

ORCA - Online Research @ Cardiff

This is an Open Access document downloaded from ORCA, Cardiff University's institutional repository:https://orca.cardiff.ac.uk/id/eprint/139615/

This is the author's version of a work that was submitted to / accepted for publication.

Citation for final published version:

Choudhry, Mazhar, Edwards, Michelle, Cooper, Alison, Anderson, Pippa, Carson-Stevens, Andrew, Cooke, Matthew, Dale, Jeremy, Hibbert, Peter, Hughes, Thomas, Porter, Alison, Rainer, Timothy, Siriwardena, Aloysius Niroshan and Edwards, Adrian 2021. Senior clinical and business managers' perspectives on the influence of different funding mechanisms, and barriers and enablers to implementing models of employing General Practitioners in or alongside emergency departments: qualitative study. Health Policy 125, pp. 482-488. 10.1016/j.healthpol.2020.11.016

Publishers page: http://dx.doi.org/10.1016/j.healthpol.2020.11.016

Please note:

Changes made as a result of publishing processes such as copy-editing, formatting and page numbers may not be reflected in this version. For the definitive version of this publication, please refer to the published source. You are advised to consult the publisher's version if you wish to cite this paper.

This version is being made available in accordance with publisher policies. See http://orca.cf.ac.uk/policies.html for usage policies. Copyright and moral rights for publications made available in ORCA are retained by the copyright holders.



Title: Senior clinical and business managers' perspectives on the influence of different funding mechanisms, and barriers and enablers to implementing models of employing General Practitioners in or alongside Emergency Departments: Qualitative Study.

Abstract:

Purpose

Health policy in England has advocated the use of primary care clinicians at emergency departments to address pressures from rising attendances. This study explored senior managers' perspective son funding mechanisms used to implement the policy and experiences of success or challenges in introducing GPs in or alongside emergency departments.

Methods

The perspectives of senior clinical, business and finance managers with responsibility for emergency department services and on-site primary care service implementation were investigated in semi-structured interviews with 31 managers at 12 type-1 emergency departments in England and Wales (February 2018 - September 2019). Emergency departments operated one of three GP models or had prior experience of implementing a GP model. Interviews were thematically analysed.

Results

Perceived successful GPs models in emergency departments were reliant on well-organised and unified funding mechanisms, appropriate staffing and governance, and consideration of population demands and needs. Funding mechanisms and the flow of funds were reported as complex, especially in Inside-parallel GP models. The most efficient mechanisms were described at departments where funding was unified, in collaboration with health and community care services. Staffing with local, experienced GPs was important. There were cautions from experiences with private locum providers.

Conclusion

Our findings contribute to debates about implementing policy on how primary care clinicians are effectively and safely deployed in emergency departments and how local context should be considered.

Classification of keywords:

- Emergency Services, Hospital
- General Practitioners
- Primary Health Care
- Health Policy
- Leadership

Introduction

Emergency Departments (EDs) across England and Wales have been facing increasing pressures, with attendances rising, crowding increasing and waiting time targets being missed [1]. To tacklethis, a specific NHS policy was introduced in 2017 in England to encourage the introduction of General Practitioners (GPs) in or alongside emergency departments to see non-urgent patients and free up emergency department staff for the sickest patients [2]. However, there has been little evidence to support this policy [3-5].

A Cochrane Review in 2018 reported high heterogeneity in the four eligible studies, concluding that there was insufficient evidence to support claims that such models were effective [3]. This is supported by a narrative review of 20 studies, which also described an increase in emergency department attendances due to "provider-induced demand" when GPs were introduced [4]. A rapid realist review of 96 studies found significant evidence gaps in evaluation of outcomes and health economic evaluations of such services and wider system outcomes [5].

Implementing large systemic changes such as placing GPs in or alongside emergency departments requires significant funding, consideration of the opportunity costs of the alternative uses of such funding, an available workforce and evidence of how it should be used. Capital investment of around £100 million was provided by the UK government in 2017 to develop onsite "GP streaming" in emergency departments EDs in England [6], but wide variation exists in the funding structures and funding streams used for the continued operational costs of these services, how they are operationalised and what outcomes they achieve. No funding was made available for similar initiatives in NHS Wales.

In Wales, the devolved government provides direct funding to seven Local Health Boards (LHBs), which both plan and provide health services in line with ministerial policy. In

contrast, NHS England operates an internal market with (at the time of the study) 191 Clinical Commissioning Groups (CCGs). These CCGs commission hundreds of NHS Trusts (organisational units of healthcare providers), including NHS Foundation Trusts which are semi-autonomous, and thousands of GP Practices to provide, and sometimes fund, care in local areas [7]. This model focuses on financial incentives for purchasers and providers to improve healthcare. In recent years this model has evolved with an increasing number of CCGs collaborating or merging to provide system level care for wider populations [8].

Recruiting the right staff to work in these models is also important, however this is a challenge given the difficulties the NHS is facing with increasing pressure on limited staff, particularly GPs. The NHS spent £5.4 billion on temporary staffing in 2017/18 but this has in certain cases resulted in poorer patient experiences [9,10].

This study aims to better understand how, and to what extent, the models of using GPs in or alongside emergency departments work effectively, through exploring the perspectives and experiences of those with intimate knowledge of the local organisation of health and care services, the flow of funds and staffing – the senior clinical, finance and business managers. By examining the experiences of these managers, this study will add to the wider, growing evidence of the real effects and experiences of adopting these models to inform policy adaptation, service development and improve the healthcare provided to patients.

Materials and Methods

The [anonymised] study is an England and Wales, multi-centre mixed-methods study commissioned by [anonymised]. Its aim is to evaluate the clinical and cost-effectiveness of

different models of employing GPs in emergency departments, and to understand the ways in which mechanisms of delivery and context influence how services function to generate variations in outcomes [11].

[Anonymised]a taxonomy describes the different modelsof GPsworking in or alongside EDsfound in practice was developed[12]. The taxonomy provided a basis for evaluation by characterising service models into four distinct groups as shown by Figure 1. The fourth

Figure 1: The FORM of primary care service models in or alongside emergency departments

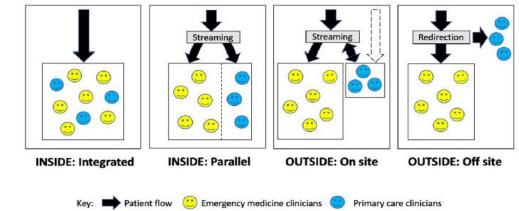


Figure 1—[anonymised ref]

category - "Outside Offsite" — describes GP services outside the hospital, and as such was not in scope of this study.

An online survey was distributed in September 2017 (www.onlinesurveys.ac.uk) to clinical directors of all 185 type 1 emergency departments (consultant led 24-hour services with full resuscitation facilities) in England and Wales. Seventy-seven respondents (40%) (clinical directors, medical directors and emergency department consultants) completed the national survey and agreed to be contacted for a follow-up telephone interview [anonymised reference]. From this a purposive sample of 13 sites was derived: composed of three Inside Integrated, four Inside Parallel, three Outside Onsite and three 'controls' and

across a range of larger/ smaller, urban/ rural hospitals. The controls were included to provide outcome data where no GPs were currently employedbut who had previously employed GPs in one of these models and then disinvested. The purposive sampling framework also covered regional differences and types of providers of GPs. This allowed the sample to cover a range of variables that could influence the research question, and thus provide greatertransferability of study findings [12].

This study sought to generate theories on how and to what extent these different service models functioned, compared between models and with those with no GP service, exploring the perspectives and experiences of those closely involved in planning and delivery to gain an understanding of the impact of the intervention on its providers and users [13]. Qualitative methods for data collection and analysis are best suited for the provision and interpretation of such rich and in-depth data [14].

Between February 2018 and September 2019, each site was visited by a research team (anonymised). A second level of sampling of *key informants* – senior business, finance and clinical managers with intimate knowledge of services' funding structures, the flow of funds and experience of providing a primary care service in the emergency department—was undertaken. Clinical directors, business and finance managers within the sample sites were interviewed, either individually or in groups. Thesemi-structured interviews were conducted by a single interviewer [anonymised], following an interview guide (Appendix 1) which was informed by theories that were iterativelydeveloped and refined from anearlier realist review [5]. The majority of interviews were audio-recorded and transcribed verbatim. In all centres field notes and notes taken during the interviews contributed to the research material. In two centres where audio recordings were not possible for all interviews

extensive notes were made and contributed to the research material. Transcripts and field notes were entered intoNVivo 12 (QSR International) for coding by [anonymised] and, 50% of the coded transcripts were checked by [anonymised] and there was a high consistency of agreement. Data were analysed using Braun and Clarke's six phases of thematic analysis [15].

Ethical approval for the survey and first interviews was granted by [anonymised]. Ethical approval for study site visits and staff interviews was granted by [anonymised]. Informed consent was gained from participantsbefore each interview (see Appendix 2). Information was stored securely in line with [anonymised] Security Information guidelines. A review of themes in the coded order identified that no new themes had emerged from the ninth interview onwards, when data saturation was deemed to have been achieved [14].

Results

Data were collected from 12 of the 13 sites in the sample(11 in England, 1 in Wales). One of the control sites (GPED15) did not respond when followed up to arrange an

Model	Number	Туре	Roles	Manager
L	GPED03	Individual	Clinical Director	Clinical
	GPED08	Individual	Clinical Director	Clinical
• • • • • • • • • • • • • • • • • • •	GPED14	Group	Care Group Manager for Unscheduled Care	Business
			GP consultant	Clinical
© ©			Clinical Director for Unscheduled Care	Clinical
Inside Integrated			Chief of Medicine	Clinical
	GPED04	Group	Clinical Director for Emergency Medicine	Clinical
			Assistant Director of Operations for Acute and Emergency Care	Business
_	GPED06	Carrie	Service Reform Manager CCG	Business
Streaming		Group	ED consultant	Clinical
y V			Senior Legal and Commercial Manager	Business
<u></u>			Head of Business Development Trust	Business
0 0	GPED07	Group	Finance Manager	Business
			Finance Manager	Business
O			Clinical Lead Urgent Care	Clinical
			Finance Manager Estates, RD and HST	Business
	GPED09	Group	Clinical Director	Clinical
Inside Parallel			General Manager (18/19)	Business
			Contract Manager	Business
T [GPED10	Group	Finance Business Partner	Business
Streaming			General Manager Urgent Care	Business
			Clinical Lead Urgent Care	Clinical
	GPED11	Group	Operational Manager for Urgent Care	Business
			ED consultant	Clinical
			Matron for ED and Walk in Centre	Clinical
	GPED13	Group	Clinical Director	Clinical
			Service Manager	Business
Outside Onsite			Emergency Department Manager	Business
	GPED02	Individual	Clinical Director	Clinical
	GPED12	Group	Information Manager	Business
Table 1 Camanla Character			ED consultant and research lead	Clinical
Table 1 – Sample Characteri	SUC GPED15	N/A	No one interviewed	N/A

interview. Within this sample, there were three sites operating Inside Integrated, four sites operating Inside Parallel, three sites operating Outside Onsite and two control sites (Table 1). In total 31 managers were interviewed, 16 of whom werebusiness, finance or service managers and the remaining 15 worked as senior clinicians. Nine interviews were conducted in groups and three were individual. The interviews lasted between 23-72 minutes. The main themes centred around funding, staffing and experiences of the model used, with subthemes listed in Table 2. The findings were largely independent of the GP model used, although funding sources and governance were particularly noted as providing challenges in sites employing the Inside-Parallel model. The themes are discussed in turn.

Themes	Subthemes		
	Overlapping funding streams		
Funding	Move to unified ED funding		
	Value of GPs		
	Local GPs		
	Experience		
Staffing	Private Providers		
	Governance		
Context	One size does not fit all Table		

²⁻ Themes and sub-themes

Funding

Overlapping funding streams

A key theme which emerged from the data was the complex nature of funding GPs in or alongside the emergency departments.

A range of funding mechanisms was evident, including being funded directly by one or more local CCGs. However, managers also reported experiences where the CCG was funding multiple urgent care services separately, despite them performing largely the same function. In some cases, multiple CCGs were funding multiple separate services in the same community.

Managers recognised that due to a shifting landscape in primary care services, whereby the separation between community and urgent care had become less clear, decisions around allocation of funding and evaluations of service performance had become more complex. This applied especially to sites operating the Inside Parallel model, where managers reported inadequate funding streams, as this model sits neither fully inside nor outside the emergency department.

Similarly, it was thought that separate funding streams disincentivised cooperation between primary and secondary care, since certain services were concerned they would lose income if patientswere signposted to another service. Furthermore, concerns were raised that if too many services werefunded individually, they would inevitably become redundant as there would be insufficientnumbers of patients seen by each distinct service.

"This is a pot of money that is being talked about more in terms of so well what is its history, where's it come from, what's it doing? Is that a pot of money that is doing urgent care or is it a pot of money that's doing something different? Hospital admission avoidance ... improved access to GPs?" (GPED14)

Move to unified emergency department funding

Managers felt that more 'unified'or 'block' emergency department funding contracts(providing a fixed budget for the year to the ED) were better in facilitating the changes necessary for effective models of employing GPs in or alongside the emergency department. The reliable budget was felt to enable delivery of clearer strategy, structure and operational activity. Managers at sites being paid through Payment-by-Results (PbR) tariffs

"Any budget always goes over, just because of the nature of the beast, we do see more and more patients every year, it has exponentially grown, we've now entered into a block contract arrangement for this year, just to allow us just to stabilise." (GPED06)

reported rapidly rising costs, above the designated budgets, alongside increasing demand on services. Payment-by-Results is based on funding contracts where providers receive payments for each patient seen, and according to the complexity of the case. Many had therefore switched back to block contracts to stabilise finances. In particular, 'aligned incentivised contracts' (AIC) were seen as favourable. These wereblock payment contracts aligned with expected performance and activity outputs, incentivised through non-payment if outputs were not achieved. At sites operating the Outside Onsite models, there was evidence for the creation of single 'health economies' whereby community and urgent care were jointly funded and with shared governanceby Hospital Trusts. However, managers at control sites felt that without distinct investments, implementing such models based on unified emergency department funding would simply be an additional drain on their emergency department budgets.

Value of GPs

Managers at control sites (one in England, one in Wales) were apprehensive about employing GPs in or alongside the emergency department. This partly reflected poor prior experiences, but was mainly for financial reasons, since it was thought that "expensive GPs" could be replaced with cheaper alternatives, such as Advanced Nurse Practitioners (ANP) or Physician Associates (PA). There were also preferences by the CCG in one Trust to allocate funding to extended primary care hours in the community rather than have a primary care service in the emergency department. However, at GP modelsites, managers felt that employing only ANPs or PAs mightincrease the supervision load on emergency department doctors and hence it was perceived that GPs, who required no supervision, could have a vital role to play.

Staffing

Local GPs

Managers were unanimous in expressing the view that local GPs should be recruited to work in any of the models. GPshadmostly been provided by local federations (groups of general practices) rather than private providers or agencies which employed doctors from a wider geographical pool.

Managers recognised that patients coming to the hospital with primary care type problems were rarely simple cases, and just as in the community, usually had complex physical and psychosocial problems. There was a recognition that they should be treated accordingly, ensuring long-term care planning, rather than with the sole aim of discharging them from the emergency department. Local GPs were knowledgeable about services available locally

that could support patient care and were perceived to offer a more consistent approach to treating patients and they were also felt to effectively replicate the less risk averse role they usually took on in the community. Managers felt this ability to manage risk was crucial for the success of the GP model.

Managers valued employing local GPs, with their knowledge of community care services facilitating more complete management at the point of presentation. Managers also thought that local GPs had a greater desire for delivering a good and comprehensive service as they had a vested interest to ease the workload in their own community.

One of the main explanations for why shift 'fill rates' were sometimes below 100% was that multiple different services within the same hospital or trust were drawing from the same pool of GPs. However, sites which had used both local and agency GPs in the past all reported better shift fill rates with the former. Drivers behind this were the aforementioned positive motivations, and that local GP federations tended to provide GP cover for the area. Thus, different communities were not in competition for the same pool of GPs. This was seen as particularly beneficial for more rural and smaller hospitals, which may have had difficulties attracting a workforce.

"These are fully qualified GPs, they're senior decision makers, they're autonomous, they're not coming back to ask you information, they're not coming back to ask how to manage patients all the time, and actually they can just crack on and knock through the patients, so the amount of time the A&E consultant is spending down doing queue busting has massively dropped, and we can focus on the resus majors patients more." (GPED03)

Experience

Managers felt that the unique nature of the role which GPs working in or alongside the emergency department must perform could only be fulfilled by a specific type of clinician. Experienced GPs who were comfortable in the ED setting were thought to be less risk averse, so that they were thought less likely to over-investigate or over-treat patients. They were also seen as autonomous, senior decision-makers, meaning they would require help less regularly from emergency department consultants. Managers at one site using the Inside Integrated model explained how experienced GPs were also having a positive educational impact on their emergency department trainees and this role provided added benefits.

Private Providers

Most of the sites with experience of working with private providers of GP services (e.g. locum agencies) had reported difficulties with them. This might have been due to commissioning or contract management weaknesses. The most significant outcomes of this were poor shift fill rates, sometimes at short notice, with no accountability or financial penalty for unfilled shifts meaning the workload had to be borne by the emergency department doctors. The interventions (GP models) were found neither financially viable nor operationally sustainable, and CCGs involved often needed to retender the contracts.

"We have kind of a strange arrangement whereby the CCG pay an external company and they then run the in hours service. But then they sublet the out of hours service to yet another external provider ... they probably ran the whole year at about two thirds of our slots being filled ... there seems very little that the CCG could kind of hold [company name] to account for that." (GPED09)

Governance

Compounding these issues were a lack of accountability and poor governancewith detrimental consequences for the ED. Managers from one site explained how private providers were sub-letting a GP service which they had been commissioned to provide, resulting in poor outcomes and little cooperation with the emergency department. At another site, emergency department managers were unaware of key decisions by private providers regarding the delivery of GP services. Poor communication was also a recurrent experience, particularly among those operating either the Inside Parallel or Outside Onsite models. These issues created poor working environments which made it harder to recruit GPs, thereby further increasing the number of unfilled shifts.

The issue of indemnity was identified frequently. Managers reported difficulty recruiting GPs when they had to pay their own indemnity, as the financial benefits from beingin emergency departments as contractors were diminished. Conversely, sites which paid for GP indemnityhad much better shift coverage.

Context

One size doesnot fit all

Managers felt that government policy for primary care streaming in emergency departmentsmisunderstood the drivers of increasing emergency department attendances and the variation in demand across the country. Respondentsfelt that increased acuity and complexity of cases plus the increasing numbers of frail elderly patients were driving rising pressureon emergency department services rather than simply increasing populations and numbers of attendances, but that several local contextual factors influenced this. Demand stemming from primary care type patients was variable and ultimately dependent on several wider population and healthcare system factors. For example, transient populations and migrant workers in rural communities who were reluctant or unable to access GPs,or were not familiar with the distinctions between primary and urgent care services,were reluctant or unable to access GPs and were reported to be using these new models as their first access point for primary care in larger cities.

Moreover, the resilience and consistency of community care services was pivotal in managing these demands. Managers in areas which had good provision of GP services reported stable and relatively predictable demand, whilst those where the surrounding GP services were failing or over-stretched saw large increases in demand. This was particularly true for emergency departments in areas near CCG boundaries, where one area was performing better than the other, or at national borders, where patients unable to access emergency department services in a timely manner in Wales or England might cross to the other country and health system. Hence, managers thought the success of employing GPs in or alongside the emergency department in meeting demands within the wider primary care

15

setting was heavily dependent on the complex interaction of influences from environment, local workforce and working culture rather than a simple commitment of investment or a specific GP model.

Discussion

PrincipalFindings

Funding mechanisms for employing GPs in the emergency department were frequently reported as complex with confusion about the source and purposes of the money provided, particularly in Inside Parallel GP models. The most efficient mechanisms, that enabled delivery of clearer strategy, structure and operational activity, were reported from sites where funding, whether from the Trust or the CCG, was unified at the service level in collaboration with adjacent services and community care. Themes around staffing indicated that local knowledge and level of experience of GPs were considered important for implementing an effective and sustainable service. This contrasted with experiences of those privateproviders which provided GPs who lacked experience or local knowledge. Risks of lack of accountability and poor governance from private provider contracts, with detrimental consequences for the ED, were more frequently reported. Across the different contexts and models, experiences from implementing the "primary care streaming" policy did not always align with its intention, reflecting variations in the drivers and nature of demands across England and Wales.

Strengths and Limitations

Our national survey appeared representative in terms on applications for streaming capital funding relating to the 2017 NHS England policy[13], and was diverse in terms of the types of GP models included, urban and rural settings, size of department, and experiences with funding models and NHS and private providers. The interviewer [anonymised] was not involved in coding or analysis to maintain an objective approach to the data and reduce bias from interpretations based on the interviewer's experience of the interview rather than the data themselves. The interviewer's notes were referenced to give context when necessary. After the analysis, the findings were discussed with [anonymised] for guidance in linking back to the wider system and policy contexts.

The purposive sample led to only a small proportion (12 out of 77 survey respondents) being included in the study. Obtaining prior consent may have influenced the selection of the sample, as some individuals who fit the eligibility criteria may have nevertheless been uncomfortable to express their views and not given consent or responded to the invitation to be interviewed. With small numbers of hospitals per GP model thematic saturation may not have been reached for experiences within and between all models. For example, there might be other independent factorssuch as organisational and leadership culture and valuesthat have not been identified in these managers' perspectivesabout models of GPs in Emergency Departments. These influences may also relate to the identified themes: in an organisation where the relationships were predominantly transactional e.g. GPs were employed on locum contracts, this may reflect that the job function is seen as a generic skill. In contrast, where GPs were employed on permanent contracts, gaining more experience, this might reflect a longer term 'relationship' or 'values-based' culture.

Differences in the number of interviewees and the relative proportion of senior business and clinical managers at each site may have influenced the way different models were viewed. For example, the Inside Integrated model group had six clinical managers and only one business manager within its sample. Furthermore, we only interviewed hospital-based managers so our findings reflect the acute care sector perspectives. Further research is needed to understand the experiences of primary care managers and members of the clinical commissioning groups.

One control site in England was not available for interview; the two control sites that contributed to the interviews had both had experience with GPs in EDs, one with positive experiences and the other more negative experiences.

Comparison with other literature

It is important for national policy initiatives to be evaluated as in this wider study of the effectiveness, patient experience, safety and wider system implications of GP models in emergency departments [12] In contrast the Same Day Emergency Care programme has much local level evaluation but little synthesised evidence to guide further policy-making. Such evaluations will also be particularly important in new service changes, such as the "call before you walk" (to Emergency Departments) nowbeing widely piloted [16]. The findings in this study about complex funding mechanisms are consistent with problems identified by the National Audit Office, which viewed current mechanisms as presenting hindrances to managing rising emergency department demands [17]. Moves towards more integrated funding models have already been adopted in NHS policy and by April 2021 all healthcare

commissioning will occur through Integrated Care Systems (ICS). These have the option to adopt single pooled budgets in the form of Integrated Care Provider (ICP) contracts [18], which our data indicated would be valued by managers. To this end, collaboration between commissioners, trusts and staff – emphasised by managers as a key determinant of success - will be even more important going forward to achieve such integrated funding models in England [19].

The importance of local GPs in providing the primary care services in emergency departments has not been previously examined, however Uthman et al. also found that experienced GPs were more likely to deliver the intended primary care service within a secondary care setting [20]. NHS England's regulatory body, the Care Quality Commission (CQC), has also raised concerns around governance and effectiveness issues with private providers within the NHS [21].

Policy Implications and Future Research

These experiences from business, finance and clinical managers from implementing different models of using GPs in emergency departments contribute to alimited evidence base that addresses the uncertainties around primary care streaming and the provision of GPs in emergency departments [22]. Our findings could add to guidance for successful mechanisms of funding and strategies for employing GPs in or alongside emergency departments. These findings are largely independent of the choice of model, although lack of clarity in funding sources and governance were particularly noted in sites employing the Inside Parallel model. These findings will be reported as part of the 'GPs in EDs' study [12]and could subsequently inform NICE guidelines [23] and adaptations of NHS policy about implementing models of GPs in emergency departments.

The findings generated in this study should be further tested, firstly for their generalisability, and for whether implementing unified funding achieves improvements in key performance indicators.

Conclusions

The experiences of clinical directors and emergency department business and finance managers show that (perceived) successful models of employing GPs in or alongside the emergency department are possible. Their perspectives indicate that this success depends on a well-organised and unified funding mechanism, a local and experienced GP workforce that can provide GP shift coverage in EDs, and careful consideration of the intervention's place within the wider context of geography, community services and population needs. Whilst the research and findings reported here are in UK national health service settings we believe the overarching messages have applicability in countries with publicly or social insurance funded health care and where pressures on EDs are increasing.

References

- [1] NHS Digital. NHS Performance Statistics. 2019. Available from: https://www.england.nhs.uk/statistics/wp-content/uploads/sites/2/2019/09/Combined-Performance-Summary-September-July-August-data-2019.pdf
- [2] NHS. Next Steps on the NHS Five Year Forward View. London: 2017. Available from: https://www.england.nhs.uk/wp-content/uploads/2017/03/NEXT-STEPS-ON-THE-NHS-FIVE-YEAR-FORWARD-VIEW.pdf

- [3] Gonçalves-Bradley D, Khangura JK, Flodgren G, Perera R, Rowe BH, Shepperd S. Primary care professionals providing non-urgent care in hospital emergency departments. Cochrane Database Syst Rev 2018. Available from: https://doi.org//10.1002/14651858.CD002097.pub4
- [4] Ramlakhan S, Mason S, O'Keeffe C, Ramtahal A, Ablard S. Primary care services located with EDs: a review of effectiveness. Emerg Med J 2016;33:495 LP 503. Available from: https://doi.org/10.1136/emermed-2015-204900.
- [5] Cooper A, Davies F, Edwards M, Anderson P, Carson-Stevens A, Cooke MW, et al. The impact of general practitioners working in or alongside emergency departments: a rapid realist review. BMJ Open 2019;9:e024501. Available from: https://doi.org/10.1136/bmjopen-2018-024501.
- [6] HM Treasury. Spring Budget 2017. London: HM Government; 2017. Available from: www.gov.uk/government/publications
- [7] National Assembly for Wales. The organisation of the NHS in the UK: comparing structures in the four countries. Cardiff: 2015. Available from: www.assemblywales.org/research
- [8] NHS Clinical Commissioners, NHS Providers. Driving Forward System Working. 2018. Available from: https://nhsproviders.org/driving-forward-system-working
- [9] Nuffield Trust. Doomed to repeat? 2018. Available from: https://www.nuffieldtrust.org.uk/files/2018-10/learning-from-history-web.pdf
- [10] Sizmur S, Raleigh V. The risks to care quality and staff wellbeing of an NHS system under pressure. 2018. Available from: https://www.picker.org/wp-content/uploads/2014/12/Risks-to-care-quality-and-staff-wellbeing-VR-SS-v8-Final.pdf
- [11] Anonymised
- [12] Annonymised[13] Pawson R, Tilley N. Realistic evaluation. London: SAGE Publications Ltd; 1997.

- [14] Green J, Thurgood N. Qualitative methods for health research. 4th edition. Los Angeles; 2018.
- [15] Braun V, Clarke V. Thematic analysis. APA Handb. Res. methods Psychol. Vol 2 Res. Des.

 Quant. Qual. Neuropsychol. Biol., Washington, DC, US: American Psychological Association; 2012, p.

 57–71. Available from: https://doi.org/10.1037/13620-004.
- [16] Discome M. National roll out of 'call before you walk': A&Es set for winter. Health Services Journal. 2020 Available from: https://www.hsj.co.uk/coronavirus/exclusive-national-roll-out-of-call-before-you-walk-aandes-set-for-winter/7028044.article
- [17] Morse A. NHS financial sustainability. London: 2019.Available from: https://www.nao.org.uk/wp-content/uploads/2019/01/NHS-financial-sustainability_.pdf
- [18] NHS. The NHS Long Term Plan. London: 2019. Available from: www.longtermplan.nhs.uk
- [19] Timmins N. Leading for integrated care. London: 2019.Available from: https://www.kingsfund.org.uk/sites/default/files/2019-11/leading-for-integrated-care.pdf
- [20] Uthman OA, Walker C, Lahiri S, Jenkinson D, Adekanmbi V, Robertson W, et al. General practitioners providing non-urgent care in emergency department: a natural experiment. BMJ Open 2018;8:e019736. Available from: https://doi.org/10.1136/bmjopen-2017-019736.
- [21] Care Quality Commission. The state of care in independent doctor and clinic services providing primary medical care. London: 2019. Available from: https://www.cqc.org.uk/sites/default/files/20190321_stateofindpms_report.pdf
- [22] Cooper A, Carson-Stevens A, Hughes T, Edwards A. Is streaming patients in emergency departments to primary care services effective and safe? BMJ 2020;368:m462. Available from: https://doi.org/10.1136/bmj.m462.
- [23] Emergency and acute medical care in over 16s: service delivery and organisation. NG94. London, UK: 2018. Available from: https://www.nice.org.uk/guidance/ng94

Part A Appendix 1

Interview Guide PA, adapted from GPED14 group interview

- What is the history of having GPs in or alongside EDs in your hospital?
- What differences have you seen in financing through this time?
- How has, and is the service evolving?
- What are the operational hours?
- What type of GPs work in your service?
- Are your GPs local?
- Who provides the GPs?
- Do you get good shift coverage?
- There is a theory that GPs are less risk averse, does this hold true from what you have experienced in your service?
- What is the character of the population in this area?
- Is there increased housing development or significant migration into your area?
- Is there extra funding in response to this?
- What is the rate of increase in ED activity?
- · What attracts GPs to work in this area?
- Do you serve multiple CCGs?
- Explain your funding streams in more detail?
- Does the way the service is funded cause you any problems?
- Do you have any other adjacent primary care services onsite?
- What are your thoughts on the performance indicators that are required to access funding?
- Do you think the policy is realistic?
- How can you access data for marker conditions?
- What electronic system is used within the ED and by the GPs?
- Given what we are trying to accomplish with this study, is there anything that I've missed or you feel that I should understand about your centre?
- Have you been dealing with the same people at the CCG for some time or different people?

Consent form for Finance and Management Staff

Project Title: [Anonymised]

1.	I confirm that I have read a dated 05/02/2018 (version the opportunity to consider have had these answered	Please initial each line				
2.	I agree to take part in the a interview which includes tall department operates, fundin structuring and managemen	w the				
3.	I consent for the interview t	o be audio recorded				
4.	I consent for use of anonymised verbatim quotes in publications relating to this study					
5.	I understand that my participation is voluntary and that I can withdraw from the study at any time, without giving a reason					
6.	I agree for my contact details to be kept for up to 3 years to allow for any follow-up interviews in a further study					
Please	e select one of the below opti	ons:		Please initial your choice		
1.	I agree to be interviewed in a mutually agreed location and time at the hospital site, or in my office in person.					
2.	I would prefer to be intervie time	wed by telephone at mutual	ly agreed			
Name	of participant	Date	Signature			
Name	of Researcher	Date	Signature			

Please turn over and complete the rest of the form

Contact number	Email address	
	one interview option, please provide contact yoo	
	Dav(s)	Time(s)