A systematic review of the factors - barriers and enablers - affecting the implementation of clinical commissioning policy to reduce health inequalities in the National Health Service (NHS), UK

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Review Paper

A systematic review of the factors - barriers and enablers - affecting the implementation of clinical commissioning policy to reduce health inequalities in the National Health Service (NHS), UK

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ABSTRACT

Objective: The aim of the present study is two-fold. First, it attempts to identify the barriers and enablers of implementing clinical commissioning policy. Second, it synthesises how these barriers and enablers affect the success of National Health Service (NHS) efforts to reduce health inequalities in the UK.
Methods: A systematic review was conducted. We searched large biomedical bibliographic databases, namely MEDLINE, EMBASE, CINAHL, Allied & Complementary Medicine, DH-DATA, Global Health and CINAHL for primary studies, conducted in the UK, that assessed the factors - barriers and enablers related to health inequalities, published from 2010 onwards and in English, and reported in accordance with Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement. We used Joanna Briggs Institute (JBI) Critical Appraisal and Mixed Methods Appraisal tools to assess the methodological qualities, and synthesised by performing thematic analysis. Two reviewers independently screened the articles and extracted data.
Results: We included six primary studies (including a total of 1155 participants) in the final review. The studies reported two broad categories, under four separate themes: (1) the agenda of health inequalities has not been given priority; (2) there was very little evidence for reducing health inequalities through the clinical commissioning (CC) process; (3) CC was positively associated with the restructuring of NHS; and (4) CC brings better collaboration and engagement, which led to some improvements in health services access, utilisation and delivery at the local level.
Conclusion: This study provides useful factors — barriers and enablers — to implement and deliver clinical commissioning policy in improving health and well-being. These factors could be assessed in future to develop objective measures and interventions to establish the link between commissioning and health inequalities.

Introduction

The National Health Service (NHS) refers to the government-funded medical and healthcare services that everyone living in the UK can use without being asked to pay the full cost of the service. People often refer to these service as 'free at the point of use or delivery'. Most of its health services are publicly funded and most of the money is collected through UK residents paying tax. Everyone counts, working together for patients, improving lives; respect and dignity, compassion and commitment to quality of care are the core values of the NHS.[1]

Since the establishment of the NHS in 1948, several organisational changes have been made, equally influenced by the components of commissioning and health inequalities.[2] The meaning and interpretation of the term 'commissioning' is extensively contested, as people often equate this term with contracting,

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assigning, authorising, hiring, and purchasing. Commissioning refers to many actions ranging from the health needs assessment for a population, through the clinically based design of patient pathways, to service specification and contract negotiation or procurement, with continuous quality assessment. Department of Health (UK)[3] defined commissioning as 'The process of translating aspirations and need, by specifying and procuring services for the local population, into services for users which:

- deliver the best possible health and well-being outcomes, including promoting equality;
- provide the best possible health and social care provision;
- achieve this with the best use of available resources' (p.11).

The term commissioning in the context of NHS refers to a 'proactive and strategic process for the planning, purchasing and contracting of health services'[4] to be able to achieve high quality care that is effective and responsive to local people's and patients' needs, and ensures value for money (efficiency) for the well-being of communities and securing the best outcomes for local communities by making use of all available resources.[3]

Several authors argue that such action would help moving healthcare services from hospital to community settings, to avoid potential cases of emergency admissions as admissions trends have been observed in an inexorable increase,[5–7] as well as reduced health inequalities that may impact positively on the social determinants of health.[8,9]

Health inequality has been a global public health challenge and is now a key policy priority for every nation, as inequality damages the health of the poor people as compared to the health of the rich.[10] Avoidable health inequalities, therefore, are — by definition — unfair and unjust. The World Health Organization (WHO) defines health inequalities as 'systematic differences in health status between different socio-economic groups. These inequities are socially produced (and therefore modifiable) and unfair.'[11] Similarly, in Graham's[12] view, 'Health inequalities … are the systematic differences between more and less advantaged groups'.

Over the past 30 years, different strategies, for example, education, housing, the built environment, employment and income, have been implemented to tackle health inequalities, mainly focusing on 'improving the health of the most deprived groups, and narrowing the gap or universal health improvements',[13,14] but these issues have not been successfully and appropriately addressed. Still, the impact of health inequalities is very alarming. In England based on those individuals born in 2010, The Marmot Review appraised the existing published literature and reported that people who are currently dying prematurely each year as a result of health inequalities would otherwise have enjoyed, in total, between 1.3 and 2.5 million extra years of life.[15–17] Marmot et al.'s work on health inequalities further concludes that, despite general improvements in health, still a clear gradient appeared, such that people living in the poorest neighbourhoods, will, on average, die 7 years earlier than people living in the richest neighbourhoods.[17(p.10)]

Recently, the most extensive NHS reform has taken place in England with the implementation of the Health and Social Care Act 2012. This Act abolishes primary care trusts (i.e. local statutory organisations, created in 2002, responsible for improving public health and also considered as powerful local purchasing agencies, rooted in primary care),[18] and decentralises the decision-making process, including public health functions and resources to newly formed clinical commissioning groups (CCGs), also called CC.[19] This act includes: (1) a move to clinically led commissioning bringing clinicians closer into decision-making; (2) an increase in public involvement by establishing independent consumer champion organisations; (3) create Public Health England, an executive agency of the Department of Health, to protect and improve health and to address health inequalities; (4) develop guidance and set quality standards for social care (National Institute for Health and Care Excellence [NICE]); and (5) allow fair competition for NHS funding to independent, charity and third-sector healthcare providers, in order to give greater choice and control to patients in choosing their care.[1] For the first time ever, this act has introduced specific legal duties of the NHS in reducing health inequalities between patients in access to health services and the outcomes achieved by creating the provision of healthcare for all.[20,21]

There is only one main local equity indicator for clinical commissioning groups (CCGs), which is inequality in potentially avoidable emergency admissions and the performance of commissioning against this varies. For example, despite serving the most deprived communities, Liverpool, City and Hackney in London, Fareham and Gosport, East Surrey, Crawley and the Isle of Wight CCGs appeared as the worst performers in most of these indicators, whereas Tower Hamlets and Portsmouth CCGs appeared on the best performers list. Similarly, South Cheshire, Manchester, Blackburn, Darwen and Islington performed badly on inequalities, while East Surrey CCG did well while serving wealthy communities, using emergency admissions as an indicator, i.e. how well the NHS is succeeding in delivering out-of-hospital services to deprived patients with complex long-term conditions.[22] There are local indicators for Improving Access to Psychological Therapies (IAPT) services and plenty of other national inequality indicators so we refer readers or practitioners to see these resources for official NHS equity indicators.[23–26]

A preliminary scan of the work (book, chapter, report or article) using a quick Google Scholar search and PubMed using variations on the ultimate search terms, e.g. clinical commissioning and health inequalities, shows some empirical research on health inequalities in UK settings,[16,17] but the literature has never been systematically reviewed or synthesised focusing on the role of healthcare in reducing health inequalities.[27–30] Second, some related reviews have reported benefits[7,27,31–33] as well as challenges, of commissioning.[32,34–40] Third, health inequalities are an important component of population health and addressing health inequalities is one of the top priorities for clinical commissioning because it is a moral imperative concerning social justice. It is now a legal requirement, and burdens of ill health and disability are more prevalent amongst the most deprived populations, who are least equipped and resourced to make the best and most appropriate use of services.[41] In addition, no systematic reviews have been published looking at these effects.

Research question

This systematic review aims to answer the question: 'what the barriers and enablers of implementing clinical commissioning policy are to reduce health inequalities in the English NHS (UK)?'

Aims and objectives

The aim of the proposed research is to find out the factors — barriers and enablers — of implementing clinical commissioning policy that reduce health inequalities in the English NHS (UK). The objectives to achieve this are two-fold. First, it attempts to identify the barriers and enablers of implementing clinical commissioning policy. Second, it synthesises how these barriers and enablers affect the success of English NHS efforts to reduce health inequalities.

Methods

This study utilised a systemic review design which involves ʻcollating all empirical evidence that fits prespecified eligibility criteria in order to answer a specific research question.ʼ[42,43]

Criteria for considering studies for review

Inclusion criteria:

1. Type of studies: To be included, articles had to report specifically on the healthcare commissioning and health inequalities reported in the NHS UK, published between 2010 and 2020;
2. Published articles using quantitative (e.g. cross-sectional, randomised controlled trials, cohort, case—control) or qualitative (ethnography, grounded theory, phenomenological studies); and
3. Article published in English in peer-reviewed journals, with retrieval full texts.

Exclusion criteria:

1. Articles not related to commissioning and health inequalities;
2. Articles related to commissioning and health inequalities but not reported or published in the NHS UK;
3. Commentaries, editorials, letters as well as other reviewers, e.g. narrative reviews, scoping reviews; and
4. Studies deemed to have overall poor quality.

Search strategy

A broad search strategy has been designed to maximise the level of *sensitivity* and *specificity* in searching,[44] and improve both *recall ratio* and *precision ratio*.[45] We searched seven large biomedical bibliographic databases: MEDLINE, EMBASE, Allied & Complementary Medicine, DH-DATA, Global Health, CINAHL and PsycINFO. The literature search used the following terms: "Clinical commissioning"[All Fields], "Clinical commissioning groups"[All Fields]", "GP lead commissioning", "Healthcare disparities"[MeSH Terms], "healthcare disparities"[All Fields], "inequalities in health"[All Fields], "health inequalities"[All Fields], "health inequalit*"[All Fields], "health inequit*"[All Fields], using both medical subject heading (MeSH) and free terms to focus and broaden our search results appropriately for commissioning and health inequalities were used in the main search combined with the UK filter developed by Ayiku et al.[46] We utilised the ʻRelated Articlesʼ including the best match and most recent features in PubMed. Searches were also supplemented by reviewing the reference lists (ʻreferences of referencesʼ) of selected articles to find any other relevant articles. We contacted subject experts/information specialists from authors' universities to verify the research strategy, ensuring its comprehensiveness. We also contacted some study authors to identify additional studies. The literature search was conducted during May—June 2020 and the last search was conducted on 10 June 2020 in order to contemplate the recent studies. The searchers were not limited by study design. A detailed SR protocol with specific search terms has been developed by authors and provided in Additional file 1.

Study selection strategy

All studies retrieved from the large biomedical bibliographic databases have been screened twice: first, screening of titles and abstracts based on meeting all inclusion criteria. Second, review of full text of the studies. Both reviewers (KR and OM) were equally involved in both screening stages. For the first level of screening, i.e. screening for the titles and abstracts, we developed and used an abstract template suggested by Polanin et al.[47] to make the process more clear and transparent (Additional file 2). Any discrepancies were discussed and resolved by consensus. The standard Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flow diagram was used to provide the process of study selection[48] (Fig. 1). We also completed a PRISMA checklist for this manuscript (Additional file 3).

Quality appraisal of included studies

We used Joanna Briggs Institute (JBI) Critical Appraisal tools[49,50] and Mixed Methods Appraisal Tool [MMAT][51] to assess the methodological qualities. These tools have established content validity and have been piloted across all methodologies.[52—54] All six retrieved articles were reviewed by two reviewers (KR and OM), independently, using the standardised 10-item, 9-item and 5-item critical appraisal checklists for qualitative assessment, quantitative and mixed methods studies, respectively. To facilitate comparison of appraisal processes, both reviewers recorded the rationale for inclusion or exclusion, and discrepancies were resolved by consensus. Table 1 presents the results from the critical appraisal.

Data extraction

In our review, based on the guidelines produced by the Cochrane Group[55], we developed a Microsoft Word sheet to extract data. We extracted data on author, aim of the study, theoretical framework/approach, study design, sample size, timeframe, as well as findings reported including the ethical approval (Table 2). When specific data were missing from the retrieved articles, we made attempts to contact the study corresponding authors via LinkedIn, ResearchGate and email. As Rodgers and colleagues note, this would not only improve the process of transparency by better understanding what sorts of data were extracted from which studies, but also recognising the contribution made by each study to the overall synthesis.[56]

Data analysis and synthesis

Studies in this review were not sufficiently homogenous to analyse using meta-analysis.

We, therefore, analysed primary data combining the findings from both study methods using a convergent integrated approach, i.e. evidence from both qualitative and quantitative studies synthesised simultaneously (i.e. convergent).[57] As this review included more qualitative studies (4) compared to quantitative (1) or mixed methods (1), we adopted The Joanna Briggs Institute's approach of ʻqualitisingʼ for analysing data. According to the Joanna Briggs Institute, ʻqualitising involves extracting data from quantitative studies and translating or converting it into "textual descriptions" to allow integration with qualitative data.ʼ[58]

We used thematic analysis/synthesis as a method of integration or synthesis where assembled data were categorised and pooled together based on similar meanings or interpretations in themes and subthemes. In thematic synthesis, ʻextracted data are coded, followed by grouping of codes which then make up a specific themeʼ.[59] We presented the results according to themes and then described quantitative and qualitative results in the same section. As Joff[60] suggested, we examined these themes and subthemes on ʻtheir similarities, differences and contradictionsʼ, to be able to address the research question about potential barriers and enablers of clinical commissioning on reducing health
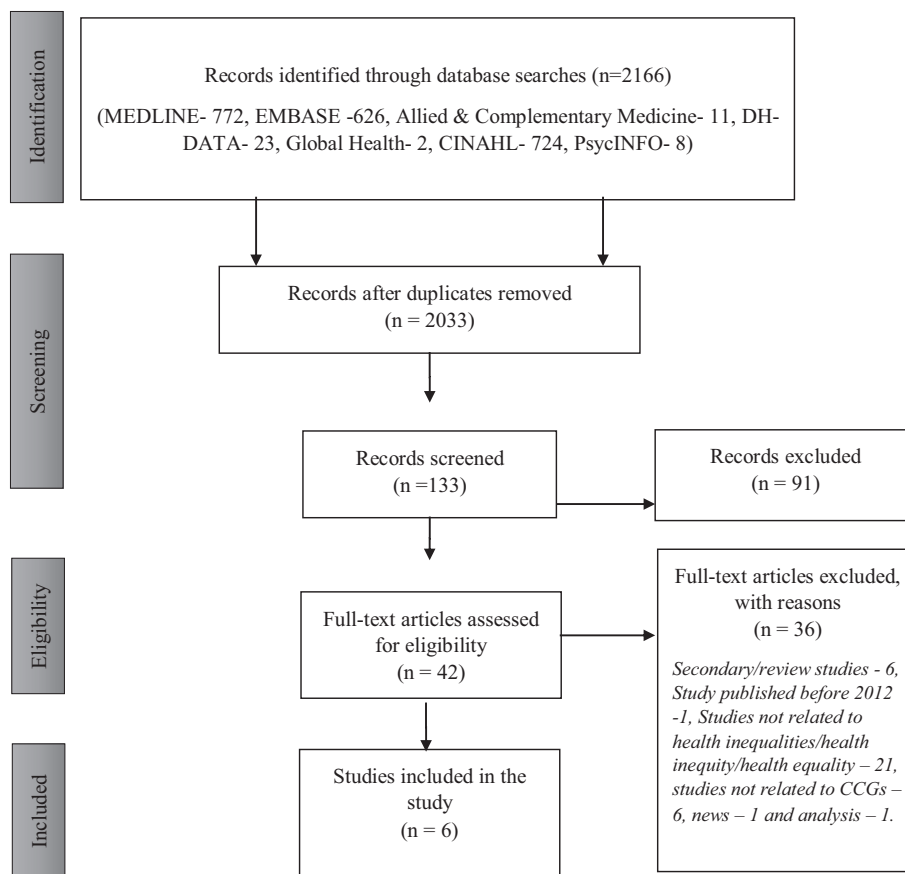
Fig. 1. PRISMA Flow diagram to show results of searches.

Table 1
Results from the critical appraisal of methodological quality.

Results from critical appraisal of four qualitative studies - JBI Critical Appraisal Checklist for Qualitative Research[49]										
Studies no/Question no	1	2	3	4	5	6	7	8	9	10
McDermott et al.[62]	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
Turner et al.[63]	Yes	Yes	Yes	Yes	Yes	Unclear	Yes	Yes	Yes	Yes
Cheetham et al.[64]	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
Salway et al.[65]	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
In total	4/4	4/4	4/4	4/4	4/4	0	1/4	4/4	4/4	4/4

Results from critical appraisal one quantitative study - JBI Critical Appraisal Checklist for Studies Reporting Prevalence Data[50]									
Study no/question no	1	2	3	4	5	6	7	8	9
Al-Haboubi et al.[66]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
In total	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1

Results from critical appraisal one mixed methods study -Mixed Methods Appraisal Tool (MMAT)[51]					
Study no/question no					
Gadsby et al.[67]					
Qualitative components	1.1	1.2	1.3	1.4	1.5
	Yes	Yes	Yes	Yes	Yes
Quantitative components	4.1	4.2	4.3	4.4	4.5
	Yes	No	Yes	No	Yes
Mixed methods	5.1	5.2	5.3	5.4	5.5
In total	Yes	Yes	Yes	No	No (due to Low quality)

inequalities. To generate themes, we followed Braun and Clarke's[61] key steps, e.g. (i) immersion and familiarisation — getting to know more about the data through in-depth reading and re-reading and comparing data across the dataset, (ii) coding — fixing the meaning for a segment of data (a word, phrase, sentence or passage), (iii) developing and refining themes — involving some constant comparison with the aspects of the whole data, and (iv) organising themes and write-up. The relative contribution of each study to the synthesis is in Table 3. The coding process and the

Table 2
Summary of reviewed studies.

Author	Aim and purpose of study	Theoretical framework/ approach	Study design	Sample size	Time-frame	Key findings	Ethical approval
McDermott et al.[62]	To analyse how CCGs have responded to the new responsibility and to identify challenges and factors that facilitated or inhibited achievement of integrated care systems	• Not provided	• Qualitative - exploratory approach • Data were collected using interviews and national telephone surveys	112	2015—2017	Integration of budgets and commissioning responsibilities; CCGs understood the roles of primary and local needs, new models of care	The study received ethical approval from the University of Manchester's Research Ethics Committee.
Turner et al.[63]	To inform current debates by reporting findings from a series of in-depth interviews conducted with a range of experienced professionals working in varied roles within the health and social care commissioning arena	• Not provided	• Qualitative methods • Data were collected using semi-structured and in-depth interviews	42	2012	Community did not feel any progress on the issue of health inequalities but reported better management due to partnership, commitment and strategic programme approach	Ethical approval was obtained from NRES East Midlands
Cheetham et al.[64]	To examine the factors affecting the design, commissioning and delivery of integrated health and well-being services (IHWSs), which seek to address multiple health-related behaviours, improve well-being and tackle health inequalities using holistic approaches	• Not provided	• Qualitative methods • Semi-structured interviews and evaluation were conducted to collect data	16	2015—2016	Challenging organisational context but realised long-term benefits to population health and well-being	Ethical approval was obtained from research ethics subcommittees at Teesside, Durham Universities and NHS R&D approval
Salway et al.[65]	To what extent and in what ways are ethnic diversity and inequity considered within healthcare commissioning? What factors influence this commissioning practice?	• Not provided	• Qualitative method • Data were collected by semi-structured interviews	89	2010—2013	Tackling health inequalities not considered as part and parcel of commissioning	Ethical approval was obtained from the National Research Ethics Service (Nottingham Committee 2, and governance approval
Al-Haboubi et al.[66]	To explore: (i) whether there are inequalities in the use of dental services among adults residing in a socially deprived, ethnically diverse metropolitan area; (ii) satisfaction with services provided; and (iii) public perceptions on possible areas for improvement of local services	• Not provided	• Cross-sectional quantitative • Data were collected using interviews using a structured questionnaire	695	not provided	Community felt positively in terms of service improvement, affordability and accommodation	Ethical approval was obtained from the King's College London Research Ethics Committee
Gadsby et al.[67]	To examine key changes to the public health system following the reforms and explores the broad function of commissioning for health improvement within the new system	• Integrated theoretical framework	• Mixed methods • Data were collected employing multimethods — web-based questionnaire survey and in-depth case studies	201	2014—2015	Raised issues of time, costs and relationship between commissioners and local authorities but positively influenced the prioritisation and decision-making process	Ethical approval was granted by the University ethics committee and research governance approval

development of themes throughout the analysis were discussed among authors.

Results

We identified 2166 references, scanned 133 titles and abstracts and retrieved 42 publications for full texts. From these, we included six studies that reported data on clinical commissioning and health inequalities[62—67] and excluded 36 studies (Additional file 4). A full report of the study selection process can be found in the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) diagram in Fig. 1.

Study characteristics

Table 2 shows a summary of the six included studies in the analysis. Of the six, four were qualitative,[62—65] and one article presented cross-sectional quantitative and another mixed methods analysis. Data were collected using semi-structured and in-depth interviews for qualitative studies, whereas both structured

Table 3
The contribution of each study in a thematic synthesis.

Theme	McDermott et al.[62]	Turner et al.[63]	Cheetham et al.[64]	Salway et al.[65]	Al-Haboubi et al.[66]	Gadsby et al.[67]
Roles and performance	●		●			○
Tool/data		◉				
Ethnicity				●	●	
Satisfaction					○	
Social grade					●	
Joint strategic needs assessments	○	○				
Priority setting		○				
Context	○		○			○
Organisation and structure	○		◉			○
Wider determinants of health			○			
Fragmented and split			●			●
Financial costs and public health budgets	●		●	●	●	●
Change management			○			
Complexity	●					●
Dialogue between commissioners and providers	○		○			
Commitment	●	●	○			
Sharing and engagement	○	●				○
Collaborative, partnership and engagement		◉	○			
Prevention and early intervention			○			
Decision-making						◉
Health equity and inequality	●	○	●	●	●	
Pessimistic approach		●				
Prioritisation						○
Improve services	○			○	○	○
Contracts and retendering	●		●			●
Politicised			●			
Uncertainty and delays			●			
Relationships and responsibilities between councils and CCGs	○		◉			●
Impact at a local level	●		●		○	
Alignment with the strategic priorities of prevention and early intervention	○		○	○	○	

○ facilitator; ● barrier; ◉ facilitator and barrier.

questionnaire surveys and in-depth interviews were used for quantitative and mixed methods studies. A total of 1155 participants (range: 16–695) participated in the included studies. All studies were conducted between 2010 and 2020 and focused on the NHS in England, UK. Quality assessments have been used for those six included studies. Out of standardised 10-item critical appraisal checklists for four qualitative studies, one article scored nine items[63] and three articles scored eight items.[62,64,65] Nine out of nine scored nine-item critical appraisal checklists for quantitative assessment for one article,[66] and the final article scored five out of five (for the qualitative component) and three out of five (for the quantitative component) from five-item critical appraisal checklist mixed methods studies.[67]

All studies clearly stated some theoretical premises as well as methodological approaches on which their studies were based. Similarly chosen methodological data collection methods and analysis techniques were reported appropriately. However, in four studies,[62–65] researchers' cultural and theoretical orientation and

their relationships between the researchers and the study participants were not described in detail. Similarly, in the quantitative component of the mixed methods study, researchers did not sufficiently discuss the integration of the findings from the qualitative and quantitative components. As Pluye et al.[53] suggested, different strategies such as reconciliation, initiation, bracketing, exclusion or triangulation would help to minimise these errors. Further details of the critical appraisal can be found in Table 1.

Findings of the review

This study is organised under four major themes/findings which emerged.

Finding 1: An overwhelming majority of the articles (five of six articles, 83%) indicated the agenda of health inequalities has not been given priority by clinical commissioning.

The primary and overriding finding of this study is that clinical commissioning (CC) has not given health inequalities a priority agenda of the commissioning process. 69% ($N = 480$) of study

participants who visited health services in the last two years reported that there were inequalities in the use of health services.[66] The study further reported that inequalities exist more among adult females (73%, adjusted prevalence ratio (PR) 1.14, 95% confidence interval [CI]: 1.03–1,27), among Asian ethicality (85% Adjusted Prevalence Ratio (PR) 1.21, 95% CI: 1.03-1.43) followed by Black (65% adjusted prevalence ratio (PR) 0.94, 95% CI: 0.82-1.08) mostly among the age group of 45-55 years (79%, adjusted prevalence ratio (PR) 1.13, 95% CI: 0.92-1.38).[66]

Some evidence indicated that CC was more considered a public health activity to determine health needs of individuals or populations by identifying, assessing and prioritising their needs and actions as general public health functions rather than a commitment to reducing health inequalities.[62] One article, however, reported that CC has been used as a tool to improve service improvements to address inequalities.[63] Participants expressed these aspects thus:

Commissioning was considered one of the broad aspects of public health activity […] identifying needs, reviewing service provision, deciding priorities, procuring services, and managing performance.[67]

Responsibility for the health inequalities agenda was seen primarily as a function of public health roles rather than part and parcel of core healthcare commissioning work, even where PCTs had adopted explicit strategic priorities relating to inequalities.[63]

CCGs understand primary care and local needs. Allowing CCGs to commission primary care alongside other services would support the development and implementation of local strategies for service improvement, support innovation in primary care and allow investment in primary care (by allowing resource shifting).[62]

Finding 2: More than half of the articles (four of six, 67%) reported reform through restructuring and organisations, and strategic approaches in collaboration, commitments and engagement as benefits of commissioning in healthcare.
The benefits of clinical commissioning have been reported across different studies. The commonest factors associated with the benefits of clinical commissioning are collaborative, partnership and engagement,[62,64,67] alignment with the strategic priorities of prevention and early intervention,[62,64,66] dialogue between commissioners and providers,[62,64] joint strategic needs assessments,[62,63] and planning and prioritisation.[63,67] Based on further analysis of the articles, three major benefits emerged:

a) *Context and restructure of services:* Since the Health and Social Care Act (HSCA2012), the commissioning process has been much better in terms of understanding the wider social-political context of local healthcare, recognising wider consultation on decision-making to plan and deliver health services involving local elected people and organisations. Similarly, this reform has relocated public health from NHS to local government, and prepared staff for transition to deliver integrated approaches.[66(p.4)] The following extracts illustrate issues relating to service context and restructure:

The relocation of public health from the NHS to local government provided important context for the introduction of integrated health and well-being services. Participants in both sites felt there were new opportunities to work across local authority directorates to address the wider determinants of health and health inequalities.[64]

There is wider consultation on decisions in the local council setting than in the NHS, and elected members now have a strong influence on public health prioritisation. There is more (and different) scrutiny being applied to public health contracts, and most councils have embarked on wide-ranging changes to the health improvement services they commission. Public health money is being used in different ways as councils are adapting to increasing financial constraint.[67]

b) *Strategic approaches - service integration and commitment*: CC offers greater knowledge and understanding of integrating local health services reflecting data to local health plans. McDermott et al.[62(p.7)] further add that "Integrated care [in the context of CC] requires detailed local work to build trust and develop context-specific mechanisms to work across boundaries." Similarly, a great commitment through investment has been given within council services to improve public health to meet needs and expectations. Included articles reported these aspects as follows:

Potential for greater integration of knowledge and data on local communities, stronger Joint Strategic Needs Assessments (JSNAs) and better understanding of needs, was noted with the move of public health to Local Authorities. In addition, new structures, particularly the health and well-being board, created the possibility of new opportunities for representation.[63]

Greater recognition of public health objectives and expected outcomes in a wider range of council services as a result of public health investment. And we saw public health staff working hard to influence the wider workforce.[67]

Both local authorities had a long-term strategic commitment to community development and asset-based approaches, which was seen as beneficial by public health commissioners.[64]

c) *Partnership and engagement*: The association between CC and wider healthcare partnership and engagement has been reported positively in terms of meeting healthcare needs by reducing duplication costs/resources and sharing knowledge and expertise. These studies conveyed this view:

Expressed concerns that CCGs would have to start a lot of community engagement work from scratch and develop meaningful relationships with key communities. Engagement was seen by many participants to be important not just for understanding population needs, but also in commissioning services that effectively meet those needs.[63]

… recognised and articulated the potential added value of collaborative working between NHS and local authority partners, plus the third sector in WFL. Anticipated benefits included reducing duplication, extending the reach of existing services and programmes, sharing expertise and capacity and maximising opportunities for innovation. The idea of offering a more streamlined accessible approach, which seeks to knit together a number of different functions was broadly welcomed.[64]

GPC endorsement of the social model of health underpinning LWG and WFL, there was also broad acceptance of prevention and early intervention, recognised as being more cost-effective than long-term treatment.[64]

Finding 3: All six articles (100%) indicated that there was some poor evidence for reducing health inequalities through the clinical commissioning process. The commonest associated factors were:

(i) lack of commitment or focus on health equity and inequalities,[62–66] (ii) uncertainty and delays in resource allocation,[62,64–67] (iii) lack of trust and clarity in terms of the roles and performance[62,64] and poor relationship between the councils and CCs in planning and decision-making.[62,64,67] These barriers have been broadly categorised into two levels:

a) *Structural impediments*: All articles reported that in commissioning, the decision-making process was a challenge as it demanded wider consultation with a range of policy-planners, politicians, and decision-makers at local levels. Since the implementation of CCs, the positioning of public health teams at the local level varied mostly due to the unprecedented cuts to their budgets. One survey found[67] that 26% (N = 73) of the public health teams were distinct public health directorates; 52% were sections of another directorate; and 22% had other arrangements, including merged, distributed and mixed models. Directors of public health (DsPH) also had different levels of access to key council decision-making bodies (53% of DsPH respondents were members of the council's most senior corporate management team), and different line-management structures (47% said that they were managerially responsible to the council's chief executive; 53% were managed by a range of other directorate heads). Because of such changes, DsPH therefore were not always in the best place for strategic influence in the council. Similarly, studies reported commissioning responsibilities have been fragmented between different organisations (NHS England, Public Health England (PHE), local councils and CCGs), and co-ordination was slow, difficult and bureaucratic.[64,67] Therefore, there was serious concern raised not only about diluting local authorities' action on health inequalities, but also failing to recognise and reduce health inequalities because of poor direction from central government and poor commissioner engagement in health services commissioning.[63,67] The extracts below illustrate this:

> Decision-making within councils was found to be very different to that within PCTs. Decision-making across the local system following the reforms was intended to be more co-ordinated. However, with commissioning responsibilities now fragmented between NHS England, Public Health England (PHE), local councils and Clinical Commisioning Goups (CCGs), our research found that co-ordination was proving to be difficult.[67]

> Poor track record of shifting resources out of secondary care and into the types of primary care and public health interventions felt to be capable of achieving a significant impact on health inequalities.[63]

b) *Personal impediments*: More than half of the articles reported personal impediments (three of six, 50%) to reducing health inequalities in the CC process. Commissioners' inadequate level of knowledge and expertise, poor trust/relationships between local authorities and staff involved in the commissioning process, poor partnership, working in different geographical locations and engagement, and a largely pessimistic approach have been reported as major challenges.[63] Some extracts below illustrate this:

> Most commissioners did not view identifying and tackling ethnic inequalities in healthcare access, experience or outcomes as part-and-parcel of their job due to lack of clarity about their responsibilities.[67]

> Pressures to get both services 'off the ground' quickly, coupled with different organisational cultures, a history of competing for contracts and mistrust arising from short-term contracts and

reducing budgets, may have destabilised early efforts to build relationships among staff and with communities.[64]

While asking about commissioners' influence and contributions, 92% of elected members responding to our survey (N = 38) said they felt always able (45%) or quite often able (47%) to influence the priorities of the public health team.[67] In addition, there is now a greater disconnect between public health officers and NHS commissioners. In response to this survey, 48% of DsPH (N = 69) said they felt 'less able' to influence local CCGs than before the reforms. This study found that evidence of meaningful engagement between public health teams and CCGs was limited.[67]

Finding 4: Most articles (four of six articles, 67%) indicated improving health services, appropriate policy and approaches should be in practice.

These studies reported service improvement associated with availability, affordability, and accommodation or flexibility of services.[66] Similarly, organisational contexts and appropriate translating of evidence into practice were factors reported that influence health services locally improving. Though health and well-being boards were meant to be the mechanism for coordinating commissioning across NHS, social care and public health at the strategic level, our survey found that amongst DsPH (N = 65), 48% felt the Health and Well-being Board (HWB) was 'definitely' instrumental in identifying the main health and well-being priorities, and 45% felt it had 'definitely' strengthened relationships between commissioning organisations.[67] However, less than 5% felt that the Health and Well-being Board was 'definitely' making difficult decisions, and only 28% felt that it had 'definitely' begun to address the wider determinants of health, including health inequalities.

The extracts below highlight some relevant issues:

> Greater accountability of healthcare commissioners to the public and more influential needs assessments via emergent Health and Well-being Boards.[63]

> Investment and opportunities contained in national and local initiatives were seen as major contributors to enabling CCGs achieving a people-centred, locally driven, integrated primary care service with general practice.[62]

Discussion

The main finding of this study is that there is very little evidence in the peer-reviewed literature of clinical commissioning policy having any noteworthy impact on reducing health inequalities. In this review, only six studies met our inclusion criteria from over 2166 citations in the major biomedical bibliographic databases. This study has clearly highlighted factors related to both benefits and challenges. Better collaborative partnership engagement and alignment with the strategic priorities, dialogue between commissioners and providers and joint strategic needs assessments and planning and prioritisation are revealed as the key enablers for the success of CCs and health inequalities.[62–64,66] The study, however, reported clear gaps due to different commissioning structures, different roles, financial pressures, accountabilities, trust and relationship between the councils and CCs in planning and decision-making, GP skills and competencies, organisation experience and local contextual conditions, to address inequalities in policy and practice.[62–66,68]

These identified different barriers and enablers (Table 3), are appropriately aligned with the Marmot health inequalities review, stating that health inequalities are determined by a complex mixture of factors, despite the fact that Marmot review was

conducted before implementation of the Health and Social Care Act 2012.[1,20] In 2008, Marmot was asked by the then UK Secretary of State for Health to conduct a review of health inequalities to assemble the evidence appraising the existing published evidences, and advise on the development of a health inequalities strategy in England from 2010. The review was published as 'The Marmot Review' in 2010.[69] The key themes reported from this review were: reducing health inequalities is a matter of fairness and social justice, action is needed to tackle the social gradient in health through proportionate universalism (providing universal services with added intensive support for those in greatest need), action on health inequalities requires action across all the social determinants of health, reducing health inequalities is vital for the economy, and effective local delivery requires particularly effective decision-making at the local level.[17] Marmot[17] also argued that 'addressing health inequalities at earlier stages of life was the surest way to reduce the long-term incidence of health inequalities'. NHS also reported that 'reducing health inequalities improves life expectancy and reduces disability across the social gradient. Tackling health inequalities is therefore core to improve access to services, health outcomes, improving the quality of services and the experiences of people.'[70(p.11)].

Due to implementation of CC, this study has found targeted and integrated approaches which would be beneficial to improve health and reduce health inequalities. It is because the remit of commissioning involves assessment of local needs, as well as deciding priorities and strategies and purchasing services for local populations, which is called *strategic purchasing*.[62,71] CC has been viewed as a new and integrated model of care, holding promise for addressing inequalities largely at the provider:patient interface.[72,73] We also argue that through CC, it is not just about having enough GPs, but also whether they listen to the whole community.[73]

Our study also found that power and decisions have been shared with communities and service providers, but still there are some gaps or challenges in terms of transformation of funds and availability of funds to run community services, and their priorities are structured differently.[74] Therefore, changing the culture of communities from passive consumers to active partners would be one of many options to make wider access to healthcare possible.[73] Atkins et al.'s finding in this context might be useful, because they suggest that we: "should work more clearly with local government public health team to define research questions [issues] through the lenses of local government and their proprieties and imperatives, taking into account the context of the significant loss of resources local government are dealing with."[75(p.15)]

Similarly, in CCs, changing responsibilities mean these two partners (health services and local government) have to think afresh about the way they address these issues and of course, things like devolution, e.g. CC gives us a new opportunity to look at this.[76] This also aligns with the findings of Baroness Thornton and colleagues, showing that the NHS can do things to help tackle inequality, addressing the social determinants of health and the wider factors.[73] Moran et al.'s[74] survey of over 2600 GPs claimed that though approximately 30% of the GPs agreed that commissioning was part of their role and responsibilities, most of them also agreed that their involvement would add value to the commissioning process in terms of influencing and addressing the local healthcare needs. The NHS Commissioning Board complements existing research, claiming that 'clinical leadership would significantly improve their performance in their practices' in the NHS.[20] Clinical leadership is, therefore, considered 'central to all models of primary care-led commissioning', involving both the components of service improvement and service redesign.[39,62] In fact, such interpretations are supported by earlier work,[20,70] i.e. effective

GP engagement to take on a greater level of responsibility in the commissioning of primary care services would be an important role, as reported by our own study.

Williamson[77] supports this view, stating that through better understanding of health needs and gaps, we can create some effective service models and care pathways. Similarly, this study also supports Smith et al. emphasising that: 'competent commissioning may help ensure appropriate monitoring and review of current services, the design and planning of necessary changes, and setting of priorities for funding'.[8(p.12)] Another study conducted by Atkins et al.[75] among public health directors and healthcare practitioners acknowledged that they need to develop service commissioning skills.

This study has further highlighted that one of the challenges GPs faced was due to poorly defining their roles in clinical commissioning, as well as the size of population they should cover.[78] Similarly, frustration at work among GPs, mainly due to increased volume of work and lack of resources, has been reported as a major barrier since the implementation of Health and Social Care Act, 2012, which has also been reported in Humphery and Claver's findings.[79] Working in collaboration with a wide range of stakeholders would help develop appropriate local healthcare strategies and evidence-inform policy in practice.[75,80] Unequal distribution of funds between primary and secondary care, resulting in inefficiencies and poor performance, have also been reported as other barriers. As reported in the previous study, we also found some limited attention to ethnic diversity and inequality within healthcare commissioning.[81] From the users' perspective, our study has reported that users' demand and expectations, in line with the demographic changes, would certainly influence GPs' ability in terms of (re)designing and (re)shaping primary healthcare services at the local level, as highlighted in other similar studies.[69,79,82–84] Therefore, as Checkland et al.[78] suggested, it is important to support the development of new models of service provision and work more closely with LAs, other providers (e.g. voluntary sector) and other local bodies (e.g. health and well-being boards) for commissioning of primary care services.

Strengths and limitations of the review

To our knowledge, this is the first systematic review to examine the factors − barriers and enablers − since the implementation of CC for improving health quality and reducing health inequalities in the English NHS. This review was conducted using a comprehensive search strategy, developing a systematic review research protocol and also attempting to address a particular review question, i.e. 'what are the barriers and enablers of implementing clinical commissioning policy to reduce health inequalities in the English NHS (UK)?' using both qualitative and quantitative evidences. DH[3] and NHS Improvement[85] proposed some commissioning cycles, but how a commissioning model would be meaningful in addressing health inequalities has not been reported before. CC is a continuous strategic assessment process. To make an effective link between CC and reducing health inequalities, it is important to make a stronger link between public health and broader work on the social determinants of health; putting people at the centre of the framework ensures their needs are appropriately met by providing best-quality care in primary care services. The process would also give more immediate results in improving public health, making it part of the local political landscape.[86] It is, therefore, important to routinely monitor the inequalities in access and health outcomes, acknowledging the skills and capacities of GPs and other healthcare providers in leadership and governance and ensure they can fulfil their operational and strategic roles effectively, efficiently and equitably.[68,87]

It is important to highlight that there is only one main local equity indicator for CCs, which is inequality in potentially avoidable emergency admissions (called CCG improvement and assessment framework indicator)[88] but there are local indicators for improvement access to psychological therapy services (see more – the NHS equity right care packs[24]), and there are plenty of other national inequality indicators. CCGs were supposed to set their own quantitative local equity indicators and ambitions as part of the five-year plan, but most have failed to do so. National health inequality monitoring is better, but national monitoring does not help with local quality improvement and accountability – no individual CCG, hospital, GP practice or clinician is responsible for the national inequality picture, and so they can all safely ignore the national picture, which we consider a missed opportunity.[89] Therefore, the big policy issue is how to get CCGs to take this seriously – not just talk about it, but actually set quantitative equity indicators for their own local equity performance compared with similar CCG areas that can be monitored over time. An important analytical issue is how to monitor ethnic inequalities as well as deprivation-related inequalities – this is very difficult as ethnicity coding is weak. We argue that the identified factors from this study perhaps could be helpful for formulating appropriate indicators to monitor inequalities related to health at the NHS hospitals and GP practices.

Similarly, we need to get NHS equity performance indicators developed for hospitals and GP practices that benchmark their equity performance against the populations served by similar organisations. Provider organisations are the ones with power and influence so in a way equity monitoring for them would be more important than equity monitoring for CCGs which are rather feeble organisations lacking clout.[89]

This review has, however, some limitations. First, a potential limitation of this study is that as the study is internally funded, and therefore time and resource were constrained, we were unable to include and review grey literatures, thus studies could have been missed which may present another potential source of bias. However, efforts were undertaken to identify all relevant studies associated with clinical commissioning and health inequalities, using seven well-known major bibliographic databases. Second, there is a small number of studies conducted on the topic that meet the inclusion criteria, which brings a relatively small pool of research. This was unavoidable as we have clearly set out the timeframe as well as the country of publication. Third, studies are variable in sample size, quality and population which are open to bias, besides which the heterogeneity of data precludes a meaningful meta-analysis to measure the impact of specific enablers or barriers, therefore the findings warrant generalisation. Fourth, despite overall good methodological quality of the included articles, some studies provided inadequate descriptions of study methods and procedures.[62,63,67] We, however, added a detailed description of study methods and procedures. This review has been reported in accordance with the PRISMA statement for systematic reviews.[48] In addition, we also completed a 27-item PRISMA checklist (Additional file 3). Fifth, as Maden[90] reported while considering health inequalities in systematic review, 'there was no validated search filter for health inequalities'; therefore it was difficult to search the databases using the exact terms. However, we used these terms based on those used in a Cochrane methodological review, exploring how effects of health inequalities are assessed in SRs.[91]

Conclusion

The current systematic review highlighted that effective CCGs are essential to promote equality, improve health outcomes and reduce health inequalities. This review recognises that improving social condition is important to improve people's health, as both social and economic inequalities are bad for health inequalities. This study provides useful factors – barriers and enablers – to implement and deliver CC policy in improving health and reducing health inequalities. These factors could be assessed in future monitoring/evaluation of local primary care services. Further research is needed to find the best methods and approaches in terms of developing objective measures and interventions to establish the link between clinical commissioning and health inequalities improving equitable access, health outcomes and effective partnerships.

Author statements

Authors contributions

KR conceived and designed the study with the advice from OM; KR and OM reviewed, analysed and interpreted the data and contributed to drafting, revising and finalising the manuscript. All authors read and approved the final version of this manuscript.

Appendix A. Supplementary data

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