

CHILL Evaluation of 7- Day GP Access

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CHILL Evaluation Team

The Centre for Health Innovation Leadership and Learning (CHILL) is a research unit at the Nottingham University Business School. CHILL specialises in programme evaluation, and the translation and application of organisational and management research to contemporary problems in healthcare organisation and delivery. Partner organisations include the National Institute for Health Research, EU, Research Councils UK, charities, and partners in applied health services.

The CHILL team for the evaluation of 7-Day GP Access is:

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1 Key Findings

When members of the general public are asked a question such as 'Do you think that weekend access to your GP is a good thing?', they invariably answer 'Yes'. This is perhaps what we would expect, when someone is asked if they would like to receive more of a public service rather than less.

But there is a problem in the way in which this question is framed.

Firstly, the question does not address whether such a service would actually be taken up, if offered.

Secondly, access is not just about the number of days that the local GP surgery is open. Suppose people were asked to choose one of two options. The first option is 5-day GP opening with patients being seen on the same day that they contact their GP surgery. The second option is 7-day GP opening but patients are not seen on the same day. The question of opening days is not so clear cut now. Which would you choose?

Research conducted by CHILL since 2014 has addressed both of these issues. The findings are presented in this short report.

Weekend Hubs are a means of extending the hours of access to primary care services. Since April 2014, a number of weekend hubs have been piloted across NHS England, funded by the PM Challenge Fund initiative [later renamed the GP Access Fund].

In Nottinghamshire, three weekend hub pilots have been funded. Two of the hub pilots offer responsive, urgent care appointments to patients calling at weekends. The third hub provides a mixture of pre-booked, routine appointments at weekends and some urgent care appointments.

The key findings from these pilot hubs are:

- There is low take-up of available urgent care appointments by patients. At one of the hubs the take-up of weekend and bank holiday urgent appointments was just 22%, with just 18% take-up on Sundays. (In a pilot elsewhere in England, the take-up of appointments was as low as 10%).
- An important target group for weekend services are people who are working. Yet working people do not take up the available service. Under-5s were the largest users, accounting for around 1 in 5 of urgent care appointments.

A patient survey undertaken by CHILL identified three aspects of GP access that are important to patients. One is speed of access (i.e. whether one can be seen on the same day, or not). Another is whether or not patients will see their usual GP or practice nurse. A third aspect is GP opening hours (5 or 7-day opening). CHILL conducted a conjoint preference survey of patient preferences on these three dimensions of access. Patients were asked to consider and, to rank, different combinations of service.

The key finding is:

- Speed of access – i.e. same day appointments – is the issue which most concerns patients. Not 7-day opening.

2 Introduction

The demand for primary care services in the UK has been increasing over recent years¹. This increase has been attributed to several factors, such as the rise in the number of patients with long-term conditions, in tandem with an increased life expectancy. Alongside this rising demand, there has been a perceived reduction in access to primary care, relating to a reduction in the number of GPs working in primary care, a lack of investment in primary care in line with increasing demand for services, and an increase in patient expectations^{2,3}.

In recognition of the rising demand for services and the need to improve access, the Prime Minister's Challenge Fund (subsequently renamed the 'GP Access Fund') was launched in 2013⁴. GPs and their practices were invited to apply for funding by proposing pilot schemes to improve access, which could be tested and evaluated within a two-year window.

In the Nottinghamshire and Southern Derbyshire area, nine Clinical Commissioning Groups (CCGs) individually developed pilot schemes that focus on improving access to services, as well as a number of other locally defined goals such as reducing Emergency Department (ED) attendances. NHS England - North Midlands⁵ presented these plans collectively in a combined bid. Total funding received for the implementation of the PMCF was £7m.

This report presents the key findings from CHILL's formative evaluation of the weekend hub innovations in primary care access in Nottinghamshire, funded under Wave One of the Prime Minister's Challenge Fund (PMCF).

¹ Campbell, J., Fletcher, E., Britten, N., Green, C., Holt, T., Lattimer, V., Richards, D., Richards, S., Salisbury, C., Calitri, R., Bowyer, V., Chaplin, K., Kandiyali, R., Murdoch, J., Roscoe, J., Varley, A., Warren, F.C. and Taylor, R. (2014). Telephone triage for management of same-day consultation requests in general practice (the ESTEEM trial): a cluster randomised controlled trial and cost-consequence analysis. *The Lancet*, 384(9957), 1859–68.

² Rosen, R. (2014). *Meeting need or fuelling demand? Improved access to primary care and supply-induced demand*. The Nuffield Trust. Available from: http://www.nuffieldtrust.org.uk/sites/files/nuffield/publication/140630_meeting_need_or_fuelling_demand.pdf [Accessed: 24th February 2016].

³ Tan, S. and Mays, N. (2014). Impact of initiatives to improve access to, and choice of, primary care urgent care in England: A systematic review. *Health Policy*, 118, 304-315.

⁴ NHS England Analytical Service (2013). *Improving general practice – a call to action*. NHS England Publication. Available online: <https://www.england.nhs.uk/wp-content/uploads/2014/03/emerging-findings-rep.pdf> [Accessed: 24 February 2016].

⁵ At the time of the initial bid, NHS England - North Midlands was called the NHS Derbyshire and Nottinghamshire Area Team.

3 Evaluation Approach

A formative evaluation approach was to examine the implementation of the pilots in detail. Formative evaluation is designed to help form or shape an innovation. It can help to explore not only whether an improvement has been achieved, but also how it occurred within a particular environment⁶.

3.1 Evaluation aims and objectives

The aim of the evaluation was to help determine which innovation best met the objective of improving access, and to discover the qualities that distinguish successful implementation processes from those which are less successful. The purpose of the CHILL evaluation was three-fold:

- 1) to test stakeholders' expectations of what the pilots can achieve.
- 2) to establish what is required empirically in order to effectively measure impact.
- 3) to provide insight into factors that influenced the implementation process.

For the purposes of this Report, we need to clarify a set of key terms. We define an '*innovation*' as the introduction of a change in access that is *new to the GP practice*.

'*Pilots*' are specific innovations in access that local GP practices have *tried and tested*. These were funded, either fully or in part, by the PMCF.

A '*trial*' is an *experimental implementation of a pilot*, conducted over a fixed period of time.

Project Teams are the individuals within CCGs and within local GP practices who were involved in different stages of the implementation process. These include the selection and design of the innovation, the management and monitoring of the implementation, the daily activities associated with the operation of the innovation, and the making of any necessary adaptations to the innovation.

⁶ The Health Foundation. (2014). *Evaluation: What to consider*. The Health Foundation: London.

3.2 Evaluation methods

In order to conduct a thorough formative evaluation, both qualitative and quantitative methods were used to collect and analyse the data. The evaluation was informed by an implementation science perspective, using the Consolidated Framework for Implementation Research (CFIR)⁷ to inform the collection, coding, analysis and interpretation of data. All data analysed by the CHILL team was provided by the participating CCGs. All interview data collected from interviews and meetings was recorded with permission and transcribed verbatim.

3.3 Phase 1

The evaluation was carried out in two phases. Phase 1 involved the profiling of the pilot projects. The profiling work enabled the CHILL evaluation team to develop relationships with stakeholders, facilitate further data collection, and encourage participation in the evaluation process. At the end of phase one, March 2015, an interim report was prepared, presented and circulated to all participating CCGs.

3.3.1 Profiling

Profiling involved meeting with, and interviewing, members of project teams involved in the commissioning and planning of an innovation. A stakeholders' workshop was facilitated by CHILL on 30th September 2014. Project teams from all CCGs were invited, along with staff from NHS England - North Midlands. Project teams in each of the nine participating CCGs were visited by the CHILL team and team members were interviewed. There was a total of 126 interviews (see Table 1). All profiling interviews were recorded with the participant's permission, and were transcribed verbatim.

⁷ Damschroder, L. Aron, D. Keith, R. Kirsh, S. Alexander, J. and Lowery, J. (2009). Fostering implementation of health services research findings into practice: A consolidated framework for advancing implementation science. *Implementation Science*, 4(50). Available from: <http://implementationscience.biomedcentral.com/articles/10.1186/1748-5908-4-50> [Accessed: 25th November 2015].

Table 1. Number of formal meetings and interviews (30th September 2014 to 14th January 2016).

Contact Role	Number of meetings
NHS England - North Midlands	16
CCG Clinical	29
CCG Non-Clinical	36
Practice Staff	34
Other	11
Total	126

This information from the profiling provided an understanding of the various pilot initiatives. It enabled the CHILL evaluation team to identify five pilot projects for detail analysis. These five pilots addressed the two areas of access that we are interested in – i.e. innovations which either seek to extend hours of access by offering additional appointments, or else reconfigure services to better meet patient demands for same day appointments.

3.4 Phase 2

Phase 2 involved the CHILL team working in collaboration with members of the five pilot projects teams to develop a Logframe Matrix (LFM) to examine in detail their innovations. The Logframe approach helped members of each project team to articulate the purpose of their innovations, describe the implementation processes, and to explain, in their own words, what they perceived to be the measurable benefits and expected outcomes of their innovation.

At the end of the PMCF funding period (October 2015), each of the participating project teams were asked by the NHS England to provide an end of project overview.

3.4.1 Logframe approach

A Logframe Approach (LFA) was used to assist key stakeholders to identify the aims, goals and objectives of their pilot. Working with the respective project team, a Logframe Matrix (LFM) was developed for each pilot. The LFM enables participants to develop descriptions of the project goals, purposes, outputs, and inputs required in the project, to agree on ways of measuring these dimensions, and to express the underpinning conditions necessary for their stated goals to be achieved.

3.4.2 Conjoint analysis

There is a knowledge gap with regards understanding patients' demand for primary care access. To address this, CHILL conducted a conjoint survey on patient preferences for access to primary care. This includes patient demand for extended hours of access to GP services, the demand for same day appointments, and also the demand for continuity of care with the same GP/practice nurse. The survey was carried out in five Nottinghamshire GP practices.

The survey adds value to the national evaluation of the PMCF evaluation conducted by Mott MacDonald. The national evaluation focuses on the *supply* of primary care services, i.e. the number of additional appointments created. There has been very little evaluation of patients' *demand* for these services, and hence why patients did or did not take up the new services offered.

4 Findings

In this section we report findings from the in-depth case study analysis of three weekend hubs pilots. This includes a quantitative analysis of data on the utilisation and costs of hub pilots that seek to extend access to weekends, and on the utilisation of services that address patients' requests for same-day appointments.

4.1 Overview

The three weekend hub pilots share the same underlying goal; to increase access by providing additional hours of GP services. These pilots were designed and implemented in three different CCG areas within the Nottinghamshire.

While sharing a common goal, each hub differed in the approach taken to delivering additional hours.

Table 2 provides a summary of the data gathered from meetings with project teams to develop and validate the Logframe matrix for their project.

Table 2: Summary of the three hub pilot projects

	Pilot A Weekend GP Service	Pilot B Primary Care Hub	Pilot C Extended Weekend Service
Number of practices	12 practices served by 1 hub.	12 practices served by 2 hubs.	3 associated practices served by 1 hub.
Design	Urgent appointments offered at weekends at one location.	Urgent appointments offered at evenings and weekends at two locations.	Routine and <i>some</i> urgent appointments offered at weekends at one location
Approach	Collaborative approach between the project team and the 12 member practices across the CCG, managed by a lead practice.	Set up by the project team, and outsourced to a contracted external service provider.	Bottom-up approach with a lead GP practice working with and managing two collaborating practices.
Primary aim	To increase availability of urgent care appointments at weekends.	To improve availability of same-day appointments by offering extended hours.	To improve primary care provision for working individuals.
Secondary aims	To create a federation of GPs. To direct patients to the most appropriate professional.	To improve GP work satisfaction. To reduce ED attendance.	To more evenly distribute demand throughout the week.
Service	Two GPs, offering thirty-two 15-minute GP appointments per day, plus occasional nurse appointments (sixteen additional 15 minute appointments per day). Appointments offered through NHS 111.	One GP at each hub on weekdays from 4pm-8pm (site 1) and 5pm-8pm (site 2) and weekends 9am-2pm. 15 minute appointments booked through patients' practice receptions.	One GP and one nurse offering 10 minute appointments on Saturday (9am-1pm) and Sunday (12pm-4pm), booked through patients' practice receptions.
Data provided to CHILL	Staff rota, consultation data and staff costs. Interviews with key stakeholders.	Staff rota, consultation data and staff and service costs. Interviews with key stakeholders.	Appointment data, patient satisfaction data, administrative staff activity data and staff costs. Interviews with key stakeholders.

4.2 Increased access

We examined increased access with respect to the number of additional appointments that were planned during the pilot periods.

As illustrated in Table 2, Pilots A and B offered an urgent appointment service at weekends. Pilot C rescheduled appointments that would have otherwise taken place at the weekend, and additionally offered some urgent appointments.

Based on data provided, both Pilots A and C succeeded in delivering the number of appointments that were originally intended. Between 10th January and 27th September 2015, Pilot hub A offered a total of 2,592 GP appointments and 352 nurse appointments at weekends and on bank holidays over the pilot period.

At the Pilot hub C, 1,600 GP and 1,552 nurse appointments were made available between 28th March and 27th December 2015.

Based on the data provided for Pilot hub B, 46% of all planned appointments were actually provided at the two hub sites, with a total of 4,680 GP appointments and 1,496 nurse appointments made available between 1st January and 31st July 2015. One or other of the two hubs was closed on 86 days (41% of total planned service days). On 13 days (6% of total planned service days), both hubs were closed and no service was available. Analysis of the data provided indicated that shortages of staff affected delivery of the planned appointments.

4.3 Service utilisation (take-up by patients)

Here we examine the take-up of available appointments by patients during the pilot periods. The data provided by the project teams in Pilot hubs A and B indicates very low utilisation of the urgent care appointments that were made available.

At Pilot hub A, patient take-up of the available weekend and bank holiday appointments was just 22% between 10th January and 27th September 2015 (of the 2,944 fifteen minute GP and nurse appointment slots offered, 652 were taken up as consultations by patients). Utilisation was 25% on Saturdays and 18% on Sundays.

At Pilot hub B, 57% of the available week day and weekend appointments were taken up as consultations (of the 6,172 fifteen minute appointments made available at weekends and weekday evenings, 3,501 were taken up as consultations by patients). Utilisation was 48% on Saturdays and 41% on Sundays. One should bear in mind the impact of staff shortages on the number of appointments that were offered to patients. Had the original number of planned

appointments been made available, utilisation rates would be around in line with those at the Pilot hub A.

Patient utilisation was highest at Pilot hub C. But it should be noted that this hub model is not a responsive, urgent care appointments model. The majority of appointments were routine (pre-booked) appointments with some availability of urgent appointments. Patient utilisation of the available appointments was 87% on Saturdays, and 78% on Sundays.

4.4 Main users of the hubs

To get an understanding of the profile of those attending each hub service, we analysed the age of those attending and the outcomes of the consultations. Based on the data provided, under-5s were the largest users at Pilot hubs A and B.

At Pilot hub A, under-5s accounted for 23% of all consultations. Similarly, the largest proportion of users of Pilot hub B is parents bringing children aged 5 and under. This group accounted for 17% of all consultations across both Pilot hub locations. Upper respiratory infection was the most common condition presented (6.9% of consultations), followed by lower respiratory tract infections (6.3%), and cystitis (6.1%).

The age profile of those attending the Pilot hub C is notably different. Based on the data provided, approximately 3% of consultations were with a patient aged 0-4, while the most intensive users were the 45-49 age group, who account for 10% of all consultations. Over 57% of consultations took place with patients aged between 20 and 65 years of age. Consultations were predominantly non-urgent, with dressings (13%), muscular skeletal (8%), skin conditions (7%) and medication reviews (7%) being the main four reasons for attending. The age profile of patients, and the reasons for attending, reflect the particular mix of pre-booked routine and urgent care appointments offered at this weekend hub. This is in line with its original objective to expand weekend access to those in full-time employment.

Finally, for all three hub services, older adults (aged 65+) made less use of services than working age adults.

4.5 Cost per consultation

We analysed data provided on the hourly staff costs and the appointments taken up by patients in order to calculate the cost per consultation at each hub.

The largest component of operating costs is GP and nurse staff costs. Using information on differences in the mix of GP and nurse inputs, hourly payments, and the number of consultations per hour at each hub, we derived a benchmark for the lowest possible clinical cost per consultation.

This lowest possible cost is when all those appointments which are made available are taken up and utilised by patients as consultations. For Pilot hub A, GP costs are £100 per hour and nurse costs are £40 per hour. Between 10th January and 27th September 2015, total GP costs were £64,800 and total nurse costs were £3,520. 2,944 fifteen minute GP and nurse appointment slots were offered during the pilot period. The benchmark clinical cost per consultation - if all of offered appointments were taken up as consultations – is £25.00.

At Pilot hub C, staffing costs were £125 per hour per GP, and £40 per hour per nurse. For the period 28th March to 27th December 2015, total GP costs were £40,000, and these accounted for three-quarters of total clinical staff costs (£52,416). 3,152 ten minute appointments were made available during the pilot period. The benchmark clinical cost per consultation is £18.00 per consultation.

The findings highlight the extent to which patient utilisation drives average consultation costs. The highest cost per consultation is the Pilot hub A. Utilisation was much lower than expected. 652 of the available appointments were taken up as consultations by patients. The average cost per consultation is £104.79. The lowest cost per consultation is Pilot hub C. 2,584 appointments were taken up by patients as consultations (82% of those offered by the hub). The average cost per consultation is £20.28.

For Pilot hub B, the average cost per consultation was £40.84 between 1st January and 31st July 2015. Patient demand for Pilot hub B urgent appointment service was also much lower than originally expected and planned for. If the originally planned provision had been delivered (see above), the average clinical cost per consultation would have been higher, and closer to that of Pilot hub A.

4.6 Patient preferences

In order to examine further the issue of patients' preferences, CHILL conducted a conjoint analysis study in August 2015. Three key attributes of primary care access were considered: weekend opening hours, continuity of care, and speed of access. Patients were asked to rank their preferences with respect to eight different combinations of these three attributes.

Responses were collected from 958 patients attending three medical centres in Nottinghamshire.

A total of 1,268 questionnaires were collected from the practices, giving a response rate with a lower bound of 48%. 310 were excluded because they were incomplete or incorrectly ranked, giving a cleaned dataset of 958 respondents. For the set of eight unique scenarios this provided 7664 observations. The sample is also large relative to other conjoint analysis studies in healthcare.

Our analysis showed that the aspect of access which is valued highest by patients is the ability to get a same day appointment at their practice. For older patients, the ability to see their usual nurse or GP is the second most important attribute. For younger patients the second most important attribute is extended practice opening hours.

5 Discussion and Conclusions

It is one thing to ask someone whether they think the idea of weekend GP opening is a good idea. It is another to see what patients *actually do*, when such a service is offered to them. The pilots funded by the PM Challenge Fund since 2014 provide this opportunity to observe the choices which patients actually make.

Patient take-up of weekend urgent care appointments is low in the in Nottinghamshire Pilot hubs. Patient demand for urgent care appointments was far lower than anticipated and planned for. The excess supply of appointments relative to patient demand is clearly reflected in high average cost per consultation.

Low utilisation of urgent weekend appointments have been widely reported by other urgent appointment hub pilots funded under Wave One of the PMCF. The national evaluation conducted by Mott MacDonald (2015)⁸ found low utilisation rates of extended weekend access have been reported across the first wave of PMCF pilots, with Sunday utilisation rates being as low as 10%.

The CHILL conjoint study of patient preferences for primary care access indicate that patients do not have a strong demand for weekend GP services, when compared to their demand for same ay appointments. This lends support to the Mott MacDonald statement that low

⁸ Mott Macdonald (2015). *Prime Minister's Challenge Fund: Improving Access to General Practice. First Evaluation Report: October 2015*. NHS England Publication Gateway Reference Number 04123.

utilisation is “not necessarily attributable to the delivery and design of projects or an ineffective communications strategy; rather it is a result of entrenched patient behaviours”.⁹

The House of Commons Health Committee highlighted that low utilisation is not due to a lack of public awareness as “any patient registered with a practice offering weekend services who seeks an appointment will be made aware of weekend availability once they contact their surgery.”¹⁰

There is an alternative model to offering responsive, urgent care appointments. This is the mixed appointment model, piloted by Hub pilot C. This requires a good estimate of the demand for urgent care appointments, and a scheduling of pre-booked appointments on the weekend. The appointments services offered can, as here, include screening programmes, immunisations (child vaccinations, and weekend flu clinics), and chronic health reviews. These are particularly attractive to the types of patients targeted by the service – adults in full-time employment who are less able to access primary care services during the working week. These are services that would otherwise have taken place during the (5-day) working week. Organising these activities into blocs at the weekend may gain some efficiencies, but the question arises whether the increased costs of running a weekend hub outweigh these efficiency savings.

Currently, there is clearly a lack of understanding of patients’ needs and their demand for primary care access. There has been an overestimation of the demand for urgent appointments with GPs at weekends. This has led to an overprovision of weekend appointments. By contrast, there is a lack of appreciation for patients’ demand for same day appointments during the week. More effective tools for understanding the factors that drive patient demand needs to be considered.

6 Recommendations

A needs-based approach is required to inform the design and selection of innovations that better cater to patients’ needs. This includes methods to understand patients’ demand for the innovation being proposed, such as healthcare/health needs assessment, health service scoping review, or health equity audit.

⁹ Ibid, p.10.

¹⁰ House of Commons Health Committee, 2016. *Primary Care: Fourth Report of Session 2015–16*, HC 408, 21 April 2016, London: House of Commons.

More sophisticated analysis needs to be undertaken to establish the actual needs and the expectations of different types of patient, recognising the heterogeneity of demands that is placed on primary care, and the trade-offs between different aspects of access.

Mechanisms and guidance on evaluation need to be put in place prior to innovations being undertaken in primary care. It is important to ensure that an evidence base informs future plans and policy.