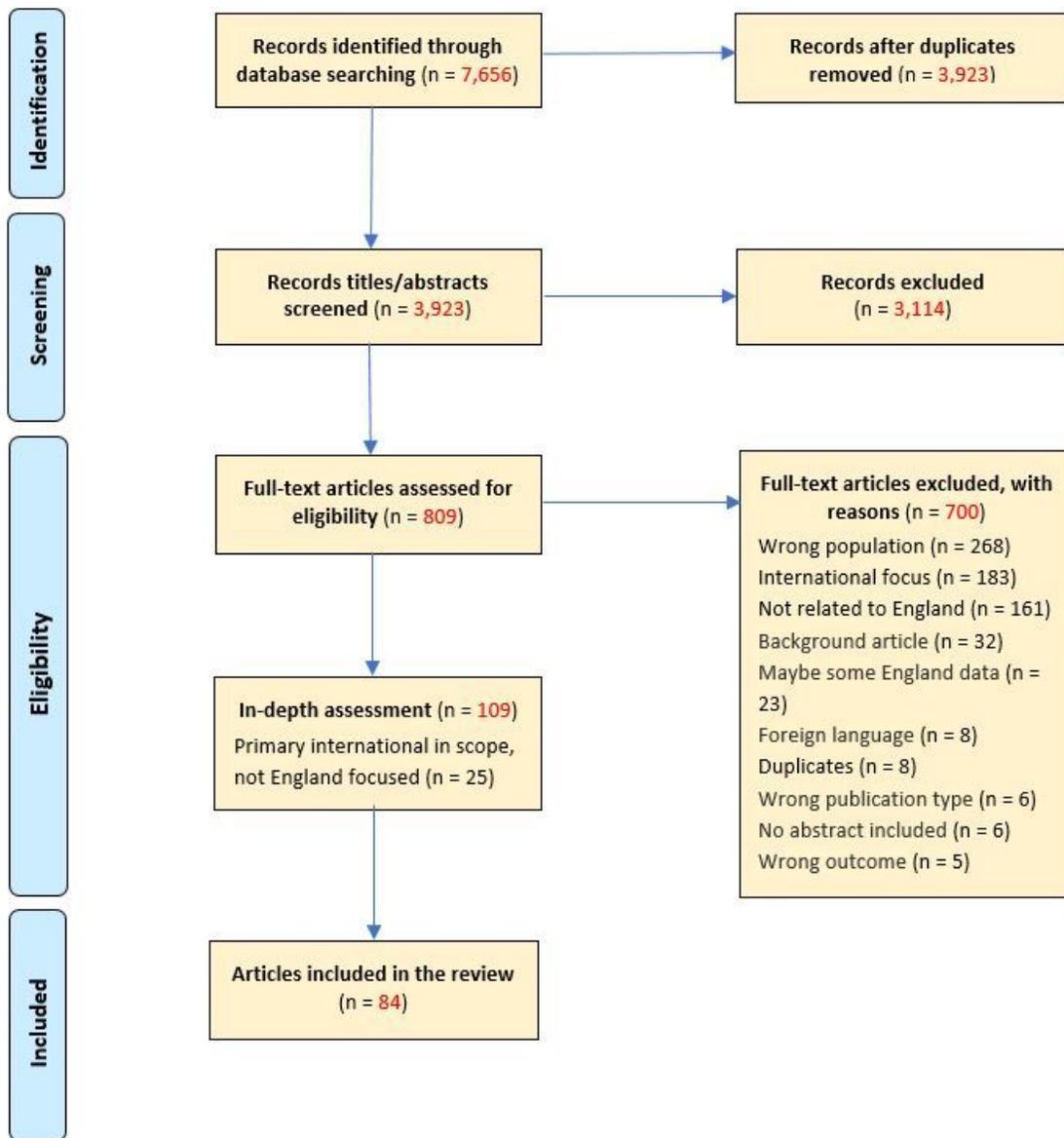


Figure 2

Adapted PRISMA Flow Chart Explaining the Study's Documentary Inclusion Process

Supplementary Files

This is a list of supplementary files associated with this preprint. Click to download.

- [Figure3.pdf](#)