

Kent Academic Repository

Full text document (pdf)

Citation for published version

Warwick-Giles, Lynsey, Hammond, Jonathan, Bailey, Simon and Checkland, Kath (2021) Exploring commissioners' understandings of early Primary Care Network development: qualitative interview study. *British Journal of General Practice*. ISSN 0960-1643. (In press)

DOI

<https://doi.org/10.3399/BJGP.2020.0917>

Link to record in KAR

<https://kar.kent.ac.uk/89524/>

Document Version

Author's Accepted Manuscript

Copyright & reuse

Content in the Kent Academic Repository is made available for research purposes. Unless otherwise stated all content is protected by copyright and in the absence of an open licence (eg Creative Commons), permissions for further reuse of content should be sought from the publisher, author or other copyright holder.

Versions of research

The version in the Kent Academic Repository may differ from the final published version.

Users are advised to check <http://kar.kent.ac.uk> for the status of the paper. **Users should always cite the published version of record.**

Enquiries

For any further enquiries regarding the licence status of this document, please contact:

researchsupport@kent.ac.uk

If you believe this document infringes copyright then please contact the KAR admin team with the take-down information provided at <http://kar.kent.ac.uk/contact.html>

Accepted Manuscript

British Journal of General Practice

Exploring commissioners' understandings of early Primary Care Network development: qualitative interview study

Warwick-Giles, Lynsey; Hammond, Jonathan; Bailey, Simon; Checkland, Katherine

DOI: <https://doi.org/10.3399/BJGP.2020.0917>

To access the most recent version of this article, please click the DOI URL in the line above.

Received 08 October 2020

Revised 25 February 2021

Accepted 02 March 2021

© 2021 The Author(s). This is an Open Access article distributed under the terms of the Creative Commons Attribution 4.0 License (<http://creativecommons.org/licenses/by/4.0/>). Published by British Journal of General Practice. For editorial process and policies, see: <https://bjgp.org/authors/bjgp-editorial-process-and-policies>

When citing this article please include the DOI provided above.

Author Accepted Manuscript

This is an 'author accepted manuscript': a manuscript that has been accepted for publication in British Journal of General Practice, but which has not yet undergone subediting, typesetting, or correction. Errors discovered and corrected during this process may materially alter the content of this manuscript, and the latest published version (the Version of Record) should be used in preference to any preceding versions

**Exploring commissioners' understandings of early Primary Care Network development:
qualitative interview study**

Authors

Lynsey Warwick-Giles, Research Associate, PhD
Centre for Primary Care and Health Services Research
Division of Population Health, Health Service Research & Primary Care
School of Health Sciences
Faculty of Biology, Medicine, and Health
The University of Manchester
Williamson Building, Oxford Road, Manchester, M13 9PL
Email: lynsey.warwick-giles@manchester.ac.uk

Jonathan Hammond, PhD
Centre for Primary Care and Health Services Research
Division of Population Health, Health Service Research & Primary Care
School of Health Sciences
Faculty of Biology, Medicine, and Health
The University of Manchester
Williamson Building, Oxford Road, Manchester, M13 9PL

Simon Bailey, PhD
Centre for Health Services Studies
University of Kent
Canterbury, Kent, CT2 7NF

Kath Checkland, PhD, Professor of Health Policy and Primary Care, GP
Centre for Primary Care and Health Services Research
Division of Population Health, Health Service Research & Primary Care
School of Health Sciences
Faculty of Biology, Medicine, and Health
The University of Manchester
Williamson Building, Oxford Road, Manchester, M13 9PL

Accepted Manuscript - BJGP - 2020.0917

Title: Exploring commissioners' understandings of early Primary Care Network development: qualitative interview study

Abstract

Background

Primary Care Networks (PCNs) are financially incentivised groupings of General Practices (GP) in the English NHS. Their purpose is to deliver a number of policy goals set out in the NHS Long Term Plan. Clinical Commissioning Groups (CCGs) have a role in their establishment, support, and oversight.

Aim

Explore commissioner's perspectives on the early development of PCNs.

Design and Setting

Qualitative study of CCGs using telephone interviews. Semi-structured interviews (n=37) with CCG employees involved in PCN establishment.

Method

Interviewees were asked about local PCNs' characteristics, factors shaping development and form, activities to date, challenges and benefits, and their CCGs' relationship with PCNs. Interviewee responses were summarised within a matrix and analysed thematically.

Results

Three meta-themes were identified: the multifaceted role of the commissioner; uneven advantages; engaging the broader system. Interviewees reported that the policy potentially favours PCNs working from a 'blank slate' and does not sufficiently account for the fact some GP practices and wider system organisations have been doing similar work already. The prescriptive, contractual nature of the policy has led to local challenges, trying to ensure local good practices are not lost during implementation. Interviewees also considered an important part of their work to be protecting PCNs from the weight of expectations placed upon them.

Conclusion

CCGs are well placed to understand the complexities of local systems and facilitate PCNs and working practices between wider system partners. It is important that this local role is not lost as CCGs continue to merge and cover larger geographical populations.

Keywords:

Primary Care Networks, Clinical Commissioning Groups, policy implementation, qualitative, general practice

How this fits in:

Primary Care Networks (PCNs) in the English NHS are new, financially incentivised collaborations between general practices organised via an add-on to the contract GPs have with government.

Clinical Commissioning Groups (CCGs) have had a role in authorising PCNs as well as supporting their development and operation, often through the provision of additional management support.

In some local areas, the contractual approach and stipulations of the policy have slowed down and damaged existing collaborative initiatives.

PCNs need to work together with other providers; CCGs are well suited to support this work. However, the supporting role lacks any formality and funding, we outline the contribution of CCGs, in supporting PCN development.

Word count: 3998

Introduction:

There is a perceived crisis in primary care in the English NHS: General Practitioners (GPs) are leaving the profession at an earlier age than previously, or choosing to work part-time, and there is a lack of newly trained doctors entering general practice(1, 2). Alongside this, demands on the system are growing due to an increasingly elderly, multi-morbid population, and funding is failing to keep pace (3). The NHS Long Term Plan(4) set out a number of proposals to address these problems, including the introduction of Primary Care Networks (PCNs) to support GP practices and increase integration.

Policy guidance suggested PCNs would be geographically contiguous groupings of GP Practices usually covering a patient population of 30-50,000(5). PCNs are being established using a contractual mechanism, a voluntary add-on (or Directed Enhanced Service) to the existing General Medical Services (GMS) contract, which governs GP services. This add-on contract was negotiated between NHS England and the British Medical Association (BMA; representing GPs), and it provides additional funding for: participation; the employment of new staff under an Additional Roles Reimbursement Scheme (ARRS); offering extended hours; a performance incentive scheme; and funding for a Clinical Director for each PCN. Roles covered by the ARRS include clinical pharmacists, social prescribers, physician associates and others such as paramedics and advanced practitioners. These new workers will be employed across PCNs to relieve pressure on practices. The incentives for GP practices to become involved are thus strong and most GP practices opted to join a PCN in July 2019.

Although PCNs had some discretion in terms of their formation, they required the approval of their local Clinical Commissioning Group (CCG), the body with responsibility for commissioning primary care services, and NHS England. GP practices were given some leeway in deciding both their configuration and the content of an agreement between member practices, which included internal governance processes, a lead practice (a nominated practice to hold the PCN bank account), and arrangements for receiving and distributing funding(6). The result has been considerable variation in the size and population coverage of PCNs, with many outside the official target of a population size of 30-50,000 people(7).

PCN development has not been entirely smooth. In return for the additional investment, from April 2020, PCNs were expected to deliver a set of service specifications, covering five areas of work, including: structured medicines reviews and optimisation; enhanced health in care homes; personalised care; supporting early cancer diagnosis; and anticipatory care for vulnerable patients. However, draft specifications, published in December 2019(8), were strongly opposed by GPs and their representative organisations (9), with concerns cited about the increased workload involved in meeting the specifications. Further negotiations with the BMA led to significant amendments, including the phasing of the introduction of the specifications, a reduction in associated performance requirements, additional funding, increased reimbursement for all roles from 70% to 100%, and additional payments for providing care in Care Homes. In March 2020, the Covid-19 pandemic further delayed the introduction of the service specifications and the introduction of the proposed performance incentive scheme.

In this paper, we report findings from a national interview study with CCGs, conducted to better understand how PCNs are constituted and how CCGs are supporting their development. We show how CCGs have played an important role in the creation and early operation of PCNs and illustrate the complexities faced in implementing the Network Contract Directed Enhanced Service (DES) alongside existing working practices and commissioning arrangements. We draw on these to highlight some issues of key relevance to both local policy implementation and the further development of national policy.

Methods

This study is part of an on-going longitudinal mixed-methods project (July 2019-July 2023) comprising four work packages: 1) exploring national policy objectives(10); 2) telephone interviews with CCGs to explore how they are supporting PCN development (August-December 2019); 3) case studies of PCNs within five different CCG areas; 4) quantitative analysis of PCN development and outcomes(7). Ethical approval for the project was received from The University of Manchester Proportional Review Committee. This paper focuses on work package 2 and reports data from 37 semi-structured qualitative interviews with CCG staff across England with a role in commissioning or supporting the development of PCNs within their geographical area (comprising Director of Commissioning, Head of Primary Care, Accountable Officer, Director of Place, Local Care Director, and Director of Transformation). Qualitative interviews explored the role of commissioners and the local implementation of national policy. This work package complemented the quantitative work that took place at the same time. CCGs were purposively selected to provide geographical coverage (see table 1), however, recruiting respondents from the London region proved difficult. Prospective interviewees were approached by email, informing them of the research team, the funders of the project and the purpose of the research. A participant information sheet, outlining the study in more detail and what their involvement would entail, was provided. Respondents then made contact with the research team, via email to organise a suitable interview time.

Insert Table 1 here

The topic guide (see box 1) focused on: PCN characteristics; factors shaping their development and form; activities to date; challenges and current and potential perceived benefits; CCG relationships with PCNs. Our central concern was to understand the factors affecting how PCNs were forming and this informed our research questions. The topic guide was piloted with three sites to ensure that the

questions were understandable and that the guide would capture the information required. The questions were developed from our reading of the policy documents, the wider literature and informal discussions with CCGs, NHS England, and the Department of Health and Social Care.

Insert Box 1 here

Telephone interviews, lasting 30 minutes on average, were conducted by LW-G and JH (female and male, respectively; both experienced qualitative, health policy researchers) and audio recorded. Verbal consent was taken before the interview and audio-recorded. A framework analysis approach was employed (11). LW-G summarised responses to each question to populate a matrix using spreadsheet software, and codes were developed from these responses. This process took place alongside data collection. When data saturation, with the same issues being highlighted by participants, was reached no additional interviews were scheduled. Codes were then formulated into categories, which were tested against the authors' understandings of salient aspects of the policy derived from documentary analysis and findings from the other work packages of the project. This process was accomplished using NVivo 12. All authors collaboratively developed the meta-themes below.

Results:

The interviews generated rich data concerning the establishment and form of PCNs, alongside complexities and issues faced when trying to implement the PCN policy locally. For the purpose of this paper, we present three meta-themes that encapsulate the majority of comments from interviewees: the multifaceted role of the commissioner, uneven advantages, and engaging the broader system.

All CCGs reported numerous factors that had influenced how PCNs had formed. The most common influences that were discussed were historical working relationships; local geography; and the role of the Local Medical Committee (LMC; the local statutory representative body for GPs) of the BMA. Respondents emphasised that although PCNs are a new policy initiative, GPs working collaboratively within specific geographical footprints has been happening in many areas for some time (e.g. practice based commissioning and GP Federations).

Theme 1: The multifaceted role of the commissioner

CCGs identified themselves as having a number of roles that they needed to fulfil when implementing the PCN policy locally; these included supporting the development of PCNs, protecting PCNs from expectations and co-ordinating the PCN policy into existing programmes of work.

Support and Protection

Although GP practices are being financially incentivised to join PCNs, the financial entitlements do not provide designated monies for PCN management. This has meant that the staff time and resources for management support have been commonly provided by CCGs to ensure that practices have been able to understand the policy, prepare themselves for the registration procedure and develop themselves into a PCN. Twenty-six CCGs reported that they had allocated some of their

staff time through their CCG primary care teams to work alongside PCNs through a variety of different mechanisms including PCNs being added to the primary care team's portfolio of work, providing workshops to disseminate the policy and facilitate local conversations between PCNs, and drawing together local Clinical Directors. In the short term, four CCGs had also agreed to second some of their staff to PCNs to provide skills PCNs were perceived to be lacking (i.e. finance and management). However, CCGs were concerned about the sustainability of these arrangements for PCNs and CCGs.

The majority of CCGs reported that they helped shape the formation of PCNs locally, ensuring they were geographically contiguous, and in line with policy guidelines. Many CCGs spoke of having 'honest and open' conversations with their PCNs to ensure that PCN development issues had been addressed before registration and applications were not rejected by the CCG. CCG staff liaised with other organisations and entities in the broader system to ensure that, for example, community services were aware of PCN developments, and that PCNs were engaging with the relevant ICS/STP (Integrated Care System/Sustainability and Transformation Partnership). CCGs were naturally well placed within the system to interact with other system partners because of existing working and commissioning relationships developed over a number of years. CCGs told us that this position in the system was important in supporting the development of PCNs to ensure they were aligned with the rest of the system.

There were concerns from some CCGs that the expectations being placed on PCNs through central policy initiatives were too extensive and could lead to professional backlash. CCGs reported that if the work required was too onerous, general practices would refuse to sign up to the DES for the following financial year. CCGs explained how they were trying to protect their PCNs from such expectations.

It has all come too quickly-[PCNs have been] asked to put in place this new entity, employ people, develop new services-it is too much. [IDNS1.14]

We have been shoulder to shoulder [with the LMC] on how to support PCNs & shield them from the heat as being the solution to everything. [IDNS1.31]

One CCG staff member described PCNs under pressure from too many expectations from organisations across the system:

PCNs are like Buckaroo [a children's game], people keep piling work on them & everyone wants a bit of them. We need a reality check or we will kill them before they start. [IDNS1.19]

Nine CCG staff described PCNs as being seen as the 'nirvana' or 'cavalry'; PCN working was perceived to be an opportunity to solve all the problems that the NHS had historically faced without any real evidence of how such things would be achieved. Four CCGs suggested that they felt they needed to protect their local PCNs from the pressures and expectations being placed upon them, pushing back on occasion to NHSE and local organisations when they deemed the pressures to be too great for PCNs.

Co-ordination

When implementing the PCN policy locally, ten commissioners discussed the complexities associated with integrating the PCN policy into existing streams of work. This meant that CCGs had to work to ensure the new more prescriptive requirements did not disrupt existing relationships, which were felt to have been successful.

Having [local integration initiatives] in place made it more complicated. We weren't starting with a blank sheet, we had to think about how this would all come together [IDNS1.2].

Five CCGs suggested that the PCN policy had caused local distraction; primary care development was seen as something separate from the local system for a time, because general practice was focusing on the DES, to ensure that they were meeting the contractual requirements, rather than collaborating with the wider system. General practice needed time to understand what being a PCN meant and how they wanted to form themselves.

We were further ahead [than this policy]; we had arrangements in place, working ... in integrated groups. The PCN contract caused lots of distraction for a number of months ... It has taken us backwards. [IDNS1.34]

The added complexity faced locally, in some areas, was associated with programmes of work and service delivery which were broader than general practice and primary care. For example, CCGs had locality and neighbourhood programmes of work focussing on an integration agenda with other system organisations. The implementation of the PCN policy and the geographical contiguity element of the policy was found to be restrictive in some areas, as it did not allow for recognition of other partnerships and in some instances caused local tensions. This has meant that a substantial amount of CCG time has been spent 'knitting together' pre-existing local schemes with PCNs.

Theme 2: Tensions between PCN policy and locally commissioned services

Respondents told us the introduction of PCNs had taken local commissioners and practices by surprise, resulting in a need to re-evaluate existing commissioning decisions and work programmes. Four CCGs told us that if they had been aware of the policy direction earlier they would have made different recent local commissioning decisions.

The GP contract is agreed at national level-it is hard for localities to understand the direction of travel. We had made decisions on our [local service standards] & the next month the DES came out & we may have made different decisions if we would have known what was coming [IDNS1.12]

As a national 'one size fits all' contractual approach, the Network Contract DES and the new service specifications created duplication across a number of programmes of work for some CCGs. For example, some CCGs had already established local collaborative groups of GPs, with funded positions for a clinical lead. Others had already funded social prescribers and clinical pharmacists locally. These CCGs have had to spend some time reconciling the PCN policy with existing local commissioning arrangements, identifying duplications and potential double funding problems. The policy was felt by those interviewees to be of more benefit to commissioners that had not been proactive in developing new ways of working in primary care.

Because of historical integrated working, we identified a need and funded Mental Health practitioners in general practice. The DES is prescriptive on roles which has meant we (CCG) have had to work through how we will afford the workforce that was in place before the DES [IDNS1.34]

Many CCGs told us that they have been working on primary care development for some time in their role as (co-)commissioners of primary care services. They described identifying local population needs and recruiting different professional roles to address those needs. For example, a large proportion of CCGs reported that they had been working with social prescribing organisations for some time. The PCN ARRS had significant implications for these CCGs, because it was a requirement of the DES that in order to be eligible for the reimbursement for new roles, staff employed had to be new and in addition to existing staff. This meant, for instance, that if the CCG already established a social prescribing service for their practices they would only be eligible for the additional funding if they appointed additional staff, and this caused confusion and some practical problems in one CCG area:

...We have had to re-deploy social prescribers in areas where the CCG can afford to commission them; otherwise, we wouldn't be able to draw down the additional resource. We had 15 social prescribers who were on recurrent schemes because we knew money was coming from PCNs. We didn't realise that by doing it in advance we would be penalised. Practices where the social prescribers were working are having to recruit afresh [IDNS1.19]

Theme 3: Engaging the broader system

The objectives of the PCN policy are multifaceted; PCNs have been established to create a more collaborative general practice, promote inter-organisational place-based care and to support and shape the system(10). Commissioners suggested that the GP-centric contractual approach to PCN development failed to facilitate the engagement of elements of the local system beyond general practice.

The policy frames PCNs as an opportunity to engage and influence the collaborative entities at a broader 'system' level (ICSs and STPs), with Clinical Directors representing the voice of local primary care. Realising this aspiration in practice was considered problematic, however. Ten CCGs spoke of the complexities involved, which included deciding whether all Clinical Directors needed to attend all relevant ICS/STP meetings, and establishing collaboration and governance arrangements so that Clinical Directors could represent each other and speak with one voice.

...We are trying to ensure that their voices are heard but we need to think about the value of clinical time. We are working on a network of leads; they don't all have to go to everything. [IDNS1.24]

In order to achieve this, PCNs needed mechanisms for consulting their membership and deciding agreed positions. CCGs told us these things were not simple to accomplish. Some reported that their local PCNs were not yet engaged at the wider system level as GPs did not feel they understood what happened at system level or why it was relevant to them.

...There are negotiations at the moment at STP level to ensure that the PCNs all have a seat at the leadership table. The PCNs themselves are not sure whether they should be there, I think that is about their immaturity. It will change over the next 12-18 months. [IDNS1.32]

Ten CCGs told us that they saw it as an important part of their role to liaise between PCNs and the wider system, as there was no formal structure to ensure that the system worked effectively with local level organisations such as PCNs.

...The CCG is making the STP link to PCNs. There is an STP wide meeting with Clinical Directors but the focus is on integration at a local level. It is where the PCNs believe they can make a difference. [IDNS1.11]

At the time of the telephone interviews, PCNs were in their early establishment phase and were primarily general practice focussed. CCGs acknowledged that co-operation between PCNs and their local community service providers would be very important in the future, particularly in relation to delivering the proposed service specifications. Two CCGs had established local arrangements whereby community services were 'wrapped around' PCNs. In other areas, geographical boundaries for PCNs had caused local tensions with other providers. Two CCGs acknowledged that they were unsure how their local PCNs and community services were going to function in practice together. CCG interviewees told us that in the short term their primary focus was internal, to support the development of relationships between practices, as it was believed that was a prerequisite for longer-term success. However, they also acknowledged that, as commissioners, they would have an important role in the future in brokering relationships between PCNs and other community providers.

Discussion:

Summary

The policy establishing PCNs using a centrally-negotiated contractual mechanism tied to the core GP contract brings with it a number of complexities. Our interviewees reported that CCGs (which co-commission primary care services) had been required to reconcile the top-down contractual changes with existing local primary care support and development mechanisms. For those CCGs where such programmes were most advanced, the PCN policy represented a particular challenge which some felt had slowed their progress and damaged existing initiatives. As commissioners of primary care services, CCGs have had a role in: supporting the establishment of PCNs and mediating between practices to ensure smooth implementation of comprehensive coverage; providing managerial and administrative support to PCNs who have neither the resources nor capability to do this; reconciling the new contractual requirements with existing commissioning plans; protecting PCNs from perceived excessive expectations and demands from other parts of the system; brokering relationships with other providers in their local area; and supporting PCNs to engage at system level with ICSs or STPs.

PCNs are provider organisations, and there is therefore an important role for a body with planning responsibility which can maintain an overview of the local landscape of provision. The GMS contract and associated Network DES contract do not account for the full range of primary medical care

services which need to be commissioned, and it is important that the core and add-on contracts align with existing and planned local service plans and developments. PCNs need to be supported to work together and with other providers, and proactive management and planning are required to ensure that the provision of care meets local needs. CCGs, as commissioners of primary care with a good understanding of their local primary care providers, are ideally suited to fill this role. Future iterations of PCN policy need to engage proactively with CCGs to ensure that policy development meets the needs of local areas and complements local service developments.

Strengths and limitations

The strength of this paper is that it offers some of the first empirical evidence of issues arising as PCNs were established. We undertook qualitative interviews with CCG primary care leads across England, and data saturation was reached, suggesting that we had captured the important issues arising. However, our data were collected at a single point in time and thus represent a snapshot of PCN development. We undertook our interviews before the draft service specifications for PCNs were released; had we been able to repeat the interviews we would likely have gathered additional interesting data about how the specifications were received by PCNs and how CCGs had engaged in the consultation process. We did not collect data from PCN leads, whose perspectives on the roles of CCGs in PCN development may have been different. PCN policy is developing rapidly, and the Covid-19 crisis has put additional pressure on all parts of the NHS. We will capture the impact of these pressures in the next phase of the research.

Comparison with existing literature

PCNs are new organisations, and as such there is at present no existing literature on the topic. However, there is a long history of collaborative working between GP practices, including running collective audits(12), providing out of hours care(13) and undertaking commissioning activity(14). Such initiatives have been shown to increase GP wellbeing(15), and studies have shown that collaborations between GPs as providers need flexible and enabling managerial support from the commissioning authority(16, 17). Studies of primary care commissioning have demonstrated the need of detailed local knowledge and strong understanding of how primary care is delivered on the part of commissioners and strong relationships between commissioners and providers(18, 19). Existing literature thus supports our conclusions about the importance of the CCG role in supporting PCN development.

Implications for research and/or practice

The formal guidance surrounding PCNs has been GP practice focused, with a heavy emphasis on negotiating inter-practice agreements and on the minutiae of the rules surrounding contractual payments. This is understandable, given the core role of GP practices in forming PCNs, and is an inevitable consequence of the choice of a nationally negotiated contractual mechanism for implementing the policy. However, this has led to something of a vacuum in guidance relating to the role of CCGs in supporting PCNs. Our study has shown that CCGs take this role seriously, and are keen to provide the support that PCNs need to establish themselves and develop their role. Ongoing policy envisages PCNs as a neighbourhood nucleus around which other services coalesce(20); supporting this process will require CCGs to act as brokers of relationships, mediators of disputes and providers of development and management support. Following on from the NHS Long Term

Plan(4), many CCGs have recently merged creating significantly larger commissioning organisations(21). As CCGs scale up and lose staff there must be a concern that local, historical knowledge about the system and local trusting relationships will be lost the local links that will be needed for successful collaboration across provider organisations will be lost.

The next phase of PCN development will see PCNs working internally and with other providers to deliver an increased range of services. Ensuring that these services dovetail with and complement existing extended services will be another important role for primary care commissioners. The interplay between national contract negotiation and locally-determined service need will require careful management.

Funding

This article draws upon the findings from independent research commissioned by the Department of Health and Social Care and carried out by the Policy Research Unit in Health and Social Care Systems and Commissioning (PRUComm). PRUComm is funded by the National Institute for Health Research (NIHR) Policy Research Programme (Ref: PR-PRU-1217-20801). The views expressed are those of the authors and not necessarily those of the Policy Research Programme, NIHR or the Department of Health and Social Care.

Ethical approval

This study was granted ethical approval by The University of Manchester Proportionate Research Ethics Committee (study number: 2019-6922-11622).

Acknowledgements

The authors wish to thank the interviewees for their time and contribution.

Accepted Manuscript – BSCP – 10/2020

1. Owen K, Hopkins T, Shortland T, Dale J. GP retention in the UK: a worsening crisis. Findings from a cross-sectional survey. **BMJ Open**. 2019;9(2):e026048.
2. Marchand C, Peckham S. Addressing the crisis of GP recruitment and retention: a systematic review. *Br J Gen Pract*. 2017;67(657):e227.
3. Charlesworth A, Bloor K. 70 years of NHS funding: how do we know how much is enough? **BMJ**. 2018;361:k2373.
4. NHS England. The NHS Long Term Plan. Leeds: NHS England; 2019.
5. NHS England, BMA. Investment and evolution: A five-year framework for GP contract reform to implement The NHS Long Term Plan. NHS England.; 2019.
6. NHS England, British Medical Association. Mandatory network agreement. Leeds: NHS England; 2019.
7. Morciano M, Checkland K, Hammond J, et al. Variability in size and characteristics of England's Primary Care Networks: observational study. *Br J Gen Pract*. in press.
8. NHS England and NHS Improvement. Network Contract Direct Enhanced Service: Draft Outline Service Specifications. Leeds: NHS England; 2019.
9. Serle J. GPs vote down 'Trojan horse' PCN scheme" *Health Services Journal*. 2020.
10. Checkland K, Hammond J, Warwick-Giles L, Bailey S. Exploring the multiple policy objectives for primary care networks: a qualitative interview study with national policy stakeholders. **BMJ Open**. 2020;10(7):e038398.
11. Gale NK, Heath G, Cameron E, et al. Using the framework method for the analysis of qualitative data in multi-disciplinary health research. *BMC Med Res Methodol*. 2013;13(1):117.
12. Humphrey C, Berrow D. Developing role of medical audit advisory groups. **BMJ Qual Saf**. 1993;2(4):232-8.
13. Pickin D, O'Cathain A, Fall M, et al. The impact of a general practice co-operative on accident and emergency services, patient satisfaction and GP satisfaction. *Fam Pract*. 2004;21(2):180-2.
14. Coleman A, Checkland K, Harrison S, Dowswell G. Practice-based Commissioning: Theory, implementation and outcome. Final report. University of Manchester: National Primary Care Research and Development Centre; 2009.
15. Fletcher J, Pickard D, Rose J, et al. Do out-of-hours co-operatives improve general practitioners' health? *Br J Gen Pract*. 2000;50(459):815-6.
16. Checkland K, Snow S, McDermott I, et al. 'Animateurs' and animation: what makes a good commissioning manager? *J Health Serv Res Policy*. 2012;17(1):11-7.
17. Coleman A, Checkland K, Harrison S, Hiroeh U. Local histories and local sensemaking: a case of policy implementation in the English National Health Service. *Policy Polit*. 2010;38(2):289.
18. Coleman A, Checkland K, McDermott I, Harrison S. The limits of market-based reforms in the NHS: the case of alternative providers in primary care. **BMC Health Serv Res**. 2013;13 (Suppl 1)(S3).
19. McDermott I, Checkland K, Moran V, Warwick-Giles L. Achieving integrated care through commissioning of primary care services in the English NHS: a qualitative analysis. **BMJ Open**. 2019;9(4):e027622.
20. NHS England, BMA. Update to the GP Contract agreement 2020/21-2023/24. NHS England.; 2020.
21. Brennan S. Revealed: The CCG map after new wave of mergers. *Health Services Journal*. 2020.

Box 1. Topic guide for telephone interviews

To start can you just explain to me your role within the CCG and your involvement with Primary Care Networks...

Local PCNs

How have PCN been established? (*Flat practice network/lead provider/GP Federation-Provider entity/super practice as a network, non-GP provider (community trust) employer model*)

How many PCNs are within your CCG footprint?

How many patients in the largest PCN and smallest PCN?

Why have the PCNs been established in this way? (*History / GP Federation/geography...*)

As a CCG did you reject any PCN applications? (*If so, why?*)

Are the Clinical Directors of local PCNs GPs? (*If not, what job role and why not a GP*)

Have patients had any role in the development or operation of your PCN?

Have any members of staff been recruited using the Network Contract DES within any of your PCNs? (*Clinical Pharmacist & Social Prescriber*)

What factors have enabled & supported the establishment of PCNs? (*max 3*)

What issues have you faced when trying to establish PCNs? (*max 3-100% coverage/data sharing*)

PCN work and wider organisational involvement

How are GP practices working together?

What domains of work are they focussing on? (*What influenced the choices made?*)

Are networks working with other organisations? (*If so, at what level neighbourhood, place or system level? Get examples from each level where available*)

Intended benefits of PCNs

What are the intended benefits of PCNs for patients?

What are the intended benefits of PCNs for practices?

What are the intended benefits of PCNs for the CCG?

How are outcomes being measured and by whom?

Commissioning and contracting mechanisms

What commissioning arrangements do you have in place as a CCG to support PCNs? (*Is the support to help with their development or for longer term?*)

Were any financial incentives put in place to help with PCN development, in addition to the DES? (*From NHSE and/or the CCG?*)

What kind of organisation holds the DES contract for most PCNs and how was this decided?

What contract mechanisms as a CCG are you using to support collaborative working? (*DES/LES etc.*)

Are NHSE involved with the commissioning of PCN? (*If so, explain...*)

Are NHSE involved with the contracting of PCN? (*If so, explain...*)

Table 1: Geographical coverage of CCGs

Geographical Area	Number of CCGs interviewed
East of England	6
North West	8
North East & Yorkshire	10
South West	3
Midlands	4
London Region	1
South East	5

Accepted Manuscript – BJGP – BJGP-2020-0917