

Learning from Salford's NHS Health Check Improvement Journey: A document review

Part B – Research Report

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1 Introduction

1.1 Background and rationale for exploring NHS Health Checks (formerly known as vascular checks)

The National Health Service (NHS) Health Check (HC) programme is the largest cardiovascular risk assessment and management programme in the world (Chang et al., 2016). It began in 2009 and is aimed at preventing cardiovascular disease (CVD) through early identification and management of risk factors, or early detection of disease (Department of Health [DH], 2008). It is estimated that about 15 million adults in the UK are eligible for an NHS Health Check¹, targeted at adults at risk of developing "*heart disease, stroke, diabetes, kidney disease and some forms of dementia*", between the ages of 40 and 74 years old (Public Health England [PHE], 2013). Ideally it should be carried out once every five years. The NHS Health Check presently includes guestions about:

- 1. Family and personal medical history
- 2. Lifestyle level of physical activity, smoking and drinking behaviour
- 3. Demographic information sex, age and ethnicity
- 4. Body Mass Index (BMI) (kg/m²)
- 5. Blood pressure
- 6. Cholesterol level

Since April 2013, the programme has been the responsibility of Local Authorities², and it is a legal requirement to ensure that systems are put in place to correctly identify the eligible population and offer this population HCs within a five-year period (National Institute for Health and Care Excellence [NICE], 2014). National evidence suggests that implementation and take up of HCs is variable across the country, and that the referral to and follow up of interventions following a HC (both medical and those aimed at improving people's lifestyles) needs to improve (PHE, 2013).

¹ The NHS Health Check is aimed at those who have no existing diagnosis of heart disease, stroke, kidney disease or diabetes, those already prescribed statins for lowering cholesterol, those who have been found to have 20% or higher risk of developing CVD over the next 10 years and provides an assessment of risk over a specified time period.

² The NHS Health Check programme had previously been the responsibility of Primary Care Trusts

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By targeting modifiable risk factors³ of CVD, diabetes, stroke and chronic kidney disease (CKD), the NHS HC aims to reduce the mortality, morbidity and inequalities associated with these conditions (PHE, 2014c). PHE (2014a) estimate that in a year across England: 650 deaths can be prevented; 400 people can be stopped from developing type 2 diabetes; and 19,000 cases of undiagnosed diabetes and 24,000 cases of kidney disease can be detected (PHE, 2014a).

Reducing avoidable premature mortality is the ultimate aim of the NHS HC programme, and the programme aims to achieve this by (PHE, 2016):

- Promoting and improving the early identification and management of the individual behavioural and psychological risk factors for vascular disease and the other conditions associated with these risk factors
- Supporting individuals to effectively manage and reduce behavioural risks and associated conditions through information, behavioural and evidence based clinical interventions
- Helping to reduce inequalities in the distribution and burden of behavioural risks, related conditions and multiple morbidities
- Promoting and supporting appropriate operational research and evaluation to optimise programme delivery and impact, nationally and locally

1.2 Salford cardiovascular disease profile

Salford has higher levels of deprivation compared with the average for England, with 46.5% of its population living in the most deprived national quintile and 4.9% of its population in the least deprived quintile (Figure 1-1) (SEPHO, 2013; PHE, 2015). All-cause mortality has decreased over the last decade in Salford; and whilst premature mortality due to heart disease and stroke has fallen, rates are still worse than the average for England (SEPHO, 2013).

A detailed CVD profile for Salford showed that the total CVD mortality rate for all people (2009-2011) was 198.3/100,000; significantly higher than England (155.6/100,000), and also higher when compared to the Greater Manchester, Lancashire and South Cumbria Clinical Network as a whole (183.5/100,000) (SEPHO, 2013). Male CVD mortality rates were significantly higher than female rates (251.3/100,000 and 150.9/100,000 respectively). In

³ High blood pressure, smoking, high cholesterol, obesity, poor diet, physical inactivity, alcohol consumption

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the most deprived areas compared with the least deprived areas of Salford, CVD mortality rates were 243.8/100,000 and 127.2/100,000 respectively. These rates are higher than overall CVD mortality rates for the most and least deprived areas in England (213.1/100,000 and 120.6/100,000 respectively). In Salford, the percentage of cardiovascular deaths as a proportion of all deaths was 24.3% for those under 75 years old (compared to England, 23.8%), and 33.6% for those aged 75 years and over (compared to England, 34.7%) (SEPHO, 2013).

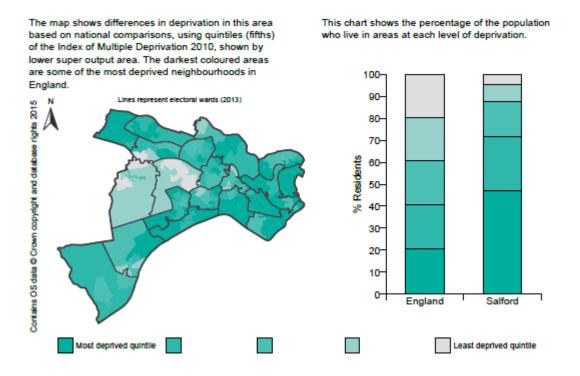


Figure 1-1 Deprivation profile of Salford compared to England (PHE, 2015)

The all persons emergency admissions rate for CHD in Salford (2011-2012) was 244.9/100,000, equating to 672 admissions; significantly higher than England (198.3/100,000). Similarly, the all persons emergency admissions rate for stroke in Salford (2011-2012) was 127.5/100,000, equating to 376 admissions; significantly higher than England (89.5/100,000) (SEPHO, 2013).

Modifiable, lifestyle-related behaviours such as diet and smoking are estimated to be worse in Salford compared to the England average, whilst alcohol consumption is not significantly different (PHE, 2015). This has resulted in higher than average levels of obesity and smoking related deaths in the adult population. Consequently, avoiding premature mortality from CVD is a public health priority for Salford (PHE, 2015). Over a quarter of adults (22.9%) were estimated to smoke in Salford compared to 18.4% for England (2013); 27% of the adult population were estimated to be obese (compared with 23% for England) (2012);

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only 48.5% of adults were estimated to have achieved at least 150 minutes of physical activity per week, compared to 56% for England (2013).

1.3 The Health Check Process

PHE and DH have produced best practice guidance documents that outline the methodology and implementation of the NHS HC (DH, 2013b, PHE, 2016a). The location of the NHS HC can be determined by the Local Authority; however, all the data collected from these checks must be provided to the relevant general practices (DH, 2013b). The programme is represented graphically in Figure 1-2.

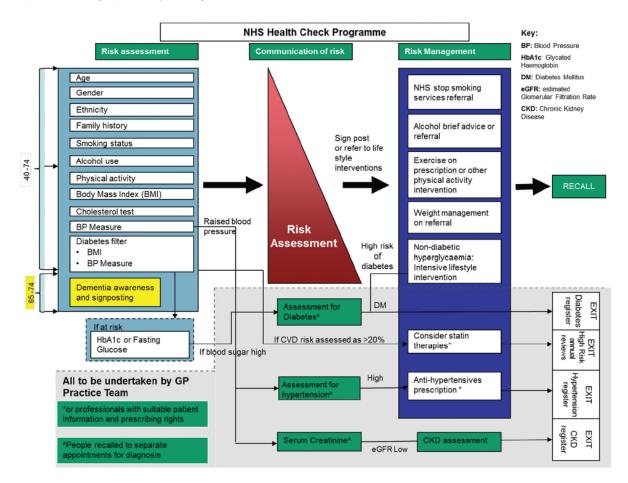


Figure 1-2 Diagrammatic overview of the vascular risk assessment and management programme (DH, 2013b)

A complete NHS HC requires that all the elements outlined in the best practice guidance are taken at the time of the health check. Those aged 65 to 74 years old are also made aware of the signs and symptoms of dementia (DH, 2013b).

A CVD risk engine is used to calculate a person's risk (expressed as a percentage) of developing heart disease within the next 10 years. There are four main CVD risk engines that are currently used in primary care:

- Framingham 1991 (Anderson, Wilson, Odell, & Kannel, 1991)
- JBS2⁴ (Joint British Societies' guidelines of prevention of cardiovascular disease in clinical practice) (British Cardiac Society et al., 2005)
- QRISK (Hippisley-Cox et al., 2007)
- QRISK2 (Hippisley-Cox et al., 2008)

On completion of the HC, the results should be communicated to the individual, using everyday language, so as to ensure the individual understands the results and the implications of them. This should be done face to face. Additionally, individualised written information with advice on the risks identified and referral information for lifestyle interventions should be provided (DH, 2013b, PHE, 2016a).

The results of the HC determine which pathways individuals will follow; all individuals should have access to high quality and appropriate risk management interventions, such as stop smoking services, physical activity interventions, weight management interventions and alcohol use interventions (DH, 2013b, PHE, 2016a). Additionally, when the HC flags up an abnormal parameter, individuals should stay in the HC programme (see Figure 1-2), until these have been followed up and either diagnosed or cleared. Any individual diagnosed with conditions such as diabetes, hypertension, or CKD exits the programme and is managed according to the relevant NICE guidance (DH, 2013b, PHE, 2016a).

1.4 Uptake of NHS Health Checks in the UK

It is recognised that the challenges of encouraging uptake of NHS HCs are manifold, with multifaceted reasons for people attending and not attending them. However, understanding the population and the factors that may impact attendance are vital for the commissioning of effective services (DH, 2013a).

Whilst there is limited literature on the factors influencing the uptake of HCs it is recognised that because a number of the risk factors for vascular disease are asymptomatic, this can lead to the potential beneficiaries being reluctant to present for screening either because they are unaware of their risk (Forde, Chandola, Raine, Marmot, & Kivimaki, 2011), or because of individual views regarding the purpose of screening (Thornton, 2010).

Notwithstanding this, health-screening programmes are known to show low response rates to invitations. The DH economic modelling document assumed that 75% of those invited

⁴ JBS have recently updated this to JBS3, which also includes data on ethnicity, BMI, deprivation and co-morbidities (British Cardiac Society et al., 2014)

would attend for an NHS HC (DH, 2008); although, this estimate was based on uptake of the National Breast Screening Programme (NHS Health and Social Care Information Centre, 2006). Recent studies of cardiovascular screening across the UK have reported uptake rates of between 21.4% and 47% (Chang et al., 2016; Artac et al., 2013; Dalton, Bottle, Okoro, Majeed, & Millett, 2011; Kumar et al., 2011; Lambert, Burden, Chambers, & Marshall, 2012; Marshall et al., 2008; Richardson et al., 2008).

1.5 The role of Haelo in improving Health Check Uptake

Haelo was formed in 2013 and is Salford's centre for innovation and improvement. Haelo is a joint venture between many of the stakeholders involved in the NHS HC collaboration (Salford CCG, Salford City Council, Salford Royal Foundation Trust, and the University of Salford). In 2013 Haelo was commissioned by the Salford City Council Public Health Team to lead projects around improving HC uptake in Salford.

Haelo aims to use improvement science methods to support those they work with to make changes to achieve the overall aim of a programme. The improvement methodology is based on the 'Model for Improvement' (Langley et al., 2009) and uses the 'plan/do/study/act' (PDSA) cycle supported by wider learning sessions service deliverers to learn the methodology and then to implement small tests of change in their day to day practice. This work also falls under one of the priorities of the MAHSC Population Health and Implementation which is to "*save 500 lives from Cardiovascular Disease by 2017*"⁵.

The aim of the collaborative was to improve the uptake of HCs from 30% to 75% by the end of the commissioned period. The aim was to do this through involving a number GP practices to work intensively with Haelo to support them with achieving greater uptake in HCs, alongside involving a number of community stakeholders to help raise awareness of HCs and working with a range of key stakeholders to deliver HCs within non-GP settings.

During the course of the collaborative there were a number of staff changes within Haelo and SCC which may have had an impact on the continuity of the collaborative.

1.5.1 Overview NHS Health Check Drivers

Throughout the collaboration period from 2013-15 the key drivers for NHS HC have been identified, refined, and captured in a number of diagrammatic iterations beginning in October, 2013 with the Figure 1-3 below. A driver diagram is a form of logic model, designed to outline the aim, higher level factors and then specific projects or activities linked to the

⁵ http://www.haelo.org.uk/what-we-do/programmes/healthchecks/

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factors⁶. As such they are designed to be an illustration of the strategy to meet the aim, and when there is new learning they are updated to reflect this. Overall there have been 10 iterations of the Driver Diagram (see Part B – Technical Report) with the latest version shown in *Figure 1-4*.

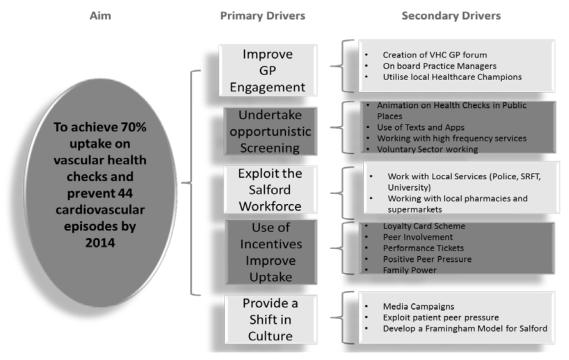


Figure 1-3 Initial Vascular Health Checks Driver Diagram (October, 2013)

⁶ Quality and Service Improvement Tools – Driver Diagrams: http://www.institute.nhs.uk/quality_and_service_improvement_tools/quality_and_service_improvemen t_tools/driver_diagrams.html

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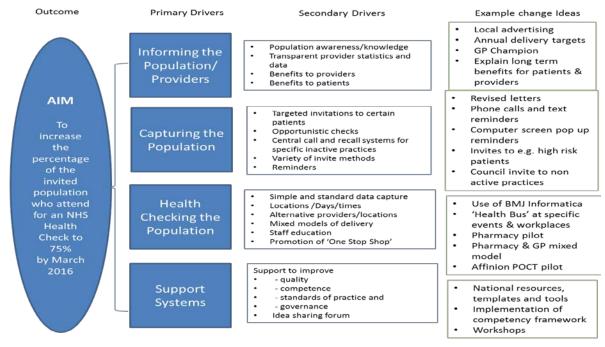


Figure 1-4 Latest Vascular Health Checks Driver Diagram (December, 2015)

Table 1-1 (below) shows that the primary and secondary drivers largely focus on quantitative outcomes (e.g. uptake rates), reflecting the role Haelo had, which focused on working with service delivers to increase HC uptake. Reflecting on these drivers it is not clear whether, participants (i.e. those receiving the HCs) informed the process, as recommended in the behaviour change literature (see for example NICE, 2014b, or Medical Research Council, 2008). In addition, as recommended by the health intervention literature, it does not appear from the goals/drivers, that evaluation components were built into the process from the outset. These aspects of the HC programme will be considered further below.

Through the driver diagrams we can see that the primary outcome of increasing the percentage of the invited population who attend for an NHS HC has remained largely unchanged throughout the period. The target rate of improving uptake and the duration of each driver diagram have been through iterations over time, example aims are:

- To increase the uptake of HCs in Salford to 60% by December 2014 (April 2014)
- To complete 8500 NHS HCs in Salford between April 2014 and March 2015 (May 2014 Following the initial Learning Session)
- To complete NHS HCs on 60% of the invited eligible population in Salford between April 2014 and March 2015 (*equates to 7,500 Health Checks)

The initial driver diagram had the aim of increasing uptake to 60%, which was increased to 75% by the end of the collaboration.

Primary/Secondary Drivers											
Fig. 1 October 2013		Fig. 2 Dec 2013		Fig. 3 April 2014		Fig. 4 May 2014 (following initial learning session)		Fig. 5, 6 & 7, 8 July 2014 (learning session 1), August 2014, October 2014, March 2015		Fig. 9, 10 May 2015 & December 2015	
Improve GP Engagement	 Creating of VHC GP forum On board practice manager Utilise local health care champions 	Staff & Patient Awareness	Evidence Outcome rationale	General practice	 Call & recall system Miquest/Farsite Point of care testing Opportunistic screening Targeting non- attenders Personalised invitation letters 	Informing the population	 Advertising Media campaigns Promotion of HC events 	Informing the population & providers	 Population awareness/knowledg e Transparent provider statistics & targets Benefits to providers Collaboration 	Informing the population & providers	 Population awareness/knowled ge Transparent provider statistics & targets Benefits to providers Collaboration
Undertake opportunistic screening	 Animation of HCs in public places Use of texts & apps Working with high- frequency services Voluntary sector working 	Call & Recall systems	 Invitation Reminder Technology Equipment Results discussion 	Locality level	 Opportunistic screening Community locations Work with employers Pharmacists dentists 	Capturing the population	 Identification of eligible population Call & recall system Timing, e.g. milestone birthdays or time of year 	Capturing the population	 Identification of eligible population Targeted or opportunistic invitations Call & recall systems Methods of invitation Timing of invitations Incentives 	Capturing the population	 Targeted invitations to certain patients Opportunistic checks Central call & recall systems for specific inactive practices Variety of invite methods Reminders

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Primary/Secondary Drivers											
Fig. 1 October 2013		Fig. 2 Dec 2013		Fig. 3 April 2014		Fig. 4 May 2014 (following initial learning session)		Fig. 5, 6 & 7, 8 July 2014 (learning session 1), August 2014, October 2014, March 2015		Fig. 9, 10 May 2015 & December 2015	
Exploit the Salford workforce	 Work with local services Working with local pharmacies/ supermarkets 	Laboratory & point of care testing		City wide	 Publicity campaigns Local radio advertising High profile sponsors HCs at Salford Royal 	Health checking the population	 Point of care testing/equipm ent Data capture Locations Days/times Staff education IT follow up Consistent process & resources used 	Health checking the population	 Equipment Data capture Locations/days/times Staff education Alternative providers IT follow up Processes/resource consistency 	Health checking the population	 Simple & standard data capture Locations, days & times Alternative providers/locations Mixed models of delivery Staff education Promotion of 'one- stop' shop
Use incentives to improve uptake	 loyalty card scheme peer involvement performance tickets positive peer pressure family power 	Follow up	 advice tests success 			Managing the system	 Contracting & payment Audit Governance Data flow, analysis & coding NHS HC standard Networking, troubleshooting & peer support 	Support systems	 Contracting and payment Audit Governance Data flow analysis and coding NHS HC standard Networking trouble- shooting & peer support 	Support systems	 Support to improve: Quality Competence Standards of practice Governance Idea-sharing forum
Provide a shift in culture	 Media campaign Exploit patient peer pressure Develop a Framingham model for Salford 										

2 Project aims and methodology

2.1 Project aims

The review aims to:

 Explore the outcomes of the 2014-2016 collaboration between Salford City Council (SCC), Haelo and other Salford Partners with respect to improving the uptake of NHS Health Checks.

2.2 Methodology

This project is a secondary data analysis of documentation from a range of key stakeholders involved in the provision and delivery of Health Checks between 2014 and 2016. The documents for analysis include: reports; minutes of meetings; research (including successful and unsuccessful bids), posters, a rapid review of the literature, research bids and best practice guidance from PHE.

2.2.1 Data Analysis

To ensure consistency in respect of the data captured, a data extraction form (see Part B, Technical Report) was used. The form was designed to identify, the key features of the range of programmes/interventions designed to increase the uptake of HCs, and captured:

- Description and timeline of the project
- Barriers (those issues which potentially stopped the project)
- Challenges (overcome within the project)
- Facilitators
- Learning
- Wins
- Impact (uptake and learning), including the potential for standardisation for wider rollout)
- Recommendations

2.2.2 Outline of the report

The findings have been grouped into the following key areas:

- Non-traditional settings/ partnerships Community Engagement
- Practice Engagement/GPs

- Research
- Management/governance of the Health Check processes

Each section will be discussed in turn, beginning with a description of what was done in respect of the four key areas, followed by an outline of the key conclusions and recommendations in respect of those activities. Further detail in respect of 'barriers, challenges and facilitators' for each individual activity are available in Part B – Technical Report. The report will end with an overall discussion, conclusion and recommendations.

3 Outcomes

3.1 Timeline of activity during the 2014-2016 collaboration

In order to gain an overview of the activities carried out by the collaboration between 2013-2015 a timeline of the key activity between 2013 and 2016 is presented below. On the timeline:

- Peach represents Non-traditional settings/ partnerships Community Engagement
- Yellow represents Practice Engagement/GPs
- Green represents Research activities
- Purple represents Management/Governance of the health check processes

Overall during the collaboration there were over 40 identifiable activities, some of which spanned the duration of the collaboration, whilst others were one-off or short projects. As expected, there were a higher number of activities initiated in year one, compared to year two. These have involved a number of stakeholders and were carried out in a variety of settings.

Looking at the spread of the activity during the collaboration period, although overlapping, the stages largely progress through activities linked to management and governance during the initial stages of the collaborative (up until August 2014). Overlapping some of this period engagement started with both practices and community, which continued throughout year one and year two with training and workshops to reinforce and sustain existing activities, and encourage innovation and new stakeholders to engage. There were elements of research during the first year, however, as can be seen below, there was more emphasis on trying to get a better understanding of the factors that facilitate or inhibit uptake throughout year two.

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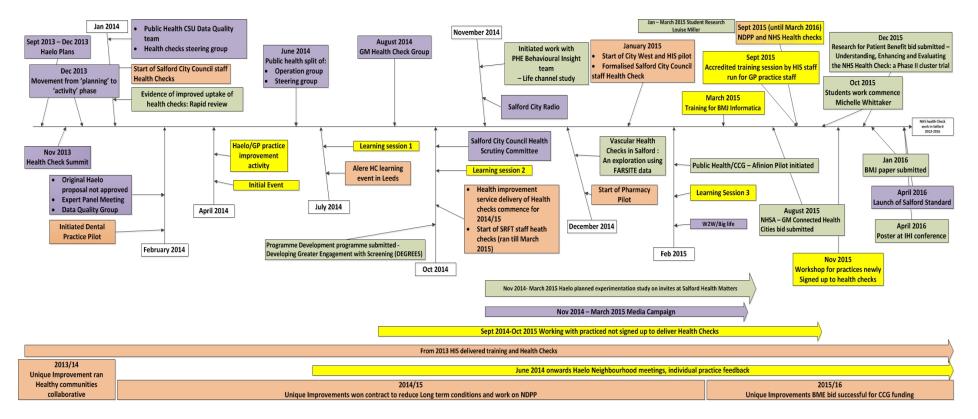


Figure 3-1 Overall timeline of collaboration activity between 2013-2015

3.2 Uptake through the timeline of activity during the 2014-2016 collaboration

Public Health England recommend that the figure used for the eligible population is calculated as the total resident population aged 40 to 74 minus 30% (as this is the amount estimated to be on the disease register and therefore ineligible for a health check).

Data produced by PHE in March 2016 highlighted that across England offers for NHS HCs were slightly below 60%, and that nationally just under half of those (27.4%) of the five-year eligible population have had a health check, although this varies considerably between local authorities. The North West region overall reports 27.9%, with Salford reporting 22.4% (ranked 114 out of 152 local authorities) – however, only five areas (out of 23) within the North West achieve the PHE targets for the expected proportion of people having an NHS Health Check. These are Bolton, Rochdale, Blackpool, Bury, and Stockport.

Figure 3-2 data is taken from the quarterly returns data to Public Health England.

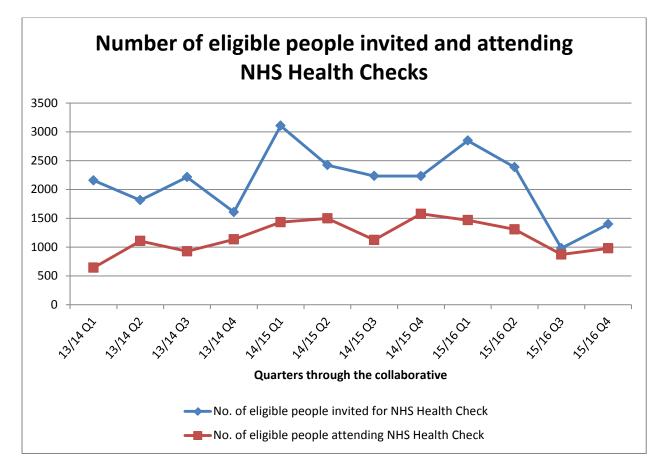


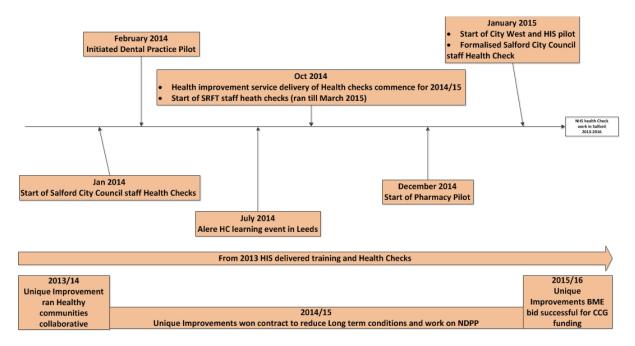
Figure 3-2 Number of eligible people invited and attending NHS Health Checks

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Figure 3-2 indicates peaks and troughs of activity (both invites and attendance), with Quarter 1s consistently showing higher rates of invites, and Quarter 2s correspondingly showing higher rates of attendance for the first two years.

Although it is not possible to map discrete activities against uptake, PHE (2016b) data shows that offers taken up between Q1 2013/14 and Q4 2015/16 (which reflects the period of the collaborative) were 55.4% and met the PHE target. Although during the same period, PHE targets were not met for appointments offered, or NHS HCs received. Looking at the Salford NHS Health Checks Workstream Dashboard and the quarterly returns to PHE, whilst the goals set around increasing uptake and number of invites was not consistently met across the collaborative period, it can be seen that at points during the collaborative activity, levels of activity were above the median (most notable during the first quarter of each year).

It is worth noting, lack of uptake may be reflective of difficulties in accurately measuring uptake in relation to invitations, for example if only opportunistic screening occurs uptake will appear high.



3.3 Theme 1: Non-traditional settings/ partnerships - Community Engagement

Figure 3-3 Timeline of Non -traditional settings/ partnership - community engagement activity

3.3.1 What was done

This theme highlights the broad range of activity carried out in respect of the delivery of HCs in non-traditional settings:

- **Dental Practice Pilot** aimed to pilot HCs offered on an opportunistic basis through a dental practice in Salford and to raise awareness of HCs.
- **Pharmacy Pilot** aimed to improve access and increase the uptake of HCs by piloting a screening programme in 8 pharmacies in the city.
- Alere HC Event (Leeds) An event to bring those working on HC's together to present current research findings and to feedback on the dental and pharmacy pilots that had been running in other areas.
- Health Improvement Service (HIS) Since a small number of GP practices do not offer health checks, in 2014-15 Public Health commissioned the HIS to deliver HCs opportunistically in those areas using the Health Bus, Workplace HCs and the City West Pilot. Looking at these in turn:
 - Health Bus (Pilot) Offered opportunistic screening aimed at capturing patients who were in practices that were not signed up to deliver HCs (n=6), or people who do not usually access their GPs. Public Health commissioned

the HIS to provide HCs in accordance with the HCs Screening Programme from a mobile unit in four locations across Salford for 15 days as part of a pilot. Training was provided by the HIS.

- Salford Royal Foundation Trust (SRFT) staff health checks these were offered to eligible staff at SRFT, since over 2000 staff had been identified as being in the eligible age group with a Salford postcode. This built on the need to engage workplaces. HCs were delivered by HIS and the publicity and marketing was developed by Haelo team in conjunction with SRFT.
- Salford City Council (SCC) staff health checks these were promoted to eligible staff at SCC. These had already been offered by HIS since September 2013, but only 132 were carried out, so they were aiming to formalise the process and promote the service, which was carried out by HIS.
- City West a pilot whereby wardens posted HC invitations through people's doors, and subsequently conducted a survey to ascertain people's views on the HC (n=31 respondents).
- Health Community Collaborative (HCC) This included a range of community activities to increase HC uptake, e.g. working with the pharmacies, attending community events, producing materials for media campaigns published in 'Life in Salford', having focused teams, e.g. a men's team, and a range of innovative events, including using a 'bus ticket' to invite people onto the Health Bus, 'Bowel Bingo' adapted to 'CVD Bingo', or a 'Dare to wear Red event'.
- National Diabetes Prevention Programme (NDPP) and NHS Health Checks -Salford became a demonstrator site for the NDPP in 2015. Nationally, PHE stated that the HC programme would act as a feed into the NDPP programme as the eligible population had many similarities apart from age, as NDPP starts from age 30 and people can be on any register except a diabetic register. Locally, SCC and Haelo staff recognised the similarities in the national diabetes risk assessment (DRA) and the NHS HCs – the only difference being one question re 'diabetic family history', plus a routine BP check in the NHS HC.
- Salford's Orthodox Jewish Community (OJC) SCC commissioned Unique Improvements, a North West social enterprise to develop Salford Healthy Communities Collaborative (SHCC) to support engagement of the OJC. The SHCC used 'the breakthrough methodology' developed by the US Institute of Healthcare

Improvement. The OJC were firstly invited to an 'orientation event' at a local community venue. The aims were to:

- Identify stakeholders with an interest in becoming involved
- Describe the scale of the problem around CVD for local communities
- Create awareness of the need to change
- Begin to build ownership and involvement within the SHCC
- Recruit a local community team

3.3.2 Impact

In respect of the **dental pilot** practice staff were very enthusiastic and felt able to identify the eligible population, however the impact was limited in terms of uptake. Similarly in respect of the **pharmacy pilot** uptake was lower than anticipated; however, staff were upskilled to use the point of care testing machines and in respect of their knowledge and understanding of HCs.

The **Alere Event** enabled a broader understanding of the range of activities being done nationally in respect of HCs in non-traditional settings.

Looking at the **Health Improvement Service** (HIS), they trained their own staff to deliver HCs in all the 8 neighbourhood areas that they promote and they are accredited to deliver training for HCs by the Royal Society of Public Health. They also trained the pharmacy staff in the pilot and put on training sessions when required as long as there was a minimum of 6 attendees. Accredited training was offered to GP staff in 2015 (Public Health paid the fee for the accreditation). It was useful that training for the delivery of HCs was able to be provided by HIS, as external trainers can be hard to source and costs can vary. There has been positive feedback from recent PHE competency training: Learner and Training workbooks. Overall 435 NHS health checks were completed by HIS (April – December 2015), 72.5% of target set by HIS. 92 SRFT staff were also provided with HCs and a further 323 up to January 2016 (Q's 1 - 3). The City West Housing pilot resulted in 14 HCs, which was lower than anticipated. The results of the survey conducted by Haelo indicated that 100% of those who responded (n=31) would recommend a HC to friend/family, and that the preferred invite method was by letter.

The impact of the **health bus** was to advertise the HC service and also facilitate the delivery of HCs in non-traditional settings to people who potentially would not otherwise access their GPs.

Overall for the **workplace HCs** there was limited impact, however, feedback from SRFT indicated that workplace health checks increased HC awareness, although uptake was lower than anticipated.

The **HCC** records the number of: brief conversations focused on NHS HCs that were led by community team members, showing to date (March 2016), that there was a total of:

- 1,202 NHS HC Brief Advice Conversations (at venues such as libraries, supermarkets, outdoor markets, faith buildings etc)
- 465 (38.5%) follow up conversations*
- 424 (91%) of those followed up had increased knowledge and/or intention to act*
- There were 151 events/activities in partnership with other organisations (e.g. attending tea dances, flash mobs, and targeted health information events, e.g. within the Jewish Communities)*,
- and 74 people were signposted or referred for a HC*

* since August 2015 (prior to this date, this data was not captured)

Impact was highlighted in respect of the **NDPP** & NHS HCs programme as being an attempt to develop a triage system for all people either having a NHS HC or a DRA, i.e. anyone over the age of 30 would be streamlined into either pathway where eligible. Whilst a recognised 'triage system' did not evolve from this process, communication between all staff involved in the two programmes became more cohesive and greater efficiencies have developed in practice, especially within the community providers who have recognised that the two 'checks' are similar and often involve the same cohort of the population. In this regard, processes have evolved where any person approached about one check is also offered the other, if seemingly eligible, resulting in a more efficient use of staff.

In respect of the **Jewish Orthodox Community** Project, since April 2013 the Jewish team members have achieved:

- 39 awareness events
- 9 events shared with other services
- 1188 brief interventions
- 355 lifestyle risk assessments
- 98 signposts to primary care services

• 27 signposts to a community service

The team used a structured approach where they would plan small-scale changes to trial in their community using 'plan, do, study, act (PDSA)' change cycles. These plans covered a range of community facing interventions from testing the best methods of engagement at synagogues to designing community specific resources. The Jewish team met every 6 weeks or so to make further plans and update each other on progress. Following these action periods, the group would then attend a workshop to review the impact of any changes and identify further improvements to try out. This cycle was repeated 3 times over a 12 month period.

This innovative intervention has demonstrated the importance of engaging specific communities in a collaborative way, to both identify needs/issues, and also be involved in designing and developing solutions to these issues. The approach, i.e. social marketing, which includes 'bottom-up' programme development, has facilitated meaningful engagement of this potentially difficult to engage community.

3.3.3 Conclusions

Under the facilitation and support of Haelo and Salford City Council, there were a broad range of activities carried out to increase the uptake of HCs in non-traditional settings including, workplaces, shopping centres, dental practices, pharmacies, during community events and meetings, and using the health bus. Training for HC delivery was carried out by the HIS, which avoided the need to source external trainers for whom costs can vary'. The training was developed when the need for service deliverers to be skilled up for HCs delivery became apparent. However, it should be noted that in this sense the development/delivery of the training could be considered reactive, i.e. rather than it having been designed/developed following a review of the available providers in respect of the quality and types of training that were available externally (see Part B – Technical Report).

In terms of stakeholder involvement, service delivery teams (e.g. practice nurses, pharmacy staff) were involved in the development of the programme mainly through Haelo learning events (discussed below in Theme 2). Participant stakeholders (i.e. those who were the intended HC recipients) were only involved in designing and developing the process during the Jewish Orthodox Community Project. This was an innovative approach that included specific events held by third parties, e.g. Jewish Ladies Evening, that was initiated by SHCC.

In respect of evaluation, overall only 1 (namely the Jewish Orthodox Community) of the 11 pieces of activity done around HCs in the community setting had a formal evaluation built

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into it. Although not done locally, formal evaluation was carried out in respect of the dental and pharmacy pilots, at a national level.

Key learning in respect of Non-traditional settings/ partnerships - community engagement was that HCs have the potential to be delivered in other settings, utilising and extending the skills of current staff, e.g. using housing wardens to post HC invites through doors in City West. Providing HCs in non-traditional settings offers the potential for eligible populations to be identified by staff, other than GP practice staff, e.g. dental or pharmacy staff. It also provides an opportunity for those who do not access primary care to have a HC in a non-traditional settings. However, uptake from these settings was found to be fairly low.

Having technology for 'point of care' testing was useful to provide instant results to clients, and to provide mini-MOTs for those who were ineligible for a full HC. Ease of access was felt to be a key to improving uptake, and it was recognised that top management/gatekeeper support was needed to enhance success, particularly in the workplace. In addition the PDSA approach, alongside the social marketing approach, which involved understanding local needs, local knowledge and local experience, together with developing shared ownership and facilitating shared solutions were highlighted as keys to success in the OJC Project.

Despite the potential to use different settings within the community for a number of the activities uptake was lower than anticipated e.g. the Salford dental practice where large numbers of potential participants were anticipated but not realised. Challenges identified to improving uptake were identified as:

- 'Ineligibility' (particularly in respect of the health bus and within workplaces) whereby those coming forward for a health check were ineligible for a full HC due to living outside the area and/or having a pre-existing condition, of if they'd had an alcoholic drink at an event that the health bus was attending.
- Lack of room/space/correct facilities/equipment (e.g. Wi-Fi) to carry out the HC at SRFT
- Lack of co-operation from within some workplaces
- Costs of delivering the HC, found to be higher in dental practices
- Lack of participant knowledge/interest in taking part in a HC
- Knowing which 'gatekeepers' were important in different settings

The key facilitators to improving uptake were found to be:

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- Partnership working, i.e. working with existing teams to improve uptake, e.g. Practice Patient Groups, Salford Health Matters, and the Jewish Orthodox Community
- Having technology to enable speedy testing/reporting back, e.g. 'Point of Care' testing machines and mini-ipads
- Being flexible and providing easy access to potential participants, e.g. through the health bus, being available in the workplace, and at different events, e.g. Eccles Pop-Up Market
- Utilising internal communications systems in the workplace effectively
- Having targeted teams which utilise connections within communities, e.g. 'a men's team' and targeted events, e.g. 'Jewish Ladies Evening'
- Having innovative campaigns, e.g. 'bus ticket', 'NHS HC car freshener', including media and social media campaigns, e.g. producing stories/case studies for 'Life in Salford', and Jewish Orthodox Community Campaign
- Linking in with other national campaigns, e.g. 'know your numbers'

Key wins were the value of the HCs for those who had them in non-traditional settings. For these people, ease of access, the range of locations and the quality of information given was reported to be very good. The coming together of NDPP & HCs was also reported to be an efficient use of staff. In addition, HCC were reported to be very proactive, and their engagement events produced 16 community teams and 200 peer-to-peer volunteers, including 14 residents from the local Jewish Orthodox Community, thus increasing the reach and raising awareness.

3.3.4 Recommendations

- Continue to work in partnership and offer a mixed methods approach to delivering HCs in Salford, to reach their potential and address those who would normally not access primary care
- Explore reasons for low uptake in non-traditional settings (e.g. City West), ideally using qualitative methods
- Actively seek to engage all key stakeholders (particularly those that HCs are seeking to engage) to develop shared ownership and innovative solutions to their identified needs.
- Use local experience/local knowledge/gatekeepers to access groups in a meaningful way.

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- Evaluate the strengths, limitations and outcomes of each type of approach from a broad range of perspectives, to inform future development. For service delivery staff Learning events (discussed under Theme 2 below) have been shown to be a useful way of engaging staff in this type of activity – potentially, these types of events could be mirrored to engage different groups.
- In respect of workplace health checks, ensure that these are marketed effectively, engage senior management and all relevant stakeholders, and plan effectively to ensure rooming, equipment, etc., is adequate. If attendance and uptake is low greater attempts should be made to understand the reasons for this (e.g. process evaluation).
- There are a number of recommendations from the Jewish Orthodox Community that are transferrable to other community settings, including: testing interventions in small manageable ways, challenging traditional approaches, getting creative, moving from 'expert' to 'facilitator, and linking with other services.

3.4 Theme 2: Practice Engagement/GPs (including the learning events designed to engage practices)

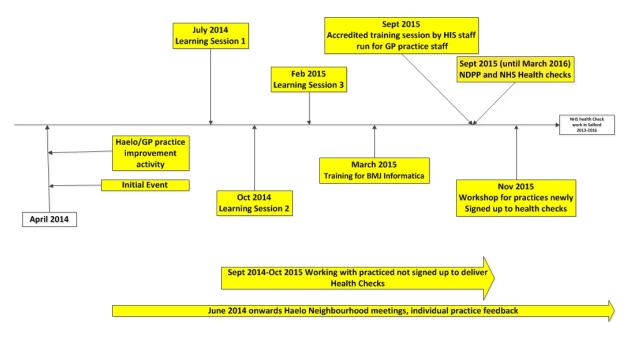


Figure 3-4 Timeline of Practice and GP engagement activity

3.4.1 What was done

This theme highlights the broad range of activity that was carried out to engage practices in delivering and improving uptake of HCs and includes a range of events facilitated by Haelo.

- Initial Events and Learning Session This session included the 13 practices that were engaged with Haelo at the time. The session allowed the interim goals of the collaborative to be outlined and the data that informed these to be shared. This session enabled Haelo to '*introduce the idea of Improvement Science and the Break Through Series Collaborative model to all stakeholders for the first time*'. Presentations were provided about the HCs programme, a review of current process, and a discussion about the contribution of quality improvement models as well as two demonstrations (DB Motion and FARSITE).
- Learning session 1 was designed to promote learning around how to achieve the target of increasing uptake. The event outlined what Haelo was trying to accomplish, the challenges associated with this, and what changes are being made in Salford around uptake. The event also provided a place to outline the planned improvement method around Plan Do Study Act (PDSA), and to share the views of HCs from a practice and commissioner perspective.

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- Learning session 2 As with session 1 this session was designed to support sharing information and supporting practices around improving the uptake of HCs. A similar format was used as in session 1 around initially providing an overview of the progress and summary of the activity being done as part of the collaborative. Those attending were provided with information around understanding behaviour change to try and help them support patients and also information about the importance of measurement and monitoring how things are improving. The afternoon had a greater focus on what practices could do and highlighted a patient's view of a HC and how the PDSA improvement science method could be applied.
- Learning session 3 This followed the same style as the previous learning events, but had a greater focus on supporting practices with their continued work and setting out current developments. An overview of the current data was presented along with details of current developments around NHS HCs and the newly developed Way2Wellbeing website, which was designed to facilitate effective signposting to a range of services following a HC. Updates were provided from teams in respect of how they were doing and what plans they had going forward. The afternoon saw results presented from one of the research projects (FARSITE carried out by the University of Salford, discussed in more detail under the Research theme below) and results from other studies (Salford Health Matters and City West Housing Trust) and finally how the collaboration can be useful when striving to improve uptake rates.
- NHS Health Checks Workshop This session was designed to continue to provide support to engaged practices and work to help them with HCs and increasing their uptake. It also provided a place to provide the local context for HCs. Presentations were given on the current state of play within Salford and the Salford NHS HC programme. Presentations were also provided around the practical aspects of quality improvement, BMJ Informatica (BMJi) and the gold standard for NHS HCs.
- Training Throughout the HC journey, training has been offered to staff involved in the health check process, including GP's, nursing staff, advanced nurse practitioners, Salford Health Matters, and health care assistants. Training has been provided by the Health Improvement Service (HIS). This training has been available throughout the course of HCs in Salford; however recently (in the past year) it has been accredited by the Royal Society for Public Health.

More recently (12th March, 2016), training for BMJi was arranged by the Clinical Commissioning Group (2 sessions), prior to the implementation of this new system in

April, 2016. This training was for both HCs and for 'Long-term Conditions'. Alongside the training, helpdesks are provided to practices by the BMJi team, who had 2 trainers who delivered the training, and follow up recordings of the training, using WebExs. Further training is planned for practice staff.

- Neighbourhood meetings, individual practice feedback Throughout the study period individual work was carried out with practices (n=15) that registered an interest for support around the main issues identified and also for help with PDSA cycles.
- Practice improvement activity (promotion of Improvement Science and the NHS HCs Scheme at Primary Care Neighbourhood meetings) - This involved a series of presentations and meetings to encourage GP practices to work with Haelo to increase up-take of HCs. Throughout this activity the benefits of the programme both at a local and national level were highlighted.
- GP Practice improvement activity (working with practices not signed up to deliver NHS HCs) - A series of meetings were held with practices in Eccles to encourage them to sign up to the NHS HC scheme. The uptake of HCs in Eccles is poor – primarily due to the low numbers of GP's signed up to deliver them.

3.4.2 Impact

The **initial learning event** brought together 44 stakeholders from a variety of backgrounds to discuss ways in which to improve HC uptake in Salford. The event was used to set out the plans for the HC programme in Salford, provide demonstrations and engage staff.

The subsequent **learning sessions** (1–3) were organised by Haelo and used to showcase and disseminate information to key stakeholders, particularly GP practice staff, HIS, HC and local academics. These events enabled the sharing of innovative ways of working, challenges that people were facing and solutions/good practice. Overall these events were seen as positive by those attending, who reported being keen to take the lessons they had learnt back to practice.

- 'put them into practice and hopefully get more patients for health checks'
- 'Work with Haelo to get patients for appointments'
- 'Way2wellbeing, that will use in practice'
- 'discuss with the practice team how to go forward and give an improved service'
- 'Talk to my community teams'

People reported taking away from the **NHS HCs workshop**, a better understanding and recognition of the importance and need for promotion, examples of the impact and learning are shown below:

To Try Again With Running Nhs Health Checks Devise A Plan Of How We Need To Run Health Checks Nhs Checks Are Important We Need To Be Working Together To Support Each Other An Overall Better Understanding Encourage Health Checks People And Patients Will Be Interested Promote Health Checks Continue To Do What Im Doing Promote Health Checks Prevent III Health About How Easy To Deliver

An example of a change occurring, as a result of feedback from practices, was that there was a change to the contract around payment and also which risk scores could be used.

The impact of **training** was skilling up the workforce to recognise the importance of: improving HC uptake: better data recording and monitoring (including greater recognition of the importance of using Read codes consistently): and more effective ways of inviting participants to a HC.

The **neighbourhood meetings** and **individual practice feedback sessions** were useful for providing more visibility to GPs in respect of HCs and the work being carried out through the collaborative. It also allowed engagement individually with practices around how to apply the 'plan, do, study, act' model, and enabled practices to reflect on their own ways of working to recognise the main facilitators and barriers they have around HCs. This way of thinking was a useful problem-solving tool.

In respect of those not signed up to HCs, the engagement by Haelo enabled intensive work with individual practices, with the result that some subsequently signed up to deliver HCs.

3.4.3 Conclusions

There was a wide range of activities that were driven by Haelo and carried out to engage practices/GPs in working to improve HC uptake. These included three learning events, workshops, presentations, training (including that provided by HIS and BMJi staff), and practice improvement activity through meetings with individual practices, those already signed up to HCs, those who had not, and neighbourhood groups. The learning events were designed to introduce improvement Science and share good practice about targeting and achieving increased HC uptake through PDSA methodologies.

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Key learning through GP practice engagement was the importance of providing a supported space for information sharing to occur, particularly around the goals of HCs, PDSA cycles, good practice, the importance of coding data accurately, available services (for example through HIS or HCC), the Way2Wellbeing website, innovative ways to advertising the service, inviting people and improving uptake, and new ways of capturing data, i.e. BMJi.

Key barriers to practice engagement related to a number of practices that did not respond and there were also challenges around information governance which meant that invitations could only be over via NHS sites, rather than with SCC supporting this process.

Key challenges were identified as:

- The time needed for people to attend the range of learning events offered (particularly full days). This was particularly challenging given the levels of capacity in primary care, which are minimal, and the amount of work that needs to be caught up on following time out of the practice.
- Information management, which was often incomplete, i.e. the reporting/collecting of data on activity that had been carried out, including the use of Read codes; referrals following a HC; information being correct on letters, and identifying the eligible population.
- Negative attitudes from some practices/staff towards the value of HCs and the amount of work involved in undertaking them.
- The information presented at learning events, which was sometimes felt to be repetitive, difficult to understand (e.g. statistical information), and not necessarily relevant for the diverse attendees.
- It was reported that there were issues accessing support/training for practice staff and those delivering HCs.
- The quality of information provided, and the way this information is provided to practices from HCs carried out at community events.
- A number of challenges in respect of HC payments, e.g. late payments from Public Health, changes in HC claim forms, and the elements of the HC covered by payments (e.g. invitations).
- Lack of engagement from patients.

The Learning sessions were identified as key facilitators, which allowed the sharing of knowledge about good practice and innovative ways of working, to overcome some of the challenges identified, e.g. difficulties with invitations, and enable staff to contribute their

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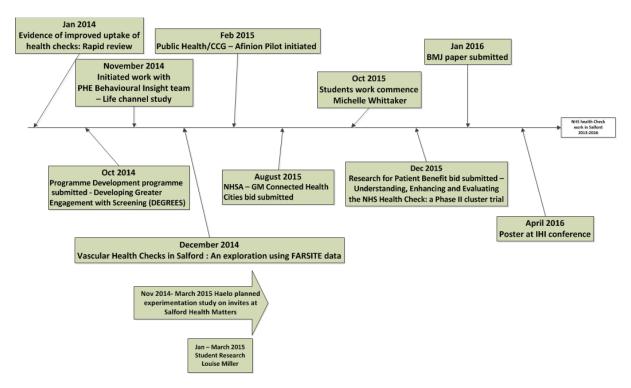
thoughts. In addition, individual support for practices wishing to be part of the collaborative was highlighted as being useful, particularly face-to-face meetings.

Key wins in respect of GP engagement were the sharing and dissemination of information across this key group of service delivers, which participants reported was useful to bring back to their practice, with a view to improving uptake. An important outcome of this strand of the project was the increased number of practices who signed up to delivering HCs, as a result of the engagement of Haelo with individual practices (which often took a number of visits). These visits enabled PDSA cycles to be completed with GP practices, which helped to provide more visibility around the HC process, and enabled practices to identify learning in respect of the health check journey, e.g. the invitation, and awareness raising for both staff and patients.

3.4.4 Recommendations

- The learning events were valued and should be continued in some form to help with ongoing information sharing.
- The wider benefits of HCs should be communicated to GP practices, e.g. the potential for HCs to get people to register with a GP which will allow GPs to have better knowledge and understanding about their population needs.
- Continue to evaluate the impact from previous learning events over time to inform the next learning event.
- Continue to try to engage 'non-engaged' staff/practices so that knowledge/learning can be shared with them. This is particularly important in respect of reducing health inequalities, as locally some of the practices from more deprived areas have lower levels of engagement with the HC process.
- Explore alternative ways for 'non-engaged' GP practices to provide HCs, e.g. by commissioning external providers to do this on their behalf (via Salford Standard).
- Regular meetings could be standardised on a rolling basis involving different clusters of practices (e.g. ones performing well, with those who have poorer performance) to facilitate continued learning/sharing of good practice.
- Continue to work with practices and provide training (including BMJi training) around improving clarity in respect of some of the issues raised, i.e. which Read Codes should be used under which circumstances, difficulties with the HC template, and with recalling patients.
- Use neighbourhood groups as a way of accessing other stakeholders.

- Continue Haelo's model of working face-to-face with practices, as this has been found to be beneficial in respect of engaging practices in the HC process.
- Find ways of enhancing integrated working with the CCG, recognising the importance of their continued support in fostering the links between GPs, practice staff, and other key stakeholders involved in the HCs.



3.5 Theme 3: Research

Figure 3-5 Timeline of Research activity

3.5.1 What was done

Over the period, two commissioned pieces of research were undertaken, three collaborative bids were submitted, two student research projects were undertaken, four internal research projects were undertaken (including a poster presented at an international conference – see Part C page 47 for poster), and a publication was submitted to the British Medical Journal.

Looking at the two commissioned research projects, these were:

- January 2014 A Rapid Review of the evidence on: the key factors that influence uptake of health screening, including demographic, social, cultural and behavioural influences; and a review of the international evidence (relating to systems and patients) to assess, a) which factors influence uptake of HCs, and b) which factors increase or inhibit uptake of HCs. Seven papers (five studies) met the inclusion criteria regarding reporting information around uptake or increasing uptake within CVD screening/HCs. All of these were studies from England.
- March 2014 Exploration of NHS HCs in Salford using FARSITE. The aims of this project were to:
 - Assess the level of uptake for the NHS HC programme in Salford, by demographic characteristics.

• Provide a better understanding of who takes up HCs in Salford, and how many of these are at high risk of cardiovascular disease.

Three collaborative bids were submitted, as follows:

- October 2014 A NIHR Programme Development programme Developing Greater Engagement with Screening (DEGREES)
- **December 2014** Research for Patient Benefit bid Understanding, Enhancing and Evaluating the NHS HC: a Phase II cluster trial
- August 2015 Northern Health Science Alliance GM Connected Health Cities Improving the cardiovascular care pathway: the NHS HC as an exemplar for a learning health system

The main theme across the first two bids was to gain a deeper understanding of the HC process from patients and staff. The need for greater understanding of why people do and don't attend HCs and the barriers and facilitators to behaviour change following a HC were highlighted as paramount to developing ways of improving uptake. This deeper understanding was sought to enable the barriers to be reduced (if possible) and facilitators to be identified, which could then be embedded in future training and delivery and subsequently evaluated.

The third bid, sought to identify variation in delivery of HCs across the city, with a view to developing more targeted resources to improve HC uptake.

In addition to these bids, two student research projects were carried out, as follows:

- **Student 1** worked with the HIS team on the health bus to follow up people at a workplace who had a HCs to see if they change their behaviour.
- **Student 2** is doing in depth interviews with 10 patients (from 2 GP practices) who have had a HC and a QRisk score of 20% or more to find out what happens to them.

Again, these studies are focused on gaining a deeper understanding of the HC process, particularly from a patient perspective, and to explore any subsequent behaviour change.

The pieces of research that were conducted internally included:

 PHE Behavioural Insights Team – this was a study to test the effectiveness of messages on GP waiting room screens as a means of increasing uptake of NHS HCs. A video was played six times an hour and managed externally to the GP centres via TLC. There were 14 'treatment practices' and 17 'control practices.

- Afinion Pilot this was a project that aimed to explore whether it was advantageous to incorporate a pre-diabetes test, the HbA1C for impaired glucose regulation (IGR) using the Afinion point of care testing machine as part of the NHS HC. The project involved 6 GP practices, although only 5 completed the study.
- Haelo Planned experimentation study on invitation methods –This focused on the key drivers of 'communication', four interventions were considered; long (standard) letter, short letter, text message (SMS) and phone call. The initial study design was based on eight groups of forty patients (320 in total) randomly chosen, who were allocated to each intervention via planned experimentation methodology. Subsequent booking rates were monitored and analysed. Any increase in uptake would indicate the optimal method, or combination of methods of invitation for this population. The original 2⁴ design required modification due to practical limitations (see below), with the final study comprising a 2³ format.

A manuscript was submitted to the **BMJ**, which aimed to highlight some of the challenges with HCs and how different aspects of the HC journey were considered in isolation, e.g. uptake, rather than the whole journey, from invite to behaviour change, being looked at.

3.5.2 Impact

The **Rapid Review** led to an invitation for the University of Salford authors to attend the 'NHS HC Research and Academic Symposium' - 21 May 2014, London. In addition the review was included on PHE website for download, and as a piece of work in one of the PHE literature reviews. The Rapid Review has been downloaded from the UoS repository over 580 times.

The **FARSITE report** showed that the number of HCs carried out, as percentage of those invited is quite high. This report has been downloaded over 50 times from the UoS repository. Attendance at NHS HCs has been increasing over the past three years in Salford, however the attendance rate (from the eligible population) is still fairly low (6.8% in 2013-2014). In respect of CVD risk factors, 'attenders' were found to be 'healthier' than 'non-attenders'; attenders also included a greater percentage of women than men. The only available prescribing data available for this analysis were for statins, and while the trend is for a slight increase in the overall prescribing of statins, attending a HC does not seem to relate to this increase. Details of onward referral to lifestyle services was limited and showed low very levels of referral, which could potentially be the result of a lack of referral, or a lack of coding of referrals. The HCs were found to be sufficiently complete to calculate a CVD score for 65% of those who attended, highlighting where gaps in reporting existed.

This enabled recommendations to be made in respect of encouraging more consistent reporting and collecting data on all of the risk factor variables needed to calculate a CVD risk score.

The FARSITE report was presented at one of the Learning Events, and a poster from the report was displayed at a NHS Health Check conference. These dissemination opportunities facilitated discussions around the challenges of using Read Codes consistently.

In respect of the Student Research Projects, one of these is still being completed therefore it is difficult to assess the impact at this stage. In respect of the student project looking at the Health Improvement Service, this showed the reach and scope of the work done by HIS, capturing data from approximately 120 participants, aged between 17 - 71 (mean age 42.6) some of whom had a full NHS HC. Overall the report highlighted (similarly to the FARSITE report) that the study participants were healthier than the general population in England and Salford (although it is unclear how many of these people were eligible for a full HC, due to their age, or geographic location). It's difficult to comment on the impact as most of the people referred to additional services were found not to have attended these. In addition no significant changes were found in QRisk2 scores between baseline and follow-up (on the population for which before and after data was available), whilst there were significant increases found in blood pressure and more participants were categorised as at higher risk due to their blood glucose measurement from baseline to follow-up. There did not appear to be any change in physical activity indicators, although more participants reporting eating fresh fruit and vegetables on a daily basis. The respondents reported preferring to have their HCs in a community setting, saying that they would not have gone to their GPs to have one.

The **Afinion Project** showed that about 10% of patients tested have impaired glucose regulation. This should make a significant difference to these patients in helping them to change their behaviour to greatly reduce their future risk of developing both diabetes and CVD.

The impact of the **Behaviour Insights** work is unclear, as there did not appear to be any impact of the intervention on the uptake of health checks in practices with the 'Life Channel', which potentially could have been due to the lack of 'call to action' at the end of the HC film.

Although the **Haelo Planned experimentation study** was a pilot it was found that a long letter or a long letter and a phone call was potentially most effective. In respect of the poster from this study (presented in Gothenburg) this enabled dissemination of the learning to a wider audience, highlighting the importance of having a range of different communication

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methods available between GP practices and patients. However, the study did not achieve its aims of increasing uptake, largely due to logistical challenges that had not been foreseen at the outset.

3.5.3 Conclusions

There was a wide range of both internal and external research activity that has been designed to inform our understanding of HCs in Salford and how we can improve uptake.

Reports and recommendations for the two commissioned pieces of research can be found online:

- Cooper, A.M. and Dugdill, L., (2014), <u>Evidence of improved uptake of health checks:</u> <u>Rapid review</u>, University of Salford, Salford, UK. (Unpublished)
 - Overall recommendations from this review were that more systematic evaluations including more qualitative components are needed to expand the evidence base.
- Coffey, M., Cooper, A.M., Brown, T.M., Cook, P.A., and Clarke-Cornwell, A.M., (2014) <u>Vascular Health Checks in Salford: An exploration using FARSITE data</u>, Project Report, University of Salford.
 - This was commissioned to interrogate and better understand the data and provide a clearer understanding of patterns of uptake.

A facilitator to research in this area has been two students' projects, one that has been completed and one which is ongoing. Both of these projects have had an exploratory focus, working with the HIS team on the bus and interviewing those who have had a HC. The evidence generated by Student Report 1 indicates high participant satisfaction with the HCs that were performed by the HIS, however the student has made some recommendations for changes in respect of the need for consistency in delivery (height – shoes on or off), and a need to improve referrals and signposting.

During the two-year period a study was conducted in collaboration with PHE Behavioural insights team, which was supported through a local video produced around HCs in Salford. Whilst no direct impact was found in respect of the video, the opportunity to work with PHE was considered a strength of this study.

A barrier to the research work was the unsuccessful outcomes of the three research bids to: the NIHR Programme Development scheme, the RfPB scheme and NHSA GM Connected Health cities. This impacted the planned programme of research and limited the ability to

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carry out a larger scale project, which included evaluation components, which, as highlighted above, were not built into the key drivers of the HC programme. Each of the bids aimed to help improve the understanding of the process from patients and staff perspective through conducting in-depth qualitative research. A further barrier was around the rejection of the paper submitted to the BMJ, although there is consideration being given to revising this for a different journal, to disseminate these findings.

Logistical challenges were also identified in respect of the Haelo Planned Experimentation study, e.g. participants not having mobile phones, which precluded this type of communication. In addition, smaller numbers than anticipated were identified to take part in the study. Within the PHE Behavioural insights study a challenge was suggested around the style of the video, which had no call to action to tell people to book an appointment at the end of the video. Overall it was concluded "*There does not appear to be any impact of the intervention on the uptake of health checks in practices with The Life Channel*". Furthermore only one person said they heard about HC on TV screen in a survey, 83.7% said they heard about them by letter. Further learning through this project was the importance of conducting an evaluation and that just raising someone's awareness does not reflect intention and subsequent behaviour.

Although the Afinion project proved to be costly, it did aid the identification of patients with a range of health conditions, providing instant feedback using 'point of care' testing equipment. Whilst this raised challenges around capacity for treatment and management, feedback from the staff was on the whole positive.

With regards to both student projects challenges were reported in terms of delivery, expectations and ease of them being conducted. As with other areas a challenge has been around the engagement with the research activity by members of the public or awareness of the projects by the public (e.g. in relation to the behavioural insights study).

Haelo's 'planned experimentation study' allowed Haelo staff to work with a practice for almost two months, enabling improvement staff to work alongside practice staff – although further research/resources were needed to identify the most effective ways of communicating with eligible participants.

Through the research a number of other collaborations have occurred both through the forming of an academic research group and through the work with PHE, which have added strength to the projects. A further win was the ability to disseminate the research findings at a number of events both locally, nationally and internationally thus raising the profile of the

work that has been done in Salford and enabling the sharing of best practices to a wider audience.

3.5.4 Recommendations:

- There is a need to continue to build in and improve the evaluation of projects to allow impact and outcomes to be demonstrated.
- Although some qualitative work has been done this element would benefit from being strengthened.
- Maintain a core research group who is able to support and look at research projects related to HC and the wider agenda they feed into.
- Look at future small projects that students could conduct around HCs.
- Continue to seek funding to carry out a thorough evaluation of the HC journey in Salford
- Continue to engage with local, national and international researchers in this area to share and develop good practice to enhance HC delivery

3.6 Theme 4: Management/governance (including training, media campaigns, Health Check Assessment Pilot etc.)

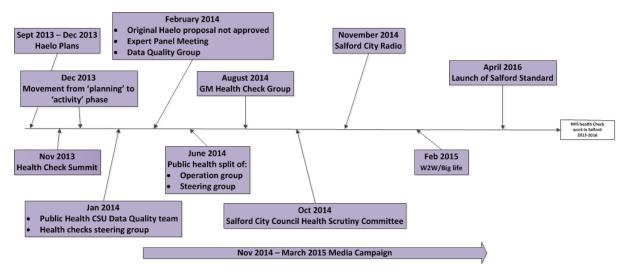


Figure 3-6 Timeline of management and governance events

3.6.1 What was done

This theme highlights the broad range of activity that was carried out to manage and improve the HC programme in Salford, including: setting up governance structures, partnership working, training, data management, media campaigns, undertaking pilot etc.

- Movement from the 'planning' to the 'activity' phase of Health Checks, through a range of activities:
 - Dedicated HC roles and staff were identified at SCC, who liaised with Haelo to improve HC uptake.
 - Haelo were commissioned by SCC to deliver an improvement programme to increase the uptake of the NHS Health Checks in Salford following the Assistant Mayor's briefing for Health and Wellbeing (August 2014), prepared by Siobhan Farmer, of SCC and Christine Camacho of Haelo. The agreed governance structure for HCs included a Steering Group with direct accountability to the JHWS Subgroup 3, and an Operational Group to create a forum for those providing HCs in Salford:

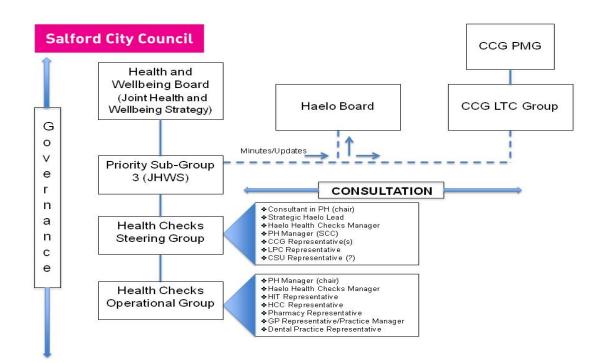


Figure 3-7 HCs Governance structure

- a 'Health Checks Summit' meeting took place, where the state of play of health checks in Salford was presented to senior staff, including the SCC members, the GP lead for DVD, the Health Improvement Service, Public Health and the SHCC. Discussions included HC results, non-LES GP work; GP level data; the health bus data.
- Expert panel meeting A convention of local stakeholders came together to discuss aspects of the programme at the start of the collaborative work early in 2014. Initially an outline of the data was presented around the eligible population and background to health check data. This was followed by outlining opportunities for improvement, a discussion around panel ideas for priorities and how they could work and an outline of the proposed model of improvement. As part of this a presentation was delivered which provided a summary of the evidence-based review conducted by UoS and a document from Haelo around data process review and the production of a data process map.
- Monitoring NHS Health Checks BMJ Informatica took over from the MIQUEST query - In April 2015 BMJi, which was funded by the CCG, was put in place to monitor the Long Term Conditions contract as well as HCs. It was found that the previous MIQUEST query system was unsatisfactory in supporting practices and also in ensuring correct data was input.

- Salford City Council Health Scrutiny Committee A presentation was made to the scrutiny committee outlining: the need for HCs; health status in Salford; the council's responsibility; the potential impact; the current model in Salford (mixed delivery); and plans for on-going delivery. This allowed the current progress to be outlined and highlight the need for a local campaign in the absence of a national campaign.
- Salford City Radio As part of a one-hour local radio show (Salford City Radio) EK and BA answered questions to provide details about HCs, what will happen, who can have them and what the outcomes can mean.
- Media Campaign -The media campaign took place during Q4 of 2015. As part of this a range of campaigns were used (some aspects incurred costs, whilst others did not), including:
 - A local video featuring a local man (Ryan) who had a HC (Q4, 2015), and three local volunteers.
 - Haelo developed a range of posters for the dental practice pilot, pharmacy pilot and for a general campaign.
 - Radio advert across Greater Manchester, played on on Key 103. The advert featured 'Ryan's words' over 2 weeks in March (funded by GM PHE).
 - Articles in 'Life in Salford' (November 2014 & February 2015) and media coverage (Salford Advertiser Wrap, adverts and a series of press releases)
 - o Outdoor and bus advertising
 - o Leaflets and posters
 - City West postcard
 - Webpage use Council's Facebook page & Council's Twitter account
 - o Face-to-face discussions, bingo halls, shopping centres and supermarkets
 - o Internal communications for SCC & partner organisations
 - Meet with representatives from BME communities to discuss opportunities to promote NHS Health Checks to people in those communities.
- Haelo Plans these incorporated the driver diagrams (as discussed above, see section 1.3.4). These diagrams were based on the Institute of Health Improvement 'Collaborative Model for Achieving Breakthrough Improvement'. The primary aim of Haelo has been to engage a cohort of primary care practices in an improvement

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collaborative to work together to generate knowledge on how to improve system performance in respect of HCs, and to build reliable systems for screening and management, which will impact a range of health outcomes.

 Health Check Self-Assessment Framework – This was a pilot of a tool developed by PHE to enable self-assessment to progress local work to improve the quality and delivery of each NHS HC programme. It provides clear, simple self-assessment processes to reflect on and can be used to supplement any existing monitoring and improvement initiatives. The tool was scored, indicating 'strong evidence', 'some evidence', or 'no evidence'

3.6.2 Impact

During the period when the programme was moving more from '**planning**' to 'activity' the **HIS** reported an increase in HCs on the bus between quarter 2 and quarter 3.

The production of a dashboard has come out of the data document presented at the **Expert Panel meeting, which** provided key HC data for key stakeholders in Salford.

Overall there are now 47 practices that are using the new **BMJi** system with two not signed up to the new contract. It was also found that the uptake rate and figures around invites and HCs improve greatly between 2013/14 and 2014/15 using the new system. As such there is better data which is possible to be displayed as needed on the council financial portal.

From the **media campaign**, action within the Council through website and intranet caused highest impact, but it is not clear whether this was related to an increase in HCs.

The **Health Check Self-Assessment Framework** highlighted that the areas where there appears to be most confidence were in respect of: vision and leadership; planning and commissioning; partnerships; service delivery and communication. Following this pilot, the NHS rolled out the self-assessment framework nationally, renamed as the StARS project.

3.6.3 Conclusion

There were a wide range of activities carried out to facilitate the management/governance of the HC process within Salford, which involved a considerable amount of collaboration and partnership working, for example Haelo and SCC, senior level meetings, the development of media campaigns, and training, particularly to support the changes from the MIQUEST query to BMJi. There was also the development of media campaigns, continual review/updating of Haelo plans/key drivers, and the commissioning of research by Haelo to provide evidence for the most effective ways of increase HC uptake.

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The key recurring learning point in respect of governance/management of the HC programme was the importance of recording and monitoring data accurately. In terms of media campaigns, while the whole campaign caused a spike in hits; this level of hits was not sustained. Learning points were incorporated on an on-going basis into Haelo project plans leading to regular updates driver models/diagrams throughout.

A key facilitator to the management/governance of the HC process was the development of a clear governance process including the Haelo Board to the Haelo plans. The marketing campaigns (including the use of the bus ticket) was also seen as facilitative, some of which have been supported by SCCs Marketing Department and through Haelo's communication function. In addition, it has been possible to produce some of the campaigns at no-cost, or at a very low cost. The evaluation of the Way2Wellbeing website was considered useful for monitoring the number of hits it received, although establishing the impact of this was more problematic. Other facilitators have been identified as the training provided, particularly BMJi training, which had the support of two trainers, the provision of follow-up support, including Webex training. The new BMJi system is able to identify more easily where payments need to be made, e.g. for invites, and for the HC itself. In addition, completing the NHS Self-Assessment Framework has been seen as a facilitator to identifying areas of success, or those that required further work.

Whilst there were a number of key barriers identified when the Health Check Self-Assessment Framework was completed (discussed in the appendices), in terms of the management/governance of the HC process key barriers were found to be:

- Training provided is not always audited, e.g. the HC training provided by the HIS,
- There is a lack of monitoring/understanding of individual outcomes from lifestyle referral programmes
- The quality of data sent to GPs from non-traditional HCs (community providers) is not always consistent
- There is a lack of ability to identify individuals recalled in five years, if they remain eligible
- A lack of sufficiently detailed information is collected from the programme's target group to inform programme design and delivery
- More formal evaluation of all aspects of the HC programme is needed, which should be incorporated into the driver diagrams. In this regard it is recommended that the

driver diagrams should also have more 'softer' outcome measures, e.g. patient experiences, and patient input into different aspects of the programme

• The technology used to support delivery.

Key challenges to the management/governance of the programme were having 'real time' information, reliable reporting data, data extraction and monitoring systems (particularly MIQUEST query), and the length of time taken to upload the new system (BMJi). In addition calculating, identifying and contacting the eligible population (having the correct data and systems to do so), together with structural changes to public health, delays in getting pilot studies operational, sorting out payments to practices due to the systems and process around this, and non-engagement of practices were identified as challenges.

The self-assessment framework identified challenges in respect of: vision and leadership with offers of HCs and uptake lower than the recommended levels. Challenges were also identified in respect of monitoring quality standards for provider contracts; data monitoring issues in relation to the MIQUEST query, lack of completeness/accuracy of read codes during the HC process, and responding to and understanding/recognising the needs of diverse communities.

The self-assessment framework identified a large number of 'wins' related to the governance and management of the project, presented in a list below:

- the increase in HCs following new members of the SCC team,
- the development of the Haelo expert panel, steering group and operational group,
- the introduction of BMJi, which encouraged some practices to re-engage,
- 'Ryan's personal story' used in the media campaigns,

Areas of good practice identified through the NHS Self-Assessment Framework included:

- vision and leadership (particularly the links/communications/support between senior staff, including clinical leadership champions, the Health & Wellbeing Board, and SCC),
- planning & leadership (relating to action plans, driver diagrams, dedicated staff, budgets and auditing systems),
- partnerships and communication with partners (i.e. third sector, HIS, GP practices, GP Neighbourhood meetings, the CCG, CVD Lead, Public Health & Haelo Improvement Science).

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- Service delivery (in terms of having systems in place for inviting people and providing HCs opportunistically), competence training & delivery (providing materials/information to providers on HC delivery, and collecting data on provider & patient experience), data monitoring (HCs are monitored and reported quarterly, and displayed nationally on the website) including the use of FARSITE to analyse health check data (by the UoS).
- Communication was also highlighted as a win, with a range of communication/marketing plans/strategies reviewed at operational and steering group levels, and engaging a wide range of stakeholders, include PHE behavioural insights team.
- There were also some wins in respect of programme development and evaluation, particularly through the use of interviews to capture participant experiences, and through using Haelo to monitor issues/challenges arising.

Assessing the governance/management processes of the collaborative is challenging, however, key areas of impact identified in the documents that were reviewed highlighted; a clear HC governance structure; the production of a dashboard that came directly out of an Expert Panel Meeting; 47 practices who are now using the BMJi monitoring system; there has been an increase in HC uptake (see Figure 3-7) over the period; and the self-assessment framework has shown confidence in respect of vision and leadership, planning and commissioning, partnerships, service delivery and communication. In addition, the pilot self-assessment framework has been rolled out nationally, under the name 'StARS'.

Recommendations:

- To continue to support practices with the use of BMJi and use this system to help with data improvements. Also to look at how BMJi can be used for other situations (e.g. to support the health bus through a community version and in relation to onward referrals)
- Capture the impact from different forms of health communication in a useable way
- Try to engage more organisations to engage with different modes of communication such as radio to help promote messages and campaigns.
- Develop systems to improve the areas which the Health Check Assessment Framework highlighted lower levels of confidence, namely: risk assessment; auditing the competence of all providers; information governance and data, aspects of data

return and monitoring (others are better); programme development and evaluation and equity and health inequality

2 Summary, recommendations and conclusions

The aim of this review was to explore the outcomes of the 2014-2016 collaboration between Salford City Council, Haelo and other Salford Partners with respect to improving the uptake of NHS HCs. The review has shown that there have been a huge variety of different activities under this collaboration, separated out into 4 key activity-themes, namely:

- Non-traditional settings/ partnerships Community Engagement
- Practice Engagement/GPs
- Research
- Management/governance of the Health Check processes

The delivery of these activities involved a considerable number of partners, including those from traditional medical settings and community focused organisations, the Health Improvement Service, and SHCC. Partnership working has been previously identified as having a key role in tackling 'wicked issues' in local communities (Hunter, 2009; Glasby, Dickenson & Miller, 2011). The co-ordination of activities began in earnest in 2014 when the collaborative was formed, a clear governance structure was established, and a HC budget agreed with the Assistant Mayor. This led to the appointment of designated staff, both within SCC and in Haelo with responsibility for improving uptake of HCs across Salford.

Part of Haelo's role involved working with individual practices to implement 'Plan, Do, Study, Act' methods in order to improve their uptake. To facilitate this, they organised a number of engagement activities, which allowed the sharing of information and communication of best practice. Haelo also worked across Salford to help facilitate increasing the uptake of HCs, supporting existing service deliverers, and engaging new ones, including GP practices who were not signed up to deliver HCs. This was a challenging aspect of the programme, involving the need for a diverse range of activities, such as face-to-face meetings, and persistence to get some of the more reluctant practices/partners on board.

Throughout the collaboration period one of the ongoing challenges was recognised as accurately being able to capture necessary data, as illustrated through the FARSITE report, and required by PHE. Specifically, it has been highlighted that there are challenges for practice staff using Read codes consistently and capturing data in non-traditional settings. Of note, referral data to onward services is virtually absent, making it impossible to track long-term outcomes of the HC, e.g. behaviour change. In recognition of the challenges with data collection BMJi was introduced (funded by the CCG) to replace the MIQUEST query.

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This new system, which practice staff have been trained and supported on is anticipated to lead to improved data quality moving forward.

There have been some challenges delivering HCs in non-traditional settings, e.g. ineligibility of patients due to their age, or postcode. However, there have also been some wins, e.g. the Jewish Orthodox Community, providing flexible ways of getting a HC, upskilling a number of providers, and potentially accessing those people who would not have attended their GP. Although a more thorough evaluation of these activities is needed to definitively ascertain the potential for HC delivery in this way, in particular to identify which facets of the process are key facilitators or barriers.

A number of media campaigns were undertaken to improve public knowledge about HCs, and encourage people to have one. These were seen as facilitative and included radio broadcasts, a video played in GP practices, articles in 'Life in Salford', and advertisements in local newspapers. In addition, a website that could be used by service delivery staff to signpost patients to a range of services was developed. Evaluating the impact of these campaigns is difficult. Hit rates, where measured, did indicate spikes in hits – however, there did not appear to be a corresponding surge in uptake levels.

Throughout the period a number of research activities were undertaken to investigate aspects of the HC journey, e.g. the invitation process. Efforts were also made to secure additional funding to enable more thorough evaluation and explore processes around the HC, e.g. training and experiences of patients. This resulted in a number of collaborations, including those between PHE Behavioural Insights, the University of Manchester, Manchester Metropolitan University, Huddersfield University, Haelo, The University of Salford, and Salford City Council. Disappointingly additional funding was not forthcoming for the larger research projects, limiting the ability to address these questions, however some of the research questions were answered through smaller projects, include those undertaken by two students.

Throughout the collaborative period there were a number of iterations of the drivers for the programme. These were informed primarily by those delivering the service through learning events, operational and steering group meetings. Patients, or those for whom the HC is intended, have had limited involvement in the collaborative learning processes. One of the challenges identified is the focus on quantitative outcomes (i.e. the numbers of people taking up HCs) with less of a focus on evaluating the processes and determining the effectiveness and acceptability of the range of activities undertaken. In this regard, the key barriers and

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facilitators to engaging people in a HC remain largely unknown, although the two student projects are anticipated to shed some light on this.

Overall, the key aim of the collaborative, i.e. to increase uptake rates to 75% was not consistently met, which mirrors national trends; see for example the recent review by Chang et al (2016). Lack of uptake may be reflective of difficulties in accurately measuring uptake in relation to invitations, for example if only opportunistic screening occurs uptake will appear high. This review has shown the breadth of work undertaken by the collaborative, facilitated by Haelo, to raise the profile of HCs in Salford, and the wealth of partnerships currently in existence, which should facilitate long-term sustainability. The work around HCs and the learning from this has provided the foundations for translating these processes into the 'Long Term Conditions' agenda. However, there is an imperative to integrate evaluation and participatory approaches more fully into future programmes i.e. involving *all* key stakeholders, including those who are the target of the intervention, in designing and developing future strategies.

Recommendations:

Under each theme specific recommendations have been made, the following recommendations are designed to provide key overall messages identified from the review.

- Good practice guidance states that evaluation needs to be built into future programmes more consistently from the outset to effectively capture information (both quantitative and qualitative) about why some initiatives are more or less successful than others. In this regard, there is potential for some of the initiatives identified in this review to be scaled up across other areas and their impact evaluated.
- 2. All key stakeholders, including those that are the intervention target, should be involved in the design, development and evaluation of future initiatives.
- 3. Efforts should be made to manage and maintain the range of partnerships that have been developed to help facilitate the continued work around long term conditions.
- 4. The 'Model for Improvement' (Langley et al, 2009) incorporating PDSA cycles should be incorporated into practice in a way that helps to test and reflect on new initiatives, and inform process evaluation.
- 5. Face-to-face contact with the range of providers should be maintained, to enable ongoing support and the identification of training needs.

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- 6. Learning events were shown to be beneficial, although it was difficult for staff to be released for a whole day. It is recommended that these been continued, but that potentially they should be shorter. It is also recommended that participants include those who are the target of the intervention at some events.
- 7. It is important that the data is used effectively to track onward referral, so that the impact of this can be ascertained.
- 8. Ensure that the learning from previous initiatives, e.g. Jewish Orthodox Community project is captured and used to inform future initiatives.
- 9. Explore methods of improving data quality and transfer from HCs done in community settings.
- 10. Explore alternative ways for GPs to provide health checks, which could be facilitated through the new Salford Standard.
- 11. Continue to use innovative mixed-method delivery of HCs, with built in evaluation.

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