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Rapid testing of service innovations in general practice: The Primary Care Home model in Newham

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List of acronyms

ACS	Accountable Care System
CCG	Clinical Commissioning Group
CCM	Complex Case Management
DNA	Did Not Attend
ELHCP	East London Health and Care Partnership
GP-AS	GP Access Streaming
HCA	Health Care Assistant
NACP	National Association of Primary Care
NEL	North East London
NIHR	National Institute for Health Research
PCH	Primary Care Home
PCN	Primary Care Network
SPN	Specialist Practice Nurse
STP	Sustainability and Transformation Plan
UCC	Urgent Care Centre

Executive Summary

Background

In autumn 2018, Newham Clinical Commissioning Group (CCG) piloted two service innovations with groups of general practices using the Primary Care Home (PCH) model as part of the national PCH programme developed by the National Association of Primary Care (NAPC). The PCH model is to provide local, high-quality, personalised and preventative care for a defined population of 30,000 to 50,000 patients, equivalent to four to six general practices, integrating health and social care services. The new initiatives were: 1) Complex Case Management (CCM) – a CCM team for physically mobile patients with multiple co-morbidities, and 2) GP Access Streaming – managing in-hours demand for doctors' appointments through online triage, care navigation and additional GP hours provided by locum doctors that were shared between practices. The goals for the evaluation were to assess the feasibility and acceptability of the PCH model and identify implementation factors that might affect the roll-out of the two service innovations across the Borough.

The evaluation adopted the Researcher-in-Residence model whereby the lead researcher (DS) was an embedded member of the Newham CCG PCH team, working with them to plan, co-deliver and evaluate the innovations and share their empirical expertise (Marshall et al., 2014).

Formative evaluation of the PCH model

Two geographic areas – 'clusters' – were selected in Newham to rapidly test out the two initiatives (one per cluster) and the pilot started in October 2018 and ended in April 2019. An evaluation of the newly developed innovations was carried out between December 2018 and May 2019 using mixed-methods and data, including: 1) routinely collected data, 2) interviews and a focus group with practitioners from general practices, the PCH project manager, and the CCM team, 3) a focus group with a patient participation group, 4) anonymised patient questionnaires, 5) web analytics, 6) analysis of emails from the set-up phase of the pilot, and 7) a literature review.

Key findings and recommendations

Complex Case Management

A functional CCM team was established that consisted of a practice nurse lead 32 hours per week, a healthcare assistant (HCA) for five sessions per week, an administrator for 20 hours per week and two GP sessions to provide ongoing everyday support to the nurse and HCA. The service enhancement was positively received by patients that attended the service, particularly in addressing unmet social care needs. However, overall there was lower than expected uptake of the service by patients and carers, and high levels of engagement and communication between general practices and the CCM team were not achieved within the timeframe of the pilot.

Learning reflections

- **Consensus on the definition of the target population:** GPs identified that complex needs patients tended to experience issues around frailty (e.g. falling and mindfulness). The care pathway to access CCM should be reviewed in light of the exclusion of housebound complex case patients in the pilot.

- **Clear and effective discussion and communication** with participating practices on what the benefits are to patients and to practices themselves should be sustained throughout the initial implementation period (three to six months).

- **Finding an appropriate host practice:** Ideally, the service should be provided in a practice with good transport links within the cluster, that can accommodate two consulting rooms and admin workstation, with a team that can travel to housebound patients if needed.

- **Training needs of the CCM team:** The team need training and support to conduct health reviews and develop care plans, and to develop their knowledge about community-based services (criteria, thresholds, quality, and outcomes) to make effective referrals.

- **Future measurement of effectiveness:** Outcomes that should be considered include meeting unmet needs, reducing admissions to A&E and UCC, reducing admissions to hospital, reducing time to discharge from hospital, patient satisfaction and quality of life.

- **The need for real-time linked datasets:** The project needs access to (near) real-time linked datasets across different care areas (acute, primary care, community and social care) to gain population and patient pathway insights.

- **Scaling-up delivery of the service model:** The HCA and nurse should have clear job descriptions and roles to avoid duplication and should have identifiable tasks. To further reduce the burden on practices' time, it may make sense to extend the nurse's role to offer other routine services, e.g. flu vaccinations. A social worker might be a very useful addition to the team to undertake assessments and make referrals. A key reflection for rolling out CCM would be to consider the number and location of multi-disciplinary teams, and how they deliver the service within each cluster:
    - Should this be coordinated through a series of hubs or through a cluster-based approach where patients see one of eight dedicated teams?
    - How can it be ensured that **housebound patients have access** to the service?
    - How can clusters buddy one another to ensure that they continue to test and learn from each other during the implementation phase and beyond?
    - Should there be a set-up programme manager working across the whole of Newham?

GP Access Streaming

Practices shared and utilised the additional GP hours provided by locum doctors and this service innovation was positively received by practices and patients alike. Success was attributed to the central location of the host practice for the locum GPs within the cluster – patients did not have to walk far from their usual practice – and to the careful recruitment of friendly and communicative locums that could liaise effectively with both patients and practices. Practices welcomed the additional appointment capacity.

The implementation of online triage was mixed, working most successfully in the practice that was fully committed to embedding the approach and problem-solving challenges that arose. Practices found online triage particularly useful for efficiently dealing with fit notes, medical reports and letters. Online triage was predominantly completed for patients of working age and posed challenges for older patients and patients with poor English literacy.

The participating practices decided within their own teams on when and how they would apply the navigator role. Practices where the care navigator role or function had existed prior to the pilot invested time in attending training in order to enhance the care navigator role/function within their practice.

However, despite attending training, attendees reported that there has been little opportunity to either build on or share knowledge acquired at the training event that would stimulate new ways of working and/or improve the quality of care navigation.

Learning reflections

- **Assistance with completing the online triage form:** Privacy is needed if a receptionist is expected to complete online forms on behalf of a patient. Translation options would be useful for patients for whom English is a second language. A standing iPad could be provided in reception areas for patients.

- **Integrating online triage into existing systems:** Protocols should be in place to streamline the online triage pilot into existing software and technology mechanisms/processes at the practice.

- **Communicating change:** A host of communication strategies should be used to warn patients of future changes, including text, posters and flyers to take away and read at home. To encourage patients to use the online triage and complete the form, practices must convey a positive attitude and assist patients where needed. Patient participation groups should take an active role as ambassadors and help in the communication strategy and planning of the enhanced service.

- **The importance of leadership support:** Some patients have been sceptical about using the care navigation system. However, when patients see support by practice manager and GP, it changes attitudes and behaviour.

- **Care navigation training:** Service invitation letters to be sent to patients by participating practices and not the CGG to improve ownership of the intervention. Navigation training should include managing sensitive and difficult care navigation interviews. Timetabling and implementation of training should be planned in agreement with practices to maximise attendance.

- **The need for a centralised directory of local provision:** The navigator role should be supported by a vetted and centralised directory of local provisions, supported by HealthWatch. Having and sharing accurate information with patients will help with take-up.

- **A phased approach:** Rather than embarking on comprehensive service changes, a phased approach to plan and introduce the different arms of the enhanced service is required. The initiatives were partially implemented in each cluster and tended to be shaped to fit around the pilot time scales, which limited the potential for service innovation and transformation. The practices have different patient populations, staff roles and operational procedures and interventions need tailoring to individual practice contexts, building on their strengths and identifying areas of where more change support would be needed. Every member of the health care team should be engaged and there should be regular opportunities to review how implementation is progressing. PCH model required more time, tailoring and intensive work in order to fully integrate the different components within its existing arms to local primary systems and structures.

Recommendations for the development of the PCH model

- **The need for a programme manager:** The successes of the PCH pilot would not have been possible without a dedicated project manager, who delivered direct programme management, workforce development training and light change management coaching to practices. Practices had been aware of the unpredictability of testing a new approach in practice, so having access to the programme manager provided easy access to solutions and support.

- **Patient involvement:** Emphasis should be placed on the involvement of patients in the redesign, along with developing an engagement strategy to help educate practitioners and patients about changes.

- **Technology** (e.g. EMIS, NELIE and Discovery) that sits behind the model should be co-designed and co-developed to ensure ease of implementation, and to limit the risk of poor reporting or communication within and across practices.

- **Communication with practices and patients:** The communication should stress to an even greater extent the benefits of additional GP appointments, and the benefits of working together across primary and secondary care, community voluntary sector and specialist services. This would ensure that the PCH model is better aligned to strategic, operational and financial drivers as part of the prevention and personalisation agenda.

- **Monitoring and evaluation:** There were several data challenges involved with the evaluation, so we recommend that Newham CCG aim to identify, access and actively involve analytical resources in their plans to widen the PCH model.

Conclusions

The evaluation did not foresee the importance the NHS Long Term Plan would place on the creation of Primary Care Networks (PCN). The evaluation will inform the development of Primary Care Networks across Newham. Within the pilot period, the PCH model stimulated and strengthen partnership working and successfully developed a cluster of GP practices pioneering new ways of working together in more than one area. In practice, securing the commitment of practices to joint working and communication within and across stakeholder groups – the CCG, practices, patients and carers – was crucial to the success of service changes.

Introduction

This report is an evaluation of the pilot of the Primary Care Home (PCH) programme based in Newham, East London, which focused on providing timely and appropriate care for all registered patients to match the urgency of their medical needs. The pilot encompassed two service innovations: the first, to offer additional support to patients with complex needs (‘Complex Case Management’), and the second, to increase access to in-hours GP surgeries (‘GP Access Streaming’). The pilot started in October 2018 in six GP practices for each innovation (12 in total).

The Institute for Health and Human Development (IHHD) was commissioned by Newham Clinical Commissioning Group (CCG) to evaluate the programme. IHHD is a research institute at the University of East London that conducts interdisciplinary applied health research and develops and evaluates interventions to improve health and wellbeing and reduce health inequalities across the life course. The evaluation adopted the Researcher-in-Residence model whereby the lead researcher (DS) was an embedded member of the PCH team, working with them to co-deliver and monitor the innovations and share their evaluation expertise (Marshall et al., 2014).

The overall goals of the evaluation were to:

1) Assess the feasibility and acceptability of the PCH model
2) Identify implementation factors that might affect the roll-out of enhanced services across the Borough.

The evaluation integrated data from multiple sources, including:

- Monitoring data collected by practitioners implementing the service innovations
- Interviews and a focus group with practitioners and deliverers
- A focus group with a patient participation group
- Anonymised patient questionnaires
- Web analytics
- Documentary evidence (emails, reports) collected on the implementation of the pilot.

A full account of the methods for the evaluation can be found in Appendix 1.

The next chapter describes the PCH model and the context for its implementation in Newham. Chapter 4 presents the details of the pilot’s service enhancements. Chapters 5 and 6 focus respectively on the findings from piloting Complex Case Management and GP Access Streaming. Chapter 7 presents recommendations for the roll-out of services across Newham.

The Primary Care Home model in Newham

Primary Care Home (PCH) is a national programme developed by the National Association of Primary Care (NAPC) designed to inspire and support General Practice to integrate with wider health and social care services. The PCH model aims to provide high quality, personalised and preventative care for a defined patient population. The model has four key characteristics:

- An integrated workforce, with a strong focus on partnerships spanning primary, secondary and social care;
- A combined focus on personalisation of care with improvements in population health outcomes;
- Aligned clinical and financial drivers; and
- Provision of care to a defined, registered population of 30 – 50,000 patients.

Bringing together professionals across primary and secondary care, mental health, community and social care, and the voluntary sector, the PCH model aims to create a care community focused on local population needs (NAPC, 2018). Focusing on a smaller population of patients, the PCH model could enable services to transform at a more rapid pace. It is important to recognise that PCH provides a framework for aligning goals and working practices of healthcare professionals, rather than a 'blueprint' for implementation. The PCH model brings together a range of health and social care professionals to work together to provide enhanced personalised and preventative care for their local community.

In March 2017, Newham Clinical Commissioning Group (CCG) successfully applied to join the PCH programme. The PCH model aligned with the development of Newham's Accountable Care System (ACS), implementing a place-based model of care with General Practice at the centre, building on its Integrated Care programme. The model supported the delivery of Newham's Primary Care Strategy and its Commissioning Strategy Plan, and fitted with the Building Health Communities and the East London Health and Care Partnership (ELHCP) Sustainability and Transformation Plan (STP).

Through the PCH model, Newham aimed to address the following issues:

- Health and wellbeing gap: integrated health and social care is needed to tackle the demands of an aging population alongside projected population growth (Newham CCG, 2017a).

- Newham patients and public feedback: patients wish to be treated holistically and equitably with clear pathways to different services, and be empowered to manage their own care.

- Care and quality gap: services in Newham are not sufficiently joined-up, and the current fragmented commissioning and delivery system results in uneven quality of care, missed opportunities for the right care at the right time and place, and ultimately inadequate outcomes. People with multiple co-morbidities in particular can experience reactive, episodic care with frequent hospital admissions, to the detriment of their wellbeing and independence.

- Efficiency gap: it is more cost-effective to treat patients in the most appropriate care setting for their needs; preventable attendance in acute care settings increases the cost of care.

The PCH in Newham aimed to 'test' the following two service innovations (see chapter 4):

- GP Access Streaming designed to allow individuals who have non-clinical needs to be signposted to self-care/preventative activities in a community setting. General practice staff could triage patients with clinical needs based on complexity, continuity and who is the most appropriate healthcare professional to address that need. The innovation would also utilise new technology and ways of working, including telephone consultations, online access and online consultations, as well as develop a collaborative model of addressing the in-hours unmet demand

- Complex Case Management which would build on existing functions from the integrated care programme to ensure that individuals who have 'complex' requirements, for example frail/elderly individuals with multiple co-morbidities, were supported by a team with the appropriate level of specialist input through an intensive case management approach.

Wider policy context: Primary Care Networks and the NHS Long Term Plan

In 2013, Newham CCG launched a five-year primary care strategy setting out how it expected to support the sustainable delivery of high-quality primary care for Newham residents. The NHS Five Year Forward View outlined the need to meet the demands of a growing population who are living longer, and provide integrated care across primary and specialist hospital care, physical and mental health services, and health and social care (NHS England, 2014).

Since the launch of these strategy documents, the NHS landscape has significantly shifted with the publication of the NHS Long Term Plan in 2019. The ten-year Plan committed to development of Primary Care Networks (PCNs) of local GP practices and community teams with a designated single fund through which all network resources would flow, building on the PCH model (NHS, 2019). PCNs would encompass a range of staff including GPs, pharmacists, district nurses, community geriatricians and social workers (NHS, 2019). Networks would also be offered a 'savings scheme' so that they could benefit from actions to reduce avoidable A&E attendances, admissions and delayed discharge, reduce avoidable outpatient visits, and over-medication through pharmacist review (NHS, 2019).

The Plan delineated an improvement strategy that mirrored the innovations that Newham PCH aimed to test, including groups of general practices providing care, digital platforms, integrated working and care navigation/social prescribing:

'NHS will move to a new service model in which patients get more options, better support, and properly joined-up care at the right time in the optimal care setting.

- Over the next five years, every patient will have the right to online 'digital' GP consultations, and redesigned hospital support will be able to avoid up to a third of outpatient appointments.
- GP practices – typically covering 30–50,000 people – will be funded to work together to deal with pressures in primary care and extend the range of convenient local services, creating genuinely integrated teams of GPs, community health and social care staff.
- Now expanded community health teams will be required under new national standards to provide fast support to people in their own homes as an alternative to hospitalisation, and to ramp up NHS support for people living in care homes.
- Within five years over 2.5 million more people will benefit from 'social prescribing', a personal health budget, and new support for managing their own health in partnership with patients' groups and the voluntary sector.' (NHS, 2019, p.6)

Newham CCG's priorities for 2019/20, and, more widely, those of the North East London (NEL) Sustainability and Transformation Partnership (STP) have been to provide high-quality and locally responsive primary care, complementing the goals of the Long Term Plan (Newham CCG, 2018):

- Easier and more convenient patient access to GP services.
- Shifting the balance of work to proactive and planned care, with GPs providing an ongoing relationship for care coordination for patients, seamless delegation to the extended Primary Care team, and GPs freed up and enabled to spend time with patients with complex conditions on person-centred, planned and preventative care.
- Improved integrated care commissioning.
- Improved primary care data.
- GP retention and new employment models for newly qualified GPs.
- General practice nurses (GPN) leadership development.
- Implement a sustainable NEL system-wide plan for quality and efficiency – supporting the continued development of a culture of quality improvement to ensure it is fully and consistently embedded across NEL.
- Reduce variation in quality and secure universally high performance.

Newham patient population

Demographics

Newham has a young and diverse population (Greater London Authority [GLA], 2019a). It has an estimated resident population of 342,900, and is the fourth largest borough in London (GLA, 2019a). The population served by Newham CCG is estimated to be 332,800 (Newham CCG, 2018). Of Newham residents, 54% were born abroad (the largest migrant population is from India), and 73% of the population are from Black and Asian communities (BAME) (GLA, 2019).

The estimated projections based on natural change (births and deaths) and internal and international migration suggest an increase of 15% in the adult population from 2016 to 2026. The greatest percentage increase is expected in the 65–74 years age group (27%) and the lowest in the 18–49 years group (8%). The greatest increase is expected to occur in the Other ethnicities (28%) and British Asian (20%), with Other White (15%) and all mixed (14%) and British Black (6%) also increasing. The population of British White ethnicity is estimated to decrease by 14%. The expected housing developments in parts of the borough will have a great impact on the population size and structure (Newham CCG, 2017b).

Wider determinants of health

The population of Newham faces multiple challenges, the greatest of which are low income and housing affordability. About 20% of all adults and 25% of all older people are income poor. The median annual household income in Newham was £28,780 in 2012/13, which was £10,000 lower than the London average but comparable to that of North West England (Newham CCG, 2017b). Poor housing affordability is associated with overcrowded housing and poor housing conditions (Newham CCG, 2017b). Newham's performance in education is similar to other London boroughs, and falls in the middle range for employment and health, based on a proportion of small areas in Newham falling in the 10% most deprived decile in the country. However, it ranks the worst for crime and barriers to goods and services (Newham CCG, 2017b).

To conclude, when considering the fidelity of the Newham PCH to the NACP model, it is important to take into account the contextual factors that influence health outcomes for residents living in Newham. A 'Newhamification' of the NACP model is needed to ensure that it is fit for purpose for Newham's target population.

The PCH pilot in Newham

Newham PCH set out to provide more proactive and integrated care to patients and to tackle existing inequalities in care across the Borough. Specifically, it aimed to:

1. Address unmet in-hours demand in practices.
2. Provide timely and appropriate care for all registered patients that matches the urgency of their medical need.
3. Provide timely, targeted care for patients with complex needs, that is, those with multiple co-morbidities and social care needs.
4. Reduce avoidable use of Urgent Care Centres (UCCs), A&E, and hospital admissions.

The PCH for Newham tested two service innovations between October 2018 and April 2019, each in different geographic General Practice Cluster areas in the Borough. The first was ‘Complex Case Management’, piloted in the North East 1 (NE1) Cluster and the second was ‘GP Access Streaming’, piloted in the North West 1 (NW1) Cluster. We describe the initiatives and clusters below.

4.1 Complex Case Management (CCM)

CCM aimed to improve the outcomes and quality of care of patients with multiple co-morbidities by providing timely, targeted access to treatment and reduce avoidable A&E admissions (Objectives 3 and 4), as well as freeing up appointment times for non-complex patients (Objective 1). CCM involved the following components:

1. The creation of a Complex Care register – the NELIE (NEL Information Exchange) Patients Stratification tool was used identify patients at high or very high risk of hospital admission. The tool uses the QAdmissions®-2017 risk calculator, a validated measure of absolute risk of emergency admission to hospital in the general population (Hippisley-Cox and Coupland, 2013). Patients scoring Very High (0.5% risk band) and High (0.5–5% risk band) were placed on the register. As of May 2018, 1,240 patients met this criterion.
2. The creation of a Complex Care Clinical team – The team comprised a GP (two sessions per week), a Specialist Practice Nurse (SPN, 32 hours per week), a Health Care Assistant (HCA, five session per week), and a Care Co-ordinator (20 hours per week). The innovation specification originally included a Clinical Pharmacist (five sessions per week) to carry out medication reviews but this role was not recruited within the pilot’s timeframe (see chapter 5). The CCM team was based in one of the practices in the cluster area. No additional training was provided to the team as part of the intervention. The Care Co-ordinator was responsible for inviting patients to attend the extended appointment, and setting up clinics, managing appointments and tracking patients.

3. Assessment and creation of a Care Plan – patients on the register were invited to attend an extended face-to-face assessment appointment with the team. It involved an initial assessment with the HCA and a 30-minute appointment with the SPN.. A detailed care plan was created. Referrals were made to social care where appropriate. Follow-up appointment – patients were invited to a follow-up review appointment face-to-face within three months, or two 15-minute telephone follow-ups.

Characteristics of CCM Cluster area NE1

NE1 is comprised of the wards Green Street East, Manor Park, East Ham North and the south half of Little Ilford. It has an estimated resident population of 65,683 (ONS, 2018). (This is an overestimate as it includes all residents of Little Ilford). The NE1 cluster has a noticeably denser population and a lower employment rate than Newham overall, and three of its wards have a much higher level of deprivation (GLA, 2019b)).

All six practices in the cluster participated in the pilot: Birchdale Road Medical Centre, Dr Bhadra’s Surgery, Dr C M Patel’s Surgery, Plashet Medical Centre, Sangam Surgery and Westbury Road Medical Practice. An additional practice, Claremont Medical Centre in Cluster North West 2, hosted the complex case team for the first three months of the pilot from October to December 2018. The practices had between 3,200 and 11,200 registered patients as of December 2018 (NHS Digital, 2018).

The GP Patient Survey data for 2018, collected between January and March 2018 (see Appendix 1), indicated variation between the practices in the number of patients experiencing long-term health problems:

- Nearly 30% of patients at Birchdale Road and Westbury Road had experienced problems with either physical mobility, falls or feeling isolated in the last year, compared to 21–24% of patients at Claremont Clinic and Plashet Medical Centre, and 5–18% of patients at the other practices.
- Emergency admission risk figures for elderly (65+) patients per GP whole-time-equivalents showed patients from Birchdale Road and Plashet Road had a high risk of emergency admissions relative to practices’ capacity, and the rest of the practices had a medium risk (as of May 2018, see Appendix 1).
- Regarding A&E activity and UCC activity, in the six months before the pilot (May–October 2018), Plashet Medical Centre and Westbury Road Medical Centres had the highest numbers of patient encounters relative to the size of the practice (see Appendix 1).

4.2 GP Access Streaming (GP-AS)

GP-AS aimed to address unmet in-hours demand in practices (which often results in patients attending UCCs or A&E) and to more efficiently and appropriately manage and meet patients' health and social care needs (Objectives 1, 2 and 4). GP-AS involved a number of different components:

1) Measurement of demand audit – the innovation's specification included an assessment of practices' current demand management systems (appointment system, triage, opening hours, telephone, IT systems). Due to time constraints, no formal assessment was carried out – instead practices informally reflected on their appointment systems (see chapter 6).
2) Care navigation – patients were assessed by front-line staff, 'Care Navigators' trained to direct/signpost patients to the most appropriate form of care. Patients with non-clinical needs were signposted to self-care and/or preventative activities in the community. Patients with clinical needs were directed to the most appropriate healthcare professional.
3) Online consultation – practice developed or expanded their provision of online triage of patients and online consultation.
4) Additional capacity across the cluster – practices shared the use of an additional resource of 10 GP sessions per week provided by doctor locums.

Staff were invited to two training workshops on care navigation by NAPC, one in November 2018 and one in January 2019, which explained the role of the Navigator and helped them to develop the model for care navigation in their own practices.

Characteristics of GP-AS Cluster area NW1

NW1 is comprised of the wards Stratford and New Town, and West Ham, and has an estimated resident population of 49,784 (ONS, 2018). The NW1 cluster has a greater working age population and a higher employment rate than Newham as a whole (GLA, 2019b).

All 10 practices in the NW1 Cluster were invited to participate in the pilot of GP-AS in September 2018, and six agreed to take part: Abbey Road Medical Practice, Dr Knight and Dr Ashar Surgery, Dr R Samuel and Dr S Khan, Lantern Health – Carpenters Practice, Stratford Health Centre, and Stratford Village Surgery. Leytonstone Medical Centre, Liberty Bridge Road Practice, Newham Transitional Practice and West Ham Medical Practice did not take part. The participating practices had between 7,000 and 15,000 registered patients as of December 2018 (NHS Digital, 2018). Of the four practices that did not participate, two had the lowest numbers of registered patients (less than 5,000) for the NW1 cluster and two had some of the highest numbers of registered patients (more than 14,500).

The GP Patient Survey data for 2018 (see Appendix 1) showed variation in the degree to which patients were knowledgeable about the online services that practices offered:

- Patients from Stratford Village were the most knowledgeable about what services were offered online: 63% knew about booking appointments online, 24% knew about ordering repeat prescriptions, and 12% knew they could access their medical records online. In comparison, patients from Stratford Health Centre were the least knowledgeable: 25% knew about booking appointments online, 18% knew about ordering repeat prescriptions, and 15% knew they could access medical records online.
- The use of practices' online services overall was quite low before the pilot – even for Stratford Village, where patients were most knowledgeable, 72% of patients had not used online services in the last year. For other practices, more than 80% had not used online services in the last year.
- Around half of patients of Abbey Road, Lantern Health, Stratford Village and Dr Knight's practice were satisfied with the appointment they were offered, while 66% of patients were satisfied at Stratford Health Centre and 73% were satisfied at Dr Samuel and Dr Khan's practice.
- Over half of appointments were offered on the same or next day at Dr Samuel and Dr Khan's practice (57%). The respective figures for the other practices ranged 20% to 44%.

To conclude, each service enhancement provided a different approach to providing timely and appropriate care. The CCM intervention targeted patients with multiple co-morbidities and the GP-AS intervention targeted all patients, aiming to direct them to the most appropriate form of care and increase access to care. Data from the GP Patient Survey, conducted before the pilot, showed that practices had different patient populations with differing needs, and wide-ranging levels of engagement with online services, and practices varied in their ability to provide swift appointments. Thus, when engaging with the interventions, practices had different starting points.

Findings – the implementation of Complex Case Management

The Complex Case Management (CCM) innovation involved the development of a CCM team that received referrals from practices across one cluster area (see chapter 4). In this chapter, we report on the challenges in setting up the team and responses to the services from practices and patients.

5.1 Setting up a CCM team

There were three key operational challenges in setting up the initiative. First, there was slippage in the innovation's implementation as a site to host the CCM within the cluster was not identified from the outset. The implementation of the pilot was pushed back by one month until a host practice was found just outside the cluster group. Within three months, the CCM team was relocated to a cluster-specific practice, once space became available. Second, there was slippage in the co-production and return of initiation documentation – honorary contracts, confidentiality statements, compliance documentation, and log-in details. Timely co-production of project documents was needed for an efficient set-up process. Lastly, despite having a clear rationale for the selection of patients invited to take part in the enhanced services, patients with mobility problems were not invited to participate in the intervention because the budget for the pilot did not allow for home visits by the CCM team. Consequently, the participating GPs agreed to exclude immobile patients although they would have been the high priority target group for the enhanced service.

5.2 The operation of the CCM team

During the first three months of the pilot, members of the CCM team undertook care navigation training and desk-based research to develop care plans and resources to support their role. It took two to three months for the team to work out how best to function.
The developed patient pathway comprised of:

1. Patient case file analysis – spreadsheets sent by participating practices of 2% of patients with four or five conditions, cleaned to omit deaths, housebound patients and inactive patient records.
2. A personalised invitation letter to patients with an accompanying speech bubble identifying patient need
3. Map of the host practice
4. A telephone call a few days later to book an appointment (and reminder call on the day of the appointment). Patients were given the option to select the day and time of appointment to suit the caregivers' availability, among other things.

To provide equitable services across the cluster, a strategy was applied to call a quota of patients from each participating practice each evening based on location and level of need. All team members called patients at home. The team invited and met with a range of local service providers at the start of the project to build local knowledge of what was available to help with signposting and referring patients once care plans had been agreed. They formed a good working relationship with the Adult Social Care Community and Neighbourhood Link Worker Service. Referrals were also made to the Council and the home practice to see patients' GP.

Patients invited to attend a CCM appointment were commonly accompanied by a carer. CCM appointments gave the patients space to discuss their health and social care needs. All patient contacts were recorded on EMIS. Some CCM appointments ran over the scheduled 30 minutes, as some patients – particularly those who felt isolated – wanted a longer opportunity to talk about their needs. The greatest amount of time was spent dealing with social care unmet needs rather than existing health issues and patients needed support to navigate their way across health and social care pathways. As a result, the CCM team found themselves functioning as advocates for patients (e.g. by placing calls to Local Authority writing letters and booking appointments at their 'home' practice), as well as doing routine injections if requested. Patients often underestimated the impact of their mental wellbeing on their physical health. The HCA role was predominantly focused on supporting patients to access social support services. Sometimes both health and social care actions were completed in the same interview due to the knowledge and experience of the nurse or HCA. The team reported that patients aged 60 – 70 who had support to physically access the service were very engaged. It was difficult to engage patients who had low levels of English and/or were dependent on a carer or those with a high level of mobility problems (for example, due to stroke).

Medication reviews undertaken at the Claremont practice were completed by the host GP, whose role extended to support the CCM team. Type 2 diabetes was frequently discussed. The reviews looked mainly for duplication, high dosage and multiple single-facing prescription, and validated existing good practice around prescribing – GP and pharmacists routinely undertake reviews in the community. The meeting provided an opportunity for patients to talk through the side effects of their medications and the entirety of their health care needs at length in comparison to a GP appointment. When the CCM team moved to the new host practice, the commissioned pharmacists were not used due to the fluid and often late nature of acquiring registered patients who qualified for the service and then agreed to participate.

In practice, the CCM team had mixed views on how effectively the service worked. They all recognised the value in the enhanced service but expressed different options on how best to optimise the enhanced service to benefit patients and to support the different roles of the professionals who make up the multi-disciplinary team. For instance, they felt the service should be mobile and provide outreach to the most vulnerable patients, rather than patients having to overcome barriers to reach the service. Also, better defined roles would be beneficial, as well as a review of contracted hours to guarantee that patients only need to make one visit to see each of the healthcare professionals.

5.3 Practices' and social care's response to the CCM pilot

The CCM team found it hard to get information from practices. On several occasions, the team were locked out of EMIS and had to phone practices to reset access. Practices were uncooperative and unaware that staff needed to remember different codes for each participating practice. Sometimes, the team made a direct call to practices to make an appointment on behalf of the patient; however, practices preferred the patient to make an appointment for themselves.

Participating practices were invited to engage in the co-design of the components of the programme prior to its launch and implementation. GPs had different perspectives on the enhanced services. Many feared that they might lose patients once they visit the CCM team hosted at a different practice. Other GPs were concerned about increased workload resulting from additional referrals being made by the CCM team. One GP had the sense that the model felt that it was implemented from the top-down rather than developed with practices. Resistance from some practices came from the exclusion of immobile patients and lack of direct funding or control whilst at the same time being open to scrutiny. Consequently, the CCM team did not always see full support of appropriate engagement with patients, service users, and carers resulting from reluctant gatekeepers. Several practices did not actively take part in evaluation interviews due to demands on their time and not understanding the relevance of the research to their practice.

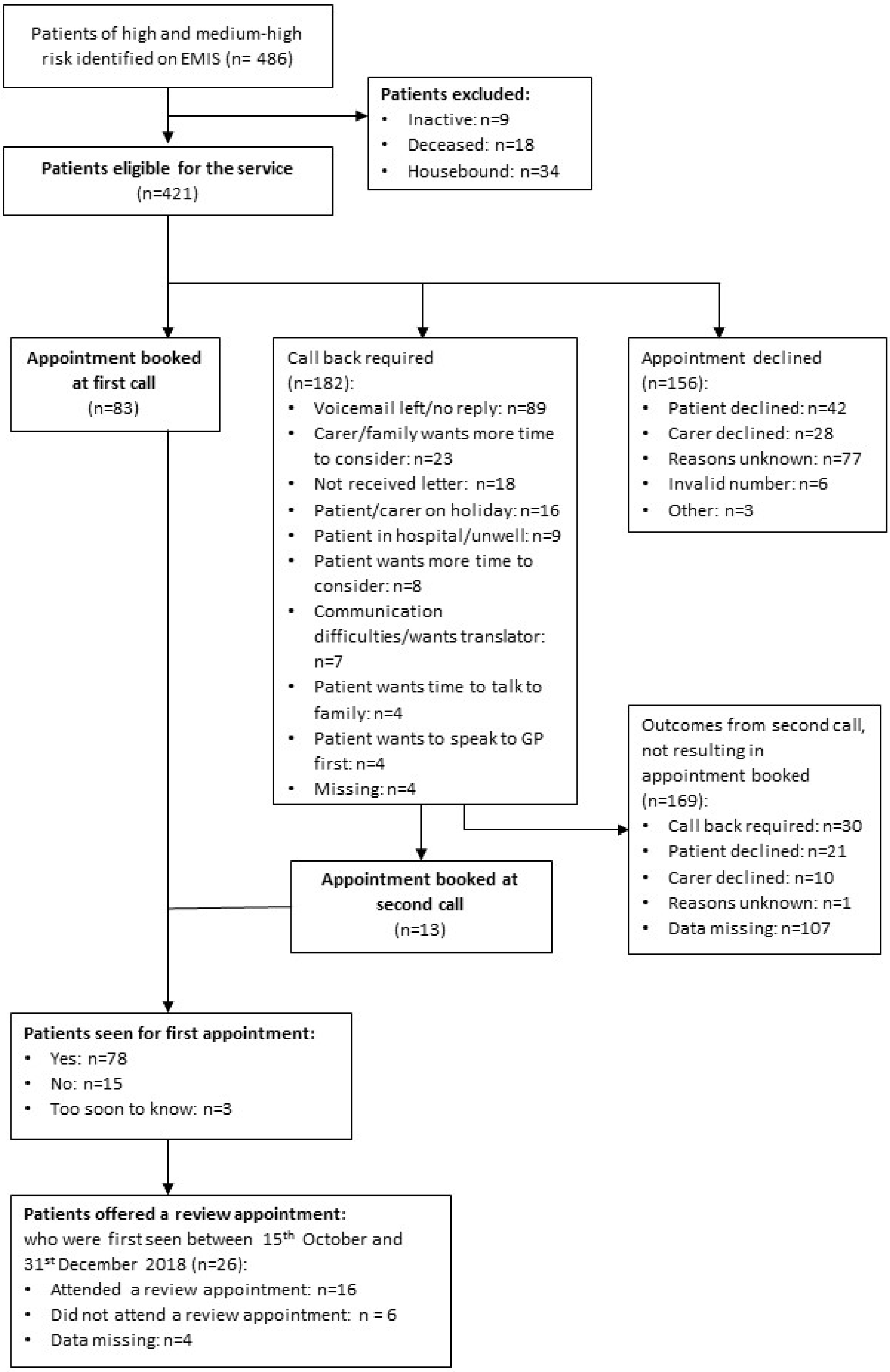
The CCM team developed a positive relationship with social care. One social worker reported that they found the service very useful and beneficial as there were tangible ways that they had improved patients' lives through the referrals made. For example, linking a lonely patient in with a befriending organisation, organising a GPS tracker for a patient in the early stages of dementia, completing carers' assessments, and organising visits from the incontinence team.

5.4 Patients' and carers' responses to the CCM pilot

Reach of the service

Four hundred and twenty-one patients were eligible for the service, 1% of the total number of registered patients in the practices (based on patients registered on 1 December 2018). Of patients eligible, 19% (n=78) attended a first appointment (see Figure 1). Patients who attended had similar characteristics to those that did not attend in terms of age, number of long-term conditions or hospital admission risk (data not shown).

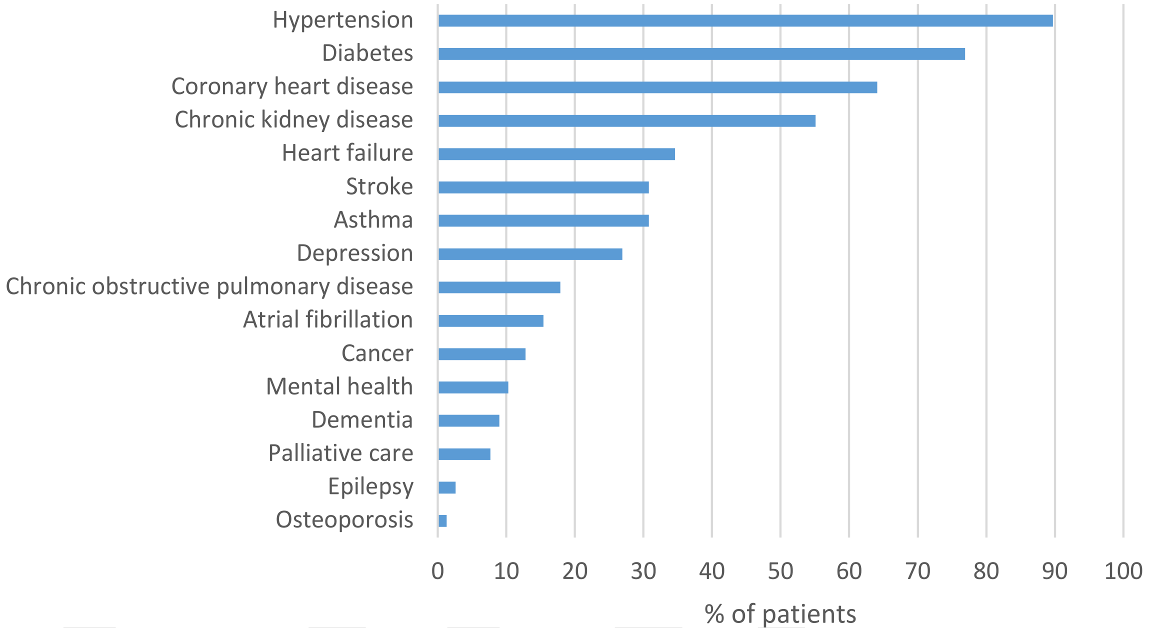
Figure 1: Recruitment of patients to the CCM pilot



The greatest proportion of eligible patients who attended a first appointment were from Westbury Road Practice – a third of eligible patients attended (33%). Around a fifth of eligible patients from Birchdale Road and Claremont Clinic attended (respectively 20% and 22%). Between 11% and 17% of eligible patients attended from the other practices (C M Patel, Sangam, Bhadra, and Plashet Road).

The mean age of patients that attended the service was 72.8 years (SD 11.5). The mean number of long-term conditions was 4.8 (SD 0.9). Figure 2 presents the conditions with which patients presented.

Figure 2: Long-term conditions of patients (N=78) who attended a first appointment with the CCM team



Nine per cent of patients had had five or more visits to A&E in the last year, 23% had been two to four times, 26% had been once in the last year, and 42% had not visited A&E in the last year. The mean risk of hospital admission was 34.8%.

Forty-five patients (58% response rate) completed the GP Patient Survey questions on their health (see Appendix 1). In the last year, 53% had problems with physical mobility, 20% had had two or more conditions that had needed medical attention, and 36% had felt isolated from others. Nearly all (96%) were taking five or more medications. Five in ten said their conditions reduced their ability a little to carry out day-to-day activities, four in ten said it reduced their ability a lot, and one in ten said their conditions did not affect their daily functioning. About half did not feel very or at all confident they could manage any issues arising from their condition(s), and 58% thought they had not had enough support from local services or organisations to help them manage their condition.

Patients' and carers' experiences of the intervention

Patients and/or carers who attended the service were asked three questions rating the effort that the professionals made to involve them in decision-making – the CollaboRATE scale (min 0 – max 9 points). Data were collected from 66 respondents: 38 patients, 14 carers, 8 combined patient and carers, and 6 by persons unknown. Patients and carers reported high scores on professionals helping them to understand their health issues (M 7.8, SD 1.2), listening to the things that mattered to them about their health (M 8.0, SD 1.0), and including those things in choosing what to do next (M 7.9, SD 1.1).

5.5 Learning reflections

Consensus on the definition of the target population for complex needs was needed at an earlier stage to inform the budget for the service. GPs identified that complex needs patients tended to experience issues around frailty (e.g. falling and mindfulness) and were concerned at the start of the process that housebound patients were excluded.

Clear and effective discussion and communication with participating practices on what the benefits are to patients and to practices themselves should be sustained throughout the initial implementation period (three to six months). New monies to practices should be clearly communicated (e.g. Quality outcomes framework work paid by performance).

Finding an appropriate host practice

Ideally, the service should be provided in a practice with good transport links within the cluster, that can accommodate two consulting rooms and admin workstation, with a team that can travel to housebound patients if needed. A stable location for an administrator is necessary for safe, accurate and efficient data management. Accommodating a clinic in each practice would require a lot of travel time from the team at the expense of clinical time.

Scaling-up delivery of the service model

The service should be able to carry out home visits to meet with housebound patients. Based on this pilot, 16 hours per week should be set aside for first appointments – each appointment would last an hour – 30 mins with the nurse and 30 mins with the HCA (in the same visit). An additional 16 hours of nurse time should be allocated to follow-up, either on the phone or in person, and an additional 4 hours of HCA time should be allocated for follow-up by telephone. The HCA and nurse should have clear job descriptions and roles to avoid duplication and should have identifiable tasks. To further reduce the burden on practices' time, it may make sense to extend the nurse's role to offer other routine services, for example, flu vaccinations. A social worker might be a very useful addition to the team to undertake assessments and make referrals. At least one team member should be employed across the Primary Care Home (PCH). The PCH should map over to Social Care footprint in Newham. Key to the success of the programme is understanding the local landscape. Other roles within the team should be considered including: an occupational therapist, clinical pharmacist and community paramedic. In this pilot, a pharmacist was not considered an essential member of the team as medication reviews are already carried out by GPs and pharmacists and a critical mass of patients to review was needed to maximise pharmacists' contract time. Protocols for communicating the results of assessments by team members to practices need to be developed.

Further consideration should be paid to determining if a series of hubs or cluster-based teams should be adopted. How can it be ensured that housebound patients have easy access to the service? How can clusters buddy one another to ensure that they continue to test and learn for each other during the implementation phase and beyond? Should there be a set-up programme manager working across the whole of Newham? Who inherits the coordination role post-implementation?

Booking appointments: Patients may be more responsive to admin staff from the patients' usual practice booking in their first appointment with the CCM team, rather than an administrator from the team.

Training needs of the CCM team: The team need training and support to conduct health reviews and develop care plans, and to develop their knowledge about community-based services (criteria, thresholds, quality, and outcomes) to make effective referrals.

Future measurement of effectiveness: Outcomes that should be considered include meeting unmet needs, reducing admissions to A&E and UCC, reducing admissions to hospital, reducing time to discharge from hospital, patient satisfaction and quality of life.

The need for real-time linked datasets: The long-term goal of the patient selection strategy is to test and learn what works in establishing a clear, locally specific definition of 'complex health needs', and transfer this learning over to the NHS DISCOVERY system. The NHS Discovery Project Integrated forms part of the Integrated Care System (ICS). The ICS will enable collaborative working between commissioners and all providers to improve patient outcomes. The project streams (Primary Care Home and Building Healthier Communities) need access to (near) real-time linked datasets across different care areas (Acute, Primary care, Community and Social care) to gain population and patient pathway insights. This area of work will be progressed by Newham Integrated Care Service.

5.5 Conclusions

The CCM began with challenges in identifying a suitable host practice for the service and developing the tools and protocols needed to implement the service effectively. However, by the end of the six month pilot, all aspects of the CCM intervention were implemented apart from a medication review which was not offered to all the patients. Despite the difficulties of engagement and access, the patients' (and carers') responses were very positive, and a high level of retention was achieved by the CCM team. Patients reported a high level of satisfaction in the service and adherence in their co-produced care plans. They valued above all 'being heard' in their extended time with the healthcare team. Team members reported that the extended period of time and quality of the interaction led to a better understanding of patients' social and healthcare needs. Helping the CCM team to navigate their way through social and health services on behalf of patients was based on a firm understanding of the local context achieved through past work in the East of London and also by dedicated time to meet community-based services at the outset of the intervention.

Findings – the implementation of GP Access Streaming

The GP Accessing Streaming service enhancement involved four main components: 1) demand management audit in practices, 2) additional GP sessions provided by locum GPs and shared between practices in the cluster, 3) online triage of patients, and 4) care navigation. We address each of these components in turn.

6.1 Demand management audit

No formal audit was undertaken to establish a baseline in how practices measure demand for appointments within their practice due to conflicting demands and time constraints in the implementation of the pilot. However, five practices reported informally by email and in interviews on the ways that they had managed demand before the pilot.

Practices categorised appointments into urgent appointments – same day or within 48 hours – and non-urgent appointments up to two weeks away (or more if high demand). Before the pilot, appointments could be booked over the phone, face-to-face or online through Patient Access (a national system for GP appointment booking). The proportion of same day and pre-bookable appointments is decided by practices depending on their individual assessment of their needs and the resources available.

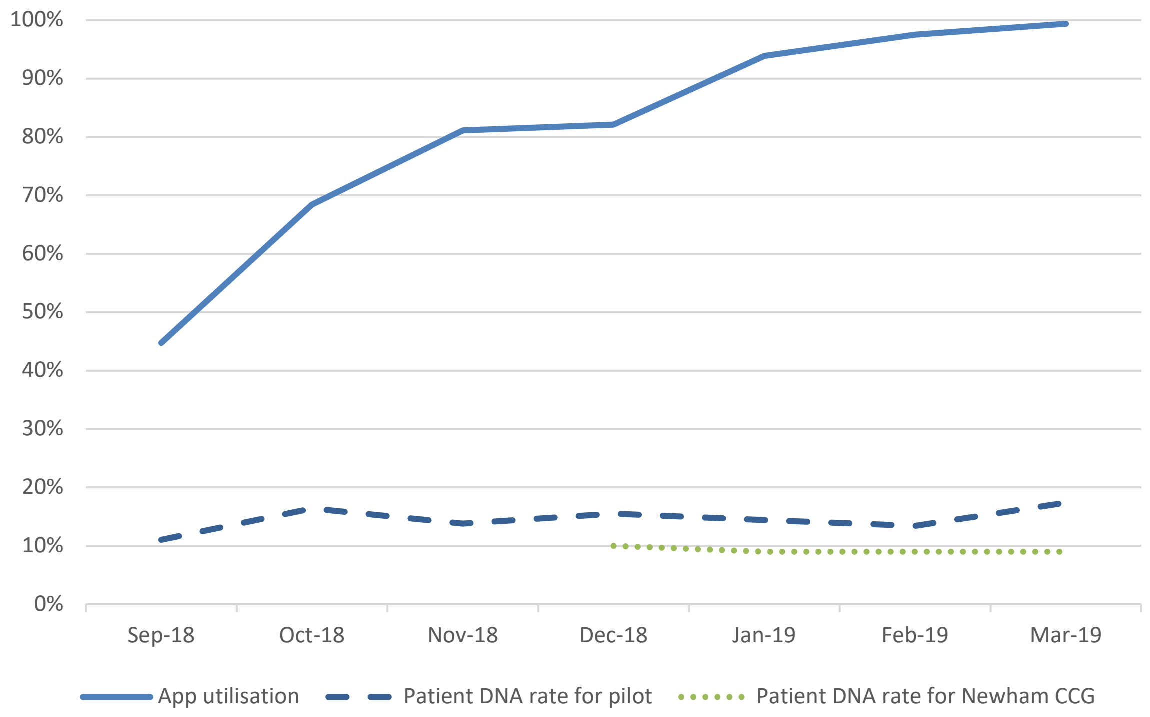
Practices conducted audits/monitoring of booking data with different levels of frequency (weekly, monthly, yearly); analysis typically reported on Did Not Attend (DNA) rates, frequent attenders, and those that booked more than one appointment in close succession. In preparing for the introduction of Care Navigation, one practice looked at the number of frequent attenders who had social needs (for example, homelessness, housing problems, low mood, social care needs).

6.2 Additional GP sessions

Appointment utilisation

From the start of the pilot in October 2018, it took approximately two months for the average utilisation of the additional GP sessions to reach 80%, and around five months for utilisation to reach close to 100% across practices (see Figure 3). Over the course of the pilot, the average patient Did Not Attend (DNA) rate at the additional sessions remained stable at around 15%, suggesting that factors outside of the practices' control were affecting whether or not patients attended. The DNA rate was slightly higher than for patients in Newham CCG overall (see Figure 3, NHS Digital, 2019, note DNA data was not available from Sep – Nov 2018).

Figure 3: Practices' utilisation of additional sessions provided by locum GPs



Staff and patient satisfaction with additional GP sessions

Overall, practices were very satisfied with the additional GP sessions available to them. The project increased the practices' appointment capacity at a time when they experienced an influx of new patients due to nearby practice closure. The additional GP time was also useful when starting the online triage because GPs required extra time to work out how to use the triage system effectively. It is not clear whether additional sessions created additional time for practices as the extra appointments also created tasks for 'home' practices to respond to.

The host practice in which the GP locums were located was in close proximity to all the practices in the hub, that is, in walking distance for patients, and patients were receptive to being seen away from their 'home' practice. Patients highlighted that there were times when continuity of care was more important than being seen at the earliest opportunity – for example, for long-standing issues. The locum GP contracts provided access to EMIS containing patients' details, locums made good use of this facility – dialling in remotely with secure site – and patients liked the GPs to be informed about their medical history. Practices found the locum GPs to be friendly, competent and good communicators. There were some teething problems initially, for example, a patient turned away due to miscommunication. However, the locum GP soon became familiar with other GPs and treatment rooms, and there was very good engagement with the practices. The locums came in regularly, with no reported sick days, which was fortunate as there was no cover for them if they were sick. Providing sick cover for locum GPs will help to resolve the complexity of re-arranging appointments for patients to proxy practices.

The host practice highlighted that the notice period from the end of the contract needed to be longer than two weeks, and transition plan was needed. Payments to the host practice were late, and they feared an adverse credit rating as a result – if the service were to be provided again, prompt payments to the host practice would be necessary to encourage practices to offer their space.

6.3 Online triage of patients

6.3.1 Patient uptake of online triage

Five of the six practices started online triage. EGTON, the software developer, provided figures on patients' use of the online system from September 2018 to May 2019 (see Appendix 1). Stratford Village had by far the greatest use of online triage, as the practice triages all patients through the online system (see Figure 4). Uptake in two other practices – Abbey Road, and Dr Samuel and Dr Khan – increased over the course of the pilot (see Figure 4). The largest proportion of forms completed were for adults aged 26 to 39 years (see Figure 5). Of all forms submitted across practices, 64% were submitted for female patients, suggesting online triage was more likely to be used by women. The most common topic for form submission was a 'General health query', accounting for nearly half of all submissions (see Table 4). The next most common submissions were for fit notes, women's health issues, and administration, e.g. medical reports and letters (see Table 4).

Figure 4: Number of patient forms submitted for online triage by practice over the course of the pilot

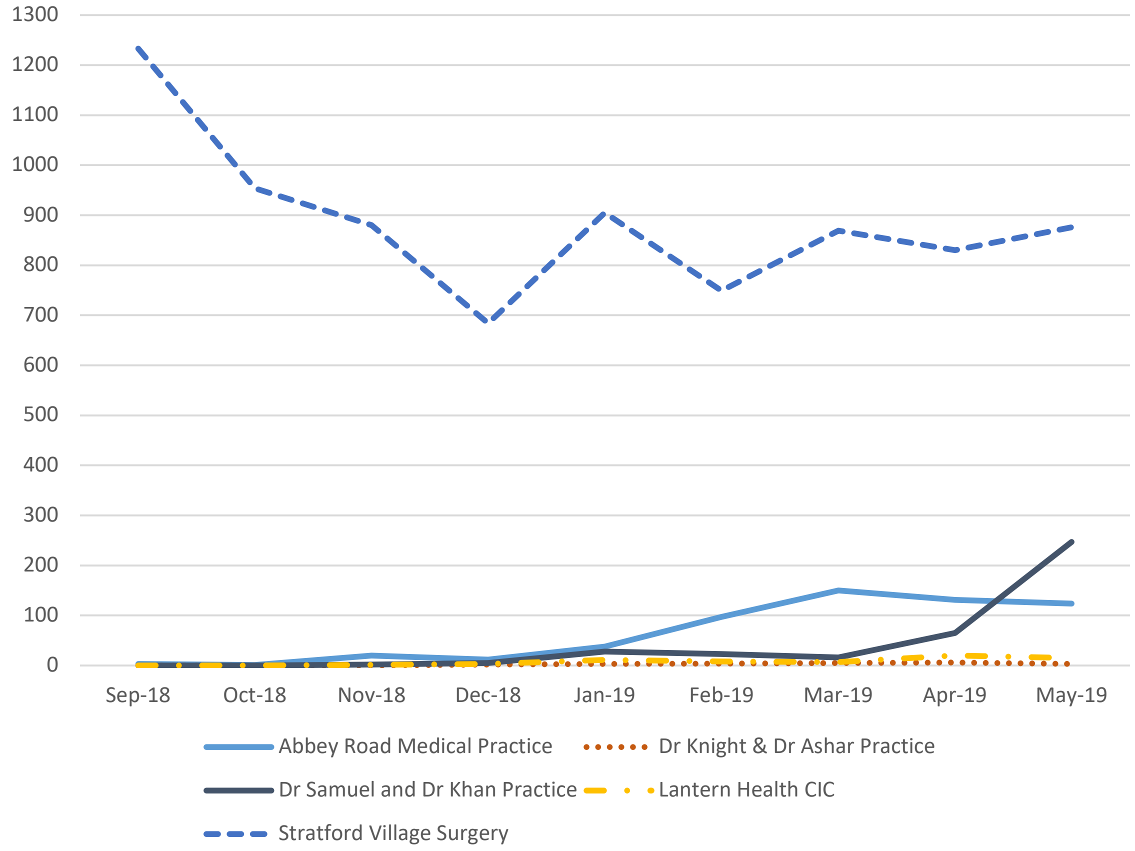


Figure 5: Age of patients for which an online form was completed by practice

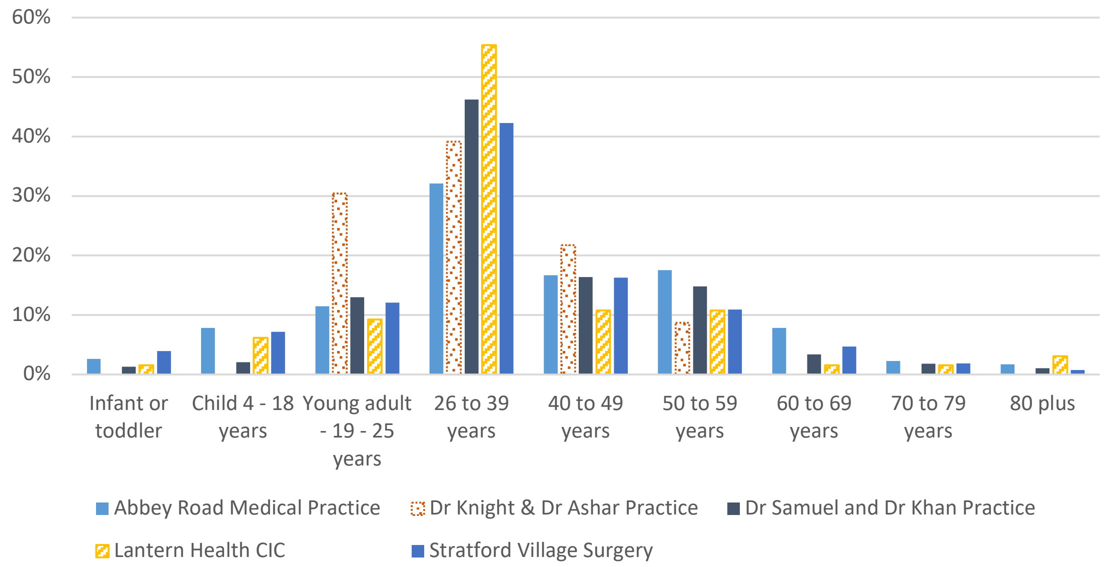


Table 1: The top 10 submission topics for online triage

	Topic	Number of forms submitted	% of all forms
1	General health query	4370	48.4
2	Fit (sick) notes	844	9.3
3	Women's health	525	5.8
4	Admin including medical reports and letters	425	4.7
5	A reception query	359	4.0
6	Muscle and joint problems	314	3.5
7	A test result query	169	1.9
8	Back pain	155	1.7
9	Travel health information (seek advice at least two months before travel)	137	1.5
10	Rash in adults	136	1.5

6.3.2 Practices' and patients' responses to online triage

Accessing the practice through online/telephone resources was predominately used by younger people and young families and was thought to be a good fit for certain patient groups, particularly working people and parents. Elderly and/or vulnerable patients, patients with poor literacy, patients lacking ICT skills, or those for whom English is a second language often struggled to navigate the digital front door. The online system was not being used by patients who were also in receipt of secondary care and had access to a consultant.

Patients who turned up to the practice or phoned as usual were supported to complete online forms by reception staff (in one practice, around 30% of all online forms were completed on behalf of the patient). Patients noted there was no private space to complete the form with a receptionist. GP appointments are still considered to be essential to offer patients reassurance.

Patients from one practice would have liked to have been better consulted at the outset and given sufficient time to adjust to the proposed changes in accessing the practice, rather than being confronted with a new system when they felt most vulnerable. The practice responded to complaints and made more information available, for example, putting small flyers with the online website at reception. Patients did become used to the new system over time and appreciated getting a quicker response than if they made an appointment in the past when they would often have had to wait three or four weeks to see a doctor.

Practices have identified how best to integrate the online forms into their pre-existing systems. One practice connected the online triage to a pre-existing text messaging system, which they operate with a different provider than EGTON. EGTON operators of EMIS have been very responsive and solution-focused, the staff team has been willing to find solutions and listen to patient feedback, and the lead GPs has been very supportive.

There was variation in the amount and quality of forms received by different practice. Some patients have submitted forms for the same health concern on different occasions. There is a need to educate patients on how to use online triage effectively and when to complete and submit a form.

Appointments were reduced in one practice from 18 morning and afternoon appointments per GP to 15 appointments with extended time per GP – the triage reduced the number of inappropriate appointments leaving time to see more complex patients.

6.4 Care navigation

This section reports on practices' experiences of care navigation based on training evaluation forms and interviews with practice staff. Within the course of this evaluation, we were not able to gather patients' views.

Navigator training

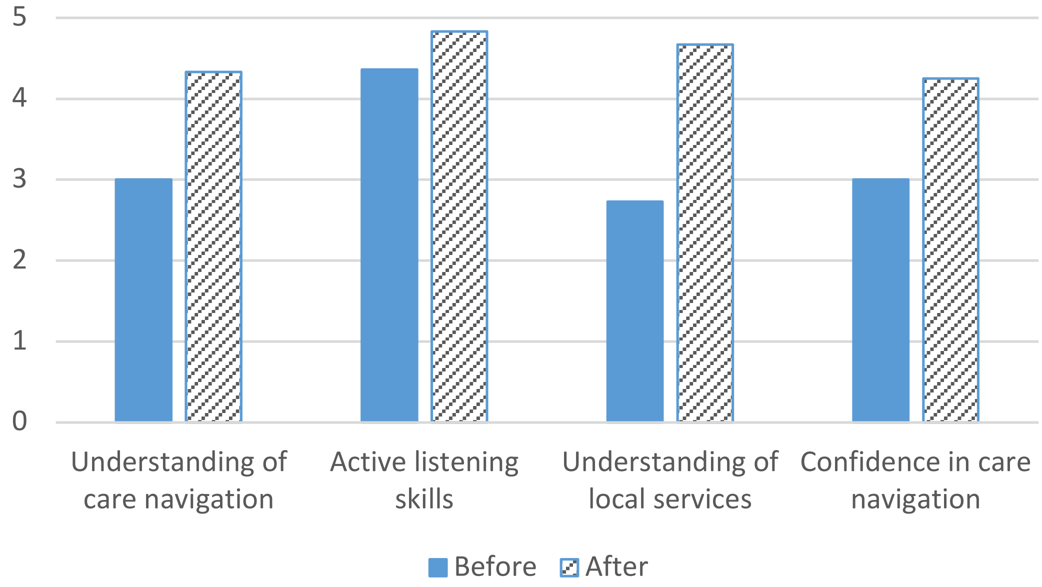
Fourteen people attended training delivered by NAPC and Newham CCG on care navigation in November 2018. Nine staff from four of the six practices involved in the pilot attended. In addition, staff from one practice based in the cluster area attended although they did not participate in the pilot, and the Complex Case Management team took part. The navigator training attendance was not as high as anticipated due to constraints on practitioners' time.

Twelve of the 14 attendees (86%) completed evaluation forms of the training. Staff reported increased knowledge and confidence in care navigation following the training, particularly increasing their knowledge of local services (see Figure 6). In response to an open-ended question about what they found particularly useful, most staff (n=7) reported that they found learning about the local services available to patients helpful:

> **'Meeting people running local services and understanding what services are available for vulnerable patients.'**
>
> **'The new information I learned – local groups etc. The professionals were very good at speaking re services.'**

Five staff commented that speakers were informative, two staff reported that they liked the training activities, and two reported on the utility of learning about the care navigation role.

Figure 6: Staff self-reported knowledge and confidence in care navigation before and after training



Practices' adoption of, and responses to, care navigation

In the GP Access Streaming intervention, all participating practices were invited to nominate staff to take part in care navigation training, which had been co-designed and partially delivered by NAPC. Following participation in the training, there is insufficient evidence to show that knowledge and awareness gained on the course has been transferred into practices.

The bulk of the participants who attended the training were nominated members of the administration team (e.g. practice managers or receptionists). When we drilled down further into the roles of delegates, it became clear that the person(s) usually responsible for the care navigation function in the practice was the sole person who attended. Therefore, the session served on the whole to validate existing best practice rather than developing new knowledge or skills per se. Regardless of the past experience of participants, they all found the session useful for their working practices. For instance, the care navigation training of value served to boost professional esteem in their roles as 'care navigator' and increased knowledge of local community assets. The challenge raised by participants was the foreseeable lack of practice time to keep themselves abreast of local provisions.

Practices all had offered informal help to patients with non-medical solutions, which had taken up a lot of the healthcare team's time. However, despite the acceptance of the problem and the bespoke training available, this component of the intervention has been the most lightly applied across all the test sites and was embraced the most by practices where this function had previously been in existence. Even with bespoke training, most practices have not promoted or advanced their care navigation service, nor supported knowledge exchange between attendees and the wider workforce. As a result, this component of the intervention largely remained unutilised.

6.5 Learning reflections

Assistance with completing the online triage form: privacy is needed if a receptionist is expected to complete online forms on behalf of a patient. Translation options would be useful for patients for whom English is a second language. A standing iPad could be provided in reception areas for patients.

Integrating online triage into existing systems: Protocols should be in place to streamline the online triage pilot into existing software and technology mechanisms/processes at the practice.

Communicating change: A host of communication strategies should be used to warn patients of future changes, including text, posters and flyers to take away and read at home. First impressions count! To encourage patients to use the online triage and complete the form, practices must convey a positive attitude and provide patients with help as needed. Patient Participation Groups (PPG) should take an active role as ambassadors and help in the communication strategy and planning of the enhanced service.

The importance of leadership support: some patients have been sceptical about using the care navigation system. However, when patients see the support offered by the practice manager and GPS, it changes attitudes and behaviour.

Care navigation training: Service invitation letters to be sent to patients by participating practices and not the CGG to improve ownership of the intervention. Navigation training should include managing sensitive and difficult care navigation interviews. Timetabling and implementation of training should be planned in agreement with practices to maximise attendance.

The need for a centralised directory of local provision: The navigator role should be supported by a vetted and centralised directory of local provisions, supported by HealthWatch. Having and sharing accurate information with patients will help with take-up.

A phased approach: Rather than embarking on comprehensive service changes, a phased approach to plan and introduce the different arms of the enhanced service is required. The initiatives were partially implemented in each cluster and tended to be shaped to fit around the pilot time scales, which limited the potential for service innovation and transformation. The Practices have different patient populations, staff roles and operational procedures and interventions need tailoring to individual practice contexts, building on their strengths and identifying areas of where more change support would be needed. Every member of the health care team should be engaged and there should be regular opportunities to review how implementation is progressing. PCH model required more time, tailoring and intensive work in order to fully integrate the different components within its existing arms to local primary systems and structures.

6.6 Conclusions

The GP-AS innovation provided a good opportunity to test new ways of managing in-hours patient demand. The different components of the GP-AS enhanced service were implemented by participating practices in slightly different ways. The most highly used component of the enhanced service was the additional appointments fostered by all the practices, followed by the roll-out of the digital front door. Online triage was predominantly completed for patients of working age and posed challenges for older patients and patients with poor English literacy. Patients at the Patient Participation Group highlighted the importance of practices actively communicating changes in access to services before and whilst they are implemented.

The participating practices decided within their own teams on when and how they would apply the navigator role, there was not a cluster-level decision. Practices where the care navigator role or function had existed prior to delivering the pilot each invested time in attending training in order to enhance the care navigator role/function within their practice. However, despite attending training, attendees report that there has been little opportunity to either build on or share knowledge acquired at the training event that would stimulate new ways of working and/or improve the quality of care navigation.

Practices were effectively supported by the programme manager in the co-production and roll-out of the enhanced service. Practices reported that the pilot did not feel imposed on them but was a collaborative process led by Newham CCG. The host practice had a ‘strong voice’ in the co-design of the piloted model. However, this fact did not detract from other practices influencing the pilot. For instance, practices could monitor capacity easily through the shared appointment tracker. Finally, for work–life balance, demand remained on GPs’ time, although they reportedly saw an increase in more appropriately allocated patients than before the pilot.

Discussion and recommendations for roll-out of service enhancements across the Borough

To meet the needs of an aging population alongside project population growth, Newham CGG piloted the Primary Care Home (PCH) model, testing two service innovations to improve timely primary care to patients appropriate to the urgency of their needs. The PCH pilot mirrored the improvement strategy set out in the NHS Long Term Plan 2019 to develop networks of local GP practices and community teams, increase the use of digital platforms and care navigation/social prescribing, and improve integrated working. The pilot encompassed two service innovations: ‘Complex Case Management (CCM)’ to support patients with complex needs and ‘GP Accessing Streaming (GP-AS)’ to increase access to in-hours GP surgeries. In order to evidence the formation of the PCH model in Newham, we used a range of research methods, including analysis of routine monitoring data to measure primarily how practices have fostered the fundamental principles of the PCH model and applied them in their practice.

We found that the CCM was feasible to implement and acceptable to patients and their carers. However, the exclusion of housebound patients was contrary to the aim of the intervention, which was to support elderly patients with multiple co-morbidities in order to reduce hospital and urgent care admissions. Including these patients may also improve the innovation’s acceptability to GP practices. The CCM team and social care identified tangible benefits to the patients that were seen by the service and patients’ who saw the team reported a high level of satisfaction with the service. A clearer delineation of roles in the team would improve its functioning and performance. The individual components of the GP-AS innovation were implemented by difference practices; only the additional GP locum sessions were negotiated by practices together as a cluster. Each of the individual components was feasible to implement and acceptable to patients and practices – but the package of components as a whole was not feasible for practices to introduce at the same time.

In both innovations, we saw evidence of small changes in service delivery leading to an increase in patient satisfaction and quality care resulting from good leadership, effective communication, sharing a common goal and solving problems (though not always consistently). The proximity and accessibility of the host practice for the CCM team and for the additional GP locums mattered greatly for both rapid test sites that ensured patients remained within walking distance to receive primary healthcare support at a time that was needed. The ability to engage patients orally in co-producing a care plan and completing the on/offline triage form also mattered significantly in both rapid test sites because of the high concentration of South Asian older patients who cannot read and/or have trouble communicating in English, or who lack digital literacy.

The ability for practices to effectively reach and track targeted patients was strongly dependent on working together but barriers remained. For instance, practices were required to set up the CCM team members on the system and either provide them with access to NELIE or extract the list in-house. This should have been a quick process once the right access was set up. Communication between the CCM team and the practices did not always go smoothly and added to the slippage in service delivery. It would have benefitted both the practice and the CCM team if a clinician from each practice had contributed towards the complex needs register verification, as this would enable the team to target the most appropriate patients.

The Newham PCH model covered each of the four characteristics of the NAPC model. However, the innovations did not include integrated working with mental health and acute trusts or the voluntary sector, nor did it adequately establish and adequately align clinical and financial drivers due to the time and financial constraints inherent in the short piloting period. This latter point was highlighted by GPs interviewed, who felt that the benefits for the practices needed to be even more spelt out, especially for considering attracting new practices when scaling-up across the whole of the Borough. The Newham model did focus on preventative approaches and the personalisation of care at a population level (e.g. 30,000 to 50,000). Despite implementing an innovative approach to strengthening and redesigning primary care, the NACP model was effectively adapted to fit within the capacity and resources dedicated to this pilot. The findings would suggest that full system implementation would require a phased approach lasting anywhere between three and six months for set-up, and a further year to embed.

We saw each practice adopt different strands of the two interventions to enhance established services. At no point did the participating practice decide to experiment and adopt a totally different approach to what had been in place before the start of the pilot. Practices were more able to implement practices which matched their existing roles and skills within their teams, for example, a practice with a Patient Liaison Officer can build care navigation into this role; a practice with modern technological facilities and a working age population may be more efficacious in initiating online triage. However, we have learnt from this evaluation that a ‘one size fits all’ model would not work in Newham; instead, the PCH model would need to be agile to accommodate the very different local needs and demands on practices and build on the patchwork of emerging, established and advanced services already in existence. With this in mind, we caution against future roll-out without embedding a ‘Test and Learn’ and evaluative arm. This way, Newham’s implementation of the PCH model will continue to build evidence that will help to find real-time solutions to support the different clusters. Building on the pilot evidence, the next iteration of the model should seek to optimise capacity and performance for all participating practices, as well as to ensure equity and quality of service for all patients.

Neither of the cluster sites were prepared to carry out an effective longer-term evaluation. The short-term evaluation was viewed as an academic exercise by some participating practices and not integral to the process, which candidly illustrates the potential for practices to lose sight of a system change as they focus solely on what they are doing in isolation from the whole system. There was an expectation that participation in the pilot would be financially compensated. As a result, a minority of participating practices hesitated to become involved due to the uncertainty of the outcome and effectiveness of the pilot based on the new financial arrangements and control over the budget. For example, there was no reimbursement to practices as the benefit to the practice was in the additional clinical time provided to their patient and the Quality Outcome Framework reviews completed. Despite the lack of engagement in the evaluation, most of the practices in the clusters have gathered or shared evidence that demonstrated improvement against their own performance in the short term, which aligns to the PCH goals.

Limitations of the evaluation

No comparative group of patients was used to help determine the effectiveness of CCM on health outcomes to show how patients have effectively been supported in scaling down or scaling up of personalised services. No patients in receipt of the CCM innovation were independently interviewed to determine why and how the service positively made a difference. We have no available data to tell us if this intervention has supported reduction in acute admissions. The evaluation of GP-AS was unable to say if practices have seen a reduction in the number of inbound telephone calls to practices or if practices have seen a reduction in the working hours of GPs. We are unable to ascertain if there has been an increase in the total number of resolved patient requests whether online or face-to-face (e.g. meaning more patients are being dealt with, with a consequent reduction in patients then attending A&E/UCC) because no baseline exists in the pre-test booking system. The timeframe of the evaluation took place over a (mild) winter period, which skewed data because it is a time when increased pressure is placed on primary and secondary healthcare services. The level of co-design and co-production with patients was low in both GP-AS and CCM pilots. The study had limited contact with lead GPs on the ground outside of cluster meetings, which makes determining the value attached to the leadership in the implementation of the model difficult to determine.

Recommendations

There are learning reflections in chapters 5 and 6 that relate specifically to each innovation. Here we make a small number of recommendations about the possible approaches that the future roll-out could take.

The need for a programme manager: The successes of the PCH pilot would not have been possible without a dedicated project manager, who delivered direct programme management, workforce development training and light change management coaching to practices. Practices had been aware of the unpredictability of testing a new approach in practice, so having access to the programme manager provided easy access to solutions and support.

Patient involvement: emphasis should be placed on the involvement of patients in the redesign, along with developing an engagement strategy to help educate practitioners and patients about changes.

Technology (e.g. EMIS, NELIE and Discovery) that sits behind the model should be co-designed and co-developed to ensure ease of implementation, and to limit the risk of poor reporting or communication within and across practices.

Communication with practices and patients: The communication should stress to an even greater extent the benefits of additional GP appointments, and the benefits of working together across primary and secondary care, community voluntary sector and specialist services. This would ensure that the PCH model is better aligned to strategic, operational and financial drivers as part of the prevention and personalisation agenda.

Monitoring and evaluation: There were several data challenges involved with the evaluation, so we recommend that Newham CCG aim to identify, access and actively involve analytical resources in their plans to widen the PCH model.

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Appendix 1: Methodology for the evaluation

The evaluation team comprised a Programme Manager (PM) from the CCG who liaised between practitioners and the evaluation team, a Senior Research Fellow/Researcher in Residence (RIR), and a Research Assistant (RA).

The evaluation was shaped by Pawson and Tilley's (2010) realist evaluation approach to investigate: **What works for whom, in what circumstances, and in what respects, and how?** This approach stresses the need to evaluate programmes within their context, and to assess what mechanisms and processes are acting to produce which outcomes. The development of the interview guides was informed by Normalization Process Theory (May and Finch, 2009), a conceptual framework for explaining what people do to implement a new practice.

The overall goal of the evaluation was to assess the feasibility and acceptability of the PCH model, and identify implementation factors that might affect the roll-out of enhanced services across the Borough. Specifically, the research questions were:

1) What were the key processes involved in setting up the service innovations?
2) How were the two service innovations implemented?
3) What was patients' uptake of the service innovations?
4) What were practitioners' views and experiences of the new modes of working?
5) What were patients' and carers' experiences of the service innovation?
6) What contextual factors were likely to facilitate or inhibit the delivery, and consequent effectiveness, of the service innovations?

Method

Study design

The six-month mixed-methods evaluation of the two service innovations began in December 2018 and ended in May 2019. The study was approved in January 2019 by the UEL Research Ethics Committee.

Study population and sample

GP-AS

Practice Managers (PMs), lead GPs and other staff that had participated in the care navigation training in November 2018 from the six GP practices who participated in the GP-AS pilot were invited to take part in the evaluation. Practitioners from four out of the six practices agreed to participate. Members of a Patient Participation Group (PPG) were invited to explore and unpack key findings from the evaluation.

CCM

PMs and lead GPs from the CCM pilot were invited to take part in the evaluation; practitioners from four out of the six Practices agreed to participate. We also asked members of the Complex Case team delivering the intervention to take part. Anonymised data were collected from all patients identified as complex cases in the six practices who participated in the CCM pilot between December 2018 and March 2019. We were not able to conduct a focus group with members of a PPG for this work stream due to time constraints.

Data collection

We collected data from multiple sources for each service innovation. Table A summarises how each data source relates to each research question and Table B shows which data source was used in each section of the findings chapters.

CCM

Patient data

- CollaboRATE scale: A 3-item patient-reported measure of the process of shared decision making on: 1) explanation about health issues, 2) elicitation of patient preferences and 3) integration of patient preferences into decisions. This measure is completed by the patient at the end of each encounter with the nurse or HCA.
- EMIS monitoring data: Data were collected by the delivery team on: 1) the number of patients offered the service, 2) the number of patients who accepted or declined the service, and 3) reasons for declining the service.
- GP Patient Survey (GPPS), section on 'Your Health' – individual patients: The GPPS is a large-scale England-wide survey on patients' experiences of their GP practices, administered by Ipsos MORI. The 'Your Health' section focuses on patients' long-term health conditions and treatment. Data are publicly available online (https://www.gp-patient.co.uk/). Patients who attended the service were asked to complete this section of the questionnaire on their first visit.
- GP Patient Survey (GPPS), section on 'Your Health' – practice-level: Due to major changes to the survey in 2018, we could not compare trends across practices from 2016 to 2018. Instead, we used GPPS data to provide contextual information on the cluster.

Practitioners/practice-data

- Emergency admission risk per GP whole-time-equivalent (WTE): data were gathered from Newham CCG on patients' level of risk relative to practices' capacity, and related to May 2018. Patient risk scores were taken from NEL CSU QAdmissions based on 30 variables, including demographic, lifestyle, chronic diseases, prescribed medication, and admissions within the last year. Practices' capacity was measured by the number of GP WTE per 1,000 patients, taken from Newham CCG staffing data.
- Number of A&E and UCC encounters per practice: data is from the period May–October 2018 and was prepared by Newham CCG from the SUS A&E data from Newham sandpit and Barts UCC data.
- *Practice Manager interview:* a number of questions were asked:
    - How the practice managed complex cases before the pilot;
    - How the intervention was delivered;
    - How staff understood the purpose of the intervention and if/how it affected their usual work;
    - Whether a complex case team was needed;
    - What resources were needed to continue to provide the intervention;
    - Which patient groups had seemed the most responsive to the intervention;
    - What have been the best and most challenging aspects about the intervention.

- *Social care worker interview:* questions were asked in relation to:
    - The process of usual working with practices;
    - Common reasons for receiving referrals;
    - Whether a complex case team was needed;
    - Whether there have been any challenges working with the team;
    - What resources are needed to continue the intervention;
    - Patients' responses to social care's input.

- *GP interview:* questions posed related to:
    - Patient characteristics and the perception of complex patients;
    - Expectations of the intervention;
    - Views on the need for medication review;
    - Views on the delivery of the service enhancement and patients' responses to the service;
    - Views on development of the service and barriers and facilitators to service development.

Intervention delivery team

- Complex Case (CC) team – practitioner reflection sheet: the pro-forma contained a set of open questions about:
    - The barriers to setting up the intervention;
    - How to address patients' expectations;
    - Early learning from the intervention;
    - How to improve the efficacy of the intervention;
    - Which patient groups have been most responsive to the intervention and which have benefitted least.

  Two members of the team completed the pro-forma twice – once mid-way through the pilot in January 2019 and once at the end of the pilot in March 2019; the team administrator completed the sheet at the end of the pilot only.
- CC team interviews: Practitioners were asked a number of questions regarding:
    - How the service is delivered;
    - How their role in the team differs from their usual way of working;
    - Whether staff in the team and GP practices had a shared understanding of the purpose of CCM;
    - Whether there was a legitimate need for CCM;
    - The best aspects and the challenges of working in the team;
    - Resources needed for effective CCM;
    - Which patient groups have been most responsive to the service.

- *Programme Manager interview:* questions related to how the service enhancements were set up; what were practices' responses to the pilot; what were the main challenges in setting up each service enhancement; what have been the main lessons learnt.
- *Document analysis:* emails between the Programme Manager and practices relating to the set-up of the services were collated.

GP-AS

Patient data

- Patient Participation Group focus group: patients were asked for their experiences of using online triage, its impact in a) accessing services, b) patient satisfaction, and c) quality of care; and lessons learnt for rolling out the enhancement to other practices.
- GP Patient Survey (GPPS), questions from sections on 'Your local GP services', 'Making an appointment', 'Your last appointment' and 'Overall experience' (practice-level): The GPPS is a large-scale England-wide survey on patients' experiences of their GP practices, administered by Ipsos MORI. Data are publicly available online (https://www.gp-patient.co.uk/). Due to major changes to the survey in 2018, we could not compare trends across practices from 2016 to 2018. Instead, we used GPPS data to provide contextual information on the cluster.

Practitioner/practice data

- Online analytics: data for online triage was provided by the software developer EGTON, via Newham CCG. Data were provided on the topic of the online form, the age and gender of the patient for whom the online form was submitted, the date the form was submitted, and for which practice.
- Evaluation questionnaire – navigator training: practitioners who took part in navigator training completed a questionnaire about their views and knowledge gained from the training at the end of the session.
- Practitioner interviews: Practitioners were asked a number of questions:
    - How the practice managed patient access before the pilot;
    - How the intervention was delivered;
    - How staff understood the purpose of the intervention and if/how it affected their usual work;
    - Whether practices should offer care navigation;
    - What resources were needed to continue to provide the intervention;
    - Which patient groups seemed the most responsive to the intervention;
    - What had been the best and most challenging aspects about the intervention.

Interviews lasted on average 40 minutes and were conducted in a private room in practitioners' workplaces.

- Measuring demand in General Practice: a formal evaluation of demand was not conducted due to time constraints. Information on demand management was collected from practices by email.

Intervention delivery team

- Programme Manager interview: see description under CCM.
- Document analysis: see description under CCM.

Data analysis

Quantitative data:

GP Patient Survey questionnaires, collaboRATE surveys, and navigator training evaluation sheets – individual patients – Data from paper surveys were entered into IBM SPSS 25 software and analysed for descriptive statistics (frequencies, mean, standard deviation).

EMIS monitoring data for GP-AS – Data on appointments booked, appointments not attended (Did Not Attend – DNA), and appointments allocated each week for each practice were input into an Excel spreadsheet. Appointment utilisation rate (%) was calculated as the number of appointments booked divided by the number of appointments allocated, multiplied by 100. The DNA rate (%) was calculated as the number of appointments missed divided by the number of appointments allocated, multiplied by 100.

EMIS monitoring data for CCM – Patient data from each practice were anonymised and cleaned, and imported into SPSS for analysis. Descriptive statistics were produced. Records for patient uptake were kept by the CCM team in an Excel spreadsheet. These data were cleaned and imported into SPSS and qualitative data on reasons for refusal were manually coded.

GP Patient Survey – all data for the participating practices in each cluster were downloaded and collated from the survey website.

Online analytics – all data for the practices were collated from Excel worksheets and imported into SPSS software. Frequencies of the number of submissions each month for each practice were produced; the age categories and gender of patients for whom forms were submitted; and topic of submissions.

Qualitative data

Managing demand in practice – email responses to questions were tabulated in Excel, and additional information from interviews was inserted into the spreadsheet. We searched for common themes.

Interviews, focus groups, practitioner reflection sheets and documentary analysis:

- In-depth qualitative interviews were undertaken with members of the healthcare teams in both interventions, which were audio recorded and transcribed.
- Focus group meetings were undertaken with members of the healthcare teams in both arms of the intervention through the timetabled cluster meetings as well as one patient group meeting linked to the GP-AS intervention. Some of the meetings were audio recorded or noted. Information was elicited either through listening to the audio or through handwritten notes.
- Practitioner reflection sheets were collected from healthcare team members who delivered the CCM intervention mid- and post-intervention.
- Documentary analysis involved reviewing secondary data, which took the form of email exchanges across the cluster, meeting minutes and observation notes, as well as routinely collected monitoring data from the participating sites.

Interviews, focus groups, practitioner reflection sheets and documents were coded using the MRC process evaluation normalisation framework (Murray et al., 2010) for linking process evaluation functions. The data were then thematically analysed (Aronson, 1995) looking for evidence pinpointing patterns and meaning attributed to the implementation of the model at a practice and population level.

Table 2: Data collection for each research question

Research question	**CCM**	**GP-AS**	**Both work streams**
What were the key processes involved in setting up the service innovations? How were the two service innovations implemented?	Practitioner interviews – n=3 • GP n=1 • Practice Manager n=1 • Social worker n=1	Practitioner interviews – n=7 • Practice/Operations Manager n=2 Other practice staff n=5	Programme manager interview – n=1
	Complex Care team interviews – n=2	Managing demand in practice – feedback by email	Document analysis
			Participant observation at cluster meetings
What was patients' uptake of the service innovations?	EMIS monitoring data	EMIS monitoring data – 30.10.18 – 26.04.19 Online analytics for online triage	
What were practitioners' views and experiences of the new modes of working?	Practitioner reflection sheet – n=5	Navigator training evaluation – n=12	
	Practitioner interviews (see above)	Practitioner interviews (see above)	
		One focus group – n=7 • Operational staff n=5 • Programme manager n=1 CCG stakeholder n=1	
What were patients' and carers' experiences of the intervention?	CollaboRATE – n=66 GP Patient Survey – n=45 (individual-level)	Patients from Public Participation Group, focus group – n=4 • Patient stakeholders – n=3 • Operational staff – n=1	
Are there any contextual factors that have had an impact on the way that the intervention works?	Practitioner interviews (see above)	Practitioner interviews (see above)	Programme Manager interview (see above)
	GP Patient Survey (practice-level)	GP Patient Survey (practice-level)	
	A&E and UCC data		
	Emergency admission risk per GP whole-time-equivalent		

Table 3: Data underpinning findings

Section title and page number	Data underpinning findings
5.1 Setting up at CCM team: operational challenges	The information in this section is drawn from: 1) emails between practices and the programme manager during the set-up of the pilot, and 2) an interview with the programme manager.
5.2 The operation of the CCM team	The information in this section is drawn from: 1) an interview with the GP lead at the surgery (outside the cluster area) at which the CCM was first based, and 2) interviews with the CCM team.
5.3 Practices' and social care's response to the CCM pilot	Information about practices' responses to the CCM pilot is based on: 1) emails between practices and the programme manager during the set-up of the pilot, 2) an interview with a practice manager, and 3) an interview with a social worker who received referrals from the CCM team, 4) interviews with the CCM team.
5.4 Patients', carers' and other stakeholders' responses to the CCM pilot	Patients', carers' and stakeholders' responses to the CCM pilot are based on the following data: 1) monitoring data on patient uptake collected by the CCM team, 2) patient satisfaction surveys collected by the CCM team, 3) interviews with and practitioner reflection sheets from the CCM team, and 4) an interview with a social worker who received referrals from the team (see Appendix 1).
6.7 Additional GP sessions	Practices' and patients' responses to additional GP sessions are based on the following data: 1) monitoring data collected by each practice, 2) interviews with seven staff, 3) one focus group with practice staff, and 4) one focus group with a public and patient group at one practice (see Appendix 1).
6.3.2 Practices' and patients' responses to online triage	Practices' and patients' responses are based on interviews with staff and a focus group with patients at one practice from a Patient and Public Involvement Group (see Appendix 1).
6.4 Care navigation	This section reports on practices' experiences of care navigation based on training evaluation forms and interviews with practice staff. Within the course of this evaluation, we were not able to gather patients' views.

Appendix 2: Annotated bibliography

Effectiveness and implementation of primary care network model or similar models

Kumpunen et al. (2017) conducted a formative evaluation of 13 Primary Care Home (PCH) rapid test sites (RTSs) between July 2016 and March 2017.

Outcomes

- Within six months, PCH had stimulated partnership working and developed or improved services for at least one patient subgroup.

Lessons for implementation

- Where sites were provider led, leaders felt their independence from CCG allowed them to make faster decisions. Where CCG led, they were better able to access whole-system data, to link PCH work to commissioning priorities, and allocate resources.
- Sites had different ways of aligning financial and clinical aims; all had put additional resources in the PCH. Services were working through a Memorandum of Understanding rather than legally binding contracts.
- None had a systematic process for tracking progress against defined outcome measures.

Pawa et al. (2017) studied clinicians' and managers' views about the process of primary care network implementation in Tower Hamlets.

Lessons for implementation

- Shared purpose was a key element – improving quality of clinical care and patient outcomes. Reduction in variation of practice performance was identified as a key aim.
- PCT staff saw the network as a stepping-stone to further development of primary care. Clinical staff were more likely to note the tension between providing scale while maintaining local relationships. Networks were a forum for learning and collaboration.
- Practices were very heterogeneous in performance, culture, and appetite for financial and organisational risk, and differences could lead to early resistance and ongoing concern about collaboration by some practices.
- There was a need to leave room for flexibility for networks to work out their governance, meetings, staffing, etc.
- Interviewees frequently spoke of strong and flexible leadership by the PCT and the importance of quick wins: visible improvement that occurred very quickly and could be used to build morale and momentum.
- Contextual circumstances that contributed to developing networks: Tower Hamlets has a long history of practice data sharing, positive relationships between providers and commissioners, and joint vision between managers and clinicians.
- While it was helpful to have funding for backfilling positions, locums were viewed as unsatisfactory, and sometimes network clinical lead positions were unfilled.
- Almost all interviewees highlighted the central role of key performance indicators linked to financial incentives.
- Interviewees valued standardised data entry templates during consultations, as well as standardised searches, which streamlined call and recall.
- Monthly performance metrics allowed practices to compare their performance with others. All patient outcomes included without 'exception reporting'.

Cockman et al. (2011) evaluated the effectiveness of MMR childhood immunisations in Tower Hamlets. The intervention started in three of the eight networks in September 2009, then rolled out in January 2010. EMIS Web enabled centralised monitoring of immunisation, with figures produced on a monthly basis. Dashboards indicated how many more children needed to be immunised to reach 95%.

Outcomes

- Rates of uptake increased, reaching over 95% for most childhood immunisations. Tower Hamlets had the highest rate of all London boroughs for the MMR1 vaccinations pre-2 years, achieving 94% in the third quarter of 2010/11.

Lessons for implementation

- Building from a practice-wide base of consistent coding, the introduction of systematic call and recall across the practice networks was likely to have been crucial to success.
- Providing the networks with regular feedback on performance led to some healthy competition, with networks seeking to improve uptake in different ways.

Robson et al. (2014) evaluated cardiovascular disease (CVD) managed practice networks in Tower Hamlets, compared with PCTs in London, England and local PCTS. In 2009, all 34 practices were allocated to eight geographical networks of four to five practices, serving 30–50,000 patients.

Outcomes

- In 2009–11, Tower Hamlets increased total statin prescribing by 17.9% compared with 5.5% in England. From 2009 to 2011, Tower Hamlets statin prescribing increased more than the other two local PCTs, Newham and City and Hackney.
- Key CVD indicators improved faster in Tower Hamlets than in England, London, or local PCTs, and in 2012/13, Tower Hamlets ranked top in the national Quality and Outcomes Framework for blood pressure and cholesterol control in coronary heart disease (CHD) and diabetes, top five for stroke and top in London for all these measures.
- Male mortality from CHD was the fourth highest in England in 2008, and reduced more than any other PCT in the next three years, reducing by 43% compared with an average fall of 25% for the top 10 PCTs in 2008 ranked by mortality.

Effectiveness of interventions targeting patients with multimorbidity

Baker et al. (2018) conducted a systematic review of care management interventions targeting multimorbidity and high care utilisation. The review focused on adults with two or more chronic medical conditions, at least one chronic medical condition and depression, adults with high past or predicted healthcare utilisation.

Outcomes

- 15 studies: US (n=11), UK (n=1), Hong Kong (n=1), Sweden (n=1) and Australia (n=1).
- Seven studies targeted patients with at least one condition and depression: they demonstrated significant improvement in depression symptoms (ranging from 9.2 to 48.7% improvement). Five out of seven also showed improvement in at least one chronic medical condition-related outcome.
- Six studies focused on high utilisers: two studies showed small, statistically significant reductions in utilisation.
- Two studies targeted patients with two or more conditions: they assessed patient-reported outcomes, not chronic condition specific outcomes.
- Patient-reported outcomes were assessed: eight out of 15 (53%) reported significant improvement in at least one of these measures.

Baxter et al. (2018) conducted a systematic review of the effects of integration or co-ordination between healthcare services, or between health and social care on service delivery outcomes in including effectiveness, efficiency and quality of care.

Outcomes

- 167 documents representing 153 unique studies eligible for inclusion.
- Analysis indicated:
  - Evidence of perceived improved quality of care (staff perception in UK studies, staff and patient perception in the non-UK studies).
  - Evidence of increased patient satisfaction. Nine out of 11 UK studies, plus 11 systematic reviews.
  - Evidence of improved access to care.
- UK studies indicated evidence of a reduction in waiting times and out-patient appointments, although the international literature as a whole was more inconclusive.
- Evidence regarding the following outcomes was rated as inconsistent:
  - Number of clinician contacts
  - Number of GP appointments
  - Length of stay
  - Unscheduled admissions
  - Number of admissions
  - Number of re-admissions
  - Attendance at A&E
  - Quality of care standards
  - Staff work experience
- Evidence was inconsistent regarding the impact on cost of provision (17 studies reported a reduction, 2 an increase, 20 no difference).

Cameron et al. (2012) examined factors that promoted or hindered joint and integrated working between health and social care services. UK papers published between 2000 and 2010.

Lessons for implementation

- Securing the understanding and commitment of staff to the aims and desired outcomes of new partnerships is crucial to the success of joint working, particularly among health professionals.
- Defining outcomes that matter to service users and carers is important. Outcomes defined by service users may differ from policy and practice imperatives but are a crucial aspect of understanding the effectiveness of joint or integrated services.
- Although most service users and carers report high levels of satisfaction, more can be done to involve them in care planning and influencing future care options. Joint and integrated services work best when they promote increased user involvement, choice and control.
- The evidence base underpinning joint and integrated working remains less than compelling. It largely consists of small-scale evaluations of local initiatives, which are often of poor quality and poorly reported.
- There is an urgent need to develop high-quality, large-scale research studies.

Damery et al. (2016) conducted a review of systematic reviews on the effectiveness of integrated care interventions in reducing hospital activity. Interventions had to have delivered care crossing the boundary between at least two health and/or social care settings for adult patients with one or more chronic diseases.

Outcomes

- 50 reviews were included. Interventions focused on case management (n=8), chronic care model (n=9), discharge management (n=15), complex interventions (n=3), multidisciplinary teams (n=10) and self-management (n=5).
- 29 reviews reported statistically significant improvements in at least one outcome (out of emergency hospital admissions/readmissions, length of hospital stay, accident and emergency use, and healthcare costs).
- 11/21 reviews reported significantly reduced emergency admissions (15 – 50%)
- 11/24 showed significant reductions in all-cause (10-30%) or condition-specific (15-50%) readmissions
- 9/16 reported LoS reductions of 1–7 days and 4/9 showed significantly lower A&E use (30%–40%).
- 10/25 reviews reported significant cost reductions but provided little robust evidence.
- Effective interventions included discharge management with post-discharge support, MDT care with teams that include condition-specific expertise, specialist nurses and/or pharmacists and self-management as an adjunct to broader interventions. The least effective intervention was case management.
- Interventions were most effective when targeting single conditions such as heart failure, and when care was provided in patients' homes.
- Interventions rarely demonstrated unequivocally positive results.

Sherlaw-Johnson et al. (2018) evaluated Health 1000 – an intervention that aimed to improve patients' quality of life through personalised care delivered by a clinically led multidisciplinary team. It was implemented Nov 2014–2017 in the London Boroughs of Barking and Dagenham, Havering and Redbridge. The intervention targeted patients with five or more chronic conditions. At registration with Health 1000, each person received a refreshed care plan, a needs assessment and a review of their pharmaceutical regimes, and was assigned a dedicated key worker.

Outcomes

- The majority of the patients interviewed were extremely satisfied with the service they were receiving. Patients highlighted the friendly atmosphere, the attentiveness of clinical staff, the availability of GP appointments and the care nature of the service. This was corroborated by staff.
- After the date of registration with Health 1000, there were no significant differences in use of hospital services between the cases and the matched controls. There were also no differences observed during the last three months of a person's life. There were significantly more primary care contacts among the Health 1000 patients, although some of this is administrative activity and it is difficult to gauge how much extract work this is in comparison to other practices.
- Staff had reported reductions in unnecessary outpatient referrals and significant improvements to medicines management. They had also referred to the benefits of better care continuity on resource use, for example, in facilitating quicker discharges from hospital and avoiding duplication across the system.
- The monthly staffing cost was £85,000, which corresponded to minimum staffing levels. However, this cost would not scale with the number of patients, as the service could handle more without extra cost.

Lessons for implementation

- There was a question of whether Health 1000's registration-based delivery model was best suited to the task (the 'carve-out' approach), or whether a service that allowed individuals to stay registered with their existing GPs would be preferable (the 'wrap-around' approach). Opinion was very split, with several staff interviewees seeing the pros and cons in both types of approach.
- The service aimed to recruit 1000 patients within six months (2,024 were eligible at the start of the service). However, by the end of May 2017, fewer than half (n=440) that number were recruited over a period of two years.
- Many of the problems with recruitment stemmed from relationships between Health 1000 and other local GPs. Where patients had a long-standing relationship with their GP, it could be difficult to persuade them to move to a new practice. There could also be a reluctance on the part of the GP to lose a patient whose care needs they understood to a service whose value they were less certain about. GPs would also lose practice income. There was also an implication that the service might generate increased scrutiny about how well conventional general practice was addressing the needs of this patient group.
- Some of the challenges with delivering the new service included the lack of a function to issue electronic prescriptions remotely, the distances some staff had to travel to reach patients across three boroughs, and increased bureaucracy when accessing notes for seconded staff dealing with patients outside their 'home' borough. Other challenges included difficulties with recruiting and retaining staff, integrating with other health and social care services and controlling costs.

Managing in-hours demand for general practices

E-consultation systems/Online triage

Banks et al. (2018) conducted a qualitative study of the views and experiences of practice staff piloting an e-consultation system, and the perceived impact on managing patient access and care.

Lessons for implementation

- Impact on clinical decision-making – e-consultations challenging for GPs as they were not able to probe for further information. The type of consultation/enquiry was key. For patients with complex or new symptoms, clinicians usually felt the need to talk to the patient directly. GPs often struggled to identify a patient's key concern. There was wide variability in the quality of information that patients gave. GPs did not feel a great risk burden; if they had any doubts, they would invite someone in. Straightforward clinical queries such as slight changes in medication for an ongoing issue, prescription queries, test results and fit notes, could be dealt with without an appointment.
- Impact on workload – the perceived impact of the e-consultation platform on GP practice workload varied. Many clinical staff felt that it added a stage to the workflow and increased practice workload. E-consultations could save clinical time when they were actioned without direct contact between GP and patient. Some GPs felt the additional information could lead to a more focused, quicker consultation. Some clinicians thought that there might be an increase in workload from patients using an e-consultation when they might have not arranged an appointment through the usual system. The overall feeling was that e-consultations did not save time.
- Staff perceptions of patients' use of e-consultations – the biggest frustration was when patients would clearly need a face-to-face or telephone appointment but still put in an e-consultation, perhaps because they thought they would get an appointment quicker and it would be the practice's responsibility to call them back. This might reduce the pressure on practice telephone systems at times of peak demand. There was a widespread perception that it had proved beneficial for patients – greater access times, less fear of embarrassment.

Edwards et al. (2017) evaluated a pilot of an online consultation system in primary care. eConsult allows adult patients to contact their GP, access self-help information or learn more about NHS 111 and local pharmacy services via their general practices' website. Piloted in 36 general practices in South West England.

Description of use of online consultation

- Online consultation website was viewed 35,981 times over the pilot period (mean 9.11 visits per 1,000 patients per month).
- 7,472 patients went on to complete an 'e-consultation' (mean 2.00 online consultations per 1,000 patients per month).
- E-consultations were mainly performed on weekdays and during normal working hours.
- Patient records (n=483) were abstracted for eight practices and showed that women were more likely to use e-consultations than men (64.7% vs 35.3%) and users had a median age of 39 years (IQR 30–50).
- The most common reason for an e-consultation was an administrative request (e.g. test results, letters and repeat prescriptions (22.5%), followed by infections/immunological issues (14.4%).
- The majority of patients (65%) received a response within two days. The most common outcome was a face-to-face (38%) or telephone (32%) consultation. The former were more often needed for patients consulting about new conditions.
- The average cost of a practice's response to an e-consultation was £36.28.

Farr et al. (2018) examined patient and staff views, experiences and acceptability of a UK primary care online consultation system, and how the system and its implementation could be improved. (Part of the study by Edwards et al. (2017) above).

Lessons for implementation

- There were different expectations between patients and staff on how to use e-consultations 'appropriately'. While some patients used the system to try and save time for themselves and their GPs, some used e-consultations when they could not get a timely face-to-face appointment.
- Most e-consultations resulted in either follow-on phone (32%) or face-to-face (38%) appointments, and GPs felt that this duplicated their workload.
- Patient satisfaction with the system was high, but a minority were dissatisfied with practice communication about their e-consultation (e.g. having to repeat information at a subsequent appointment).
- None of the 36 practices took up the system after the pilot, which would have involved paying market prices for the software; 13 practices were interested in continuing, if costs were paid for by alternative funding sources, and technological interoperability with electronic patient record systems was further developed.

Care Navigation

Allen and Drabble (2017) evaluated a Primary Care Navigator (PCN) programme in South Lambeth, focusing on supporting people with diabetes and associated conditions.

Outcomes

- Patients had improved self-management of diabetes, healthier lifestyles and, to a lesser extent, better patient engagement.
- The PCN network improved the system of diabetes care, and led to better collaboration between GP practices and pharmacies.

Lessons for implementation

- Time pressure was still an issue for PCNs. Supervisors could be helpful in managing pressure.
- PCNs thought training topics could include more description about day-to-day work, learning from the experiences of patients, practical training on engaging patients. There was a desire for ongoing training.
- Knowledge of local provision is important – useful if resources are interactive and updated regularly, and ideally online.