

1
2 **Title:** Senior clinical and business managers' perspectives on the influence of
3
4
5 different funding mechanisms, and barriers and enablers to implementing
6
7
8 models of employing General Practitioners in or alongside Emergency
9
10
11 Departments: Qualitative Study.
12
13
14
15

16 **Abstract:**
17
18
19
20
21

22 *Purpose*
23

24 Health policy in England has advocated the use of primary care clinicians at emergency
25
26 departments to address pressures from rising attendances. This study explored senior
27
28 managers' perspective on funding mechanisms used to implement the policy and
29
30 experiences of success or challenges in introducing GPs in or alongside emergency
31
32 departments.
33
34
35
36
37
38
39

40 *Methods*
41

42 The perspectives of senior clinical, business and finance managers with responsibility for
43
44 emergency department services and on-site primary care service implementation were
45
46 investigated in semi-structured interviews with 31 managers at 12 type-1 emergency
47
48 departments in England and Wales (February 2018 - September 2019). Emergency
49
50 departments operated one of three GP models or had prior experience of implementing a
51
52
53 GP model. Interviews were thematically analysed.
54
55
56
57
58
59
60
61
62
63
64
65

Results

1
2 Perceived successful GPs models in emergency departments were reliant on well-organised
3
4 and unified funding mechanisms, appropriate staffing and governance, and consideration of
5
6 population demands and needs. Funding mechanisms and the flow of funds were reported
7
8 as complex, especially in Inside-parallel GP models. The most efficient mechanisms were
9
10 described at departments where funding was unified, in collaboration with health and
11
12 community care services. Staffing with local, experienced GPs was important. There were
13
14 cautions from experiences with private locum providers.
15
16
17
18
19
20
21
22

Conclusion

23
24
25 Our findings contribute to debates about implementing policy on how primary care
26
27 clinicians are effectively and safely deployed in emergency departments and how local
28
29 context should be considered.
30
31
32
33
34
35

Classification of keywords:

- 36
37 • Emergency Services, Hospital
- 38
39 • General Practitioners
- 40
41 • Primary Health Care
- 42
43 • Health Policy
- 44
45 • Leadership
- 46
47
48
49
50
51
52
53
54

Introduction

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

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 tackle this, 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

1 contrast, NHS England operates an internal market with (at the time of the study) 191
2 Clinical Commissioning Groups (CCGs). These CCGs commission hundreds of NHS Trusts
3 (organisational units of healthcare providers), including NHS Foundation Trusts which are
4 semi-autonomous, and thousands of GP Practices to provide, and sometimes fund, care in
5 local areas [7]. This model focuses on financial incentives for purchasers and providers to
6 improve healthcare. In recent years this model has evolved with an increasing number of
7 CCGs collaborating or merging to provide system level care for wider populations [8] .
8
9

10 Recruiting the right staff to work in these models is also important, however this is a
11 challenge given the difficulties the NHS is facing with increasing pressure on limited staff,
12 particularly GPs. The NHS spent £5.4 billion on temporary staffing in 2017/18 but this has in
13 certain cases resulted in poorer patient experiences [9,10].
14
15

16 This study aims to better understand how, and to what extent, the models of using GPs in or
17 alongside emergency departments work effectively, through exploring the perspectives and
18 experiences of those with intimate knowledge of the local organisation of health and care
19 services, the flow of funds and staffing – the senior clinical, finance and business managers.
20 By examining the experiences of these managers, this study will add to the wider, growing
21 evidence of the real effects and experiences of adopting these models to inform policy
22 adaptation, service development and improve the healthcare provided to patients.
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52

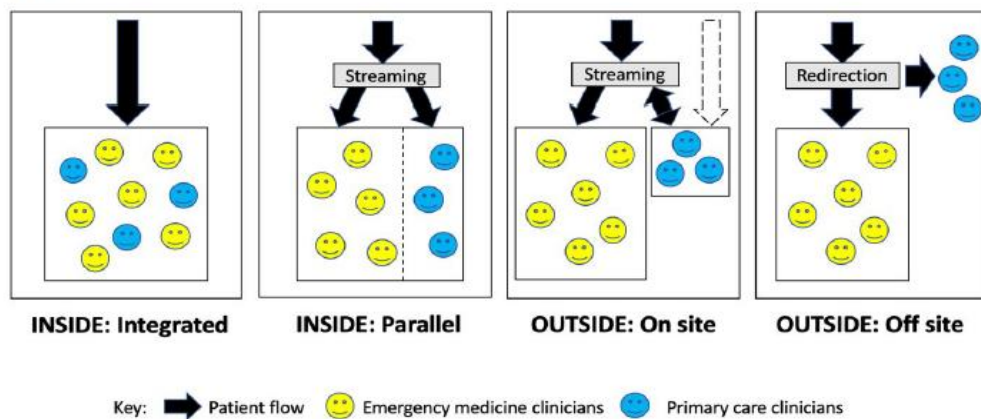
53 ***Materials and Methods***

54 The [anonymised] study is an England and Wales, multi-centre mixed-methods study
55 commissioned by [anonymised]. Its aim is to evaluate the clinical and cost-effectiveness of
56
57
58
59
60
61
62
63
64
65

1 different models of employing GPs in emergency departments, and to understand the ways
2 in which mechanisms of delivery and context influence how services function to generate
3 variations in outcomes [11].
4
5
6
7

8 [Anonymised]a taxonomy describes the different models of GPs working in or alongside
9 EDs found in practice was developed [12]. The taxonomy provided a basis for evaluation by
10 characterising service models into four distinct groups as shown by Figure 1. The fourth
11
12
13
14
15
16
17

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



36 *Figure 1-[anonymised ref]*

37 category - "Outside Offsite" – describes GP services outside the hospital, and as such was
38 not in scope of this study.
39
40
41

42 An online survey was distributed in September 2017 (www.onlinesurveys.ac.uk) to clinical
43 directors of all 185 type 1 emergency departments (consultant led 24-hour services with full
44 resuscitation facilities) in England and Wales. Seventy-seven respondents (40%) (clinical
45 directors, medical directors and emergency department consultants) completed the
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

1 across a range of larger/ smaller, urban/ rural hospitals. The controls were included to
2 provide outcome data where no GPs were currently employed but who had previously
3 employed GPs in one of these models and then disinvested. The purposive sampling
4 framework also covered regional differences and types of providers of GPs. This allowed the
5 sample to cover a range of variables that could influence the research question, and thus
6 provide greater transferability of study findings [12].
7
8
9
10
11
12
13
14
15

16 This study sought to generate theories on how and to what extent these different service
17 models functioned, compared between models and with those with no GP service, exploring
18 the perspectives and experiences of those closely involved in planning and delivery to gain
19 an understanding of the impact of the intervention on its providers and users [13].
20
21
22
23
24
25

26 Qualitative methods for data collection and analysis are best suited for the provision and
27 interpretation of such rich and in-depth data [14].
28
29
30
31

32 Between February 2018 and September 2019, each site was visited by a research team
33 (anonymised). A second level of sampling of *key informants* – senior business, finance and
34 clinical managers with intimate knowledge of services' funding structures, the flow of funds
35 and experience of providing a primary care service in the emergency department – was
36 undertaken. Clinical directors, business and finance managers within the sample sites were
37 interviewed, either individually or in groups. These semi-structured interviews were conducted
38 by a single interviewer [anonymised], following an interview guide (Appendix 1) which was
39 informed by theories that were iteratively developed and refined from an earlier realist
40 review [5]. The majority of interviews were audio-recorded and transcribed verbatim. In all
41 centres field notes and notes taken during the interviews contributed to the research
42 material. In two centres where audio recordings were not possible for all interviews
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

extensive notes were made and contributed to the research material. Transcripts and field notes were entered into NVivo 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 participants before each interview (see Appendix 2). Information was stored securely in line with [anonymised] Security Information guidelines. A review of themes in the coded data 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

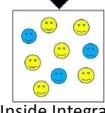
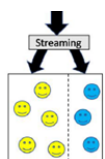

Model	Number	Type	Roles	Manager
 <p>Inside Integrated</p>	GPED03	Individual	Clinical Director	Clinical
	GPED08	Individual	Clinical Director	Clinical
	GPED14	Group	Care Group Manager for Unscheduled Care	Business
			GP consultant	Clinical
			Clinical Director for Unscheduled Care	Clinical
Chief of Medicine	Clinical			
 <p>Inside Parallel</p>	GPED04	Group	Clinical Director for Emergency Medicine	Clinical
	Assistant Director of Operations for Acute and Emergency Care	Business		
	GPED06	Group	Service Reform Manager CCG	Business
	ED consultant	Clinical		
	GPED07	Group	Senior Legal and Commercial Manager	Business
			Head of Business Development Trust	Business
			Finance Manager	Business
Finance Manager			Business	
Clinical Lead Urgent Care	Clinical			
Finance Manager Estates, RD and HST	Business			
GPED09	Group	Clinical Director	Clinical	
General Manager (18/19)	Business			
 <p>Outside Onsite</p>	GPED10	Group	Contract Manager	Business
			Finance Business Partner	Business
			General Manager Urgent Care	Business
			Clinical Lead Urgent Care	Clinical
	GPED11	Group	Operational Manager for Urgent Care	Business
			ED consultant	Clinical
	GPED13	Group	Matron for ED and Walk in Centre	Clinical
			Clinical Director	Clinical
Service Manager	Business			
Emergency Department Manager	Business			
Control	GPED02	Individual	Clinical Director	Clinical
	GPED12	Group	Information Manager	Business
			ED consultant and research lead	Clinical
GPED15	N/A	No one interviewed	N/A	

Table 1 – Sample Characteristics

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 were business, 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 sub-themes 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
Funding	Overlapping funding streams
	Move to unified ED funding
	Value of GPs
Staffing	Local GPs
	Experience
	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.

1 A range of funding mechanisms was evident, including being funded directly by one or more
2 local CCGs. However, managers also reported experiences where the CCG was funding
3 multiple urgent care services separately, despite them performing largely the same
4 function. In some cases, multiple CCGs were funding multiple separate services in the same
5 community.
6
7
8
9
10

11
12
13 Managers recognised that due to a shifting landscape in primary care services, whereby the
14 separation between community and urgent care had become less clear, decisions around
15 allocation of funding and evaluations of service performance had become more complex.
16 This applied especially to sites operating the Inside Parallel model, where managers
17 reported inadequate funding streams, as this model sits neither fully inside nor outside the
18 emergency department.
19
20
21
22
23
24
25
26
27
28
29

30 Similarly, it was thought that separate funding streams disincentivised cooperation between
31 primary and secondary care, since certain services were concerned they would lose income if
32 patients were signposted to another service. Furthermore, concerns were raised that if too
33 many services were funded individually, they would inevitably become redundant as there
34 would be insufficient numbers of patients seen by each distinct service.
35
36
37
38
39
40
41
42
43
44
45
46

47
48 *“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
49 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
50 something different? Hospital admission avoidance ... improved access to GPs?” (GPED14)*
51
52

53 54 55 56 57 58 **Move to unified emergency department funding** 59 60 61 62 63 64 65

1 Managers felt that more 'unified' or 'block' emergency department funding
2 contracts (providing a fixed budget for the year to the ED) were better in facilitating the
3 changes necessary for effective models of employing GPs in or alongside the emergency
4 department. The reliable budget was felt to enable delivery of clearer strategy, structure and
5 operational activity. Managers at sites being paid through Payment-by-Results (PbR) tariffs
6
7
8
9
10
11
12
13
14
15

17 *"Any budget always goes over, just because of the nature of the beast, we do see more and more patients
18 every year, it has exponentially grown, we've now entered into a block contract arrangement for this year,
19 just to allow us just to stabilise."* (GPED06)
20

25 reported rapidly rising costs, above the designated budgets, alongside increasing demand
26 on services. Payment-by-Results is based on funding contracts where providers receive
27 payments for each patient seen, and according to the complexity of the case. Many had
28 therefore switched back to block contracts to stabilise finances. In particular, 'aligned
29 incentivised contracts' (AIC) were seen as favourable. These were block payment contracts
30 aligned with expected performance and activity outputs, incentivised through non-payment
31 if outputs were not achieved. At sites operating the Outside Onsite models, there was
32 evidence for the creation of single 'health economies' whereby community and urgent care
33 were jointly funded and with shared governance by Hospital Trusts. However, managers at
34 control sites felt that without distinct investments, implementing such models based on
35 unified emergency department funding would simply be an additional drain on their
36 emergency department budgets.
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56

57 **Value of GPs**

58
59
60
61
62
63
64
65

1 Managers at control sites (one in England, one in Wales) were apprehensive about
2 employing GPs in or alongside the emergency department. This partly reflected poor prior
3 experiences, but was mainly for financial reasons, since it was thought that “expensive GPs”
4 could be replaced with cheaper alternatives, such as Advanced Nurse Practitioners (ANP) or
5 Physician Associates (PA). There were also preferences by the CCG in one Trust to allocate
6 funding to extended primary care hours in the community rather than have a primary care
7 service in the emergency department. However, at GP modelsites, managers felt that
8 employing only ANPs or PAs might increase the supervision load on emergency department
9 doctors and hence it was perceived that GPs, who required no supervision, could have a
10 vital role to play.
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29

30 **Staffing**

31 **Local GPs**

32
33
34 Managers were unanimous in expressing the view that local GPs should be recruited to work
35 in any of the models. GPshadmostly been provided by local federations (groups of general
36 practices) rather than private providers or agencies which employed doctors from a wider
37 geographical pool.
38
39

40 Managers recognised that patients coming to the hospital with primary care type problems
41 were rarely simple cases, and just as in the community, usually had complex physical and
42 psychosocial problems. There was a recognition that they should be treated accordingly,
43 ensuring long-term care planning, rather than with the sole aim of discharging them from
44 the emergency department. Local GPs were knowledgeable about services available locally
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61

62
63
64 *“They know how things work locally and they're even better because they're providing a service for their*
65 *patients, or patients of their colleagues.” (GPED07)*

1 that could support patient care and were perceived to offer a more consistent approach to
2
3 treating patients and they were also felt to effectively replicate the less risk averse role they
4
5 usually took on in the community. Managers felt this ability to manage risk was crucial for
6
7 the success of the GP model.
8
9

10
11 Managers valued employing local GPs, with their knowledge of community care services
12
13 facilitating more complete management at the point of presentation. Managers also
14
15 thought that local GPs had a greater desire for delivering a good and comprehensive service
16
17 as they had a vested interest to ease the workload in their own community.
18
19
20
21

22
23 One of the main explanations for why shift 'fill rates' were sometimes below 100% was that
24
25 multiple different services within the same hospital or trust were drawing from the same
26
27 pool of GPs. However, sites which had used both local and agency GPs in the past all
28
29 reported better shift fill rates with the former. Drivers behind this were the aforementioned
30
31 positive motivations, and that local GP federations tended to provide GP cover for the area.
32
33 Thus, different communities were not in competition for the same pool of GPs. This was
34
35 seen as particularly beneficial for more rural and smaller hospitals, which may have had
36
37 difficulties attracting a workforce.
38
39
40
41
42
43
44
45
46

47
48 *"These are fully qualified GPs, they're senior decision makers, they're autonomous, they're not coming back*
49 *to ask you information, they're not coming back to ask how to manage patients all the time, and actually*
50 *they can just crack on and knock through the patients, so the amount of time the A&E consultant is spending*
51 *down doing queue busting has massively dropped, and we can focus on the resus majors patients more."*
52 *(GPED03)*
53

54 55 56 57 **Experience** 58 59 60 61 62 63 64 65

1 Managers felt that the unique nature of the role which GPs working in or alongside the
2 emergency department must perform could only be fulfilled by a specific type of clinician.
3
4 Experienced GPs who were comfortable in the ED setting were thought to be less risk
5 averse, so that they were thought less likely to over-investigate or over-treat patients. They
6
7 were also seen as autonomous, senior decision-makers, meaning they would require help
8
9 less regularly from emergency department consultants. Managers at one site using the
10
11 Inside Integrated model explained how experienced GPs were also having a positive
12
13 educational impact on their emergency department trainees and this role provided added
14
15 benefits.
16
17
18
19
20
21
22
23
24
25
26
27

28 *Private Providers*

29
30
31 Most of the sites with experience of working with private providers of GP services (e.g.
32
33 locum agencies) had reported difficulties with them. This might have been due to
34
35 commissioning or contract management weaknesses. The most significant outcomes of this
36
37 were poor shift fill rates, sometimes at short notice, with no accountability or financial
38
39 penalty for unfilled shifts meaning the workload had to be borne by the emergency
40
41 department doctors. The interventions (GP models) were found neither financially viable
42
43 nor operationally sustainable, and CCGs involved often needed to re-tender the contracts.
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

“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 governance with 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 being in emergency departments as contractors were diminished. Conversely, sites which paid for GP indemnity had much better shift coverage.

Context

One size doesn't fit all

1
2
3
4 Managers felt that government policy for primary care streaming in emergency
5
6 departments misunderstood the drivers of increasing emergency department attendances
7
8 and the variation in demand across the country. Respondents felt that increased acuity and
9
10 complexity of cases plus the increasing numbers of frail elderly patients were driving rising
11
12 pressure on emergency department services rather than simply increasing populations and
13
14 numbers of attendances, but that several local contextual factors influenced this. Demand
15
16 stemming from primary care type patients was variable and ultimately dependent on
17
18 several wider population and healthcare system factors. For example, transient populations
19
20 and migrant workers in rural communities who were reluctant or unable to access GPs, or
21
22 were not familiar with the distinctions between primary and urgent care services, were
23
24 reluctant or unable to access GPs and were reported to be using these new models as their
25
26 first access point for primary care in larger cities.
27
28
29
30
31
32

33
34
35 Moreover, the resilience and consistency of community care services was pivotal in
36
37 managing these demands. Managers in areas which had good provision of GP services
38
39 reported stable and relatively predictable demand, whilst those where the surrounding GP
40
41 services were failing or over-stretched saw large increases in demand. This was particularly
42
43 true for emergency departments in areas near CCG boundaries, where one area was
44
45 performing better than the other, or at national borders, where patients unable to access
46
47 emergency department services in a timely manner in Wales or England might cross to the
48
49 other country and health system. Hence, managers thought the success of employing GPs in
50
51 or alongside the emergency department in meeting demands within the wider primary care
52
53
54
55
56
57
58
59
60
61

1 setting was heavily dependent on the complex interaction of influences from environment,
2 local workforce and working culture rather than a simple commitment of investment or a
3 specific GP model.
4
5
6
7
8
9

10 11 **Discussion**

12 13 *Principal Findings*

14
15
16 Funding mechanisms for employing GPs in the emergency department were frequently
17 reported as complex with confusion about the source and purposes of the money provided,
18 particularly in Inside Parallel GP models. The most efficient mechanisms, that enabled
19 delivery of clearer strategy, structure and operational activity, were reported from sites
20 where funding, whether from the Trust or the CCG, was unified at the service level in
21 collaboration with adjacent services and community care. Themes around staffing indicated
22 that local knowledge and level of experience of GPs were considered important for
23 implementing an effective and sustainable service. This contrasted with experiences of
24 those private providers which provided GPs who lacked experience or local knowledge. Risks
25 of lack of accountability and poor governance from private provider contracts, with
26 detrimental consequences for the ED, were more frequently reported. Across the different
27 contexts and models, experiences from implementing the “primary care streaming” policy
28 did not always align with its intention, reflecting variations in the drivers and nature of
29 demands across England and Wales.
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

Comparison with other literature

1
2
3
4 It is important for national policy initiatives to be evaluated as in this wider study of the
5
6 effectiveness, patient experience, safety and wider system implications of GP models in
7
8 emergency departments [12] In contrast the Same Day Emergency Care programme has
9
10 much local level evaluation but little synthesised evidence to guide further policy-making.
11
12 Such evaluations will also be particularly important in new service changes, such as the “call
13
14 before you walk” (to Emergency Departments) now being widely piloted [16]. The findings in
15
16 this study about complex funding mechanisms are consistent with problems identified by
17
18 the National Audit Office, which viewed current mechanisms as presenting hindrances to
19
20 managing rising emergency department demands [17]. Moves towards more integrated
21
22 funding models have already been adopted in NHS policy and by April 2021 all healthcare
23
24 commissioning will occur through Integrated Care Systems (ICS). These have the option to
25
26 adopt single pooled budgets in the form of Integrated Care Provider (ICP) contracts [18],
27
28 which our data indicated would be valued by managers. To this end, collaboration between
29
30 commissioners, trusts and staff – emphasised by managers as a key determinant of success -
31
32 will be even more important going forward to achieve such integrated funding models in
33
34 England [19].
35
36
37
38
39
40
41
42
43
44

45
46 The importance of local GPs in providing the primary care services in emergency
47
48 departments has not been previously examined, however Uthman et al. also found that
49
50 experienced GPs were more likely to deliver the intended primary care service within a
51
52 secondary care setting [20]. NHS England’s regulatory body, the Care Quality Commission
53
54 (CQC), has also raised concerns around governance and effectiveness issues with private
55
56 providers within the NHS [21].
57
58
59
60
61
62
63
64
65

Policy Implications and Future Research

1
2
3
4 These experiences from business, finance and clinical managers from implementing
5
6 different models of using GPs in emergency departments contribute to a limited evidence
7
8 base that addresses the uncertainties around primary care streaming and the provision of
9
10 GPs in emergency departments [22]. Our findings could add to guidance for successful
11
12 mechanisms of funding and strategies for employing GPs in or alongside emergency
13
14 departments. These findings are largely independent of the choice of model, although lack
15
16 of clarity in funding sources and governance were particularly noted in sites employing the
17
18 Inside Parallel model. These findings will be reported as part of the 'GPs in EDs' study
19
20 [12] and could subsequently inform NICE guidelines [23] and adaptations of NHS policy
21
22 about implementing models of GPs in emergency departments.
23
24
25
26
27
28
29

30
31 The findings generated in this study should be further tested, firstly for their generalisability,
32
33 and for whether implementing unified funding achieves improvements in key performance
34
35 indicators.
36
37
38

Strengths and Limitations

39
40
41
42 Our national survey appeared representative in terms of applications for streaming capital
43
44 funding relating to the 2017 NHS England policy [13], and was diverse in terms of the types
45
46 of GP models included, urban and rural settings, size of department, and experiences with
47
48 funding models and NHS and private providers. The interviewer [anonymised] was not
49
50 involved in coding or analysis to maintain an objective approach to the data and reduce bias
51
52 from interpretations based on the interviewer's experience of the interview rather than the
53
54 data themselves. The interviewer's notes were referenced to give context when necessary.
55
56
57
58
59
60
61
62
63
64
65

1 After the analysis, the findings were discussed with [anonymised] for guidance in linking
2 back to the wider system and policy contexts.
3

4
5 The purposive sample led to only a small proportion (12 out of 77 survey respondents) being
6 included in the study. Obtaining prior consent may have influenced the selection of the
7 sample, as some individuals who fit the eligibility criteria may have nevertheless been
8 uncomfortable to express their views and not given consent or responded to the invitation
9 to be interviewed. With small numbers of hospitals per GP model thematic saturation may
10 not have been reached for experiences within and between all models. For example, there
11 might be other independent factors such as organisational and leadership culture and
12 values that have not been identified in these managers' perspectives about models of GPs in
13 Emergency Departments. These influences may also relate to the identified themes: in an
14 organisation where the relationships were predominantly transactional e.g. GPs were
15 employed on locum contracts, this may reflect that the job function is seen as a generic skill.
16 In contrast, where GPs were employed on permanent contracts, gaining more
17 experience, this might reflect a longer term 'relationship' or 'values-based' culture.
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43

44 Differences in the number of interviewees and the relative proportion of senior business
45 and clinical managers at each site may have influenced the way different models were
46 viewed. For example, the Inside Integrated model group had six clinical managers and only
47 one business manager within its sample. Furthermore, we only interviewed hospital-based
48 managers so our findings reflect the acute care sector perspectives. Further research is
49 needed to understand the experiences of primary care managers and members of the
50 clinical commissioning groups.
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

1 One control site in England was not available for interview; the two control sites that
2 contributed to the interviews had both had experience with GPs in EDs, one with positive
3 experiences and the other more negative experiences.
4
5
6
7
8
9
10

11 **Conclusions**

12
13
14
15
16 The experiences of clinical directors and emergency department business and finance
17 managers show that (perceived) successful models of employing GPs in or alongside the
18 emergency department are possible. Their perspectives indicate that this success depends
19 on a well-organised and unified funding mechanism, a local and experienced GP workforce
20 that can provide GP shift coverage in EDs, and careful consideration of the intervention's
21 place within the wider context of geography, community services and population needs.
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

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.

66 **References**

- 67 [1] NHS Digital. NHS Performance Statistics. 2019. Available from:
68 [https://www.england.nhs.uk/statistics/wp-content/uploads/sites/2/2019/09/Combined-](https://www.england.nhs.uk/statistics/wp-content/uploads/sites/2/2019/09/Combined-Performance-Summary-September-July-August-data-2019.pdf)
69 [Performance-Summary-September-July-August-data-2019.pdf](https://www.england.nhs.uk/statistics/wp-content/uploads/sites/2/2019/09/Combined-Performance-Summary-September-July-August-data-2019.pdf)
70
71
72
73
74 [2] NHS. Next Steps on the NHS Five Year Forward View. London: 2017. Available from:
75 [https://www.england.nhs.uk/wp-content/uploads/2017/03/NEXT-STEPS-ON-THE-NHS-FIVE-YEAR-](https://www.england.nhs.uk/wp-content/uploads/2017/03/NEXT-STEPS-ON-THE-NHS-FIVE-YEAR-FORWARD-VIEW.pdf)
76 [FORWARD-VIEW.pdf](https://www.england.nhs.uk/wp-content/uploads/2017/03/NEXT-STEPS-ON-THE-NHS-FIVE-YEAR-FORWARD-VIEW.pdf)
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

- 1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
- [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/emered-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] Anonymised [13] Pawson R, Tilley N. Realistic evaluation. London: SAGE Publications Ltd; 1997.

- 1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
- [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>

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

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?

Part A Appendix 2

Consent form for Finance and Management Staff

Project Title: [Anonymised]

**Please initial
each line**

- 1. I confirm that I have read and understand the information sheet dated 05/02/2018 (version 3) for the above study and have had the opportunity to consider the information, ask questions and have had these answered
- 2. I agree to take part in the above study and taking part in an interview which includes talking to researchers about how the department operates, funding arrangements, the financial structuring and management of the department.
- 3. I consent for the interview to 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 initial
your choice**

Please select **one** of the below options:

- 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 interviewed by telephone at mutually agreed time

Name of participant

Date

Signature

Name of Researcher

Date

Signature

Please turn over and complete the rest of the form

Contact number

Email address

If you selected the telephone interview option, please provide contact details and let us know which day(s) during the week would be best to contact you to make arrangements for a telephone interview?

_____ Day(s) _____ Time(s)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

1
2 **Title:** Senior clinical and business managers' perspectives on the influence of
3
4
5 different funding mechanisms, and barriers and enablers to implementing
6
7
8 models of employing General Practitioners in or alongside Emergency
9
10
11 Departments: Qualitative Study.
12
13
14
15

16 **Abstract:**
17
18
19
20
21

22 *Purpose*
23

24 Health policy in England has advocated the use of primary care clinicians at emergency
25
26 departments to address pressures from rising attendances. This study explored senior
27
28 managers' perspective on funding mechanisms used to implement the policy and
29
30 experiences of success or challenges in introducing GPs in or alongside emergency
31
32 departments.
33
34
35
36
37
38
39

40 *Methods*
41

42 The perspectives of senior clinical, business and finance managers with responsibility for
43
44 emergency department services and on-site primary care service implementation were
45
46 investigated in semi-structured interviews with 31 managers at 12 type-1 emergency
47
48 departments in England and Wales (February 2018 - September 2019). Emergency
49
50 departments operated one of three GP models or had prior experience of implementing a
51
52
53 GP model. Interviews were thematically analysed.
54
55
56
57
58
59
60
61
62
63
64
65

Results

1
2 Perceived successful GPs models in emergency departments were reliant on well-organised
3
4 and unified funding mechanisms, appropriate staffing and governance, and consideration of
5
6 population demands and needs. Funding mechanisms and the flow of funds were reported
7
8 as complex, especially in Inside-parallel GP models. The most efficient mechanisms were
9
10 described at departments where funding was unified, in collaboration with health and
11
12 community care services. Staffing with local, experienced GPs was important. There were
13
14 cautions from experiences with private locum providers.
15
16
17
18
19
20
21
22

Conclusion

23
24
25 Our findings contribute to debates about implementing policy on how primary care
26
27 clinicians are effectively and safely deployed in emergency departments and how local
28
29 context should be considered.
30
31
32
33
34
35

Classification of keywords:

- 36
37 • Emergency Services, Hospital
- 38
39 • General Practitioners
- 40
41 • Primary Health Care
- 42
43 • Health Policy
- 44
45 • Leadership
- 46
47
48
49
50
51
52
53
54

Introduction

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

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 tackle this, 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

1 contrast, NHS England operates an internal market with (at the time of the study) 191
2 Clinical Commissioning Groups (CCGs). These CCGs commission hundreds of NHS Trusts
3 (organisational units of healthcare providers), including NHS Foundation Trusts which are
4 semi-autonomous, and thousands of GP Practices to provide, and sometimes fund, care in
5 local areas [7]. This model focuses on financial incentives for purchasers and providers to
6 improve healthcare. In recent years this model has evolved with an increasing number of
7 CCGs collaborating or merging to provide system level care for wider populations [8] .
8
9

10 Recruiting the right staff to work in these models is also important, however this is a
11 challenge given the difficulties the NHS is facing with increasing pressure on limited staff,
12 particularly GPs. The NHS spent £5.4 billion on temporary staffing in 2017/18 but this has in
13 certain cases resulted in poorer patient experiences [9,10].
14
15

16 This study aims to better understand how, and to what extent, the models of using GPs in or
17 alongside emergency departments work effectively, through exploring the perspectives and
18 experiences of those with intimate knowledge of the local organisation of health and care
19 services, the flow of funds and staffing – the senior clinical, finance and business managers.
20 By examining the experiences of these managers, this study will add to the wider, growing
21 evidence of the real effects and experiences of adopting these models to inform policy
22 adaptation, service development and improve the healthcare provided to patients.
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52

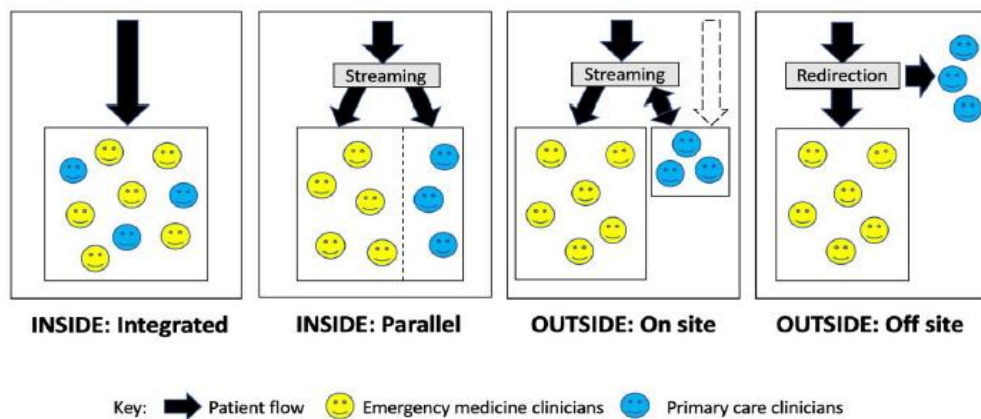
53 ***Materials and Methods***

54 The [anonymised] study is an England and Wales, multi-centre mixed-methods study
55 commissioned by [anonymised]. Its aim is to evaluate the clinical and cost-effectiveness of
56
57
58
59
60
61
62
63
64
65

1 different models of employing GPs in emergency departments, and to understand the ways
2 in which mechanisms of delivery and context influence how services function to generate
3 variations in outcomes [11].
4
5
6
7

8 [Anonymised]a taxonomy describes the different models of GPs working in or alongside
9 EDs found in practice was developed [12]. The taxonomy provided a basis for evaluation by
10 characterising service models into four distinct groups as shown by Figure 1. The fourth
11
12
13
14
15
16
17

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



20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35 *Figure 1-[anonymised ref]*

36 category - "Outside Offsite" – describes GP services outside the hospital, and as such was
37 not in scope of this study.
38
39
40
41

42 An online survey was distributed in September 2017 (www.onlinesurveys.ac.uk) to clinical
43 directors of all 185 type 1 emergency departments (consultant led 24-hour services with full
44 resuscitation facilities) in England and Wales. Seventy-seven respondents (40%) (clinical
45 directors, medical directors and emergency department consultants) completed the
46 national survey and agreed to be contacted for a follow-up telephone interview
47 [anonymised reference]. From this a purposive sample of 13 sites was derived: composed of
48 three Inside Integrated, four Inside Parallel, three Outside Onsite and three 'controls' and
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

1 across a range of larger/ smaller, urban/ rural hospitals. The controls were included to
2 provide outcome data where no GPs were currently employed but who had previously
3 employed GPs in one of these models and then disinvested. The purposive sampling
4 framework also covered regional differences and types of providers of GPs. This allowed the
5 sample to cover a range of variables that could influence the research question, and thus
6 provide greater transferability of study findings [12].
7
8
9
10
11
12
13
14
15

16 This study sought to generate theories on how and to what extent these different service
17 models functioned, compared between models and with those with no GP service, exploring
18 the perspectives and experiences of those closely involved in planning and delivery to gain
19 an understanding of the impact of the intervention on its providers and users [13].
20
21
22
23
24
25

26 Qualitative methods for data collection and analysis are best suited for the provision and
27 interpretation of such rich and in-depth data [14].
28
29
30
31

32 Between February 2018 and September 2019, each site was visited by a research team
33 (anonymised). A second level of sampling of *key informants* – senior business, finance and
34 clinical managers with intimate knowledge of services' funding structures, the flow of funds
35 and experience of providing a primary care service in the emergency department – was
36 undertaken. Clinical directors, business and finance managers within the sample sites were
37 interviewed, either individually or in groups. These semi-structured interviews were conducted
38 by a single interviewer [anonymised], following an interview guide (Appendix 1) which was
39 informed by theories that were iteratively developed and refined from an earlier realist
40 review [5]. The majority of interviews were audio-recorded and transcribed verbatim. In all
41 centres field notes and notes taken during the interviews contributed to the research
42 material. In two centres where audio recordings were not possible for all interviews
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

extensive notes were made and contributed to the research material. Transcripts and field notes were entered into NVivo 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 participants before each interview (see Appendix 2). Information was stored securely in line with [anonymised] Security Information guidelines. A review of themes in the coded data 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

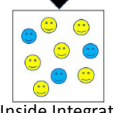
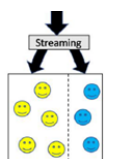

Model	Number	Type	Roles	Manager
 Inside Integrated	GPED03	Individual	Clinical Director	Clinical
	GPED08	Individual	Clinical Director	Clinical
	GPED14	Group	Care Group Manager for Unscheduled Care	Business
			GP consultant	Clinical
			Clinical Director for Unscheduled Care	Clinical
Chief of Medicine	Clinical			
 Inside Parallel	GPED04	Group	Clinical Director for Emergency Medicine	Clinical
	GPED06	Group	Assistant Director of Operations for Acute and Emergency Care	Business
			Service Reform Manager CCG	Business
	GPED07	Group	ED consultant	Clinical
			Senior Legal and Commercial Manager	Business
			Head of Business Development Trust	Business
			Finance Manager	Business
GPED09	Group	Finance Manager	Business	
		Clinical Lead Urgent Care	Clinical	
 Outside Onsite	GPED10	Group	Finance Manager Estates, RD and HST	Business
			Contract Manager	Business
			Finance Business Partner	Business
			General Manager Urgent Care	Business
	GPED11	Group	Clinical Lead Urgent Care	Clinical
			Operational Manager for Urgent Care	Business
			ED consultant	Clinical
	GPED13	Group	Matron for ED and Walk in Centre	Clinical
			Clinical Director	Clinical
			Service Manager	Business
Control	GPED02	Individual	Emergency Department Manager	Business
			Clinical Director	Clinical
	GPED12	Group	Information Manager	Business
			ED consultant and research lead	Clinical
GPED15	N/A	No one interviewed	N/A	

Table 1 – Sample Characteristics

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 were business, 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 sub-themes 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
Funding	Overlapping funding streams
	Move to unified ED funding
	Value of GPs
Staffing	Local GPs
	Experience
	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.

1 A range of funding mechanisms was evident, including being funded directly by one or more
2 local CCGs. However, managers also reported experiences where the CCG was funding
3 multiple urgent care services separately, despite them performing largely the same
4 function. In some cases, multiple CCGs were funding multiple separate services in the same
5 community.
6
7
8
9
10

11
12
13 Managers recognised that due to a shifting landscape in primary care services, whereby the
14 separation between community and urgent care had become less clear, decisions around
15 allocation of funding and evaluations of service performance had become more complex.
16 This applied especially to sites operating the Inside Parallel model, where managers
17 reported inadequate funding streams, as this model sits neither fully inside nor outside the
18 emergency department.
19
20
21
22
23
24
25
26
27
28
29

30 Similarly, it was thought that separate funding streams disincentivised cooperation between
31 primary and secondary care, since certain services were concerned they would lose income if
32 patients were signposted to another service. Furthermore, concerns were raised that if too
33 many services were funded individually, they would inevitably become redundant as there
34 would be insufficient numbers of patients seen by each distinct service.
35
36
37
38
39
40
41
42
43
44
45
46

47
48 *“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
49 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
50 something different? Hospital admission avoidance ... improved access to GPs?” (GPED14)*
51
52

53 54 55 56 57 58 **Move to unified emergency department funding** 59 60 61 62 63 64 65

1 Managers felt that more 'unified' or 'block' emergency department funding
2 contracts (providing a fixed budget for the year to the ED) were better in facilitating the
3 changes necessary for effective models of employing GPs in or alongside the emergency
4 department. The reliable budget was felt to enable delivery of clearer strategy, structure and
5 operational activity. Managers at sites being paid through Payment-by-Results (PbR) tariffs
6
7
8
9
10
11
12
13
14
15

17 *"Any budget always goes over, just because of the nature of the beast, we do see more and more patients
18 every year, it has exponentially grown, we've now entered into a block contract arrangement for this year,
19 just to allow us just to stabilise."* (GPED06)
20

25 reported rapidly rising costs, above the designated budgets, alongside increasing demand
26 on services. Payment-by-Results is based on funding contracts where providers receive
27 payments for each patient seen, and according to the complexity of the case. Many had
28 therefore switched back to block contracts to stabilise finances. In particular, 'aligned
29 incentivised contracts' (AIC) were seen as favourable. These were block payment contracts
30 aligned with expected performance and activity outputs, incentivised through non-payment
31 if outputs were not achieved. At sites operating the Outside Onsite models, there was
32 evidence for the creation of single 'health economies' whereby community and urgent care
33 were jointly funded and with shared governance by Hospital Trusts. However, managers at
34 control sites felt that without distinct investments, implementing such models based on
35 unified emergency department funding would simply be an additional drain on their
36 emergency department budgets.
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54

57 **Value of GPs**

58
59
60
61
62
63
64
65

1 Managers at control sites (one in England, one in Wales) were apprehensive about
2
3 employing GPs in or alongside the emergency department. This partly reflected poor prior
4
5 experiences, but was mainly for financial reasons, since it was thought that “expensive GPs”
6
7 could be replaced with cheaper alternatives, such as Advanced Nurse Practitioners (ANP) or
8
9 Physician Associates (PA). There were also preferences by the CCG in one Trust to allocate
10
11 funding to extended primary care hours in the community rather than have a primary care
12
13 service in the emergency department. However, at GP modelsites, managers felt that
14
15 employing only ANPs or PAs might increase the supervision load on emergency department
16
17 doctors and hence it was perceived that GPs, who required no supervision, could have a
18
19 vital role to play.
20
21
22
23
24
25
26
27
28
29

30 **Staffing**

31 **Local GPs**

32
33
34 Managers were unanimous in expressing the view that local GPs should be recruited to work
35
36 in any of the models. GPshadmostly been provided by local federations (groups of general
37
38 practices) rather than private providers or agencies which employed doctors from a wider
39
40 geographical pool.
41
42
43
44
45
46
47
48

49 Managers recognised that patients coming to the hospital with primary care type problems
50
51 were rarely simple cases, and just as in the community, usually had complex physical and
52
53 psychosocial problems. There was a recognition that they should be treated accordingly,
54
55 ensuring long-term care planning, rather than with the sole aim of discharging them from
56
57 the emergency department. Local GPs were knowledgeable about services available locally
58
59
60
61

62
63
64 *“They know how things work locally and they're even better because they're providing a service for their*
65 *patients, or patients of their colleagues.” (GPED07)*

1 that could support patient care and were perceived to offer a more consistent approach to
2 treating patients and they were also felt to effectively replicate the less risk averse role they
3 usually took on in the community. Managers felt this ability to manage risk was crucial for
4 the success of the GP model.
5
6
7
8
9

10 Managers valued employing local GPs, with their knowledge of community care services
11 facilitating more complete management at the point of presentation. Managers also
12 thought that local GPs had a greater desire for delivering a good and comprehensive service
13 as they had a vested interest to ease the workload in their own community.
14
15
16
17
18
19
20
21

22 One of the main explanations for why shift 'fill rates' were sometimes below 100% was that
23 multiple different services within the same hospital or trust were drawing from the same
24 pool of GPs. However, sites which had used both local and agency GPs in the past all
25 reported better shift fill rates with the former. Drivers behind this were the aforementioned
26 positive motivations, and that local GP federations tended to provide GP cover for the area.
27 Thus, different communities were not in competition for the same pool of GPs. This was
28 seen as particularly beneficial for more rural and smaller hospitals, which may have had
29 difficulties attracting a workforce.
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47

48 *"These are fully qualified GPs, they're senior decision makers, they're autonomous, they're not coming back*
49 *to ask you information, they're not coming back to ask how to manage patients all the time, and actually*
50 *they can just crack on and knock through the patients, so the amount of time the A&E consultant is spending*
51 *down doing queue busting has massively dropped, and we can focus on the resus majors patients more."*
52 *(GPED03)*
53

54 55 56 57 **Experience** 58 59 60 61 62 63 64 65

1 Managers felt that the unique nature of the role which GPs working in or alongside the
2 emergency department must perform could only be fulfilled by a specific type of clinician.
3
4 Experienced GPs who were comfortable in the ED setting were thought to be less risk
5 averse, so that they were thought less likely to over-investigate or over-treat patients. They
6
7 were also seen as autonomous, senior decision-makers, meaning they would require help
8
9 less regularly from emergency department consultants. Managers at one site using the
10
11 Inside Integrated model explained how experienced GPs were also having a positive
12
13 educational impact on their emergency department trainees and this role provided added
14
15 benefits.
16
17
18
19
20
21
22
23
24
25
26
27

28 *Private Providers*

29
30
31 Most of the sites with experience of working with private providers of GP services (e.g.
32
33 locum agencies) had reported difficulties with them. This might have been due to
34
35 commissioning or contract management weaknesses. The most significant outcomes of this
36
37 were poor shift fill rates, sometimes at short notice, with no accountability or financial
38
39 penalty for unfilled shifts meaning the workload had to be borne by the emergency
40
41 department doctors. The interventions (GP models) were found neither financially viable
42
43 nor operationally sustainable, and CCGs involved often needed to re-tender the contracts.
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

“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 governance with 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 being in emergency departments as contractors were diminished. Conversely, sites which paid for GP indemnity had much better shift coverage.

Context

One size doesn't fit all

1
2
3
4 Managers felt that government policy for primary care streaming in emergency
5
6 departments misunderstood the drivers of increasing emergency department attendances
7
8 and the variation in demand across the country. Respondents felt that increased acuity and
9
10 complexity of cases plus the increasing numbers of frail elderly patients were driving rising
11
12 pressure on emergency department services rather than simply increasing populations and
13
14 numbers of attendances, but that several local contextual factors influenced this. Demand
15
16 stemming from primary care type patients was variable and ultimately dependent on
17
18 several wider population and healthcare system factors. For example, transient populations
19
20 and migrant workers in rural communities who were reluctant or unable to access GPs, or
21
22 were not familiar with the distinctions between primary and urgent care services, were
23
24 reluctant or unable to access GPs and were reported to be using these new models as their
25
26 first access point for primary care in larger cities.
27
28
29
30
31
32

33
34
35 Moreover, the resilience and consistency of community care services was pivotal in
36
37 managing these demands. Managers in areas which had good provision of GP services
38
39 reported stable and relatively predictable demand, whilst those where the surrounding GP
40
41 services were failing or over-stretched saw large increases in demand. This was particularly
42
43 true for emergency departments in areas near CCG boundaries, where one area was
44
45 performing better than the other, or at national borders, where patients unable to access
46
47 emergency department services in a timely manner in Wales or England might cross to the
48
49 other country and health system. Hence, managers thought the success of employing GPs in
50
51 or alongside the emergency department in meeting demands within the wider primary care
52
53
54
55
56
57
58
59
60
61

1 setting was heavily dependent on the complex interaction of influences from environment,
2 local workforce and working culture rather than a simple commitment of investment or a
3 specific GP model.
4
5
6
7
8
9

10 11 **Discussion**

12 13 *Principal Findings*

14
15
16 Funding mechanisms for employing GPs in the emergency department were frequently
17 reported as complex with confusion about the source and purposes of the money provided,
18 particularly in Inside Parallel GP models. The most efficient mechanisms, that enabled
19 delivery of clearer strategy, structure and operational activity, were reported from sites
20 where funding, whether from the Trust or the CCG, was unified at the service level in
21 collaboration with adjacent services and community care. Themes around staffing indicated
22 that local knowledge and level of experience of GPs were considered important for
23 implementing an effective and sustainable service. This contrasted with experiences of
24 those private providers which provided GPs who lacked experience or local knowledge. Risks
25 of lack of accountability and poor governance from private provider contracts, with
26 detrimental consequences for the ED, were more frequently reported. Across the different
27 contexts and models, experiences from implementing the “primary care streaming” policy
28 did not always align with its intention, reflecting variations in the drivers and nature of
29 demands across England and Wales.
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55

56 ~~Strengths and Limitations~~

57
58
59
60
61
62
63
64
65

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

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

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

8
9
10
11
12
13
14
15
16
17
18
19 ~~One control site in England was not available for interview; the two control sites that~~
20 ~~contributed to the interviews had both had experience with GPs in EDs, one with positive~~
21 ~~experiences and the other more negative experiences.~~

22 23 24 25 26 27 28 29 30 31 *Comparison with other literature*

32
33
34
35 It is important for national policy initiatives to be evaluated as in this wider study of the
36 effectiveness, patient experience, safety and wider system implications of GP models in
37 emergency departments [12] In contrast the Same Day Emergency Care programme has
38 much local level evaluation but little synthesised evidence to guide further policy-making.
39 Such evaluations will also be particularly important in new service changes, such as the “call
40 before you walk” (to Emergency Departments) now being widely piloted [16]. The findings in
41 this study about complex funding mechanisms are consistent with problems identified by
42 the National Audit Office, which viewed current mechanisms as presenting hindrances to
43 managing rising emergency department demands [17]. Moves towards more integrated
44 funding models have already been adopted in NHS policy and by April 2021 all healthcare

1 commissioning will occur through Integrated Care Systems (ICS). These have the option to
2 adopt single pooled budgets in the form of Integrated Care Provider (ICP) contracts [18],
3 which our data indicated would be valued by managers. To this end, collaboration between
4 commissioners, trusts and staff – emphasised by managers as a key determinant of success -
5 will be even more important going forward to achieve such integrated funding models in
6 England [19].
7
8
9
10
11
12
13
14
15

16 The importance of local GPs in providing the primary care services in emergency
17 departments has not been previously examined, however Uthman et al. also found that
18 experienced GPs were more likely to deliver the intended primary care service within a
19 secondary care setting [20]. NHS England’s regulatory body, the Care Quality Commission
20 (CQC), has also raised concerns around governance and effectiveness issues with private
21 providers within the NHS [21].
22
23
24
25
26
27
28
29
30
31

32 *Policy Implications and Future Research*

33
34
35

36 These experiences from business, finance and clinical managers from implementing
37 different models of using GPs in emergency departments contribute to a limited evidence
38 base that addresses the uncertainties around primary care streaming and the provision of
39 GPs in emergency departments [22]. Our findings could add to guidance for successful
40 mechanisms of funding and strategies for employing GPs in or alongside emergency
41 departments. These findings are largely independent of the choice of model, although lack
42 of clarity in funding sources and governance were particularly noted in sites employing the
43 Inside Parallel model. These findings will be reported as part of the ‘GPs in EDs’ study
44 [12] and could subsequently inform NICE guidelines [23] and adaptations of NHS policy
45 about implementing models of GPs in emergency departments.
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

1 The findings generated in this study should be further tested, firstly for their generalisability,
2
3 and for whether implementing unified funding achieves improvements in key performance
4
5 indicators.
6

7 Strengths and Limitations

8
9 Our national survey appeared representative in terms on applications for streaming capital
10
11 funding relating to the 2017 NHS England policy[13], and was diverse in terms of the types
12
13 of GP models included, urban and rural settings, size of department, and experiences with
14
15 funding models and NHS and private providers. The interviewer [anonymised] was not
16
17 involved in coding or analysis to maintain an objective approach to the data and reduce bias
18
19 from interpretations based on the interviewer's experience of the interview rather than the
20
21 data themselves. The interviewer's notes were referenced to give context when necessary.
22
23 After the analysis, the findings were discussed with [anonymised] for guidance in linking
24
25 back to the wider system and policy contexts.

26
27 The purposive sample led to only a small proportion (12 out of 77 survey respondents) being
28
29 included in the study. Obtaining prior consent may have influenced the selection of the
30
31 sample, as some individuals who fit the eligibility criteria may have nevertheless been
32
33 uncomfortable to express their views and not given consent or responded to the invitation
34
35 to be interviewed. With small numbers of hospitals per GP model thematic saturation may
36
37 not have been reached for experiences within and between all models. For example, there
38
39 might be other independent factorssuch as organisational and leadership culture and
40
41 values that have not been identified in these managers' perspectives about models of GPs in
42
43 Emergency Departments. These influences may also relate to the identified themes: in an
44
45 organisation where the relationships were predominantly transactional e.g. GPs were
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

1 employed on locum contracts, this may reflect that the job function is seen as a generic skill.

2 In contrast, where GPs were employed on permanent contracts, gaining more

3 experience, this might reflect a longer term 'relationship' or 'values-based' culture.

4
5
6
7
8
9
10
11
12 Differences in the number of interviewees and the relative proportion of senior business
13 and clinical managers at each site may have influenced the way different models were
14 viewed. For example, the Inside Integrated model group had six clinical managers and only
15 one business manager within its sample. Furthermore, we only interviewed hospital-based
16 managers so our findings reflect the acute care sector perspectives. Further research is
17 needed to understand the experiences of primary care managers and members of the
18 clinical commissioning groups.

19
20
21
22
23
24
25
26
27
28
29
30
31 One control site in England was not available for interview; the two control sites that
32 contributed to the interviews had both had experience with GPs in EDs, one with positive
33 experiences and the other more negative experiences.

34 35 36 37 38 39 40 41 42 43 44 45 46 47 **Conclusions**

48
49
50
51 The experiences of clinical directors and emergency department business and finance
52 managers show that (perceived) successful models of employing GPs in or alongside the
53 emergency department are possible. Their perspectives indicate that this success depends
54 on a well-organised and unified funding mechanism, a local and experienced GP workforce
55
56
57
58
59
60
61
62
63
64
65

1 that can provide GP shift coverage in EDs, and careful consideration of the intervention's
2 place within the wider context of geography, community services and population needs.
3
4 Whilst the research and findings reported here are in UK national health service settings we
5 believe the overarching messages have applicability in countries with publicly or social
6 insurance funded health care and where pressures on EDs are increasing.
7
8
9
10
11
12
13
14
15
16

17 **References**

- 18
19
20 [1] NHS Digital. NHS Performance Statistics. 2019. Available from:
21 [https://www.england.nhs.uk/statistics/wp-content/uploads/sites/2/2019/09/Combined-](https://www.england.nhs.uk/statistics/wp-content/uploads/sites/2/2019/09/Combined-Performance-Summary-September-July-August-data-2019.pdf)
22 [Performance-Summary-September-July-August-data-2019.pdf](https://www.england.nhs.uk/statistics/wp-content/uploads/sites/2/2019/09/Combined-Performance-Summary-September-July-August-data-2019.pdf)
23
24
25
26
27 [2] NHS. Next Steps on the NHS Five Year Forward View. London: 2017. Available from:
28 [https://www.england.nhs.uk/wp-content/uploads/2017/03/NEXT-STEPS-ON-THE-NHS-FIVE-YEAR-](https://www.england.nhs.uk/wp-content/uploads/2017/03/NEXT-STEPS-ON-THE-NHS-FIVE-YEAR-FORWARD-VIEW.pdf)
29 [FORWARD-VIEW.pdf](https://www.england.nhs.uk/wp-content/uploads/2017/03/NEXT-STEPS-ON-THE-NHS-FIVE-YEAR-FORWARD-VIEW.pdf)
30
31
32
33
34
35 [3] Gonçalves-Bradley D, Khangura JK, Flodgren G, Perera R, Rowe BH, Shepperd S. Primary care
36 professionals providing non-urgent care in hospital emergency departments. Cochrane Database
37 Syst Rev 2018. Available from: <https://doi.org/10.1002/14651858.CD002097.pub4>
38
39
40
41
42
43 [4] Ramlakhan S, Mason S, O'Keeffe C, Ramtahal A, Ablard S. Primary care services located with
44 EDs: a review of effectiveness. *Emerg Med J* 2016;33:495 LP – 503. Available from:
45 <https://doi.org/10.1136/emered-2015-204900>.
46
47
48
49
50
51 [5] Cooper A, Davies F, Edwards M, Anderson P, Carson-Stevens A, Cooke MW, et al. The impact
52 of general practitioners working in or alongside emergency departments: a rapid realist review. *BMJ*
53 *Open* 2019;9:e024501. Available from: <https://doi.org/10.1136/bmjopen-2018-024501>.
54
55
56
57
58
59
60
61
62
63
64
65

1 [6] HM Treasury. Spring Budget 2017. London: HM Government; 2017. Available from:
2 www.gov.uk/government/publications
3

4
5 [7] National Assembly for Wales. The organisation of the NHS in the UK: comparing structures in
6 the four countries. Cardiff: 2015. Available from: www.assemblywales.org/research
7
8

9
10 [8] NHS Clinical Commissioners, NHS Providers. Driving Forward System Working. 2018.
11 Available from: <https://nhsproviders.org/driving-forward-system-working>
12
13

14
15 [9] Nuffield Trust. Doomed to repeat? 2018. Available from:
16 <https://www.nuffieldtrust.org.uk/files/2018-10/learning-from-history-web.pdf>
17
18

19
20 [10] Sizmur S, Raleigh V. The risks to care quality and staff wellbeing of an NHS system under
21 pressure. 2018. Available from: [https://www.picker.org/wp-content/uploads/2014/12/Risks-to-care-](https://www.picker.org/wp-content/uploads/2014/12/Risks-to-care-quality-and-staff-wellbeing-VR-SS-v8-Final.pdf)
22 [quality-and-staff-wellbeing-VR-SS-v8-Final.pdf](https://www.picker.org/wp-content/uploads/2014/12/Risks-to-care-quality-and-staff-wellbeing-VR-SS-v8-Final.pdf)
23
24
25

26
27 [11] Anonymised
28
29

30
31 [12] Anonymised [13] Pawson R, Tilley N. Realistic evaluation. London: SAGE Publications Ltd;
32 1997.
33
34

35
36 [14] Green J, Thurgood N. Qualitative methods for health research. 4th edition. Los Angeles;
37 2018.
38
39

40
41 [15] Braun V, Clarke V. Thematic analysis. APA Handb. Res. methods Psychol. Vol 2 Res. Des.
42 Quant. Qual. Neuropsychol. Biol., Washington, DC, US: American Psychological Association; 2012, p.
43 57–71. Available from: <https://doi.org/10.1037/13620-004>.
44
45
46

47
48 [16] Discome M. National roll out of ‘call before you walk’: A&Es set for winter. Health Services Journal. 2020
49 Available from: [https://www.hsj.co.uk/coronavirus/exclusive-national-roll-out-of-call-before-you-walk-aandes-](https://www.hsj.co.uk/coronavirus/exclusive-national-roll-out-of-call-before-you-walk-aandes-set-for-winter/7028044.article)
50 [set-for-winter/7028044.article](https://www.hsj.co.uk/coronavirus/exclusive-national-roll-out-of-call-before-you-walk-aandes-set-for-winter/7028044.article)
51
52

53
54 [17] Morse A. NHS financial sustainability. London: 2019. Available from:
55 https://www.nao.org.uk/wp-content/uploads/2019/01/NHS-financial-sustainability_.pdf
56
57
58

1 [18] NHS. The NHS Long Term Plan. London: 2019. Available from: www.longtermplan.nhs.uk

2
3 [19] Timmins N. Leading for integrated care. London: 2019. Available from:

4
5 <https://www.kingsfund.org.uk/sites/default/files/2019-11/leading-for-integrated-care.pdf>

6
7
8 [20] Uthman OA, Walker C, Lahiri S, Jenkinson D, Adekanmbi V, Robertson W, et al. General
9 practitioners providing non-urgent care in emergency department: a natural experiment. *BMJ Open*
10 2018;8:e019736. Available from: <https://doi.org/10.1136/bmjopen-2017-019736>.

11
12
13 [21] Care Quality Commission. The state of care in independent doctor and clinic services
14 providing primary medical care. London: 2019. Available from:

15
16 https://www.cqc.org.uk/sites/default/files/20190321_stateofindpms_report.pdf

17
18 [22] Cooper A, Carson-Stevens A, Hughes T, Edwards A. Is streaming patients in emergency
19 departments to primary care services effective and safe? *BMJ* 2020;368:m462. Available from:
20
21 <https://doi.org/10.1136/bmj.m462>.

22
23 [23] Emergency and acute medical care in over 16s: service delivery and organisation. NG94.
24 London, UK: 2018. Available from: <https://www.nice.org.uk/guidance/ng94>

25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52 **Part A Appendix 1**

53
54
55
56 Interview Guide PA, adapted from GPED14 group interview

- 57
58
59
60
61
62
63
64
65
- 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?

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

Part A Appendix 2

Consent form for Finance and Management Staff

Project Title: [Anonymised]

**Please initial
each line**

- 1. I confirm that I have read and understand the information sheet dated 05/02/2018 (version 3) for the above study and have had the opportunity to consider the information, ask questions and have had these answered
- 2. I agree to take part in the above study and taking part in an interview which includes talking to researchers about how the department operates, funding arrangements, the financial structuring and management of the department.
- 3. I consent for the interview to 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 initial
your choice**

Please select **one** of the below options:

- 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 interviewed by telephone at mutually agreed time

Name of participant

Date

Signature

Name of Researcher

Date

Signature

Please turn over and complete the rest of the form

Contact number

Email address

If you selected the telephone interview option, please provide contact details and let us know which day(s) during the week would be best to contact you to make arrangements for a telephone interview?

_____ Day(s) _____ Time(s)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

Title: Senior clinical and business managers' perspectives on how different funding mechanisms and models of employing General Practitioners in or alongside Emergency Departments influence wider system outcomes: Qualitative Study.

Authors and Affiliations:

Mr Mazhar Choudhry^a ChoudrhMA@cardiff.ac.uk

Dr Michelle Edwards^a edwardsm28@cardiff.ac.uk **Corresponding Author**

Dr Alison Cooper^a CooperA8@cardiff.ac.uk

Dr Pippa Anderson^b p.anderson@swansea.ac.uk

Dr Andrew Carson-Stevens^a Carson-StevensAP@cardiff.ac.uk

Professor Matthew Cooke^c M.W.Cooke@warwick.ac.uk

Professor Jeremy Dale^d jeremy.dale@warwick.ac.uk

Dr Peter Hibbert^e peter.hibbert@mq.edu.au

Dr Thomas Hughes^f tom.hughes@ndorms.ox.ac.uk

Dr Alison Porter^g a.m.porter@swansea.ac.uk

Professor Timothy Rainer^a RainerTH@cardiff.ac.uk

Professor Aloysius Niroshan Siriwardena^h nsiriwardena@lincoln.ac.uk

Professor Adrian Edwards^a EdwardsAG@cardiff.ac.uk

^a PRIME Centre Wales, Division of Population Medicine 8th floor Neuadd Meirionnydd, Heath Park, Cardiff, UK.

^bSwansea Centre for Health Economics, College of Human and Health Sciences, Swansea University, Swansea. UK

^cWarwick Medical School, University of Warwick, Coventry, UK

^dAcademic Primary Care, Warwick University, Coventry, UK.

^eCentre for Healthcare Resilience and Implementation Science, Australian Institute of Health Innovation, Macquarie University, Australia.

^fEmergency Department, John Radcliffe Hospital, Oxford, UK.

^gSwansea University Medical School, Swansea University, Swansea, UK.

^hCommunity and Health Research Unit, School of Health & Social Care, University of Lincoln, England, UK

Acknowledgements: We would like to acknowledge our patient and public involvement representatives Mrs Barbara Harrington, Mrs Julie Hepburn and Dr Bridie Evans for their contributions to the GPs in EDS project. We would also like to acknowledge Miss Delyth Price for her role in managing the administration of the project.

Declarations of interests: there are no conflicts of interest

Funding: The study was funded by the National Institute of Health Research, Health Service and Delivery Research (NIHR HS&DR 15/145/04)