University of Salford MANCHESTER

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

Part C - Technical Report

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July, 2016

Overview – Technical Document

This technical document contains additional information to support the Research Report (part b) report 'Learning from Salford's NHS Health Check Improvement Journey: A document Review'.

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.

Data was extracted from the documents that were provided to UoS by Haelo and Salford City Council using a data extraction form (pg 9). The form identified, key features of the range of programmes/interventions designed to increase the uptake of HCs were extracted, under the following headings:

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 roll-out)
- Recommendations

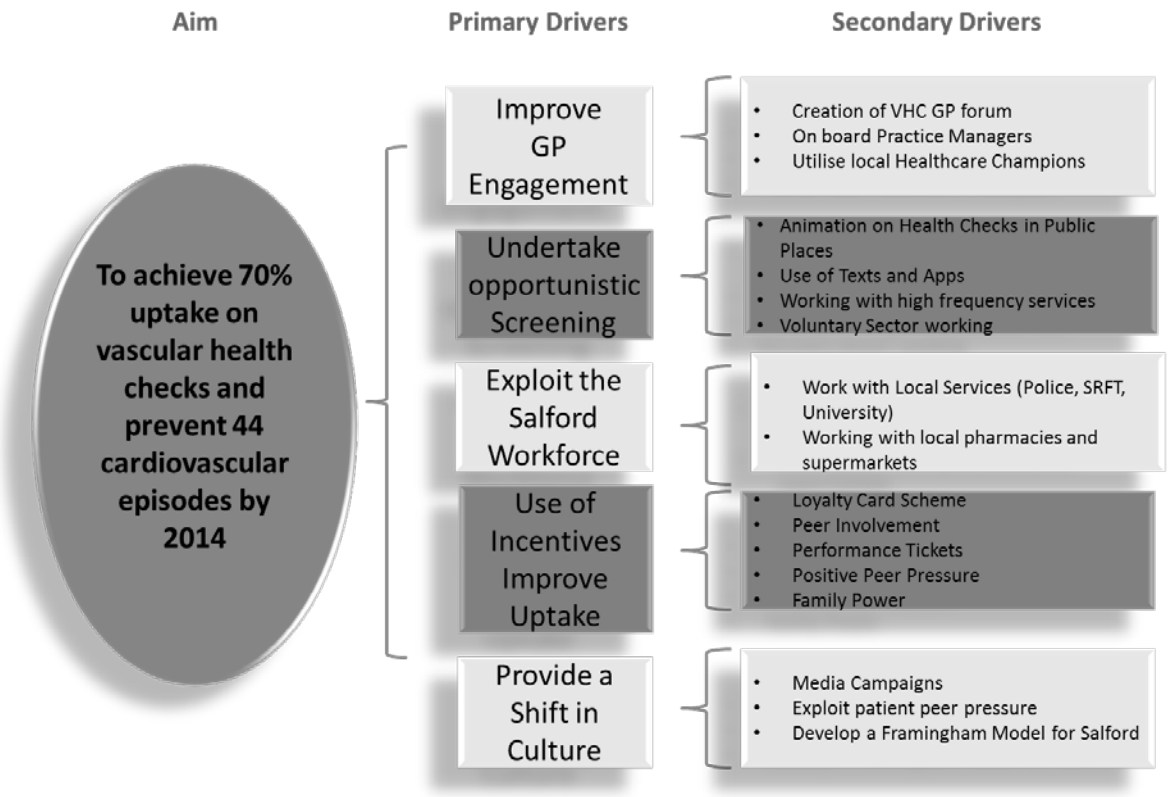
This technical document contains the data extraction forms, grouped into the following key areas: Non-traditional settings/ partnerships - Community Engagement; Practice Engagement/GPs; Research; and Management/governance of the Health Check Process. It also contains additional documents relating to the collaborative, as detailed in the contents page that follows.

Contents

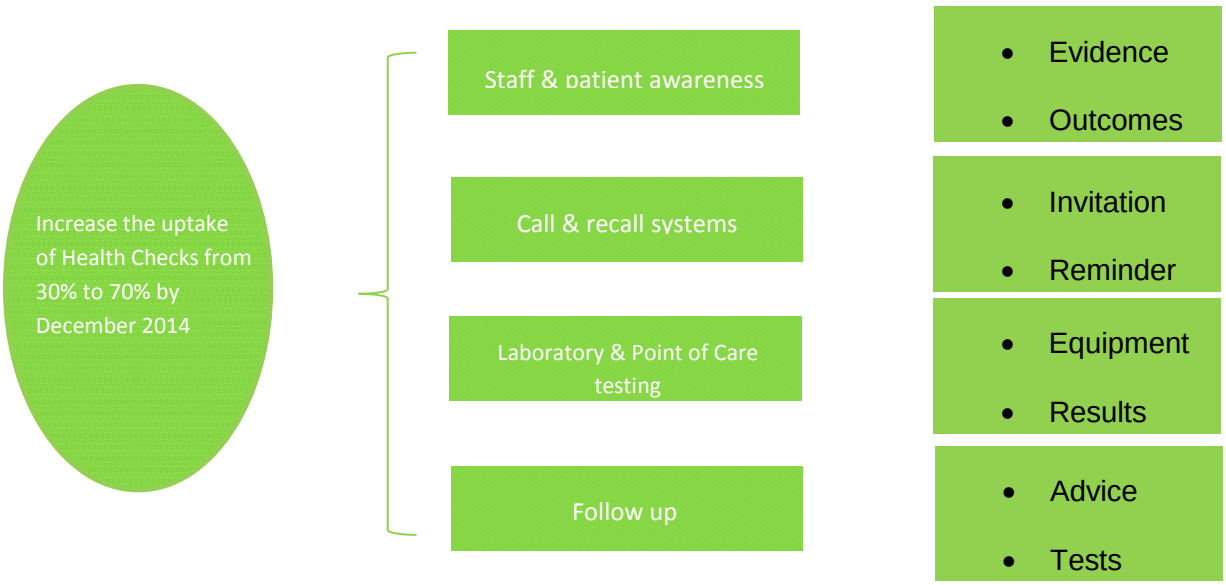
Collation of NHS Health Checks Driver diagrams 2013-2015

Throughout the collaboration period from 2013-15 the key drivers for NHS HC were identified, refined, and captured in a number of diagrammatic iterations beginning in October, 2013, discussed in more detail in Part B of the report (Section 1.5.1)

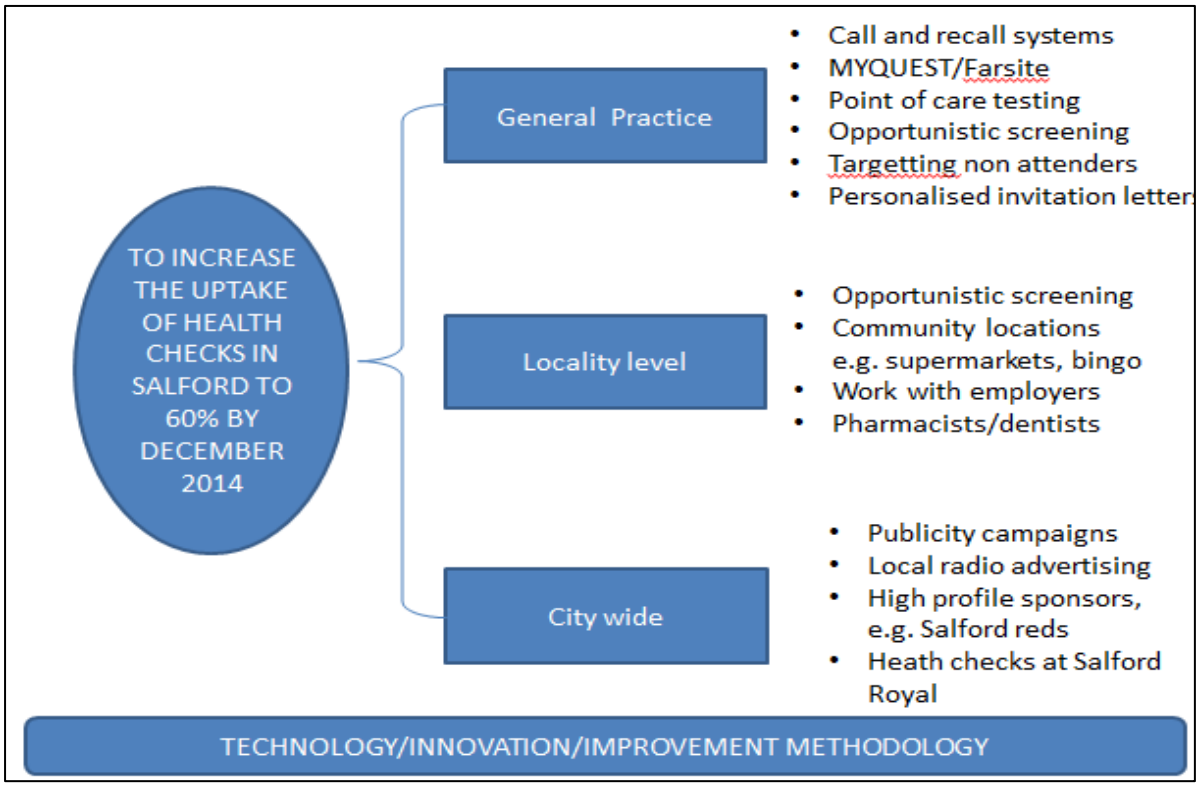
October 2013



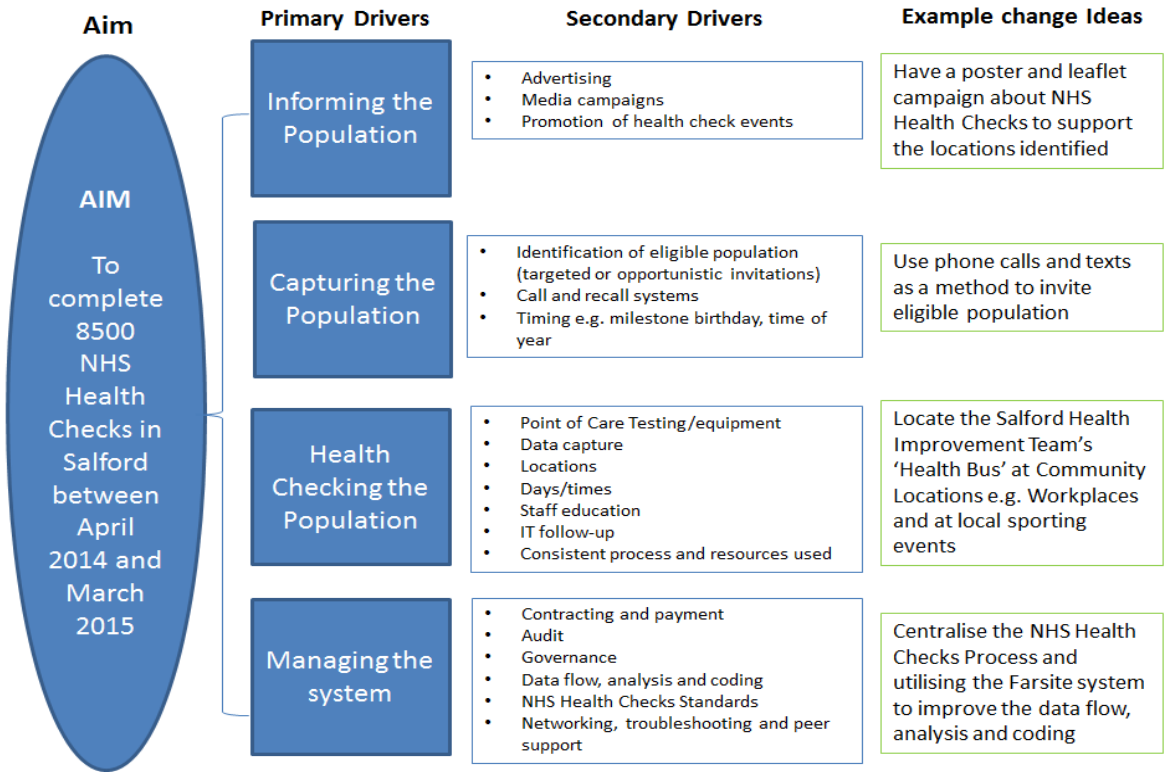
December 2013



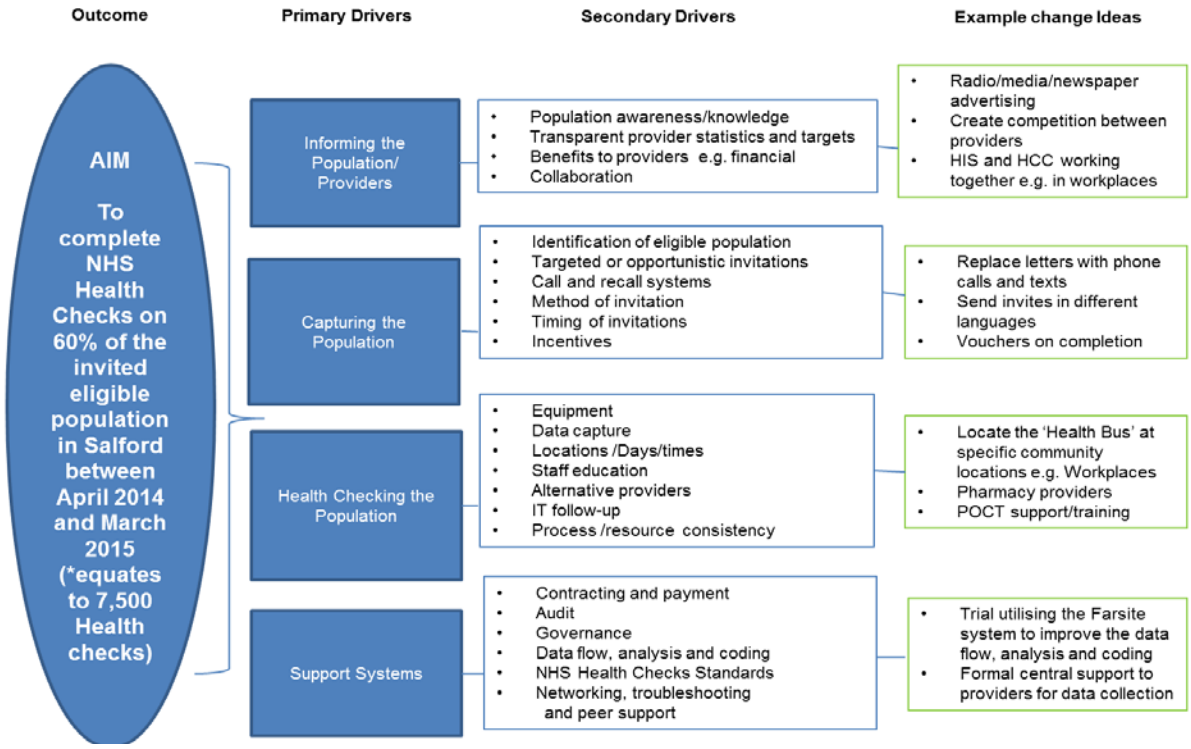
April 2014



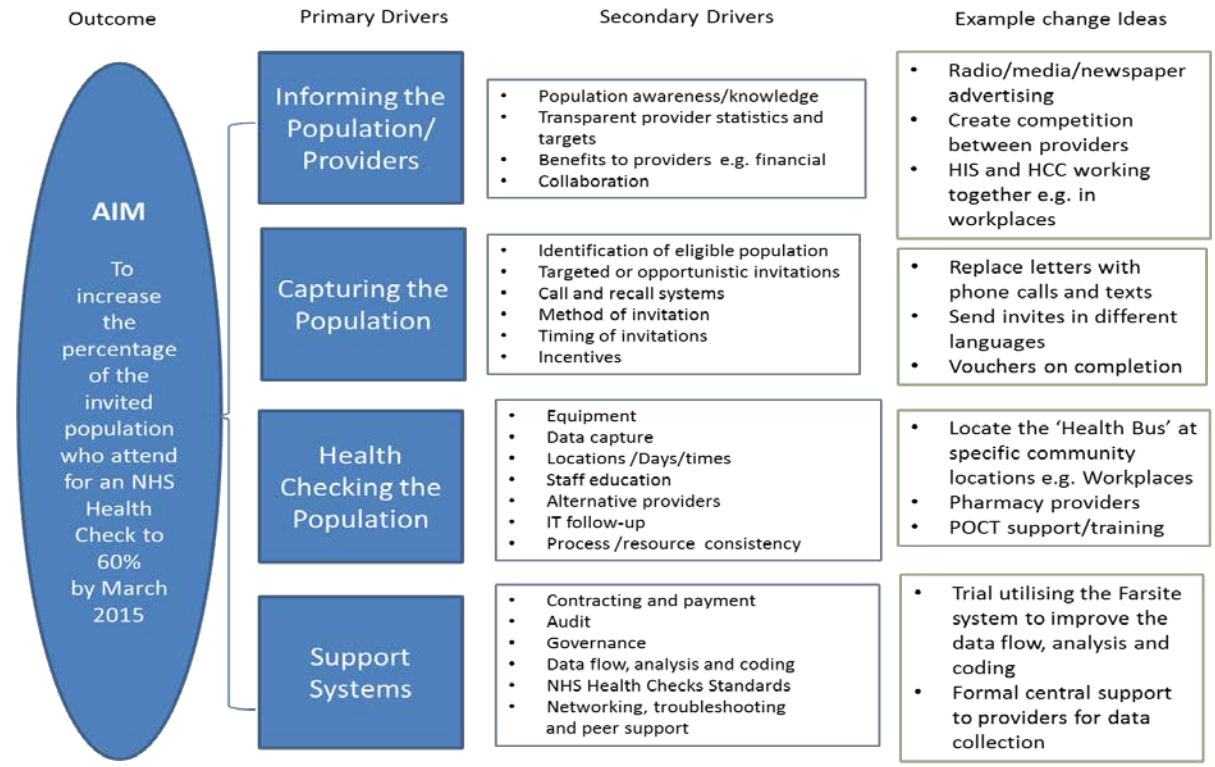
May 2014 – Following initial Learning session



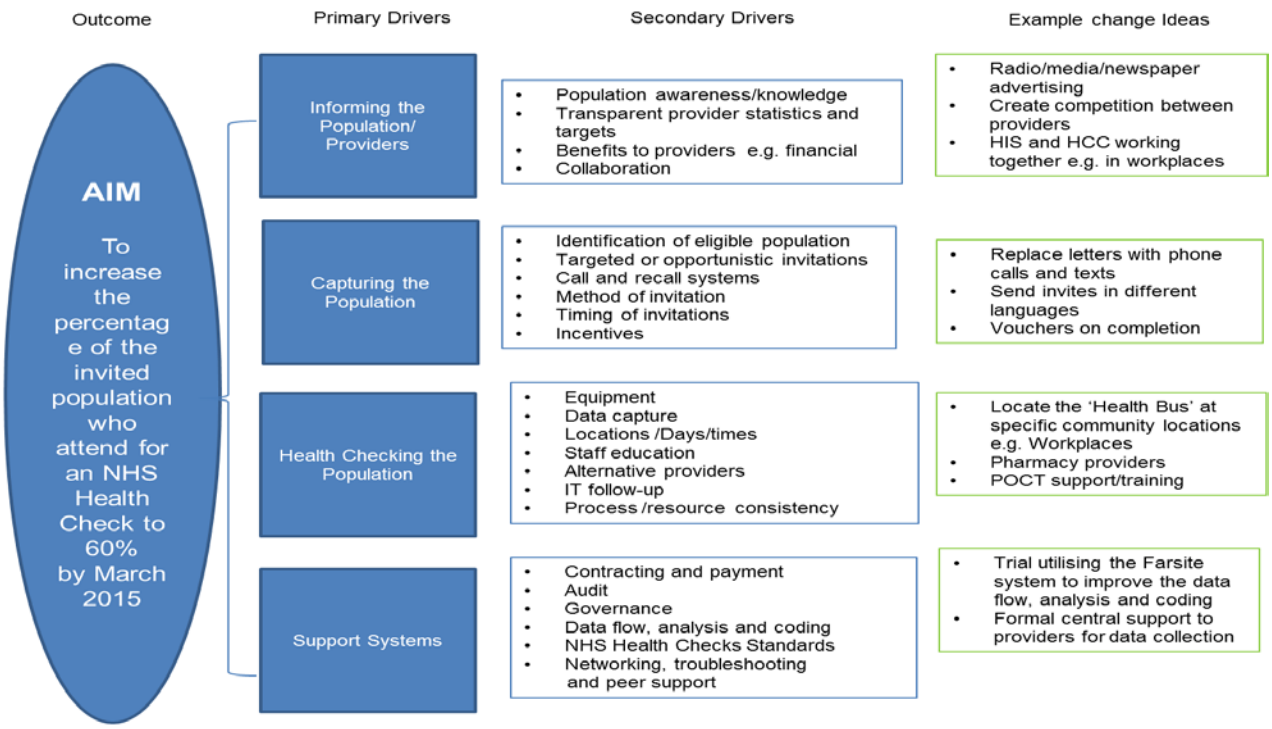
July 2014 - Learning session 1



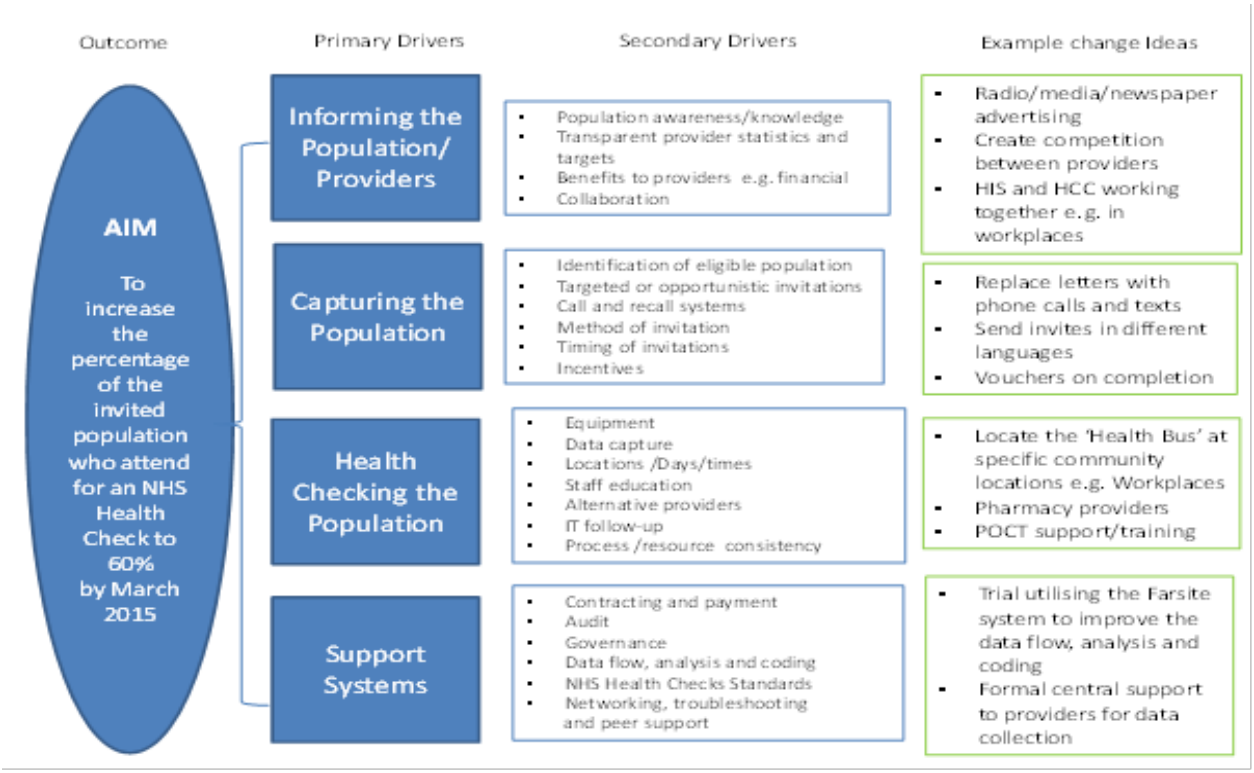
August 2014



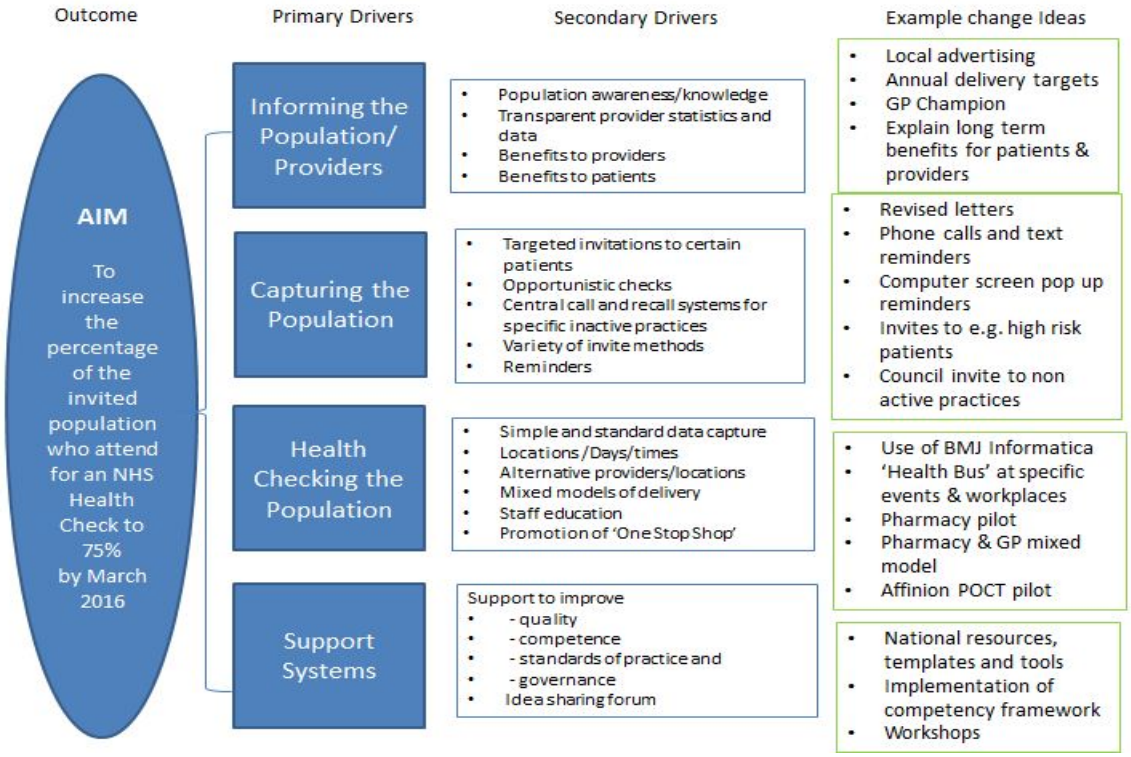
October 2014



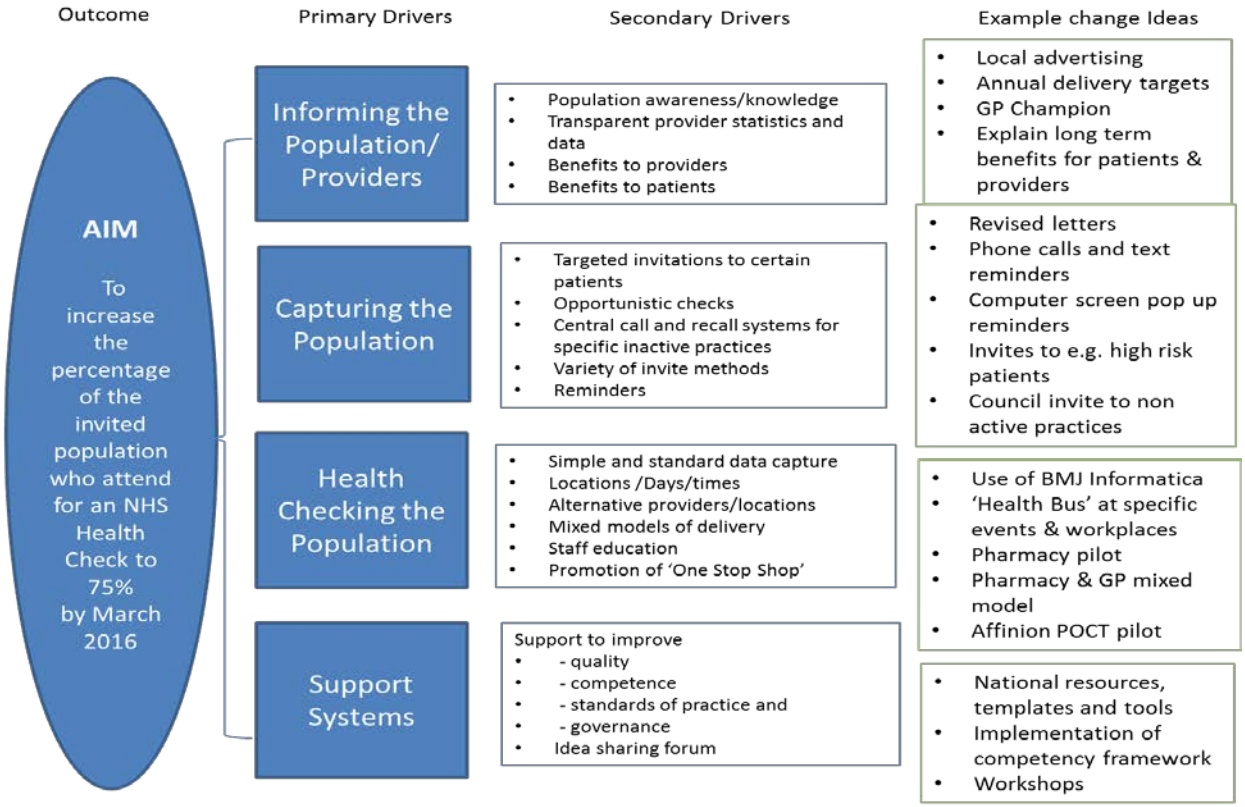
March 2015



May 2015



December 2015



Example of Data Extraction Sheet

Basic details about the project	**Project title**	
	Project Phase	
	Activity category	
	Lead organisation	
	Main Contact	
	Duration and date (months/year)	
	Setting	
	Stakeholder focus	
	Method of reporting/dissemination	
	Description of the project	
Outcome extraction	**Barriers** (stopped project)	
	Challenges (overcame within the project)	
	Facilitators	
	Learning	
	Wins/+ve	
Impact	**Impact** (uptake or learning)	
	Recommendations	
	Potential for standardisation for wider roll-out	
Other	**Notes**	
	Additional context	

Extended details Theme 1: Non-traditional settings/ partnerships - Community Engagement

Learning

The **Pharmacy pilot** was positive but opportunistic and hard to keep numbers up. However, it was successful in highlighting how HCs could be delivered in another setting and provided lessons as to how this type of approach could be scaled up.

Key learning from the **Dental practice** pilot were that the skills of dental practice staff were extended by being part of the pilot (e.g. delivery of preventative messages), as well as that it fostered greater holistic thinking. The pilot also showed that dental nurses were able to identify the eligible population and some hard to reach groups (e.g. men), again highlighting how HCs can be delivered in different settings.

The **Alere event** was useful to consolidate knowledge around how HCs can operate in different settings and some of the pros/cons of these. The event was also useful in highlighting the links between dental disease and CVD, and enabled Haelo and SCC staff to engage with dental staff and encourage them to attend Haelo Learning Sessions. During the event a study was presented, which highlighted to participants that one of the reasons that people report not attending their GPs for a HC was because they didn't want to waste the GP's time when they were not unwell.

Overall the learning from the **Health Improvement Service (HIS)** was that a mixed approach to offering health checks was useful, that HCs are useful to identify smokers who want to quit, and that December is a slow month for HCs. Looking at the different facets of the HIS:

- The **Health Bus** provides a 'points of care' cholesterol test, which gives an instant result to the client. This is felt to be more effective in encouraging behaviour change, compared to clients having to wait for a return visit. It also promoted other aspects of health, e.g. smoking cessation.
- Workplace Health Checks:
    - There was the potential need for higher-level management support to encourage more people to attend.
    - It is useful to have an alternative way of including 'ineligible' people in workplace settings and works well if mini-MOTs can be provided

- The SRFT health checks might have been more successful if they were delivered by internal teams
- A small survey of SRFT attendees (n=41) highlighted that the key influencers to taking part were: wanting to know more about their current health status; having the check available in work time; and ease of access. The majority of people reported that they had found out about the health checks through electronic newsletters.
- In respect of SRFT the cost of the programme was deemed to have outweighed the benefits.
- There was very limited uptake for the **SCC** heath checks, with similar learning points, as outlined in the other workplace health checks

City West – a small survey indicated that the preferred invite method was a letter, and 100% of the people surveyed (n=31) would recommend the HC to friends and family

In respect of the **NDPP & HCs** developing a 'triage system' for all people either having a NHS HC or a DRA this was found to be an efficient use of staff. Communication between staff involved in the 2 programmes has subsequently become 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.

Learning from the **Jewish Orthodox Community Project** included:

- The model of community-led activity involved a strong focus on audience insight, audience testing, and a move towards a model where local people were in charge of the process of generating solutions.
- The use of local volunteers allowed the project to link into pre-existing skills and knowledge in the community, bringing with it the social capital and community networks that were already there. This opened up communication between community members and professionals. Within the context of the Orthodox Jewish community, this meant a significant resource and 'passport' into their networks.
- The key critical success factors underpinning this approach included involving local people to understand local needs, developing engagement approaches, using PDSA cycles and focusing efforts on creating a long-term impact on cardiovascular health.

- Key features involved:
    - Developing shared ownership and a move away from service instigated change
    - A move from service articulation of health and wellbeing and towards community articulation
    - Supporting communities to understand their needs and how to develop solutions
    - Developing the skills, confidence and environment to enable communities to try out ideas
    - An acknowledgement of the importance of local experience and local knowledge
    - Placing a value on tacit knowledge (as well as explicit knowledge) and investing in human capital and lateral communication to support it

Key facilitators

In respect of the **Pharmacy Pilot,** posters depicting people from Salford were reported to make the campaign locally relevant. In addition, Alere provided machines for some HCs for free and PH funded other equipment that was needed. Training was provided by HIS and Alere. The **Dental pilot** was funded by Central Manchester Public Health, and as one of the practice locations was in Salford, the Salford HC team engaged with the staff at the local dental practice to offer support/guidance. Staff were reportedly very enthusiastic about this training and identified a potentially large number of eligible patients (thousands) – although, as can be seen from above, despite this enthusiasm, numbers of HCs were low.

Considering the **Health Improvement Service (HIS)** ipad minis were found to be useful to the HIS team to provided earlier access to QRISK results; the conversion rate for letters was low (e.g. 700 sent, 68 returned). Looking at the individual facets of the HIS**:**

The **Health Bus** provided:

- Easy access for clients, and could be used for opportunistic HCs in areas of high footfall, such as near large supermarkets.
- Even when people were ‘ineligible’ mini MOTs could be undertaken, and people could be advised to see their GPs if anything adverse was detected.

- Providing the training internally was useful, given the high cost of external training providers.
- The health bus was useful for advertising, as it went to areas of high footfall such as supermarkets, and bore the slogan 'Get healthier and happier'.

Workplace Health Checks key facilitators were identified in SRFT as:

- Using different means of advertising for staff, including within a payslip, SIREN, and posters.
- The HCs could be carried out during work time and close to where staff worked, meaning that staff didn't need to take time off from their roles
- There was support for the programme from the relevant managers, and collaboration and co-operation between SCC staff, HIS, SRFT managers, Occupational Health (who advertised them alongside their flu-jab clinics) and Haelo.

SCC Workplace Health Checks key facilitators were identified as:

- Removing barriers to people attending during the day
- It was open to residents who didn't live in Salford, who had a mini-MOT, and from October 2015 the diabetes risk assessment
- It was a useful way of promoting health and wellbeing in the workplace
- Communication could be done via internal communication systems
- Appointments were available all day on Tuesdays
- To capture part-time and manual staff the initiative began in an ad-hoc way, using the health bus to go to the Civic Centre, and Turnpike House

A range of facilitators were reported by the **Healthy Community Collaborative** as follows:

- Using a bus ticket to encourage people to go onto the health bus
- The range of places and shared events (e.g. Tesco (Pendleton Precinct), Morrisons (Walkden, Eccles Gateway) that that the health bus enabled engagement
- Crocheting hearts attached to balloons in the Weaste and Seedley areas to publicise HCs

- Having different focused teams, namely a ‘men’s team’; a young person’s team (attending for example teenage markets), and a Jewish team that could target different sectors of the community
- Work in Swinton supporting the ‘know your numbers’ blood pressure campaign
- Working within medical practices, e.g. Ordsall, and a local Practice Patient Group to identify joint work with patients, and how to increase HC uptake
- Developing a range of innovative products, e.g. ‘pharmacy prescription pad’ and the ‘NHS Health Check car air-freshener’
- Linking teams, e.g. Orthodox Jewish Team member with the SCC communications team
- Setting up collaborative meetings, e.g. re. the Pharmacy pilot
- Producing case studies for ‘Life in Salford’
- Producing a short HC video, and the film ‘Chant’ which the HCC youth action group produced with UoS students
- Developing plans through the learning events
- Training a cohort of community team members in ‘brief advice on smoking cessation’
- Holding a Jewish ladies health and wellbeing event
- Having a HCC celebration event (over 100 attendees)
- Delivering events, e.g. City West, ‘Dare to Wear Red Event’ (Kemball Court), adapted version of ‘Bowel Bingo’ – CVD Bingo, etc.
- Attending events – e.g. Dementia Fun Day, Eccles Pop-up Market, Clifton Green Summer Festival, Community Networking Health events (Winton/Barton/Eccles)
- Performing in front of Lady Mayor and Hazel Blears MP
- Recruiting 3 additional workers and securing new premises at Quays Reach as the service transitions into the Long Term Conditions prevention programme
- Working with Unique Improvements to engage the BME community
- Collaborating with Salford Health Matters to look at joint engagement of patient groups in LTC awareness raising and behaviour change interventions and to explore the possibility of shared events

- Working with the HIS on NDPP

Key facilitators to the NDPP were found to be the recognition of the similarities between the national diabetes risk assessment (DRA) and the NHS HCs, which only differed in respect of one question re 'diabetic family history', plus a routine BP check in the NHS HC. This allowed for a more efficient use of staff time.

A key facilitator in the Jewish Orthodox Community project were found to be the 'social marketing' approach. In addition, other facilitators were identified as:

- Immediately after the orientation event, community members who were keen to be involved were signed up to the Jewish Health Communities Collaborative (JHCC) group. They were then invited to attend a learning session.
- SHCC used a rapid evidence review to identify key factors that affected uptake of the NHS Heath Check Programme and this work informed the learning sessions. These sessions reviewed examples of best practice in increasing uptake of the NHS HC Programme. These sessions were also attended by a wide range of local stakeholders including commissioners, community members, lead GPs, public health specialists and other health care providers. Nine community members signed up to the initial JHCC team and after additional recruitment efforts, the numbers grew to fourteen active team members.
- A structured approach was then used where the JHCC 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
- Examples of interventions used included: publicising to the Jewish community using Telegraph and community members speaking on Jewish Hour on Salford Radio; writing to trusted Jewish figures for endorsement - for example the Chief Rabbi; all local rabbis were contacted and given short messages to share with congregations in advance of the Jewish team visiting and having brief advice conversations; holding women-only events in private homes and events organised with the wives of Rabbis who are influential figures in communities engaging men at morning prayer in

synagogues; linking with local community providers (Salford HIS) to identify venues where their mobile bus could be sited to offer NHS Health Checks; designing specific publicity and resources for Jewish teams - such as the blessing card which most Jewish people will carry and use as part of their religious adherence; and mapping local assets and places of congregation for different parts of the Orthodox community.

Key Challenges

National Dental and Pharmacy pilots were evaluated at the **Alere Health Check** event in Leeds. At the event challenges were identified around the lack of space available in one pilot practice (which was a converted house) for the HC and the amount of time staff needed to be released for training. In addition, there were also issues around equipment and cost, which need to be higher for dental practices. It was estimated that because staff were now required to have clinical supervision and indemnity, the cost of the health check needed to be higher to make it worthwhile for dental practices to carry out. In terms of numbers, the numbers achieved were not very high. At the beginning 88 invites were sent out from the Monton dental practice and 17 people attended (19%) this was in Sept, Oct and Nov (2015). After that the numbers dwindled, and the Dental Pilot ceased in May 2015 due to Manchester Council funding cuts.

In respect of the Pharmacy Pilots, again uptake was low – from Dec 14 to March 16 only 189 HCs had been completed across the 8 sites (range 3-59 HC per pharmacy). Some challenges were identified around the location of the pharmacies, and it was felt that there needed to be further media campaigns to generate interest.

Looking at the **Health Improvement Service (HIS)** the challenges were found to be:

- In respect of the **Health Bus** a number of people were ineligible as they were not in the right age group or they already had pre-existing conditions. In addition 'data protection issues' meant that invitations to the bus could not be issued. The bus was also quite expensive to use because it needed a driver and broke down on a few occasions. The bus was used at 'Salford's big day out', however only 8 health checks could be completed because alcohol was available, and those who had taken a drink were ineligible.
- In respect of the **Workplace Health Checks** some workplace events were found not to be very productive for HCs – e.g. in Weaste at a workplace with a high proportion of routine and manual workers only 4 out of 49 assessments were full HCs. In

respect of CCG staff, it was reported (12th November 2014) that only 8 staff were eligible following an assessment for eligibility. At **SCC** challenges were identified in respect of: co-ordinating the costs with other areas of Salford; time allowed for the health check (which was at their managers discretion) and uptake was small (2-3 each week). Workplace HCs were also instigated in **Salford Royal Foundation Trust**, with 92 completed checks carried out between October 2014 and March 2015 (which was considered low). In this regard, number of challenges were identified, including:

- Employees not resident in Salford and therefore ineligible, which caused upset to ineligible staff
- High workload of clinical staff, preventing them from attending a HC
- A lack of knowledge of NHS HCs and the potential benefits
- Lack of interes in the out of hours and weekend clinics
- Lack of co-operation/support from SRFT staff working in adjacent clinical areas; some SRFT staff were not happy that a clinical service was being offered by non-SRFT staff & others were unhappy that basic measures (e.g. height, weight) were being taken in waiting areas/corridors
- A misunderstanding that 'dementia' screening would be offered routinely to those under 60 years old
- Wi-Fi was unreliable in some areas of the hospital, which meant that the HIS could not calculate risk scores and therefore complete the HC
- Staff delivering the HCs felt that the project was not well organised, or that SRFT were well informed about the process

- **City West** – Whilst a manager at City West was supportive only small numbers of eligible people were identified

Challenges highlighted by the **Healthy Community Collaborative** were in respect of: gaps in local resources around NHS HCs; during the pharmacy pilots when team members visited pharmacies (December 2014) only two kits had been delivered, and expected delivery of the BME HC project has slipped due to staff sickness.

Key challenges highlighted in the **Jewish Orthodox Community Project** were that, whilst community leaders are important, they were found not to be the only route, and that different

Rabbis have different levels of influence depending on the orthodoxy of the community. There were also some frustrations because of the complicated ways of collecting data/measures.

Wins

In respect of the SRFT **Workplace** Health checks "The delivery staff overall felt valued by the staff receiving health checks at SRFT, that the checks once completed were well received and if all logistics were running smoothly the process worked well". The main benefit for SRFT staff was felt to be convenience to have the check at work and an increase in awareness of health checks, and those who undertook the workplace health check reported satisfaction with the: booking process; availability of appointments; range of appointment times; range of locations; the actual check; and the quality of information given.

The **HCC** have been reported to be very proactive in working to achieve their targets, and collaborating with other stakeholders to improve HC uptake.

In respect of the **NDPP & HCs** processes have evolved whereby any person approached about one check is also offered the other, if seemingly eligible. Haelo have now taken over the programme management of the Salford NDPP, given the similarities of the two processes.

SHCC engagement events produced 16 community teams and 200 peer-to-peer volunteers. They developed the JHCC team, which consisted of 14 residents from the local **Orthodox Jewish community**.

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

Learning

The **Initial Learning Event** highlighted issues around data, showing that whilst this was a challenge, exploring and learning about the issues can help in trying to overcome them. The event also provided a platform from which to invite new attendees to future events.

All the **Learning Sessions** were seen as providing a place to allow information to be given to practices around other services e.g. services offered by the health bus and tools that can be used e.g. health age. Through the evaluation after session 1 learning identified was:

- PDSA cycles – How to keep them short, manageable and easily measurable
- Identifying 'Quick Wins' for improvement
- How to use failure as a valuable learning tool
- The goals and ambitions of the NHS Health Checks programme
- The diversity of Salford's population and the various ways organisations are working with them
- The Health Improvement Service and 'Health Bus': what they can offer
- How practises can work on increasing patient engagement
- Risk factors, and how you can help minimise them

Following learning session 3 those who attended identified a number of areas of learning, however due to the limited number of people who provided feedback there was insufficient feedback to make objective suggestions about going forward. From the feedback provided the key areas of learning from the HC event included: '*Way2Wellbeing that will use in practice*'

- 'website to sign patients to'… 'looks fab and will be welcomed'
- 'several new angles to support marketing of health checks'
- 'how we offer the invite'
- 'coding needs to be improved massively'…'coding made me reflect on our own monitoring' 'University research and insight'

- ‘new computer system’…’new software’
- ‘clear understanding of the numbers underpinning service delivery’
- ‘PHE behavioural insight work’
- ‘gain more information and NHS health checks and where my role fits in’

Through the PDSA cycles completed with practices during the **Neighbourhood meetings/individual practice feedback**, identified learning included:

- The invitation
- Other aspects of the HC journey
- Awareness raising for staff and patients
- External HC providers
- Diverse method of screening

Although at times it took a number of visits with practices to improve **GP Practice Improvement Activity,** the perseverance and support was shown to be worthwhile in some instances.

Key facilitators

The **Learning Sessions** provided a place to allow the sharing of knowledge about how to get over challenges and support other practices e.g. around ways of organisation working. They also provided a place for practice staff to learn about strategies to help increase uptake of HCs. Through the feedback from learning session 2 the value if the events was reported:

- Attendees valued the chance for learning, discussion and being able to contribute their thoughts etc (“*Being able to contribute thoughts is very refreshing*”).
- Diversity of speakers “Found the day enjoyable and interesting” “Enjoyed the diverse range of speakers, you would have needed a PM break if it had ran to time though!”

Following learning session 2 all those who attended felt the event either was well above, above, or met their expectations.

The attendees after learning session 3 identified a number of facilitators with overall feedback from the learning event highlighting that the meetings brought people together

which facilitated discussions about how to improve HCs, achieved through sharing of knowledge and good practice:

- Participants felt the meetings were useful and wanted them to continue - “Carry on with these updates please, I have found this very useful” “I'd come to future events they are useful” “need to continue, good information, activities”
- “to share innovative ideas of continuing progress”
- “ideas from other health check screeners on invite uptake”

18 people from 9 practices (4 who registered did not come) attended the **NHS HC workshop**. As with the learning events it was felt the session provided an opportunity for networking and sharing ideas with their colleagues.

In the **neighbourhood meetings/individual practice feedback** through the PDSA activity planned by practices there are further plans to look at the invitation process and also follow up invitations. Other activities planned by practices following the PDSA in order to raise awareness were: posters and use of adverts/recorded messages. There was also an aim to highlight the Health Bus and when people can use it for a HC, which linked into plans around diversifying how HCs will be offered. Examples of actions taken by the practices were:

- Using a flag system to understand referrals and flag up those who need a HC
- Using posters to publicise HCs in waiting areas, phoning patents following their 3rd invitation letter and using digital displays to publicise HCs in waiting areas.
- Nurse telephone as initial point of contact.

Practice improvement activity (promotion of Improvement Science and the NHS Health Checks Scheme at Primary Care Neighbourhood meetings) provided the opportunity to offer individual practice support for those practices wishing to be part of the ‘collaborative’ and/or encourage those practices who were inactive or not signed up to deliver the NHS HCs to become active. It also helped to put HCs back on the agenda and develop new links with practices and individuals to work with.

Key barriers

GP Practice improvement activity (working with practices not signed up to deliver NHS health checks) - For one practice, after 4 visits they were finally happy for their practice population to be invited to have HCs at the adjoining pharmacy (same building) if SCC staff

would generate the invites. Unfortunately due to information governance red tape and 8 months of discussion with SCC this could not be resolved – so one of the biggest practice populations in Salford remains 'untapped'.

Key challenges

Challenges were highlighted at the **Initial Learning Event** around the engagement of practices and the collection of the activity/reporting that is being undertaken.

Attendance at the **learning events** varied in terms of numbers and practices. This may have impacted the continuity of the messages being provided and the ability to build on the previous sessions. Learning event 2 was attended by 31 of the 35 who signed up, and had a higher level of attendance from community groups. Learning session 3 was attended by 24 of the 27 who registered. Following learning session 2 some issues were raised by the attendees, both in relation to the event and in respect of going forward:

- Some people had difficulties registering for the day ("*Difficult to book, website issues*"), but overall pre-information and booking was said to have meet or be above expectation by those who completed the questionnaire.
- Some feedback around potential complexities of stats and presentation from PHE ("*PHE and statistical input may have been a little too complex for some attendee*").
- Potential need for shorter events.

Following **learning session** 3 some key challenges identified in the feedback were:

- Feedback around pre-event processes "Comments included issues with names not being on the printed sheet, incorrect dates on Haelo website, Haelo website had no connection with Facebook, delegates changing practices and missing out on the initial invite."
- "The statistic presentation was too long. Difficult to hear as a whole we are below expectation when the people here are committed to delivery statistical part was far too long - info could have been condensed into 10 minutes."
- "I am new to the role so find it hard to follow at present but will get easier."
- Further to this challenges identified in the learning event included engaging with some GP practices e.g. "*GPs in non-cooperative practices*"

Challenges identified at the **NHS Health Checks workshop** highlighted that participants felt that the session should have had: a greater focus on performance of HCs (how, not what),

no hand-outs provided, reducing the repetitive nature of content in relation to number of learning sessions, issue of relevance to GP.

A number of challenges were raised by practices as part of the **neighbourhood meetings/individual practice feedback**, such as: practices having time to attend events and challenges around lack of training and support. Issues were also raised around knowledge and awareness e.g. in relation to read codes.

Many of the practices raised issues around the quality of information sent by the Health Bus about the HCs. There were also queries about payment methods for the HCs undertaken in practices, e.g. in respect of payment for each of the invitation letters. Practices also highlighted challenges around the identification of the eligible population and also the lack of engagement with those identified.

Through the PDSA cycles completed with practices, challenges were identified as:

- Lack of engagement from patients
- Issues around knowledge and understanding in relation to practice staff
- Identification of the eligible population
- Community HCs being provided
- Point of Care testing
- Payment
- Activity around uptake
- Referrals following the HC
- Engagement with the Haelo activity
- And other aspects

It was found during the **Practice Improvement Activity** (promotion of Improvement Science and the NHS HCs Scheme at Primary Care Neighbourhood meetings) that these meeting were difficult to arrange and conduct due to the feelings of those involved (e.g. around the amount of work involved in HCs, lack of uptake and perception of the value of the HCs).

Wins

The **Learning Sessions** provided a forum for the dissemination of information and tools for practices e.g. the video made locally around the HC. Through the learning event practice

staff were asked to think about how they could help with increasing uptake of HCs. Following learning session 1, example ideas going forward were:

- Include some of the 'Big Impact Ideas' in future invites
- Look into further, more specific, demographics for local areas
- Obtain revised invite letter from 'Salford Health Matters' and share
- Use multimedia such as posters and video within the surgery to increase interest and uptake
- Review the way we identify eligible patients
- Constantly evaluate and modify our delivery
- Further team work and development around improvement and testing change
- Actioning some of the ideas discussed with other teams during break-out sessions

During learning session 2 attendees were also invited to have a HDL cholesterol test, which was received well by those who took part. In the feedback from learning session 3 it was felt ideas were provided around going forward to improve the uptake rate and provide a better understanding of the computer system and the importance of coding, numbers and the targets (*need to do more health checks in Salford'*).

Overall those who attended the **NHS HC workshop** found the event content relevant and good, and were happy with how the contact was delivered (8.3 and 8.5 out of 10).

During the **neighbourhood meetings/individual practice feedback** a total of 11 practices were engaged and through this it was found that some practices had systems in place around referrals and are actively trying to increase uptake.

(1) Practice improvement activity (promotion of Improvement Science and the NHS Health Checks Scheme at Primary Care Neighbourhood meetings)

Several practices became engaged with the HCs programme through the **Practice Improvement Activity** and activity appeared to increase during this period of engagement. This provided more visibility to HCs, which were not well supported by the GP's in general in Salford, particularly in certain areas e.g. Eccles, Irlam and Broughton.

Extended details Theme 3 - Research

Learning

The **Rapid Review** (January 2014) found limited evidence of the demographic and health factors that impact on NHS HC uptake and from a systems perspective those GP practices that are most successful at attracting people to take up the HC were small. A number of transferable findings were found from other screening and check programmes (see recommendations below)).

In respect of the **FARSITE study**

- Overall uptake rates increased between 2011 and 2013, although there was a decrease in 2013-2014 (uptake 75.4% 2012-2013; 50.1% 2013-2014). Nevertheless, attendance rates have continued to increase from 4.8% (2011-2012), to 6.8% (2013-2014) and data from 2014-2015 indicates that uptake rates will continue to increase alongside attendance rates.
- Consistently there was higher uptake for females compared to males and uptake significantly increased with increasing age groups (e.g. in 2013-2014 66% of those aged 65-74 attended). Uptake of the NHS HC varied greatly by practice and in some cases uptake rates were significantly higher than coded invites, indicating that invites had not been correctly coded or that opportunistic checks were taken up. Invited uptake rates also varied by practice from 3% to 85% in 2013-2014.
- Between 2011 and 2014, 10,315 people attended for an NHS HC in Salford; of these 8,822 (85.5%) had a corresponding 10 year CVD risk score. Of these 8,822, 15% were considered to have high CVD risk over the next 10 years. Males were significantly more likely to have a high CVD risk score than females (22.9% vs. 6.9%) and risk increased with age. For those people who did not attend for a HC between 2011 and 2014 (n=11,829), 707 had a recorded CVD risk score; their risk of having a high CVD risk score was significantly higher than those who had attended a HC.
- Within this exploration of data, the risk of having a high CVD risk score was significantly higher in those who did not attend compared to those who attended a HC in 2013-2014.
- For all conditions in 2013-2014, those who attended for an NHS HC were more likely to be diagnosed than those who were invited but did not attend. However, it is not possible to know if this diagnosis was part of a HC.

- People who attended for an NHS HC in 2013-2014 were more likely to have significantly lower (i.e. healthier) risk factor recordings for diastolic blood pressure readings, BMI, waist circumference and AUDIT scores compared to those who did not attend for a HC. In addition, they were more likely to be categorised as being active and non-smokers.
- When considering the impact of HCs on prescribing, Read codes for prescription data were only available for statins.
- The number of people prescribed statins has increased steadily since 2008 with no noticeable change/increase since the implementation of the NHS HC in 2011 (from 2011-2012 to 2013-2014 there was only an increase of 1% from 23% to 24%). Looking at those who attended for an NHS HC (and those who were invited but did not attend), the percentage of people being prescribed statins decreased between 2012-2013 and 2013-2014. The overall trend of a slight increase in prescribing is likely to be explained because of the number of people who were not eligible for a HC, because they were already identified as having an increased risk of CVD.
- Data for advice and referrals to other lifestyle services were sparse with the exception of smoking cessation. Those who attended a HC were more likely to be given lifestyle advice (most commonly smoking cessation advice) compared to those who did not attend but were invited. Only 1.5% of those who attended for a HC in 2013-2014 were coded as being given weight management advice, although over 60% of those who attended a HC in this year were overweight. Referral data were only available for smoking; people who attended for a HC were four times more likely to be referred to a smoking cessation service compared to those who did not attend. Out of those who attended a HC in 2013-2014, 24% were coded as being a smoker, however only 0.5% were referred to smoking cessation services.

Through the **Haelo Planned experimentation study on invited at Salford Health Matters** it was found that further time and resources were required to be devoted to the investigation to make any firm assumptions. There is a suggestion of potential improvement, but more detailed and more sensitive investigation is needed.

Looking at research the first **bid** was rejected because it was felt that the phases of the project were not articulated clearly; the training, following phase 1 was insufficient (at a single half day), and there was limited patient and public involvement.

The second **bid** was rejected, because it was felt that it was not sufficiently situated in the academic literature on 'screening', which could have offered deeper insight into the HC process. In addition, there were concerns about the generalisability of the findings nationally, that the project was over-ambitious in terms of it's scope, and that improving 'uptake' was an insufficient goal, at the expense of understanding HC outcomes.

In respect of the third 'connected city' **bid**, feedback indicated that that the project was again too locally focused, that the technology (BMJi) would be difficult to roll out, and that the potential gain from increasing HC 'uptake' was unclear.

Considering the **student research projects**, results from the baseline of Student Project 1 showed that people had an intention to change; that 70% preferred the community setting for the delivery (e.g. "friendly, less clinical" "instant results" "more convenient"); and that 81% reported excellent experience with 19% good (e.g. "quick, professional understandable" " staff approachable and caring about individual" "helpful and informative"). At follow-up for the whole sample of those who intended to change over half made changes (33/62) and of those who did not intended to change 7/25 did. Reasons for not changing were time, motivation, lack knowledge and reasons for changing were had plan to already and because of the health check. But for those over 40 in those who intended to change there were an even number (19) out of the 41 who did and did not make a change. No significant change in QRisk2 score over study period. Those that were advised to seek further testing (31), of those seen at follow up (23) 5 had seen there GP and of those referred to other serviced 15 had made lifestyle changes. The learning from study 2 is yet to emerge, as the study is currently ongoing.

Looking at the **Internal Research Projects** in respect of the Behavioural Insights research, it was felt that the reason that the video within the GP practice was not effective was because of the length video (2.35 minutes), the fact that there was no call to action at the end, issues around data on booked app, and that practices with video playing equipment may not be representative. The importance of evaluating the video was also highlighted, as it's effectiveness could be ascertained and lessons were learnt from this process. Learning from the Poster was that the piece of work helped in recognising the challenges around delivery, and how these modes of delivery can be adapted for the future.

Key learning (findings) from the BMJ paper were:

- There is a need to look across the whole NHS HC journey and consider how measurement and feedback can be used at different stages to help drive up quality (taking a whole systems approach).
- Current research on NHS HCs may not be measuring the same thing and there appears to be an over-reliance on uptake as an outcome.
- The current evidence-base suggests more could be done and more understanding is needed around better onward referral and follow up to improve the long term impact of NHS HCs.
- Greater collaboration is needed between commissioners, practitioners, funders and researchers to ensure more longitudinal research is conducted post-check rather than a focus on pre-check and uptake.
- There is a need to evaluate whether issues of consistency affect the efficacy of the programme at a local level.

For the **Afinion Project,** key learning was that 9% of patients tested in the pilot sites had IGR, i.e. pre-diabetic, and 5 new diabetic patients were found. In the other practices, 26% approx. had the HbA1C test, where blood samples were sent off to the lab, and 11% of these showed IGR, with 11 new diabetic patients recorded. Staff found the machines very helpful:

- "The machine works extremely well and they reported finding it much easier to use when completing the NHS health checks. The HBA1C is very useful.
- The time taken for testing is good and is within the time allocated for our health checks.
- The only issue with Hba1c is that it doesn't seem to tally with the lipid audit that is on BMJI. (This was investigated.)
- Salford Health Matters: Staff found the Afinion machine really useful and more reliable than the LDX machine.
- Feedback from the Health Improvement Service
    - The machine is easy to use and calibrate
    - If using the machine for both IGR and lipid tests, the recommended procedure (i.e. IGR test first and then lipid check) must be followed to keep blood sample viable

- Less blood is required for this machine than the LDX, so reduced chance of being unable to obtain a sample
- The machine is best left in one location as long as possible due to the large travel case it is kept in."

Key facilitators

In respect of the **FARSITE study**, collecting data in this way has been found to be an effective way of gaining population level understanding of CVD risk factors, although there were some limitations with the quality of the data collected, as discussed below (under key challenges).

Research facilitators have been identified in **Student 2's research** project, as the qualitative data which will provide insight into patient perceptions of the HC process.

Looking at the **Internal Research Projects** In respect of the Behavioural Insights Study, key facilitators were identified as support from PHE and TLC, as well as the video from Haelo, which had subtitles added. Being able to share the method of planned experimentation via the Poster was found to help with reflecting on the programme to draw out the two areas of learning – NHS HCs in Salford and planned experimentation.

Facilitators for the Afinion Project included:

- Rental of 9 machines, in 6 GP practices (one with 3 sites) plus a machine for the HIS so that they could do tests in the community.
- A contract was made with Alere to rent the point of care testing machines and to purchase all the consumable materials necessary for the testing.
- Alere provided 2 afternoons of training for the staff in the pilot.
- Allows immediate feedback to patients on blood glucose levels.

Key barriers

In terms of research, all three proposals were unsuccessful. The reasons for this are discussed more fully in section 3.3.5 below.

The manuscript submitted to the BMJ was rejected, with comments from the reviewing panel stating:

- *"It's a good topic but not clear this adds enough to what we already know. Also I would like them to be clearer about what it is they are calling for and how we should go about achieving it. Who needs to be doing what?*
- *They talk about the need to look at the picture across the whole journey before making calls to abandon the process. But it seems to me they have done this and could make a stronger call. Another limitation is its UK focus.*
- *No critical appraisal. In place of appraisal, we have an excursion into the journey. This is one weakness. Another is that they don't distinguish sufficiently between types of screening. They draw parallels between breast screening and health checks but they are very different.*"

Key challenges

The key challenge when conducting the **Rapid Review** was in respect of the time allowed for the project, which was very limited, and resulted in limiting the databases searched to four, and did not allow for an extensive search of the grey literature.

In respect of the **FARSITE study**, a number of limitations were noted, as follows:

- FARSITE is only able to provide aggregate data over a search period. This means that where someone was invited for a HC in one year (e.g. 2012-2013) but attended for a HC in the following year (2013-2014), this cannot be captured in the data analysis (i.e. they would show as attended, but not as invited in the 2013-14 period).
- There are a variety of Read Codes that could potentially be utilised for diagnoses, clinical symptoms, measurements, prescribed medication, tests, administrative data, and procedures.
- Inputting of Read Codes within general practices for HCs appears to be inconsistent.
- Age, gender and ethnicity are integrated within the FARSITE system, so run as standard on searches. However, during analysis for Question 6, it was discovered that caution should be employed when using the inbuilt ethnicity filter in FARSITE and national Read Codes should be used were possible (see section 3.7.1 for more details).
- When limiting the analysis to age range, FARSITE uses the age of a person on the date the search is carried out. Therefore, searches for years prior to 2014 had to be adjusted; i.e. searches for April 2013 to March 2014 used an age range of 41-75

years as these people would have been 40-74 years in the year 2013-2014, and searches for April 2012 to March 2013 used the age range 42-76 years etc. (i.e. the age when the search was carried out). This limitation should be noted when interpreting results across different age bands.

- The eligible population was calculated from FARSITE by subtracting the non-eligible population from all 40-74 year olds in Salford. However, analysis showed that there were a number of patients who attended for a HC who were not recorded as invited. This group have been included in the overall uptake rate and attendance figures.
- Of those who attended a HC only 50% of them had their ethnicity recorded in 2013-2014, limiting the ability to understand the ethnic profile of attenders and non-attenders.
- Risk of CVD is estimated using risk calculators; however, within Salford there is no standard procedure for which risk calculator is used, although the majority of general practices use the JBS2 (75.4%). Within some practices there is evidence of all four risk calculators being used.
- The use of Read codes for assessments (diabetes, hypertension, fasting cholesterol, and impaired fasting glycaemia/impaired glucose tolerance) for those who attended and did not attend a HC was sparse with the exception of assessment for serum creatinine (kidney function test). Those who attended for a HC were five times more likely to be assessed for serum creatinine than those who did not attend between 2011-2014. Meaningful analyses on the other assessments could not be completed due to the small numbers coded between 2011-2014.
- On the whole recording of CVD risk factors was high for those attending a HC in 2013-2014; over 85% of people had a recording for blood pressure, cholesterol, BMI and smoking status. However, recording for waist circumference, GPPAQ and AUDIT was significantly lower.

In respect of the **student research** projects, key challenges identified were that it was difficult to meet student expectations (in respect of the first student project) with regards to accessing data, given the time it takes for council approval. Similarly, *time* has been raised as an issue by Student 2, particularly in respect to the time taken to obtain NHS ethics and gain access to practices, which has led to recruitment focusing on one practice due to issues with working with practice 2.

Looking at the internal research projects, in respect of the **Behavioural Insights Study** only one person reported hearing about the HC on the TV screen, and in a survey, 83.7% said heard about it through a letter. The main challenge with the **Afinion Project** was that the more sophisticated testing identified more patients with conditions, who then have to be managed. In this regard, the capacity for treatment and management may be a risk. In addition, the pilot was quite costly in terms of machine rental, use of quality control materials and cartridges for tests. These costs would need to be compared with the cost of sending blood samples to the laboratory.

As part of the **Haelo Planned experimentation study on invited at Salford Health Matters** it was found that the logistics and execution of the design were difficult due to unexpected complexities. The plan required four months of data collection but in practice, the experiment took longer. Further although it was not captured in the experimental data the qualitative learning was no less important. The team worked on the assumption that eligible patients would have a mobile phone and have the ability to send/receive text messages. This was not always the case and often the general practice did not have the number or the correct number. These issues prevented effective execution of their intended design to include text messaging as a factor of study. They also contributed to the very small sample sizes in runs 2 and 4.

Wins

The findings from **FARSITE** were disseminated in Salford and at the NHS Health Check conference (2015) through a poster. Feedback received from practices highlighted that issues around knowledge of Read Codes should be overcome with introduction of BMJi.

In terms of the **three collaborative research proposals, and the submission to BMJ**, work on these has have led to worthwhile collaboration between various universities bringing the academic, commissioning and more clinically based staff together.

In respect of the **student research projects**, the in-depth study on the bus demonstrated the impact of the checks on the bus on people's behaviour. We are anticipating that Student 2's report about the perception of health checks will be beneficial to future development of HCs.

Wins in respect of the **Afinion Project** were the ability to provide instant testing and instant feedback to participants. As a result of the **Haelo planned experimentation study on those invited at Salford Health Matters** further programmes of work are running in the practice that was involved using the improvement science methods. In addition Haelo use

the information gained to advise other practices and the outcomes have been validated in a PHE RCT study. The work has also been presented at the Science Symposium in Gothenburg in April 2016.

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

Learning

During the period when **HCs were moving from the 'planning' to the 'activity' phase**, the importance of mechanisms of recording data accurately was a constant theme.

Through the **Expert Panel meeting** it was clear that within Salford there were a number of different methods being used in relation to the invites and also to identify the eligible population.

Better data can be produced through a better monitoring system, namely **BMJi**, which can be used for other long-term conditions as well as health checks.

In terms of the **media campaigns**, key aspects of learning were highlighted as website data from Big life – which provided URLs hits to the Way2Wellbeing with the biggest spike following start of SCC intranet story and in the middle of social media, Key 103 and SCC wallpaper. Although an initial increase was seen in hits at the start of campaigns, these were not sustained.

Haelo Plans were remodeled as the process proceeded, reflecting ongoing learning about the process, which was then incorporated into future drivers.

Key facilitators

During the period when **HCs were moving from the 'planning' to the 'activity' phase**, a number of facilitators were identified as follows:

- Marketing Campaign – HCC to consider the idea of a 'bus ticket' as a means of inviting (and therefore counting) patients to the Health Bus
- At the Health Check Steering Group meeting, **SHCC**: reported that the team is focussing on 3 areas for Phase 2. They will have 4 weeks of training starting 23rd February so will not be fully operational until April.
- Phase 1 already covers 5 areas and Phase 3 will take place in 5 months' time.
- A meeting to discuss data procedures and processes and how they could be improved was set up following the Health Checks Steering Group Meeting.

A number of ideas were put forward from the **expert panel** around ways uptake could be increased with these being at GP level, locality level and city wide level.

Practices were provided with half a day of training over 2 days in the February before the **role out of BMJ Informatica (BMJi)**, which took over from the MIQUEST query. There was also a BMJi helpdesk and 2 trainers who provided support and sent information via WeBex. The BMJi trainer also presented at one of the Haelo sessions for practices that had only recently signed up to deliver HCs.

BMJi has made it easier to support the identification of the different aspects of the HCs for payments. Public Health pay the practices for the 1st, 2nd and 3rd invites plus 2 rates for HCs depending on whether they use the point of care testing machine, plus a fee for the 12-month check, and a different fee for Carer's HCs (although this LES agreement had expired).

There was an opportunity through the **radio show** to provide details of where people are able to get a HC and contact details for the HIS. This demonstrated to the scrutiny committee the potential impact of HCs and also shows how the mixed delivery model across Salford works, with some examples.

In respect of the **media campaigns**, support from SCCa Marketing Department, and Haelo's communication function have been identified as facilitators. In addition, the lack of cost of some of the campaigns was highlighted as a facilitator, together with the evaluation component of the W2Wellbeing website, which monitored the number of hits on the site.

In respect of facilitators to the **Haelo Plans** these were highlighted as the signup from the Haelo Board, and the identification of interested parties.

Although there were challenges it was found through preliminary results of the **Haelo planned experimentation study on invited at Salford Health Matters** that a 'short letter' sent to patients and followed with a 'phone call' had a strong, positive effect on increasing the booking rate. However, when the lower limit of what could be considered system wide common cause variation was substituted, this view was altered; i.e. the use of 'short letter' in combination with a 'phone call' produced drastically worse results that either the 'long letter' alone or the combination of the 'long letter' with a 'phone call'. In addition this project allowed two Haelo staff to work with a practice every day for almost two months, meaning improvement staff were able to work alongside primary care colleagues using the VISION system.

Key barriers

Feedback from a practice indicated that 40th birthday letter invites did not go down well and it is better to invite patients in the target group who haven't been to the practice in the past 3-5 years.

The **Health Check Self-Assessment framework** identified barriers (i.e. scores of 0) in respect of the following areas:

- Risk Assessment
    - 4.2.a – do you ensure that a complete NHS Health Check, for those accepting the offer, is undertaken and recorded in line with the quality standard framework - 0
    - 4.2.d – are you implementing equipment calibration and incident reporting as set out in the quality standard framework – not formally
    - 4.2.f – have quality assurance visits been undertaken with providers in the last 12 months to ensure that checks are being delivered in line with best practice guidance – no
- Competence, training and development
    - 5.a – we do not audit the wide range of providers we have in line with the health check competence framework
- Information governance and data
    - 6.1.d – we have no way of monitoring individual outcomes from lifestyle referral programmes
    - 6.1.e – we are not sure that all GP's routinely upload data onto the patients record, if the health check was provided by an alternative provider
- Data return and monitoring
    - 6.3.c – no, we do not monitor the proportion of individuals recalled in five years, if they remain eligible
    - 6.3.f – no, we don't monitor the data that is sent back to a GP where the NHS health check is not conducted by the general practice, or it is timely
- Communication

  - 7.c – no, we don't make use of internal communication channels in ensuring and improving quality and uptake of NHS health checks.

- Programme development and evaluation
  - 8.b – no, we have not used data from users to influence or change the design and delivery of the service
  - 8.c – no, we have not evaluated how successful the service is at helping patients to understand their CVD risk
- Innovation
  - 9.b – no, we have not used technology in different ways to support delivery

Within the **Haelo planned experimentation study** it was found that it was impossible to gather the 40 participants needed for each combination of the intervention, which prevented definitive conclusions being reached

Key Challenges

Key challenges identified during the move from the 'planning' to 'activity' period included:

- At the 'Health Check Summit' meeting it was noted that some practice information was out of date (e.g. merged practices were still being identified as single practices). Fiona Reynolds (Public Health) also acknowledged that some structural changes within the Public Health department must be managed effectively to minimise effect to the HCs programme.

- The Health Improvement Service encountered challenges applying for a generic e-mail to nhs.net to send data from the health bus to practices, and needs support from the CCG.

- There were delays experienced in getting the pharmacy pilot off the ground**.** It was also noted that i**t** will be important to have reliable data reporting systems back to GP practices so that people are not invited or counted twice.

- At the **Health Check Steering Group meeting**, it was reported that GP practices were having trouble with data extraction using (the MIQUEST query), despite help, with one practice reporting that they had only just been provided with a list of people to attend.

- At the **Health Checks Data Quality Group** it was identified that:
    - the estimation of the number of people eligible for health checks in Salford may be too low because it may not include practices not signed up to the LES.
    - there was possible inadvertent double-counting by practices who have some of their patients seen on the health bus opportunistically
    - all practices should be submitting their quarterly data through a MIQUEST query. Practices have been supported to use the tool and update it with relevant dates each quarter; only 2 are still having difficulty. Some practices want to use the old system which is not appropriate now that the criteria have changed. It was agreed that for Q4 all practices should use the MIQUEST query or they will not receive payment.
    - there was a possible under-reporting of late data from Q1 and Q2 (176 invited and 86 attended) and some confusion with late payments, but the numbers can be counted in the quarterly returns to PHE.
- A challenge was identified at the **Expert panel meeting** around generating the engagement of those who attended expert panel. Through the discussions the panel raised issues around data collection/quality and that there was a feeling the aim of 70% uptake was very ambitious/unrealistic.

In respect of **monitoring NHS Health Checks** it took 3 months for all practices to upload BMJi and some practices experienced difficulties with the new system. It was also found that it takes a lot of time to sort quarterly payment queries to practices and liaising with the key person at the CSU.

Ensuring the accessibility of the messages and delivery on the **radio show** to make the information meaningful for those who listened was found to be challenging.

In respect of the **media campaign**, there were limited increases in hits to the Way2Wellbeing website as a result of SCC web ad, posters/leaflets, bus shelters, and the Key 103 2nd run.

Key challenges with **Haelo Plans** were found to be the reliance on local consortia for scale-up and lack of uniformity. There were also challenges in the identification of the manager project manager and team at the start of the programme.

The **Health Check Self-Assessment framework** identified challenges (i.e. scores of 1) in respect of the following areas:

- **Vision and Leadership**
    - 1.f – only the scrutiny committee see progress reports
    - 1.i – acting as an exemplar in supporting staff to access an NHS health check is planned for the next financial year
    - 1.j – offers are at 8.5% - not up to the 20%+ recommended mark
    - 1.k. – we have achieved year on year improvement in uptake, but is 54.3%, as opposed to the aspirational 75%
- **Planning and commissioning**
    - 2.3 – our provider contracts don't include enough on quality outcome standards
- **Service delivery**
    - 4.1.a – we use MIQUEST to identify the eligible population, but there are some issues with it
    - 4.1.b – there could be improvement in respect of the systematic strategy used to identify the local eligible population
- **Risk assessment**
    - 4.2.b – we advise Qrisk 2 in the contract in line with NICE guidance
    - 4.2.c – providers are supposed to ensure that individual risk factor and CVD risk factor scores are communicated effectively…they may need training to do this
    - 4.2.3 – we encourage practices to participate in the quality control scheme, so that machines are always working at an optimal level
- **Competence, training and development**
    - 5.c – delivery staff are offered training in various areas including brief intervention and Point of Care Testing.

  - Further training may be offered on alcohol awareness to pharmacy staff involved in the pilot and also dementia awareness

- **Information governance and data**

  - 6.1.a – Read Codes are used to log those who are invited who decline, do not attend or do not respond
  - 6.1.b – the use of Read Codes is set out in the PH contract and is required for quarterly payments to practices
  - 6.1.c – the completion of a Health Check is recorded via Read Codes but we have no way of recording onward referral to lifestyle services

- **Equality and health inequality**

  - 10.a – the FARSITE analysis provides some information on equitable uptake of health checks
  - 10.b – we have invite letters in other languages
  - 10.c – we have mapped availability and uptake across the various neighbourhoods in Salford, however, this is preliminary data – we don't know the needs of all communities

Key wins

During the **Health Check takeover period**, at the 'Health Check Summit' it was reported that Public Health were very pleased with the increase in HCs uptake and all stakeholders were thanked.

One practice had dropped out of the delivery of HCs but then returned when BMJi was introduced and the contract was made more flexible in terms of invitations, which can be sent by phone, text or delivered opportunistically.

Through the **radio show** the messages were publicised to a wider audience which provided the chance to outline the HC in more detail and this could link to dementia testing.

In respect of the **media campaign**, the personal story 'Ryan', seemed to increase hits when on the SCC intranet.

In respect of **Haelo Plans** the identified wins were the development of the expert panel, programme management board, and initial clarification of the project scope within Salford Public Health.

The **Health Check Self-Assessment framework** identified wins (i.e. scores of 2) in respect of the following areas:

- **Vision & Leadership**
    - 1a – Yes quarterly reports are made to the Health and Wellbeing Board
    - 1b – yes, a senior elected member for Health has taken great interest and is very supportive of the NHS HC programme in Salford
    - 1c - Yes, we have a local action plan for the programme and this is regularly updated on a monthly basis and communicated to all partners via the Operational and Steering Group meetings.
    - 1d - Yes, on 3rd September 2015 members of the PH team attended the SCC Scrutiny Board to report back on progress and to answer questions from councillors.
    - 1e – yes, clinical leadership champions are engaged with the NHS HC programme
    - 1g – yes, the programme has been championed at the supra-local (PHE centre) level by the PH GM lead
- **Planning & Leadership**
    - 2a(i) – yes we have an action plan
    - (ii) yes, we have a suite of measures which are reported quarterly and we have a driver diagram which includes primary and secondary SMART aims
    - (iii) yes, the DPH signs the plan off
    - (iv) yes, improvement can be demonstrated against the objectives in our own plan
    - 2b – yes, we have a dedicated HC budget and a lead PH manager (.5wte) and time input from a PH consultant and a full-time project manager from Haelo Improvement Science
    - 2c – yes, spend is monitored – but not compared with previous years…the use of budget is discussed at the Steering Group Monthly Meetings
    - 2d – yes, we have public health contracts for all providers

- 2f - yes, there has been an internal audit of the programme, and also through FARSITE

- **Partnerships**

  - 3a - Yes, we have partnerships with Haelo Improvement Science who are funded to improve uptake and also with providers via our Operational Group, ie., third sector, HIS, GP practices (through the Practice Managers meetings), GP Neighbourhood Cluster meetings
  - 3b(i) – yes, we have a Health Check Steering Group that meets monthly and includes reps from PH, CCG, Council Marketing, CVD Lead, Haelo Improvement Science. It also has terms of reference, and (ii) engages with all relevant key stakeholders. 3b(iii), the work of the group has clear links to the HWBBV through the JHWB Priority sub-group
  - 3d – yes, there are regular links and communications with CCGs and GPs through the GP newsletter, practice visits (via Haelo), training and development for providers, and workshop learning sessions (Haelo)
  - 3f – yes, we can evidence co-production of local achievements, working with communities and stakeholders… we have developed several different delivery models eg., pharmacy and dental pilots, Community Health Bus and a mixed model ie., one GP practice is sending invites to eligible patients to attend at the pharmacy next door. We have encouraged point of care testing by all Salford providers.
  - 3h – yes, we contribute and benefit from relevant existing sub-national networks (see 1g)
  - 3i – yes, we collaborate with people outside of the LA, e.g. Manchester Pride Weekend, where we agreed to cross-charge for any eligible Salford attendees

- **Service Delivery**

  - 4.1c – HC letters vary from practice to practice, but they are advised to include a HCs leaflets which describes the risks and benefits
  - 4.1d – practices are paid to invite eligible patients 3 times
  - 4.1e – there are systems in place for people who are not registered with a GP, e.g. Health Bus, 1 pharmacies and 1 dental practice

- **Competence, training and development**
    - 5.d – yes, we make providers aware of the NHS HCs website and provide advice on where to obtain promotional materials and leaflets, together with local posters
    - 5.e – yes, case studies of provider and patient experiences are collected to inform future training requirements…including a PHD student doing qualitative research with clients on the health bus
- **Data Monitoring**
    - 6.3a – yes, we have evidence that data on offered and received health checks is reported to PHE…it is reported by a PH manager on a quarterly basis and is displayed nationally on the website
    - 6.3d – yes, we monitor local implementation compared to other similar areas, i.e. Greater Manchester
    - 6.3e – yes, we provide quarterly internal performance on the delivery of the programme through our Covalent reporting system and at the JHWB priority sub group 3 quarterly meetings
- **Data Return and Monitoring**
    - 6.3.a – yes, data on offered and received NHS HCs is reported to PHE in line with the single use list returns on a quarterly basis and is displayed nationally on the website
    - 6.3.b – yes, we use FARSITE to analyse uptake of health checks – reported by the University of Salford and provided anonymously to commissioners
    - 6.3.d – yes, we monitor local implementation and compare across Greater Manchester
    - 6.3.e – yes, we use our ‘Covalent Report System’ and the JHWB quarterly meetings to report on internal performance on the delivery of the programme
- **Communication**

- 7.a – yes, we have a communication/marketing plan, and an action plan for engaging with key stakeholders which are reviewed monthly at the Operational and Steering group meetings.
- 7b – yes we link with and amplify national and supra-local campaigns, we are planning a local and a GM wide campaign in the New Year, we are also working with the PHE Behavioural Insights Team on a pilot project (Life Channel screens).
- 7d – yes we make use of external communication channels
- 7e – yes, we engage with voluntary, community and professional bodies to raise awareness of the programme
- 7f – yes, can show where we have spent money on marketing and communication – our campaign has a budget of 30K
- 7g – yes, we are using national branding logos, templates, and library pictures of health checks, together with local images to promote the programme
- 7h – yes, there is an entry for the service on the NHS choices directory

- **Programme development and evaluation**
  - 8a – yes we invite people to feedback on their experience of their HC, e.g. PHD student and focus groups
  - 8d – yes, we have undertaken research with the UoS to 'better understand local public attitudes or behaviour through the NHS HC programme'?
  - 8e – yes, we work with the Operational group and Haelo's work with the GP collaborative to monitor issues or challenges arising in deliver of NHS HC
- **Innovation**
  - 9a – yes, we have systems in place for learning from local innovative delivery - Haelo Improvement Science Learning Sessions (3 this year) include presentations, improvement methodology, and training on measurement and data for local providers

- 9c – the GP collaborative run via Haelo has investigated and identified barriers to delivery and come up with potential solutions using improvement methodology

Copy of poster presented at the International Forum on Quality and Safety in Healthcare in Gothenburg, April 2016

NHS HEALTH CHECK

WHAT CAN WE LEARN FROM IMPLEMENTING PLANNED EXPERIMENTATION?

1. BACKGROUND

Cardiovascular disease (CVD) is the number one contributor to poor health, chronic disease and premature mortality in Salford.

Identifying those at risk earlier will enable early intervention which can improve health and life expectancy and reduce hospital admissions.

The NHS Health Check is a way to do this. Available for adults aged 40-74 without a pre-existing condition. However uptake is poor.

Haelo, Salford's innovation and improvement science centre, aimed to increase the uptake of NHS Health Checks at one GP practice in Salford by 50% over the next 4 months.

We began by working alongside the GP practice and observing the current invite system.

2. DETERMINING THE PLAN

After observing the current system the project team had three interventions which we thought could have a positive effect on the uptake of NHS Health Checks.

- A shortened letter
- A 'follow-up' telephone script
- A 'follow up' text message
- The original long letter

Rather than completing multiple consecutive PDSA cycles to ascertain the impact of these changes, a sophisticated approach was used: planned experimentation. This allows for several PDSA cycles to be completed simultaneously.

Planned experimentation allows us to understand which changes have an effect on the uptake of health checks and enables us to understand the interaction effect between the interventions.

3. IMPLEMENTATION OF THE TESTING

Haelo worked alongside the GP practice manager to perform the planned experimentation at the test site. Staff members attended an orientation session. A confidentiality agreement was signed.

The content of the letters and texts and of the 'follow up' telephone calls was standardised.

The following table shows the eight groups and the combination of interventions each group received.

Group	Interventions	Group	Interventions
1		5	
2		6	
3		7	
4		8	

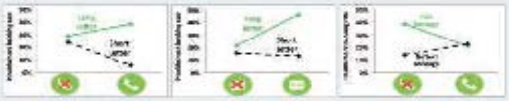
Post invitation booking rates of NHS Health Checks were monitored for nine working days.

4. MEASURING SUCCESS

Post experiment, 149 patients had to be removed as their records were not up to date.

This left us with a much lower than expected population size.

Plotting data in response plots can help us understand the effect of individual and combined interventions on the uptake of NHS Health Checks.



Each plot shows the interaction between a pair of interventions. The relationship between the factors can be understood by studying the slopes of the lines. Similar gradients indicate little interaction, whereas a large difference indicates a larger interaction effect.

A P-chart can be used to understand the effect of the smaller sample size on the experiment.

The control limits are statistically calculated to help us interpret whether a group has a higher booking rate than we would expect. This helps narrow our focus, but further testing should be completed with a larger sample size for definitive answers.

5. RESULTS AND CONCLUSIONS

We did not meet our aim of increasing the uptake rate by 50%, however we did benefit from a lot of learning in two distinct areas:

1. NHS Health Checks in Salford

- Practices need to maintain patient records of all forms of communication
- Practices should be encouraged to follow up the initial letter with some form of reminder; this is a common theme in the data

2. Planned Experimentation

- Chosen interventions should be relevant and achievable. It was assumed the information for sending a text message would be available. The lack of this information negatively affected the sample size.
- Appreciate and understand the context and environment of the test site: the practice could not perform the experiment in one 'run' as initially intended which increased the burden of data collection and time taken.
- Establish contingency plans to increase the resilience of the project team to adapt with and mitigate unexpected issues.

haelo

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Copy of poster presented at NHS Health Check National Conference, February 2015

University of Salford MANCHESTER

NHS Health Checks in Salford: an exploration using FARSITE data

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Background

- NHS Health Check is part of a national initiative aimed at preventing cardiovascular disease (CVD)
- Early identification of CVD is of paramount importance, given that CVD is the main cause of death and disability in the UK
- Since April 2013, the programme has been the responsibility of the Local Authorities
- Across England, premature mortality from CVD is highest in the North West and lowest in the South East and South West
- Modifiable, lifestyle-related behaviours such as diet and smoking are estimated to be worse in Salford, compared to England; Salford also has high levels of deprivation

Project aims

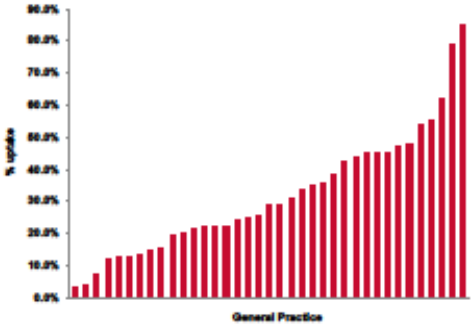
- Assess the level of uptake for the NHS Health Check programme in Salford, by demographic characteristics
- Provide a better understanding of who takes up health checks in Salford, and how many of these are at high risk of CVD
- Compare those who attend and do not attend health checks
- Determine the completeness of CVD risk factor information on GP databases

Methods

- Secondary data analysis of the FARSITE system (2013-2014)
- FARSITE is a system that is used within Salford to capture NHS data; it provides a comprehensive search filter based on Read codes
- Using FARSITE, only aggregate data are obtained
- Data were extracted by a researcher from the University of Salford at Salford City Council offices

Results

- Uptake was higher in females (53%) compared to males (47%)
- Uptake increased with increasing age groups
- As shown in the graph, uptake varied greatly by practice
- 15% of patients were considered to have high CVD risk (≥20%) over the next 10 years; males were more likely to have high CVD risk compared to females (22.9% vs. 6.9%)
- Those who attended a health check, in general, were more likely to have 'healthier' risk factor recordings



- Data for advice and referrals to other lifestyle services were sparse, with the exception of smoking cessation
- Overall, recording of CVD risk factors was high for those attending a health check
- However, only 65.1% of those who attended a health check had a corresponding CVD risk score recorded

Risk factor variable	Completeness (n,%) (in those who attended, n=3833)
Blood pressure reading	3823 (97.2)
Cholesterol (either total, HDL or ratio)	3446 (87.6)
Family History of CVD	1393 (35.4)
BMI	3656 (93.0)
Waist circumference	1310 (33.3)
Physical activity	1783 (45.3)
Smoking status	3717 (94.5)
Alcohol use	1222 (31.1)

Recommendations

- Further research into understanding the motivation behind individuals in Salford choosing to attend or not attend a health check
- Explore the reasons of high uptake rates in certain practices
- Explore why health checks are not consistently coded
- Consistent usage of referral Read codes in all health checks, with the potential to follow behaviour/behaviour change
- Explore barriers and facilitators to lifestyle referral for general practices, including for example, communicating risk, training needs etc.
- Ensure a complete set of CVD risk factors is collected during a health check
- Further research into methods to improve accurate and consistent inputting of data; for example, setting standards to define the components of a complete dataset

Acknowledgments

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