Croydon NHS Health Check Programme: Review and Options Appraisal

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Executive summary and recommendations

1. **Aim of paper:** The aim of this paper is to review the design of the Croydon NHS Health Check Programme, analyse the options available and make a recommendation for a new design of the programme.

2. **Background of NHS Health Checks in Croydon:** The NHS Health Check programme is a national systematic vascular risk assessment and management programme to assess an individual’s risk of heart disease, stroke, diabetes, kidney disease, dementia and alcohol misuse in order to reduce both death and the burden of disease from these conditions. It is a mandatory service for Croydon Council.

The target group are aged 40 to 74 - approximately 100,000 people in Croydon. Public Health England (PHE) expect 20% of the eligible population to be invited each year over the 5 year rolling programme with an uptake of approximately 75%. In Croydon each year, this equates to approximately 20,000 invitations and 15,000 NHS Health Checks actually completed.

3. **Summary of services / existing contracts:** Currently in Croydon, 14 of 73 pharmacies and 8 of 61 GP practices are signed up to provide NHS Health Checks. A payment of £35 is paid per NHS Health Check. There is no community outreach provider. NHS Health Checks are completed by invitation only; there is no opportunistic activity.

4. **Activity levels and current performance:** Over its almost 2 year operation, the NHS Health Check programme has met the prescribed Department of Health indicator for performance - achieving the required number of offers of an NHS Health Check to the eligible population. However, although there was no mandated minimum uptake of NHS Health Checks, in the 1st year (2011-12) of the Croydon programme, uptake was only 8.6% compared to a national average of 50%. In its 2nd year (2012-13), uptake in Croydon improved slightly although remained low at 12.5%. Compared to other London boroughs with a similar population makeup and levels of deprivation, Croydon had the lowest rate of Health Check completion reaching only 1,591 per 100,000 eligible population in comparison to Hillingdon which reached 8,996 per 100,000 eligible population.

In addition to poor uptake, in the latter part of 2012/13 and following Transition (of Public Health from NHS to Croydon Council), there have been significant problems relating to information governance (IG) which have had serious consequences for the call and recall aspect of the programme.

5. **Spend analysis:** The gross cost of an NHS Health Check has reduced from £74.31 to £50.14 over its first 2 years of operation. The gross cost of ‘finding’ a high risk (QRisk >/ 20%) client has also reduced, from £758.17 to £659.69.

6. **Strategic direction and policy drivers:** There are a number of national and local strategic drivers including the Public Health Outcome Framework, Marmot Review recommendations on tackling health inequalities, the Equality Act 2010, Croydon Health and Wellbeing Strategy and synergies with the Croydon ‘Heart Town’ programme.

7. **Current and future projection of need:** Table 4 estimates that in Croydon, there are approximately 16,890 – 18,358 undiagnosed cases of vascular conditions (diabetes, dementia, coronary heart disease, stroke, hypertension, chronic kidney disease). However, this is likely to be an under-estimate. Table 5 forecasts the number of referrals to other services (including GP,
smoking cessation service etc) anticipated as a result of increases in the number of NHS Health Checks completed. Referral rates are based on historical referral data.

8. **Existing provision and local asset base:** According to the Local Medical Committee (LMC) and Local Pharmacy Committee (LPC), there is potential to increase the current local pool of NHS Health Check provision by recruiting more GPs and Community Pharmacies.

9. **Gap analysis:** There are a number of needs identified. Some key ones include using the NHS Health Check as an opportunity for promoting health and wellbeing to people who may not usually have much contact with health care professionals especially those who are most at risk of vascular disease and ensuring that the results of NHS Health Checks are used by GPs to help people improve their health. In addition, there is a need to ensure that the NHS Health Check service leads liaise with our colleagues providing other related Public Health services such as healthy weight management.

Priority outcomes for the programme are defined by (1) short-term programme activity outcomes eg number of NHS Health Checks provided each year against the expected PHE target of approximately 15,000 for Croydon and (2) Croydon population outcomes which are medium and long-term measures. These include measuring the prevalence of various risk factors eg smoking, and diseases eg diabetes.

10. **What does the evidence say about improving the effectiveness of the NHS Health Check Programme:** Peer-reviewed evidence is scanty however, there are some pockets of evidence on elements of the programme and shared best practice. This includes the importance of GPs in influencing clients to take-up and then respond to the results of their NHS Health Check. It also highlights the importance of using behavioural insights to improve uptake of the programme. Nationally-commissioned evidence is in the pipe-line.

11. **Market factors:** The market is increasingly developing as there is no national template for the NHS Health Checks service and different areas use different models of service provision including community outreach providers and IT software to support their programmes.

Competiton is good for good quality off-the-shelf solutions for various ‘chunks’ of the programme and it is unlikely that a costly bespoke solution will be needed for Croydon.

12. **Options:** Two options each were provided for the 5 key steps of the NHS Health Check process. This covered deciding who gets an invitation (universal or targeted); the principles of the invitation process (invitation only or invitation + opportunistic); identifying and inviting the eligible cohort (GPs vs centrally); delivery of the Health Check (fixed locations or fixed and community outreach) and how the result of the Health Check is entered into the GP-held patient record (manually vs paperless electronic transfer).

These options were discussed and scored by the Steering Group in July 2013. The summarised results are at Annex E.
13. Recommendations

1) Recommended options for the future commissioning and management of the NHS Health Check Programme.

Table 7 showing the preferred option for each key step and comments relating to the implementation of this option.

<table>
<thead>
<tr>
<th>Key step</th>
<th>Preferred option</th>
<th>Comments about implementation (taking into consideration key elements from Options Appraisal meeting and SWOT and cost analysis in Annex D)</th>
</tr>
</thead>
</table>
| 1 Agree who gets an NHS Health Check         | Universal approach                        | Universal invitations must be supplemented with the additional ‘safety net’ of some targeted work to reach the traditionally ‘hard to reach’ and to reduce health inequalities eg through:  
- Targeted marketing (population subgroups / geographical areas etc)  
- Mobile community outreach  
(This especially refers to those who are not registered with a GP.)  
- Milestone birthdays eg 40, 45, 50 etc may act as useful trigger for increased uptake. |
| 2 Principles of invitation process            | Invitation + opportunistic approaches     | - Ensure that in addition to the formal invitations, any opportunistic approach has clear additional eligibility criteria and safeguards to minimise risk of repeat NHS Health Checks and fraud. |
| 3 Identifying eligible cohort (and associated invitations) | Centrally organised cohort identification and invitation issue by 3rd party | - Cohort identification should make best use of the available IT software solutions using regularly updated GP data for accurate call and recall.  
- Even though there will be a centralised system of call and recall, the will still be a requirement for work with local GPs to raise greater awareness of the NHS Health Check programme and its benefits to community as well as GP practices. |
| 4 Delivery of NHS Health Check                | Fixed locations + Community outreach       | - In addition to the current GP and Pharmacy provision, additional models of service provision eg opportunistic community outreach, should be used to reach more of Croydon’s eligible population.  
(Existing providers may also wish to offer model of provision.)  
- In addition to new types of provision, the mainstay of NHS Health Checks should continue to be provided by GP practices and pharmacies and in line with areas having greater uptake of NHS Health Checks, more of these providers should be recruited across Croydon. |
| 5 Entry of result in GP patient record        | Capability for electronic uploading into GP ePatient record | - Once accepted by the patient’s GP, results from the NHS Health Check should be fully integrated into the electronic patient record and the most efficient and effective way of achieving this is by electronic transfer (in a similar way to laboratory test results). |

2) Additional recommendations to develop the NHS Health Check programme and to ensure a high quality service with sufficient capacity to deliver approximately 15,000 NHS Health Checks per year:

1. **Programme team:** There should be a dedicated programme team (compare with Stop Smoking Service) to address, for example, day-to-day running, timely monitoring, provider quality control (especially training and audit), marketing and programme evaluation.

2. **Optimising use of appropriate IT solutions:** There should be appropriate use of IT software solutions to facilitate the call and recall process, improve the NHS Health Check patient experience, improve the efficiency of data recording and reporting by service providers,
ensure timely and accurate returns to GP-held electronic patient records and optimise PH management of the programme (for provider payment and monitoring and evaluation).

3. **Liaison with other PH services:** Liaise with the Commissioners of Public Health lifestyle intervention services e.g. stop smoking, healthy weight and physical activity, to request that anonymised patient outcomes resulting from a referral from an NHS Health Check are reported back to the NHS Health Check service. This will enable closer monitoring and evaluation of the NHS Health Check programme.

4. **Increase pool of providers:** Increase the number of providers, particularly GP surgeries and community pharmacies to provide the bulk of NHS Health Checks (to achieve the expected target of an almost 10-fold increase in service provision). However, any planned increase in the number of providers will need to be balanced against the need to monitor quality of service.

5. **Client experience:** Ensure the client experience is monitored and evaluated and that specific consent for this is gained from clients at the outset of their NHS Health Check. (However, there should be sufficient opportunity for clients to decline consent for sharing information but still allowing their NHS Health Check.) Annex F describes the client experience we would hope to achieve through the new design of the NHS Health Check programme.

6. **Protected characteristics:** There should be adequate routine information collection of protected characteristics, including disability status to allow adequate monitoring of Croydon Council’s compliance with the Equality Act 2010.

7. **Marketing:** There should be increased marketing to the public to improve uptake, including the requirement to monitor the impact of different media on uptake. Social marketing techniques could help develop a more sophisticated approach to targeting different groups within the community. Marketing approaches to test ‘likelihood of uptake’ should be tested on the target population both before roll-out and as part of ongoing programme evaluation.

8. **Functional literacy:** Any information produced for the public should be accessible. For example, particularly for groups of the community where NHS Health Check uptake is low, it will be important to consider the impact of poor functional literacy or that English is not the first language.

9. **Working with GPs:** There should be improved marketing to GPs to promote the benefits (both for patients and individual practices) of the NHS Health Check programme. This is to help improve uptake of the programme and to improve the subsequent management of people identified by the programme to need further medical intervention.

10. **Closure of old design service:** There should be a process developed to ensure the formal closure of the ‘old’ design of the Croydon NHS Health Check programme, taking into consideration appropriate information governance.
1. **Aim of paper**

1.1 Recent concerns about the Croydon NHS Health Check Programme have highlighted that it is not working as well as it could. Given that the NHS Health Check Programme offers an opportunity to tackle the top behavioural and biological risk factors leading to premature death and disability in Croydon - and their uneven distribution amongst the Croydon population - and that it is a mandatory service by Croydon Council, it is vital to ensure the programme operates as effectively and efficiently as it can.

1.2 The aim of this paper is to review the design of the Croydon NHS Health Check Programme, analyse the options available and make a recommendation for a new design of the programme.

2. **Background of NHS Health Checks in Croydon**

2.1 The NHS Health Check programme is a national systematic vascular risk assessment and management programme established in 2009, to assess an individual’s risk of heart disease, stroke, diabetes and kidney disease in order to reduce both death and the burden of disease from these conditions. Since April 2013, the programme also identifies people at risk of problems with alcohol and dementia. Detailed guidance on best practice is available.¹

2.2 The NHS Health Check programme was mandated by the Department of Health and implementation in Croydon was started by the former Croydon PCT in June 2011 following a pilot scheme in six community pharmacies.

2.3 The target group are aged 40 to 74 – in Croydon, almost half the population over 16 years (48%). People with an existing diagnosed vascular condition are excluded from the programme, leaving a population of approximately 100,000 people in Croydon. Eligible persons are offered an NHS Health Check every five years – about 20,000 people per year.

2.4 During an NHS Health Check, the data gathered to assess an individual’s vascular risk relate to age, gender, ethnicity, family history (first degree), smoking status, levels of physical activity, blood cholesterol, height/weight/BMI, blood pressure and alcohol consumption. In addition, dementia awareness and signposting is mandated for those aged 65-74 years of age. Data is input to a risk calculator and a risk score generated. Individuals scoring 20% risk or above are referred for more in-depth risk assessment by their GP. Referral thresholds for individual components of the test eg: blood pressure, also trigger onward referral. In the course of the NHS Health Check, in addition to this formal vascular risk assessment, there is also the opportunity to provide information and help motivate the client to make changes to their lifestyle if necessary.

2.5 The NHS Health Check programme is therefore primarily a public health programme aimed at preventing disease but it will also identify individuals at high risk of developing or having disease who will require some additional clinical testing and follow-up. There is therefore a need for different parts of the health and wellbeing system to work closely together to ensure this happens, with Health and Wellbeing Boards being pivotal to this.

3. Summary of services / existing contracts

3.1 Currently, 14 pharmacies (of a possible 73 community pharmacies in Croydon) and 8 GP practices (of a possible 61 practices in Croydon) are signed up to provide NHS Health Checks. Prior to April 2013, they were contracted under the terms of a LES (local enhanced service) agreement. Since April 2013, the LES has been replaced with the Public Health Services contract. A payment of £35 is paid per NHS Health Check. There is no community outreach provider.

3.2 Until 31 March 2013, the NHS Health Check process was as follows:

- Cohort identification: A cohort of eligible clients was identified by Public Health from a central database where local GPs shared their patient data. (In its first 2 years of operation, identified patients were stratified according to whether their GP record showed they were either a smoker or ‘smoking status unknown’.) With this method, only Croydon residents who were registered with a GP could be invited.
- Invitation: Details of the cohort were sent to the Primary Care Support Service (PCSS) who generated standard invitations that were sent to clients ‘by NHS South West London on behalf of local GP practices’. The letter gave details of all the providers in Croydon and invited patients to arrange an appointment with a provider of their choice.
- NHS Health Checks completion: The provider completed the NHS Health Check according to guidance and provided a results booklet for the client. When practices undertook a Health Check for one of their registered patients, results were entered directly on to the GP patient record, otherwise results were entered on an Excel spreadsheet that was shared with both Public Health and the patient’s GP.
- Data entry to GP records: On receipt of NHS Health Checks results, GP practices were expected to manually enter patient data/READ codes into their electronic patient record and act according to results and associated recommendations.
- Data validation by Public Health: Data returns by providers were verified manually by Public Health for provider payment and for population-level surveillance of programme uptake.
- Recall: With Public Health managing the invitation process, a process was in place to also manage the 5-year recall aspect.

Information governance concerns

3.3 Information governance issues have largely arisen because the local NHS Health Check Programme has been dependent on Public Health having access to GP data at a central level following historic local data sharing agreements. Since Transition (31 Mar 2013), data sharing agreements have expired and there is ambiguity about the legality of Public Health Departments, now part of Local Authorities, having access to and using person identifiable data (PID).

3.4 The legislation detailing Local Authorities’ (LAs) new responsibilities includes NHS Health Checks\(^2\). This is detailed at Annex A. Unfortunately, while it makes specific reference to LAs handling the data related to the recording of information during a Health Check, it does not make specific reference to the data required for the invitation process.

3.5 Section 251 of the NHS Act 2006\(^3\) allows in certain circumstances for the setting aside of the common law duty of confidentiality for medical purposes where it is not possible to use

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\(^3\) Health Research Authority. Available at: [http://www.hra.nhs.uk/hra-confidentiality-advisory-group/what-is-section-251/](http://www.hra.nhs.uk/hra-confidentiality-advisory-group/what-is-section-251/)
anonymised information and where seeking individual consent is not practicable. (However, it was anticipated when Section 251 powers were originally established that the NHS would develop mechanisms to seek, record and implement consent.)

3.6 There appears to be an increasing confidence of LAs to interpret Section 251 of the Act, referring to access to PID for the sake of ‘patient care’ to include their responsibility for NHS Health Checks and the associated data flows however, this confidence is not universal.

4. Activity levels and current performance

4.1 Over its almost 2 year operation, the NHS Health Check programme has met the prescribed Department of Health indicator for performance – achieving the required number of offers of an NHS Health Check to the eligible population. However, although there was no mandated minimum uptake of NHS Health Checks, in the 1st year (2011-12) of the Croydon programme, uptake was only 8.6% compared to a national average of 50%. In its 2nd year (2012-13), uptake in Croydon improved slightly although remained low at 12.5%.

4.2 Public Health England (PHE), have recently produced new expected targets for the NHS Health Checks programme. The expected roll-out for local authorities is to achieve offers to 20% of the eligible population annually with a vision to realise at least 75% uptake per year. This equates to being expected to complete 15,000 Health Checks per 100,000 eligible population. To put this expected target in context, Table 1 shows that Croydon performance in 2011/12 was 1,591 Health Checks per 100,000 eligible population – approximately 1/10th of what is expected in the future.

Table 1 showing how Croydon compares to its statistical neighbours in London (2011-12)

<table>
<thead>
<tr>
<th>Public Health Outcome Framework indicator 2011/12</th>
<th>Croydon</th>
<th>Enfield</th>
<th>Hillingdon</th>
<th>Merton</th>
<th>Redbridge</th>
<th>Waltham Forest</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.22i - Take up of NHS Health Check Programme by those eligible - <strong>health check offered</strong></td>
<td>18.5%</td>
<td>4.9%</td>
<td>17.4%</td>
<td>11.2%</td>
<td>3.7%</td>
<td>2.8%</td>
</tr>
<tr>
<td>2.22ii - Take up of NHS Health Check Programme by those eligible (who received an invitation) - <strong>health check take up</strong></td>
<td>8.6%</td>
<td>34.2%</td>
<td>51.7%</td>
<td>41.3%</td>
<td>85.0%</td>
<td>89.7%</td>
</tr>
<tr>
<td>Calculated rate of Health Check completion per 100,000 eligible population</td>
<td>1591</td>
<td>1676</td>
<td>8996</td>
<td>4626</td>
<td>3145</td>
<td>2512</td>
</tr>
</tbody>
</table>

a – Health Check ‘rate of completion’ is calculated: % health check offered x % health check take up x 100,000. It allows easy comparison across boroughs of the proportion of people eligible for an NHS Health Check who actually received one.

4.3 The Public Health Outcome Framework’s two indicators for NHS Health Checks relate to NHS Health Checks offered to the eligible population and of those offered, NHS Health Checks taken

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up. As can be seen from the table above, an area such as Waltham Forest can have very high uptake but if its invitation level is low, the rate of NHS Health Check completion is still low.

4.4 Compared to other London boroughs with a similar population makeup and levels of deprivation, Croydon had a low rate of Health Check completion. Croydon had the lowest rate of NHS Health Check completion of its statistical neighbours - reaching only 1,591 per 100,000 eligible population in comparison to Hillingdon which reached 8,996 per 100,000 eligible population.

Table 2 comparing performance of the NHS Health Check Programme between 2011-12 and 2012-13.

<table>
<thead>
<tr>
<th>Year</th>
<th>2011-12 (1st year)</th>
<th>2012-13 (2nd year)</th>
<th>Change relative to first year of operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>No of invitations issued (target)</td>
<td>18,055 (17,613)</td>
<td>20,047 (20,040)</td>
<td>+ 11%</td>
</tr>
<tr>
<td>Completed NHS Health Checks</td>
<td>1,561</td>
<td>2,514</td>
<td>+ 61%</td>
</tr>
<tr>
<td>Uptake</td>
<td>8.6%</td>
<td>12.5%</td>
<td>+ 45%</td>
</tr>
<tr>
<td>No of clients with high risk (ie QRisk ≥20)</td>
<td>153</td>
<td>191</td>
<td>+ 25%</td>
</tr>
<tr>
<td>% high risk clients (of completed NHS Health Checks)</td>
<td>10%</td>
<td>8.2%</td>
<td>- 18%</td>
</tr>
<tr>
<td>Total programme spend</td>
<td>£116,000</td>
<td>£126,000</td>
<td>+ 9%</td>
</tr>
</tbody>
</table>

4.5 An evaluation of the 1st year in Croydon highlighted a number of concerns including the ability of the programme to help reduce the burden of disease from vascular disease and tackle health inequalities given both poor general uptake and relatively low yield of high risk clients among the more deprived areas.  

4.6 The results of the 1st and 2nd years (2011 – 2013) are detailed in Annex B. Sizeable gaps in some of the data make it harder to interpret all the findings, especially to identify any trends over the 2 years of operation. In summary:

**NHS Health Check uptake**

- More NHS Health Checks are completed in the younger age groups of the eligible population ie approx 60 – 75% are in the Under 60s
- Slightly more women than men have a Health Check
- Uptake among the BME population is consistent with the makeup of Croydon’s population: 20% black people, 15% Asian people and 5% ‘other’ non-white groups. Uptake in the white population is 30-35% although the white population in Croydon is 55%. 20-30% of those who have had a Health Check are ethnicity unknown to Public Health
- There are slightly more Health Checks in more deprived groups than less deprived groups
- Overall, approx 10% of Health Checks are high risk, 20% are medium risk and 70% are low risk

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**High vascular risk group**

- Of the Health Checks considered high risk (ie Q Risk >/20%), few were in the Under 50s while most are in the 60-69 year age group
- Considerably more are in men – approx 70-80%
- The main ethnic groups identified were white and Asian with considerably less people from Black and other BME groups identified as high risk
- There appears to be a trend that people from more deprived areas are less likely than less deprived people to be high risk
- There are various reasons for under-representation of black and more deprived people in the high risk group but one of the reasons may be that some people who suspect they may be at higher risk are choosing not to attend an NHS Health Check

4.7 In addition, in the latter part of 2012/13 and following Transition (of Public Health from NHS to Croydon Council), there have been significant problems relating to information governance (IG) which have had serious consequences for the call and recall aspect of the programme. The combination of poor uptake and information governance problems has driven the need for a comprehensive review of the existing design of the NHS Health Check Programme in Croydon.

**What do our Providers recommend?**

4.8 As part of this Review, the 22 providers were asked their opinions about the programme and what changes they would make for its future design. 11 of the 22 providers responded (8 of 14 pharmacies and 3 of 8 GP practices). The 4 main themes that emerged from their feedback were:

- Client eligibility and the difficulty managing clients who have been sent an invitation letter but are not eligible for an NHS Health Check
- The need for an efficient IT system for ease of data collection and transfer
- Increase public awareness of the programme
- Allow opportunistic NHS Health Checks

5. **Spend analysis**

Table 3 showing the spend of Croydon NHS Health Check programme in years 2011-12 and 2012-2013

<table>
<thead>
<tr>
<th>Year</th>
<th>Total spend including programme overheads</th>
<th>No of NHS Health Checks completed</th>
<th>Gross cost per NHS Health Check</th>
<th>No of high risk (≥20%) clients</th>
<th>Gross cost per high risk client found</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011/12</td>
<td>£116k</td>
<td>1561</td>
<td>£74.31</td>
<td>153</td>
<td>£758.17</td>
</tr>
<tr>
<td>2012/13</td>
<td>£126k</td>
<td>2514</td>
<td>£50.12</td>
<td>191</td>
<td>£659.69</td>
</tr>
</tbody>
</table>

5.1 Table 3 shows the total spend for the first 2 years of operating. It shows that the gross cost of an NHS Health Check has reduced from £74.31 to £50.12 which is likely to reflect the cost of setting up the programme as well as increased efficiencies with greater familiarity of the programme. The gross cost of ‘finding’ a high risk (QRisk >/ 20%) client has also reduced, from £758.17 to £659.69.

5.2 The relatively low spend (in comparison to anecdotal reports of allocated budget from other areas of the country) is partially due to the fact that many of the functions of the programme were conducted ‘in house’. As explained in Section 6 below, due to information governance
problems resulting from the Transition of Public Health from NHS to Local Authority, much of the ‘in house’ working is no longer allowed.

6. Strategic direction and policy drivers
6.1 There are a number of strategic and policy drivers that affect the NHS Health Check Programme in Croydon. These are detailed below:

6.2 There is a statutory duty for the Council to provide the risk assessment element of NHS Health Check Programme and this will be monitored by the Public Health Outcome Framework. The legal requirements are outlined in The Local Authorities (Public Health Functions and Entry to Premises by Local Health Watch Representatives) Regulation 2013.

6.3 Public Health Outcome Framework – Focus on 2 high-level outcomes:
   1. Increased healthy life expectancy;
   2. Reduced differences in life expectancy and healthy life expectancy between communities.

   Local Authority data will be published via an interactive map available to the public on a quarterly basis.

6.4 Croydon Health and Wellbeing Board strategy: Improvement area 3 – 3.1 Early detection and management of people at risk for cardiovascular diseases and diabetes.

6.5 Information governance and requirement for Privacy Impact Assessment: There is still some ambiguity regarding the law however, the safest assumption is that Public Health should no longer to have direct access to PID. This has impacts on both current call/recall methods and the processing of returns data for both PH evaluation and provider payment.

6.6 Equality Act 2010: Ensure that the NHS Health Check programme offered is in keeping with the Equality Act 2010.

6.7 Marmot Review recommendations: Marmot was commissioned by the Government to review what would best reduce health inequalities in England. The Review proposes that health interventions should be offered to everyone (and not just the most deprived) but that it must be ‘proportionate to the level of disadvantage’ - the principle of ‘proportionate universalism’.

6.8 Synergies / alignment: Since Jul 2013, Croydon has become a British Heart Foundation ‘Heart Town’. This is a major five year Public Health programme encompassing high quality, integrated, ‘wellness’ services, encouraging health promoting environments, promoting community

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7 Health and Social Care Act 2012.
engagement, and fostering personal responsibility, resilience and independence to improve heart and vascular health in the borough.

**Funding and working across the health care system**

6.9 From 1 April 2013, local authorities became responsible for the risk assessment and lifestyle interventions for the programme, which will be funded through the public health ring-fenced budget. The risk assessment element of the check is a mandatory function which local authorities are required to commission or provide.

6.10 Where additional testing and follow up is required, for example, where someone is identified as being at high risk of having or developing vascular disease, this remains the responsibility of primary care and will be funded through NHS England. Local authorities will need to work closely with their partners across the health care system, including through Health and Wellbeing Boards, to ensure these different elements of the programme link together.\(^ {11}\)

7. Current and future projection of need

Table 4 showing prevalence and undiagnosed need for various vascular conditions in Croydon

<table>
<thead>
<tr>
<th>Condition</th>
<th>Prevalence</th>
<th>Estimated number of Croydon population aged 16 yrs and older with condition (diagnosed and undiagnosed)</th>
<th>Estimated undiagnosed % of Croydon population (aged 16 yrs and older)</th>
<th>Estimated number with undiagnosed condition in NHS Health Check age group: 40-74yrs. (48% population aged 16 yrs and older)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 2 Diabetes (ages 16+)</td>
<td>5.7%</td>
<td>22,526</td>
<td>32.0%</td>
<td>3,459</td>
</tr>
<tr>
<td>Dementia</td>
<td>0.4%</td>
<td>3,283</td>
<td>54.3%</td>
<td>1,783</td>
</tr>
<tr>
<td>Coronary heart disease (CHD)</td>
<td>2.3%</td>
<td>14,300</td>
<td>36.3%</td>
<td>2,492</td>
</tr>
<tr>
<td>Stroke / TIA</td>
<td>1.1%</td>
<td>6,165</td>
<td>25.8%</td>
<td>763</td>
</tr>
<tr>
<td>Hypertension (18+ years)</td>
<td>12.8%</td>
<td>35,604</td>
<td>48.1%</td>
<td>8,220</td>
</tr>
<tr>
<td>Chronic kidney disease (18+ years)</td>
<td>5.3%*</td>
<td>14,742</td>
<td>23.2% (Stages 3-5)</td>
<td>1,641</td>
</tr>
<tr>
<td></td>
<td>0.56%$</td>
<td>1,557</td>
<td></td>
<td>173</td>
</tr>
<tr>
<td>Total estimated number of undiagnosed vascular conditions in Croydon in NHS Health Check age group</td>
<td></td>
<td></td>
<td></td>
<td>18,358* / 16,890$</td>
</tr>
</tbody>
</table>

Source: Prevalence and estimated undiagnosed % data from Croydon JSNA\(^ {12}\)

Notes:
*The percentage prevalence of chronic kidney disease (US National Kidney Foundation: Stage 3) for patients aged 18 years and over, as a percentage of patients aged 18 years and over.

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The percentage prevalence of chronic kidney disease (US National Kidney Foundation: Stages 4-5) for patients aged 18 years and over, as a percentage of patients aged 18 years and over.

7.1 Table 4 above shows that amongst the NHS Health Check target age group, it is estimated there are approximately 16,890 – 18,358 undiagnosed vascular conditions amongst the Croydon population. This equates to about 1 in 6 people aged 40 – 74 years old. However, it should be noted that these estimates are based on Croydon residents who are registered with a GP and are therefore likely to be an underestimate of ill health in Croydon. Unregistered residents (for example, those who are homeless, migrants or those with chaotic lifestyles) are more likely to experience poor health – both as a cause and a consequence of not being registered with a GP. As such the NHS Health Check Programme is a real opportunity to narrow the ‘prevalence gap’ of various vascular long-term conditions.

7.2 Having identified people with undiagnosed vascular conditions and those with vascular risk factors that are amenable to change eg smoking or diet, the NHS Health Check Programme offers clients the opportunity to be referred to the appropriate service. Based on past performance of the programme in Croydon, we can estimate the likely future demand on services – such as referrals to GPs, stop smoking service etc.

7.3 Table 5 below shows the forecasted number of referrals for each service based on 3 future scenarios of NHS Health Check uptake in Croydon – from 5,000 to 15,000 NHS Health Checks in a year. (PHE expected target for Croydon is approximately 15,000 NHS Health Checks per year).

Table 5 showing projected need for Lifestyle and GP referrals as a result of NHS Health Check programme based on referral patterns in 2011/12 – 2012/13

<table>
<thead>
<tr>
<th>Referral scenarios based on projected numbers of NHS Health Checks completed each year</th>
<th>5,000</th>
<th>10,000</th>
<th>15,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lifestyle Referral</td>
<td>Referral rates as % of NHS Health Checks completed&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smoking</td>
<td>11.7%</td>
<td>585</td>
<td>1170</td>
</tr>
<tr>
<td>Physical Activity</td>
<td>9.0%</td>
<td>450</td>
<td>900</td>
</tr>
<tr>
<td>Weight Management</td>
<td>7.0%</td>
<td>350</td>
<td>700</td>
</tr>
<tr>
<td>Total numbers referred to GP at referral rate of 42.3%&lt;sup&gt;b&lt;/sup&gt;</td>
<td>2115</td>
<td>4230</td>
<td>6345</td>
</tr>
<tr>
<td>Medical Referral</td>
<td>Medical referral rates as % of all GP referrals&lt;sup&gt;c&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qrisk score &gt;/ 20%</td>
<td>21.4%</td>
<td>453</td>
<td>905</td>
</tr>
<tr>
<td>BP &gt;=140/90</td>
<td>43.4%</td>
<td>918</td>
<td>1836</td>
</tr>
<tr>
<td>BP &gt;=240/120</td>
<td>0.1%</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Cholesterol &gt;=7.5</td>
<td>3.0%</td>
<td>63</td>
<td>127</td>
</tr>
<tr>
<td>BMI &gt;=30</td>
<td>51.1%</td>
<td>1081</td>
<td>2162</td>
</tr>
<tr>
<td>Needs pulse and BP checked</td>
<td>1.9%</td>
<td>40</td>
<td>80</td>
</tr>
</tbody>
</table>
Note to Table 5:
Referral rates based on identifying 10% of QRisk >/ 20% therefore, are likely to be an underestimate if identification of high risk clients increases to 20% of NHS Health Checks.
a – Lifestyle referral rate based on 2012-13 referral rate (as no data available for 2011-12)
b – GP referral rate based on average of 2011-12 and 2012-13 GP referral rates
C – Medical referral rate based on average of 2011-12 and 2012-13 medical referral rates
See Annex B (Table 8) for data that underpins calculations in this table.

8. Existing provision and local asset base
8.1 There are currently 22 independent providers who provide NHS Health Checks – 8 GP surgeries and 14 community pharmacies.
8.2 According to discussions with both the Local Medical Committee (LMC) and Local Pharmacy Committee (LPC), there could be significant scope to increase the number of GP and community pharmacies who provide the NHS Health Check service however, it would depend on the terms offered.

9. Gap analysis
Need
9.1 The following needs have been identified:
- Agree a strategy for identifying each year’s cohort of eligible people to invite for an NHS Health Check in order to:
  - Identify those at highest vascular risk;
  - Tackle health inequalities in Croydon
- Use each NHS Health Check to motivate a client to behavioural change (or maintenance) for good vascular health – as well as assessing vascular risk
- Liaise with NHS England (Local Area Team) to ensure the information gained from an NHS Health Check is used by Croydon General Practitioners to improve the health of the patient by ensuring there is appropriate:
  - Incorporation of NHS Health Check results into patient records;
  - Follow-up with their GP;
  - Referral to lifestyle interventions as required;
  - Documentation on a suitable GP Register eg by disease. (At present, there is no nationally recommended register Croydon GPs use for patients with a ‘high vascular risk’ eg QRisk score >/20%.)
- Liaise with other Public Health commissioners to ensure there is adequate lifestyle intervention provision ie stop smoking, healthy weight management and physical activity services to cater for clients from the NHS Health Check Programme who are identified as needing support
- Use previous Evaluation report to inform future service specification / tender (in addition to current Review)
- Monitor uptake of NHS Health Checks to ensure it proportionately reaches those at most risk of vascular disease eg certain BME groups, people in lower socio-economic groups – in line with Marmot Review’s recommendation.13

• Close the ‘prevalence gap’ – the missing thousands of people in Croydon who are likely to have a vascular disease, such as diabetes, but who are not yet known to healthcare services.

**Priority outcomes**

**9.2 Croydon Programme outputs**
- Increase NHS Health Check ‘reach’ to at least 5,000 NHS Health Checks per 100,000 eligible population per annum by Mar 2015 and to 10,000 NHS Health Checks per 100,000 eligible population by Mar 2016
- Increase high risk (QRisk >=20%) yield to 20% of all those who have an NHS Health Check
- Ensure client satisfaction evaluation (form completed) in at least 50% of completed NHS Health Checks
- Evaluate use of media annually

**9.3 Croydon population outcomes**
- Ensure client satisfaction is rated ‘very good’ or ‘excellent’ in at least 80% of NHS Health Checks evaluated
- Reduce overall prevalence in over 40 year olds for vascular risk factors ie smoking, obesity and low levels of physical activity (although in the short-term, detection resulting from the NHS Health Check programme will see prevalence initially increase)
- Close prevalence gap (predicted vs recorded) each year for each of the measured vascular diseases (diabetes, dementia, coronary heart disease, chronic kidney disease and stroke/TIA)
- Narrow the health inequalities gap between most and least deprived quintiles in Croydon of the following*:
  - Short-term (over 3-5 years):
    - Risk factor prevalence ie smoking, obesity and low levels of physical activity
  - Longer-term (5-10 years):
    - Vascular disease prevalence
    - Under 75 years cardiovascular mortality
    - Life expectancy and healthy life expectancy

* subject to data being available to measure

**10. What does the evidence/best practice experience say about improving the effectiveness of the NHS Health Check programme?**

10.1 The NHS Health Check programme is the most comprehensive national programme of its kind but to date, there has been little evidence for this particular model of addressing multiple risk factors at a population-wide level. There is clear evidence that for the major non-communicable diseases, a small number of well-known risk factors contribute to the bulk of the population’s risk. There is also evidence for the benefits of tackling individual risk factors (particularly, vascular risk factors) and several of these are addressed in various NICE guidelines. However, the fact remains that the NHS Health Check programme is being implemented in the absence of high quality trial evidence to guide it.

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14 Soljak M. Population based health checks are here, RCTs or not. Evidence-based medicine. 2013:101229Published online.
10.2 Despite the lack of evidence supporting the NHS Health Check programme in its entirety, there are increasing pockets of evidence to guide various aspects of the programme, for example in how to recruit clients. A more detailed summary of this lower level evidence is available in Annex C but key findings are:

- People respond better to an NHS Health invitation when it is personalised from their GP
- Communications about the programme need to be more effective eg
  - Make messages simple and positively framed
  - People need triggers and incentives within any invitation to help them act
- Reduce barriers to uptake eg
  - Ensure a convenient time and location
- Improve communication of risk during the consultation.

10.3 Anecdotal evidence from the experience of colleagues in highly performing areas highlight the following commonalities:\textsuperscript{17,18,19,20}

- A high proportion of GP surgeries providing NHS Health Checks
- GP engagement including GP champions
- Generally, a large number of providers (but this must be offset against the greater challenge of maintaining a high quality programme with greater numbers of providers)
- IT software to improve the end-to-end Health Check process including electronic data transfer between provider and client’s GP
- Marketing to target population

11. Market factors

*Position existing providers in the market*

11.1 The traditional providers of fixed location NHS Health Checks at a national level are GPs and community pharmacists. Certainly, the areas in London who have achieved high levels of NHS Health Check provision, for example, London Boroughs of Redbridge or Hillingdon, have most, if not all of their local GP surgeries participating in the scheme and a large number of community pharmacies. However, there is nothing to prevent other providers, including commercial companies, from providing the service.

11.2 Nationally, where alternative providers have excelled is in community outreach. Their flexibility is particularly useful to target ‘hard to reach’ groups who by definition, have not responded to traditional statutory services. There are various companies who can provide mobile community out-reach clinics eg Solutions 4 Health.

11.3 In addition, following discussion with both the LPC and LMC, some of our current providers may be keen to provide community outreach using, for example, mobile stands or working on the local community outreach bus – the ‘POP’ (partnership with older people) bus.

11.4 The market has several providers of software solutions for NHS Health Checks – both private and public-sector. Given the number of companies, there is therefore a reasonable amount of

\textsuperscript{17} Emails between author and NHS Health Check Lead, Barnsley (25/6/13) and shared best practice on NHS Health Checks Learning Network.
\textsuperscript{18} Telephone conversation between author and NHS Health Check Lead, Hillingdon (29/7/13).
\textsuperscript{19} Presentation from NHS Health Check Lead, Durham at The Health Diagnostics NHS Health Check Leadership Forum. 12/6/13 (Sponsored by an IT supplier, Health Diagnostics)
\textsuperscript{20} U Khan. NHS Health Checks: Richmond’s Success Story. Richmond PCT. Aug 2012.
competition. These companies provide a range of different IT solutions, most of which are compatible with existing IT systems, for example in General Practice electronic records. Eg:

- BMJ Informatica
- Health Diagnostics
- Health Intelligence Ltd
- iPharma Solutions Ltd
- QMS
- To Health Ltd
- HSCIC (Health and Social Care Information Centre) (Public Sector)

**Market readiness / purchasing position**

11.5 The NHS Health Check programme has now been operating across England in most areas. Many areas are using a small number of off-the-shelf commercial software packages to enable them to perform various steps of the NHS Health Checks process.

11.6 Key steps that can be achieved with greater ease using software packages include:

- Cohort identification
- NHS Health Check delivery (including data input, behavioural change prompts)
- Data transfer to GP
- Provider payment
- Surveillance

11.7 Following experience of the programme in practice over the last few years and in various locations, these software packages have been updated by their creators. As a result, there is likely to be little or no requirement for bespoke IT solutions for Croydon.

12. **Options**

12.1 The NHS Health Check Programme consists of key steps which may be addressed in a number of ways as described in Table 6 below.

Table 6 showing a summary of the main options for the proposed NHS Health Check Programme

<table>
<thead>
<tr>
<th>1) Agree who gets an NHS Health Check</th>
<th>2) Principles of invitation process</th>
<th>3) Identifying eligible cohort (and associated invitations)</th>
<th>4) Delivery of NHS Health Check</th>
<th>5) Entry of result in GP Patient record</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universal (every one equally, every 5yr)</td>
<td>Invitation only VS Invitation only</td>
<td>Centrally organised cohort identification and invitation issue by 3rd party VS</td>
<td>Fixed locations (eg GP or Pharmacy provider) VS</td>
<td>Manually (eg Appended results pdf) VS</td>
</tr>
<tr>
<td>Targeted (priority groups focus)</td>
<td>Invitation + opportunistic (based on additional eligibility criteria eg BME / in receipt of benefits including DLA-equivalent)</td>
<td>Direct from GP practice (with additional ‘invitation fee’)</td>
<td>Fixed locations + Community outreach</td>
<td>Electronically uploaded into GP ePatient record (once accepted by GP)</td>
</tr>
</tbody>
</table>
12.2 Annex D details the strengths, weaknesses and relevant approximate costs of each option.

12.3 These options were discussed and scored by the Steering Group during a meeting in July 2013. The outcome of this meeting are summarised in Annex E.

13. Recommendations

1) Recommended options for the future commissioning and management of the NHS Health Check Programme.

Table 7 showing the preferred option for each key step and comments relating to the implementation of this option

<table>
<thead>
<tr>
<th>Key step</th>
<th>Preferred option</th>
<th>Comments about implementation (taking into consideration key elements from Options Appraisal meeting and SWOT and cost analysis in Annex D)</th>
</tr>
</thead>
</table>
| 1 Agree who gets an NHS Health Check          | Universal approach                                    | Universal invitations must be supplemented with the additional ‘safety net’ of some targeted work to reach the traditionally ‘hard to reach’ and to reduce health inequalities eg through:  
- Targeted marketing (population subgroups / geographical areas etc)  
- Mobile community outreach  
(This especially refers to those who are not registered with a GP.)  
- Milestone birthdays eg 40, 45, 50 etc may act as useful trigger for increased uptake. |
| 2 Principles of invitation process            | Invitation + opportunistic approaches                | - Ensure that in addition to the formal invitations, any opportunistic approach has clear additional eligibility criteria and safeguards to minimise risk of repeat NHS Health Checks and fraud.                                 |
| 3 Identifying eligible cohort (and associated invitations) | Centrally organised cohort identification and invitation issue by 3rd party | - Cohort identification should make best use of the available IT software solutions using regularly updated GP data for accurate call and recall.  
- Even though there will be a centralised system of call and recall, the will still be a requirement for work with local GPs to raise greater awareness of the NHS Health Check programme and its benefits to community as well as GP practices. |
| 4 Delivery of NHS Health Check                | Fixed locations + Community outreach                  | - In addition to the current GP and Pharmacy provision, additional models of service provision eg opportunistic community outreach, should be used to reach more of Croydon’s eligible population.  
(Existing providers may also wish to offer model of provision.)  
- In addition to new types of provision, the mainstay of NHS Health Checks should continue to be provided by GP practices and pharmacies and in line with areas having greater uptake of NHS Health Checks, more of these providers should be recruited across Croydon. |
| 5 Entry of result in GP patient record         | Capability for electronic uploading into GP ePatient record | - Once accepted by the patient’s GP, results from the NHS Health Check should be fully integrated into the electronic patient record and the most efficient and effective way of achieving this is by electronic transfer (in a similar way to laboratory test results). |
2) Additional recommendations to develop the NHS Health Check programme and to ensure a high quality service with sufficient capacity to deliver approximately 15,000 NHS Health Checks per year:

1. **Programme team:** There should be a dedicated programme team (compare with Stop Smoking Service) to address, for example, day-to-day running, timely monitoring, provider quality control (especially training and audit), marketing and programme evaluation.

2. **Optimising use of appropriate IT solutions:** There should be appropriate use of IT software solutions to facilitate the call and recall process, improve the NHS Health Check patient experience, improve the efficiency of data recording and reporting by service providers, ensure timely and accurate returns to GP-held patient electronic records and optimise PH management of the programme (for provider payment and monitoring and evaluation).

3. **Liaison with other PH services:** Liaise with the Commissioners of Public Health lifestyle intervention services eg stop smoking, healthy weight and physical activity, to request that anonymised patient outcomes resulting from a referral from an NHS Health Check are reported back to the NHS Health Check service. This will enable closer monitoring and evaluation of the NHS Health Check programme.

4. **Increase pool of providers:** Increase the number of providers, particularly GP surgeries and community pharmacies to provide the bulk of NHS Health Checks (to achieve the expected target of an almost 10-fold increase in service provision). However, any planned increase in the number of providers will need to be balanced against the need to monitor quality of service.

5. **Client experience:** Ensure the client experience is monitored and evaluated and that specific consent for this is gained from clients at the outset of their NHS Health Check. (However, there should be sufficient opportunity for clients to decline consent for sharing information but still allowing their NHS Health Check.) Annex F describes the client experience we would hope to achieve through the new design of the NHS Health Check programme.

6. **Protected characteristics:** There should be adequate routine information collection of protected characteristics, including disability status to allow adequate monitoring of Croydon Council’s compliance with the Equality Act 2010.

7. **Marketing:** There should be increased marketing to the public to improve uptake, including the requirement to monitor the impact of different media on uptake. Social marketing techniques could help develop a more sophisticated approach to targeting different groups within the community. Marketing approaches to test ‘likelihood of uptake’ should be tested on the target population both before roll-out and as part of ongoing programme evaluation.

8. **Functional literacy:** Any information produced for the public should be accessible. For example, particularly for groups of the community where NHS Health Check uptake is low, it will be important to consider the impact of poor functional literacy or that English is not the first language.

9. **Working with GPs:** There should be improved marketing to GPs to promote the benefits (both for patients and individual practices) of the NHS Health Check programme. This is to help improve uptake of the programme and to improve the subsequent management of people identified by the programme to need further medical intervention.

10. **Closure of old design service:** There should be a process developed to ensure the formal closure of the ‘old’ design of the Croydon NHS Health Check programme, taking into consideration appropriate information governance.
Acknowledgements for their help in supporting this Review and Options Appraisal:

Nerissa Santimano – PH Information Analyst, Public Health Croydon

Steering Group

Bevoly Fearon – Health Improvement Manager, Public Health Croydon
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Jamie Waterall – National Director, NHS Health Checks, Public Health England
Richard Brown – Deputy CE, Surrey and Sussex LMC
Andrew McCoig – CEO, Croydon LPC
Beran Patel – Pharmacist, Brigstock Pharmacy, Croydon
Our existing community pharmacy and GP practice providers

Annexes
Annex A - Summary of statutory requirements
Annex B - Performance data (2011-2012 and 2012-2013)
Annex C - Literature review results – Jul 13
Annex D - SWOT analysis
Annex E - Outcome of Options Appraisal meeting – 30 Jul 13
Annex F - Aspirations for the Croydon NHS Health Check client journey
Annex A: Summary of statutory requirements

The Local Authorities (Public Health Functions and Entry to Premises by Local Healthwatch Representatives) Regulations 2013 S.I. 2013/351 set out a number of mandatory public health functions for local authorities from 1 April 2013. These Regulations have been made by the Secretary of State under powers conferred by the National Health Service Act 2006\(^{21}\) and the Local Government and Public Involvement in Health Act 2007.\(^{22}\)

Legal duties exist for local authorities to make arrangements:

- for each eligible person aged 40-74 to be offered a NHS Health Check once in every five years and for each person to be recalled every five years if they remain eligible
- so that the risk assessment includes specific tests and measurements
- to ensure the person having their health check is told their cardiovascular risk score, and other results are communicated to them
- for specific information and data to be recorded and, where the risk assessment is conducted outside the person’s GP practice, for that information to be forwarded to the person’s GP.

Local authorities are also required to seek continuous improvement in the percentage of eligible individuals taking up their offer of a NHS Health Check. Further information on these provisions is provided in this document.

\(^{21}\) Sections 6C(1) to (3), 186A(4)(b) and 272(7) and (8) of the National Health Service Act 2006.

\(^{22}\) Sections 225(1) to (3) and (7)(e), 229(2) and 240(10) of the Local Government and Public Involvement in Health Act 2007.
Annex B: Performance data for years 2011-12 and 2012-2013*

* Due to the Transition from NHS to Local Authority, a small amount of data for 2012-13 is missing. In fact, a total of 2,514 NHS Health Checks were completed (and not 2,341 checks as presented below).

Tables showing uptake of NHS Health Checks by age, gender, ethnicity, level of deprivation and vascular risk (QRisk) score

### 10 Year Age Groups

<table>
<thead>
<tr>
<th></th>
<th>Count of RecordID</th>
<th>% conducted HCs</th>
<th>Count of RecordID</th>
<th>% conducted HCs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blank</td>
<td>0</td>
<td></td>
<td>544</td>
<td>23.2%</td>
</tr>
<tr>
<td>40-49</td>
<td>723</td>
<td>46.3%</td>
<td>752</td>
<td>32.1%</td>
</tr>
<tr>
<td>50-59</td>
<td>515</td>
<td>33.0%</td>
<td>641</td>
<td>27.4%</td>
</tr>
<tr>
<td>60-69</td>
<td>276</td>
<td>17.7%</td>
<td>324</td>
<td>13.8%</td>
</tr>
<tr>
<td>70-74</td>
<td>47</td>
<td>3.0%</td>
<td>80</td>
<td>3.4%</td>
</tr>
<tr>
<td>Grand Total</td>
<td>1561</td>
<td></td>
<td>2341</td>
<td></td>
</tr>
</tbody>
</table>

### Gender

<table>
<thead>
<tr>
<th></th>
<th>Count of RecordID</th>
<th>% conducted HCs</th>
<th>Count of RecordID</th>
<th>% conducted HCs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blank</td>
<td></td>
<td></td>
<td>500</td>
<td>21.4%</td>
</tr>
<tr>
<td>Female</td>
<td>812</td>
<td>52.0%</td>
<td>999</td>
<td>42.7%</td>
</tr>
<tr>
<td>Male</td>
<td>749</td>
<td>48.0%</td>
<td>842</td>
<td>36.0%</td>
</tr>
<tr>
<td>Grand Total</td>
<td>1561</td>
<td></td>
<td>2341</td>
<td></td>
</tr>
</tbody>
</table>

### Ethnicity

<table>
<thead>
<tr>
<th></th>
<th>Count of RecordID</th>
<th>% conducted HCs</th>
<th>Count of RecordID</th>
<th>% conducted HCs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blank</td>
<td>452</td>
<td>29.0%</td>
<td>503</td>
<td>21.5%</td>
</tr>
<tr>
<td>White</td>
<td>437</td>
<td>28.0%</td>
<td>864</td>
<td>36.9%</td>
</tr>
<tr>
<td>Mixed</td>
<td>37</td>
<td>2.4%</td>
<td>30</td>
<td>1.3%</td>
</tr>
<tr>
<td>Asian</td>
<td>255</td>
<td>16.3%</td>
<td>337</td>
<td>14.4%</td>
</tr>
<tr>
<td>Black</td>
<td>318</td>
<td>20.4%</td>
<td>460</td>
<td>19.6%</td>
</tr>
<tr>
<td>Other</td>
<td>62</td>
<td>4.0%</td>
<td>142</td>
<td>6.1%</td>
</tr>
<tr>
<td>Refused</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>0.2%</td>
</tr>
<tr>
<td>Grand Total</td>
<td>1561</td>
<td></td>
<td>2341</td>
<td></td>
</tr>
</tbody>
</table>
### Croydon IMD quintile

<table>
<thead>
<tr>
<th></th>
<th>2011-2012</th>
<th>% conducted HCs</th>
<th>2012-2013</th>
<th>% conducted HCs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blank (Most deprived)</td>
<td>33</td>
<td>2.1%</td>
<td>703</td>
<td>30.0%</td>
</tr>
<tr>
<td>1</td>
<td>354</td>
<td>22.7%</td>
<td>324</td>
<td>13.8%</td>
</tr>
<tr>
<td>2</td>
<td>343</td>
<td>22.0%</td>
<td>459</td>
<td>19.6%</td>
</tr>
<tr>
<td>3</td>
<td>299</td>
<td>19.2%</td>
<td>401</td>
<td>17.1%</td>
</tr>
<tr>
<td>4</td>
<td>276</td>
<td>17.7%</td>
<td>168</td>
<td>7.2%</td>
</tr>
<tr>
<td>(Least deprived)</td>
<td>256</td>
<td>16.4%</td>
<td>286</td>
<td>12.2%</td>
</tr>
<tr>
<td>Grand Total</td>
<td>1561</td>
<td></td>
<td>2341</td>
<td></td>
</tr>
</tbody>
</table>

### QRisk Score Categories

<table>
<thead>
<tr>
<th></th>
<th>2011-2012</th>
<th>% conducted HCs</th>
<th>2012-2013</th>
<th>% conducted HCs</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>153</td>
<td>9.8%</td>
<td>191</td>
<td>8.2%</td>
</tr>
<tr>
<td>Medium</td>
<td>289</td>
<td>18.5%</td>
<td>491</td>
<td>21.0%</td>
</tr>
<tr>
<td>Low</td>
<td>1102</td>
<td>70.6%</td>
<td>1659</td>
<td>70.9%</td>
</tr>
<tr>
<td>Unknown</td>
<td>17</td>
<td>1.1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grand Total</td>
<td>1561</td>
<td></td>
<td>2341</td>
<td></td>
</tr>
</tbody>
</table>

Tables showing analysis of the 'high vascular risk' group by age, gender, ethnicity and level of deprivation

<table>
<thead>
<tr>
<th></th>
<th>2011-2012</th>
<th>% of those with a HIGH risk score</th>
<th>2012-2013</th>
<th>% of those with a HIGH risk score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blank</td>
<td>7</td>
<td>4.6%</td>
<td>30</td>
<td>15.7%</td>
</tr>
<tr>
<td>40-49</td>
<td>33</td>
<td>21.6%</td>
<td>35</td>
<td>18.3%</td>
</tr>
<tr>
<td>50-59</td>
<td>80</td>
<td>52.3%</td>
<td>69</td>
<td>36.1%</td>
</tr>
<tr>
<td>60-69</td>
<td>33</td>
<td>21.6%</td>
<td>47</td>
<td>24.6%</td>
</tr>
<tr>
<td>Grand Total</td>
<td>153</td>
<td></td>
<td>191</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>2011-2012</td>
<td>2012-2013</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>------------</td>
<td>------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Count of RecordID</td>
<td>% of those with a HIGH risk score</td>
<td>Count of RecordID</td>
<td>% of those with a HIGH risk score</td>
</tr>
<tr>
<td>Blank</td>
<td>0</td>
<td>22.9%</td>
<td>27</td>
<td>14.1%</td>
</tr>
<tr>
<td>Female</td>
<td>35</td>
<td>77.1%</td>
<td>32</td>
<td>69.1%</td>
</tr>
<tr>
<td>Male</td>
<td>118</td>
<td></td>
<td>132</td>
<td></td>
</tr>
<tr>
<td>Grand Total</td>
<td>153</td>
<td></td>
<td>191</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>2011-2012</th>
<th>2012-2013</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count of RecordID</td>
<td>% of those with a HIGH risk score</td>
</tr>
<tr>
<td>Blank</td>
<td>50</td>
<td>32.7%</td>
</tr>
<tr>
<td>White</td>
<td>72</td>
<td>47.1%</td>
</tr>
<tr>
<td>Mixed</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Asian</td>
<td>27</td>
<td>17.6%</td>
</tr>
<tr>
<td>Black</td>
<td>1</td>
<td>0.7%</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>2.0%</td>
</tr>
<tr>
<td>Grand Total</td>
<td>153</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Croydon IMD quintile</th>
<th>2011-2012</th>
<th>2012-2013</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count of RecordID</td>
<td>% of those with a HIGH risk score</td>
</tr>
<tr>
<td>Blank</td>
<td>2</td>
<td>1.3%</td>
</tr>
<tr>
<td>1</td>
<td>28</td>
<td>18.3%</td>
</tr>
<tr>
<td>2</td>
<td>29</td>
<td>19.0%</td>
</tr>
<tr>
<td>3</td>
<td>29</td>
<td>19.0%</td>
</tr>
<tr>
<td>4</td>
<td>31</td>
<td>20.3%</td>
</tr>
<tr>
<td>5</td>
<td>34</td>
<td>22.2%</td>
</tr>
<tr>
<td>Grand Total</td>
<td>153</td>
<td></td>
</tr>
</tbody>
</table>
Table 8 showing referrals as a result of an NHS Health Check in 2011-12 and 2012-13

<table>
<thead>
<tr>
<th>Lifestyle Referral</th>
<th>2011-12 Nos referred</th>
<th>% of health checks</th>
<th>2012-13 Nos referred</th>
<th>% of health checks</th>
<th>Average referral rates over 2011-2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoking</td>
<td>N/A</td>
<td>N/A</td>
<td>274</td>
<td>11.7%</td>
<td>11.7%</td>
</tr>
<tr>
<td>Physical Activity</td>
<td>N/A</td>
<td>N/A</td>
<td>211</td>
<td>9%</td>
<td>9%</td>
</tr>
<tr>
<td>Weight Management</td>
<td>N/A</td>
<td>N/A</td>
<td>163</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>Total Health Checks</td>
<td>1,561</td>
<td></td>
<td>2,341</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Medical Referral</th>
<th>Nos referred for further check</th>
<th>% of those referred to GP</th>
<th>Nos referred for further check</th>
<th>% of those referred to GP</th>
<th>Total numbers referred to GP</th>
</tr>
</thead>
<tbody>
<tr>
<td>QRisk &gt;/ 20%</td>
<td>153</td>
<td>23.9%</td>
<td>191</td>
<td>18.8%</td>
<td>641</td>
</tr>
<tr>
<td>BP &gt;=140/90</td>
<td>301</td>
<td>47.0%</td>
<td>406</td>
<td>39.9%</td>
<td>1017</td>
</tr>
<tr>
<td>BP &gt;=240/120</td>
<td>0</td>
<td>0.0%</td>
<td>1</td>
<td>0.1%</td>
<td>41.1%</td>
</tr>
<tr>
<td>Cholesterol &gt;=7.5</td>
<td>28</td>
<td>4.4%</td>
<td>17</td>
<td>1.7%</td>
<td>0.1%</td>
</tr>
<tr>
<td>BMI &gt;=30</td>
<td>337</td>
<td>52.6%</td>
<td>505</td>
<td>49.7%</td>
<td>3.0%</td>
</tr>
<tr>
<td>Needs Pulse and BP checked</td>
<td>16</td>
<td>2.5%</td>
<td>13</td>
<td>1.3%</td>
<td>1.9%</td>
</tr>
</tbody>
</table>

* Note that some clients referred to their GP for further follow-up had more than 1 medical condition to be assessed.
Annex C: Summary of evidence on increasing the effectiveness of the NHS Health Check Programme

PubMed search (undertaken Jul 2013)

A PubMed search using ‘nhs health check’ found 96 papers of which less than 10 were relevant. The addition of the term ‘evaluation’ reduced the finding to less than 20 papers overall, of which only two were relevant. The addition of the term ‘uptake’ yielded no papers. The findings of the two relevant papers are summarised below.

In Stoke on Trent\textsuperscript{23}, a cross-sectional review of response, attendance and treatment uptake over the first year of their NHS Health Check programme was carried out. Patients aged between 32 and 74 years and estimated to be at \( \geq 20\% \) risk of developing cardiovascular disease were identified from electronic medical records. Multi-level regression modelling was used to evaluate the influence of individual- and practice-level factors on health check outcomes.

They found that overall, 63.3\% of patients responded, 43.7\% attended and 29.8\% took up a treatment following their health check invitation. The response was higher for older age and more affluent areas; attendance and treatment uptake were higher for males and older age. Variance between GP practices was significant (\( P < 0.001 \)) for response (13.4\%), attendance (12.7\%) and uptake (23\%).

They concluded that the attendance rate of 43.7\% following invitation to a health check was considerably lower than the DH benchmark of 75\% and that the lack of public interest and the prevalence of significant co-morbidity are challenges to this national policy innovation.

The only other relevant paper regarding evaluations of Health Checks focused on the variation in the implementation of the DH policy on NHS Health Checks. \textsuperscript{24} They highlighted that there was a high degree of variation in implementation but did not specifically look at the impact on uptake of Health Checks.

A study in Ealing\textsuperscript{25} used cross-sectional data extracted from electronic medical records in primary care to examine the attendance and management of people invited for a NHS Health Check, in a deprived culturally diverse setting.

44.8\% of high risk patients invited for a Health Check attended. Uptake was significantly lower among younger men and smokers but significantly higher among patients from south Asian (adjusted OR (AOR)= 1.71 (1.29-2.27) compared with white) or mixed ethnic backgrounds, those with diagnosed hypertension (AOR= 1.31 (1.15-1.51), and patients registered with smaller practices (AOR=2.53 (1.09-5.84) list size <3,000 compared to 3,000-5,999). Using an area based deprivation


measure there was no difference in attendance over socioeconomic status. The percentage of patients prescribed statin out of those eligible increased from 24.7% to 44.8% having been screened. The uptake of cardiovascular risk assessment and the prescribing of statins in high risk patients were considerably lower than projected in the first year of the NHS Health Check Programme. If these levels of patient involvement in the NHS Health Checks persist, the programme will have limited impact on the population’s disease burden. Targeting efforts to increase uptake, improve risk communication, and adherence to interventions in high risk populations is vital for the success of the programme. Alternatively reinvesting programme resources into population wide strategies to reduce obesity, smoking, and salt intake may prove more cost-effective in reducing the burden of cardiovascular disease in the UK than mass screening.

‘Google’ search (undertaken Jul 2013)
Following the limited yield of published peer-reviewed papers, a ‘Google’ search was done which yielded a number of relevant documents. These documents have been published on individual PCT and SHA websites and are summarised below:

QIPP East evaluated the NHS Health Check Programme for NHS Bedfordshire and NHS Yarmouth and Waveney from approximately 1400 interviews of people who had a Health Check.26 They found that uptake was low and suggested that clearer communication about the aims of the programme might help improve this.

NHS Greenwich evaluated their Community Outreach Health Checks programme.27 Since their invitations were by telephone they were able to get a basic level of feedback on why people did not take up their invitations. They identified 2908 people for a Health Check; 8% were ineligible; 44% were not contactable over 3 phone calls which left 1400 who were actually invited for a Health Check. 642 accepted (97% of these attended); 758 refused (of which 33% were not interested and 27% preferred to have their Health Check at their own GP).

NHS Leeds have researched their Health Checks programme. The aims of their research were:

- To understand the initial target audience for the Health Check Programme in more depth
- Explore their general attitudes towards health
- Understand awareness, views and opinions of vascular risk
- To understand the relevance of a Health Check and reactions to an invitation to attend an assessment at a GPs surgery
- To explore the motivations and barriers to taking part in the proposed Health Check programme
- To explore expectations of the Health Check, any follow-up treatment and programme management

They also explored in particular the needs of vulnerable groups which included:

- Homeless, gypsies, travellers, asylum seekers

Those with learning disabilities
South Asians, African Caribbeans, Africans

Their key conclusions were:
- The biggest issue surrounding improving your health is that this takes a backseat unless there are some obvious symptoms
- There are key differences between the age groups in terms of their daily life priorities
- It is very easy to allow the barriers and daily life commitments to over shadow both improving health generally and motivating an action to participate in the health check
- There is high interest in the health check but needed incentives and triggers to actually book an appointment
- There was also a dominant attitude that you see the GP if something is ‘wrong’ and to resolve an illness, not for general well being support, the practice nurse was regarded as more approachable and more aligned to well being matters
- Effectiveness of communications is key to the initial engagement of people
- High appeal / high impact themes that focussed on half an hour could put years on your life.

Researchers from the National Social Marketing Centre have reviewed the NHS Health Check Programme from a Social Marketing perspective. They make the following conclusions:

- The single most powerful influence upon whether someone has a Health Check or not, is their GP – followed by family and friends, other healthcare professionals
- In terms of cost effectiveness, a personal communication via a letter of invitation from their own GP, door drops, word of mouth recommendation, direct marketing, outdoor advertising and finally posters are most to least cost effective in this order
- There is widespread recognition that ‘prevention is better than cure’
- Although people don’t look forward to it they do expect the healthcare professional to question their lifestyle
- The benefits of Health Checks are perceived to be making the most of today; peace of mind in getting checked out; a second chance at putting something right if it’s going wrong; adding years to life to enjoy retirement and the rewards of lifelong hard work; enjoying seeing children and grandchildren grow up
- We shouldn’t assume everyone has the same basic knowledge and understanding of human anatomy and physiology – this is key if we want people to know why the NHS Health Check is important and how their lifestyle behaviours affect their bodies
- Stressing the difference between ‘prevention’, ‘treatment’ and ‘cure’ is important to avoid confusion and raising expectations
- Communicating risk needs to avoid references to ‘%risk’ and instead focus on low, medium or high risk of developing specific diseases
- Translation is a good start for people for whom English is not their first language but there needs to be a recognition that the information itself may need to change – not just the language
- Again, although not relished, people recognise the Health Check may mean they have to change what they do – they are prepared for this but it has to be manageable – ‘one thing at a time’.

28 J Bromley, L Van der Beeke. National Social Marketing Centre. Presentation. 2013. Available at:
The Department of Health Behavioural Insights Team offer recommendations on how to increase uptake of the NHS Health Check Programme at ‘no or low cost’. Their recommendations are based on evidence from NHS Health Checks qualitative research in some localities, and generalisable evidence from screening programmes and behaviour theory:29

Table 7 showing the motivators and barriers to uptake of an NHS Health Check

<table>
<thead>
<tr>
<th>Motivators</th>
<th>Barriers</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Simple messages</td>
<td>• Embarrassment</td>
</tr>
<tr>
<td>• Convenient (time, location)</td>
<td>• Fear</td>
</tr>
<tr>
<td>• Received a reminder</td>
<td>• Unwilling to change unhealthy behaviours</td>
</tr>
<tr>
<td>• Salient: pictures and use of ‘human’ stories</td>
<td>• Do not understand what it is: language difficulties or unfamiliar with the offer</td>
</tr>
<tr>
<td>• Positively framed: a focus on wellness, not illness</td>
<td></td>
</tr>
<tr>
<td>• Social norms: recommended by friends or family</td>
<td></td>
</tr>
<tr>
<td>• Eye-catching and exciting</td>
<td></td>
</tr>
<tr>
<td>• Messenger: invited by a trusted person e.g. GP</td>
<td></td>
</tr>
</tbody>
</table>

Source: Behavioural Insights Team, DH. April 2013.

Future studies – not yet reported
In addition, various research studies are in progress but are not expected to report back for some time:


- Department of Health – Policy Research programme: In 2012, two small-scale independent studies on the NHS Health Check programme were set up. The aims of these studies are to provide an early assessment of the programme outcomes since phased implementation began in 2009. Both studies are based on secondary statistical analyses of available NHS data, so a number of general limitations with such data sources also need to be borne in mind (e.g. coding errors, under-diagnosis due to patient non-attendance at NHS appointments, limited availability of health outcome measures). The direct qualitative experience of NHS Health Check staff and/or patients is also out of scope of the research projects.

- Department of Health – Behaviour Change Team: Continues to collect information on what influences uptake of the NHS Health Check – sharing best practice. Team will share information once gathered.

Annex D: SWOT analysis and costings of options

Diagram showing summary of NHS Health Checks key steps and options to be considered

NHS Health Checks key steps – simplified process

1) Agree who gets an NHS Health Check
2) Principles of invitation process
3) Identify eligible cohort and (associated Invitations)
4) NHS Health Check
5) Entry of result in GP record

Options to be considered:

<table>
<thead>
<tr>
<th>1) Agree who gets an NHS Health Check</th>
<th>2) Principles of invitation process</th>
<th>3) Identifying eligible cohort and (associated Invitations)</th>
<th>4) Delivery of NHS Health Check</th>
<th>5) Entry of result in GP Patient record</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universal (everyone equally, every 5yrs)</td>
<td>Invitation only</td>
<td>Centrally organised cohort identification and invitation issue by 3rd party</td>
<td>Fixed locations (eg GP or Pharmacy provider)</td>
<td>Manually (eg Appendixed results pdf)</td>
</tr>
<tr>
<td>VS</td>
<td>VS</td>
<td>VS</td>
<td>VS</td>
<td>VS</td>
</tr>
<tr>
<td>Targeted (priority groups focus)</td>
<td>Invitation + opportunistic (based on additional eligibility criteria eg BME / in receipt of benefits including DLA equivalent)</td>
<td>Direct from GP practice (with additional ‘Invitation fee’)</td>
<td>Fixed locations + Community outreach</td>
<td>Electronically uploaded into GP ePatient record (once accepted by GP)</td>
</tr>
<tr>
<td>Function</td>
<td>Options</td>
<td>Strength and opportunity</td>
<td>Weakness and threat</td>
<td>Approximate (est) cost</td>
</tr>
<tr>
<td>----------</td>
<td>---------</td>
<td>--------------------------</td>
<td>---------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>1) Agree who gets an NHS Health Check</td>
<td>Universal</td>
<td>- Simpler to administer eg Invite by year of birth - Distributes demand on follow-up referral services more evenly over 5 year cycle</td>
<td>- Unlikely to reduce existing health inequalities gap in Croydon in line with PH Outcome Framework</td>
<td>See later – depends on type of invitation used</td>
</tr>
<tr>
<td></td>
<td>Targeted</td>
<td>- Greater scope to reach Croydon residents at highest risk of vascular disease - Greater scope to tackle health inequalities in Croydon - Uses PH grant while ring-fenced to test benefits of NHS Health Checks ahead of future austerity</td>
<td>- More complex to administer invitations - Will depend on clear criteria for identifying target groups - Choice of target group may require community outreach - Earlier years of programme may see highest demand for further GP follow-up and referrals, and risk of overwhelming related services eg healthy weight management</td>
<td>See later – depends on type of invitation used</td>
</tr>
<tr>
<td>2) Principles of invitation process</td>
<td>Invitation only</td>
<td>- Greater control of process including monthly workload - Good method for managing the majority of the eligible population - Known NHS number for results reconciliation in GP record</td>
<td>- Misses residents who are not registered with a GP - Not flexible enough to respond to special campaigns eg Stop Smoking Day, Heart Town events etc</td>
<td>See above</td>
</tr>
<tr>
<td></td>
<td>Invitation + Opportunistic</td>
<td>- More flexible approach - Also captures residents who are not registered with a GP /</td>
<td>- Risks including ineligible residents (eg known vascular disease, previous NHS Health</td>
<td>Minimal additional charge – if</td>
</tr>
</tbody>
</table>
(based on additional eligibility criteria eg BME / in receipt of benefits including DLA-equivalent)

don’t respond to GP invitations
- Could be targeted to specific at risk-groups.
- Requested by current providers

Check)
- Risks the service becoming overwhelmed if it proves very popular therefore would need plan for managing demand within annual budget – in service specification
- More complex to handle the results of non-GP registered clients (as described in Step 1)
- Will require method of matching patient results to GP record

providers are paid by results

including eligibility criteria.
- May incur small marketing costs if particularly trying to reach certain groups eg Posters for providers
- Pharmacies are at particular risk of being exploited by clients who want multiple NHS Health Checks and therefore, there should be systems in place to help minimise abuse

---

### 3) Identify eligible cohort (including associated invitation)

**Direct from GP practice (with additional ‘invitation fee’)**

(ie PH send each practice the list of criteria for identifying eligible patients including any targeting)

- Can use free Crown copyright software eg MIQUEST
- Engages GPs earlier in the NHS Health Checks process which may have added benefits eg GPs ‘own’ NHS Health Checks as useful tool for them to identify their patients at risk

- Relies on all GP practices participating in this part of process over the 5 year cycle
- Would rely on each GP practice running its own search for eligible patients based on criteria provided by PH
- Will involve support and /or training for practice staff to identify eligible cohort correctly

**Centrally-originated**

- Simpler for GP practice staff as only need to establish initial data-sharing agreements and briefly review identified patients each month
- Simpler for PH as much less support required for GP practice staff. Main liaison is with database holders

- Requires a 3rd party to create a central database of GP records. (See Comments*)
- Requires each practice to buy-in and commitment to data-sharing agreements with Croydon Council
- Need to ensure that if specific group ‘targeting’ capability is required, this is written into any

<table>
<thead>
<tr>
<th><strong>Costs</strong></th>
<th><strong>Approx £1.50 - £2.00 per patient (for identification, filtering, invitation and 2nd invite)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(Costs would need negotiation with GPs via LMC)</strong></td>
<td></td>
</tr>
</tbody>
</table>

---

*Croydon CCG has agreed installation of a practice software system (QMS Practice Focus) which allows a central database to be formed from a copy of all GPs’ records. It is shortly due to be installed on all Croydon GP record systems.

It should be noted that a
| 4) NHS Health Check Assessment | Fixed locations  
- ie GP and Pharmacy delivery | - Familiar set-up for most public sector service provision  
- No flexibility to adapt to client / community’s needs | £35 per check completed  
Assumes that PH should not have access in the long-term to PID. Therefore requires a 3rd party to process data for various required purposes:  
- Named clinical data for patient care  
- Anonymised clinical for monitoring and evaluation  
- Anonymised provider data for provider payment  
Third party data processing is approximately £1,300 per provider (in 1st year) / £550 per provider in subsequent years.  
Basic cost for software for all 22 current providers is £28,600 in 1st year + £12,100 for each subsequent year | slightly cheaper but less sophisticated public sector tool also exists |
| Mix of Fixed locations + Community Outreach Provision  
- eg Community settings, workplaces etc | - Flexible to adapt to community needs eg specific events / roadshows etc  
- Can reach typically ‘hard to reach’ people eg men in workplace, certain ethnic groups.  
- Community outreach can be provided by a variety of providers including those traditionally ‘fixed location’ providers who wish to work in less traditional ways  
- Community outreach is likely to be more expensive (£85* vs £35 per completed NHS Health Check) * includes potential costs such as organisation and marketing of the outreach event, staffing, venue  
- More complex from IT perspective (although mobile yet secure IT solutions exist)  
- £2,600 above standard costs - (Based on extra 2 mobile outreach providers in 1st year)  
+ Depends on mix  
| ie £35 - £85 per check completed | £2,600 above standard costs - (Based on extra 2 mobile outreach providers in 1st year)  
+ Depends on mix  
| 5) Data return to GP record | Manually by practice  
(eg Email with appended results pdf) | - Cheaper option  
- Will not be fully integrated into patient electronic records but whole NHS Health Check result will be recorded as a single item  
- Abnormal individual results can be ‘hidden’ as not recorded by individual READ codes | £0  
- Assuming that GPs make no charge for entry of NHS HC results.  
- Individual results eg BP, cholesterol readings need to be entered manually by practice staff |
<table>
<thead>
<tr>
<th>Electronically uploaded into GP ePatient record</th>
<th>- Individual results collected at NHS Health Check can be uploaded with relevant READ codes and can then be fully integrated in patient record and acted upon more easily</th>
<th>- More expensive option</th>
<th>£22,000 - £35,000 per year</th>
<th>Covers automated electronic data entry for all Croydon GP practices (once accepted by GP) - complete with correct READ codes</th>
</tr>
</thead>
</table>
Annex E: Outcome of NHS Health Checks Options Appraisal meeting – 30 Jul 13

Attended by:  Susan Ismaeel (PHE, Local Area Team), Gillian Fiumicelli (Bromley NHS Health Check lead), Barbara Jesson (Croydon CCG), Charlotte Rohan, Kate Woolcombe, Steve Morton, Bevoly Fearon, Rachel Fluke, Liz Brutus (all Croydon Council)

Options chosen

<table>
<thead>
<tr>
<th>Key step</th>
<th>Preferred option</th>
<th>Score</th>
<th>Key comments from meeting discussion (See also SWOT analysis in Annex D of Review)</th>
</tr>
</thead>
</table>
| 1        | Agree who gets an NHS Health Check | Universal approach | 56/90 | General agreement that universal invitations must be supplemented with additional ‘safety net’ to reach the traditionally ‘hard to reach’ eg through:  
- Targeted marketing (population subgroups / geographical areas etc)  
- Mobile community outreach  
(This especially refers to those who are not registered with a GP.) |
| 2        | Principles of invitation process | Invitation + opportunistic approaches | 76/90 | Ensure that opportunistic approach has clear additional eligibility criteria and safeguards to minimise risk of repeat NHS Health Checks, fraud etc. |
| 3        | Identifying eligible cohort (and associated invitations) | Centrally organised cohort identification and invitation issue by 3rd party | 79/90 | - Current national GP context (eg from reduced income from PMS contract) makes it difficult to expect enthusiasm for any additional demands on GP.  
- Will still require work with local GPs to raise greater awareness of the NHS Health Check programme and its benefits to community as well as GPs themselves |
| 4        | Delivery of NHS Health Check | Fixed locations + Community outreach | 78/90 | Existing providers should be offered the opportunity to provide community outreach. |
| 5        | Entry of result in GP patient record | Capability for electronic uploading into GP ePatient record (once accepted by GP) | 88/90 | A no brainer.......! |

New Design NHS Health Check Programme: Additional comments / recommendations

- Missing prevalence: Need to amend the ‘missing’ undiagnosed number in the Review paper.  
Add caveat re prevalence rates: known to increase with age therefore figures are all likely to
be under-estimates. Consider adding data on additional conditions/risk factors eg hypertension, CKD, alcohol misuse.

- Universal invitation which coincides with ‘milestone’ birthdays ie 40\textsuperscript{th}, 45\textsuperscript{th} etc – may in itself as a trigger and suitable motivator for a ‘health check-up’.
- Diverse population in Croydon therefore, any programme design needs to be able to provide enough flexibility to appeal to and be accessible by all members of the community.
- English is not the first language of many in Croydon – therefore, communications need to take this into account.
- Equality impact assessment of preferred options: Steps 2-5 were clear cut. Step 1 was less clear cut therefore need to consider how best to identify the equality impacts of both options – and associated risks and possible mitigations.

Existing NHS Health Check Programme design – Comments / recommendations

- Examine feasibility and legality of contracting PCSS to re-send March 2013’s 10,000 invitation letters

Overall:

- Preferred options are agreed
- No significant gaps or missed alternatives in NHS Health Check Review paper identified
- Useful additional comments to add for final version of paper (see above)
- Ready to move on to next steps in commissioning:
  - Liaise with Charlotte Rohan
  - Produce and submit CCB strategy paper
  - Develop service specification
  - Develop tender paperwork

Notes: Liz Brutus – 30/7/13
Annex F: Aspirations for the Croydon NHS Health Check client journey

The 2 points of view described below are how we hope future clients will experience the NHS Health Checks programme in Croydon once the new design is embedded along with the additional recommendations that will ‘hold the programme together’.

Here we offer an example of two clients’ journeys – encountering the programme both by formal invitation and opportunistically.

One point of view - a 50 year old Croydon man .......

1. I received an eye-catching and appealing letter of invitation for an NHS Health Check just before my 50th birthday. I’d been feeling a bit down at the thought of the ‘big 5-0’ so it felt like a bit of good luck to have the chance to get checked out - now of all times. I’d already seen posters around at bus stops and in the local paper so had a vague idea of what the letter was about. The enclosed leaflet was straightforward and answered all the questions I had – I just needed to pick up the phone!

2. It was easy and convenient for me to make an appointment. I didn’t fancy going up to the doctor’s – always makes me feel a bit nervous – but the local pharmacy opens late and was really easy to book in.

3. The pharmacist who did my check was really professional – courteous, knowledgeable and put me at my ease. I’d expected a great stream of ‘don’t do’ lecturing but instead, he came up with really practical ideas to help me improve my health that I could do straightaway. My overall risk was ‘medium’ – mainly because my blood pressure was a bit high but I’ve also got a bit of a middle-age spread. He recommended that I see my doctor about the blood pressure. It was nice to be treated like the adult I am and be given my own results but I was also reassured that the GP would have my results pretty much immediately too.

4. I saw my doctor who was pleased to hear I’d been checked out – she really rates these NHS Health Checks. The doctor clicked up my results on her computer screen and then offered to take my blood pressure again. As I already knew some of my options, I was able to suggest to the GP that perhaps I could try and lose a bit of weight by walking more and cutting down on my alcohol. We agreed that I’d come back in 3 months and we’d see how my blood pressure was.

5. A year down the line and I’ve taken the really positive advice I got at the time of my NHS Health Check and I feel so much healthier in myself. My kids have stopped nagging me about having a beer gut and for the first time in ages, we enjoyed a bit of a kick around in the park!

6. I was so impressed by the service I received and the boost in my energy levels and confidence for the future that I was able to encourage my neighbour, who’s turning 60, to take up their invitation for an NHS Health Check.
Another point of view – a 62 year old woman....... 

1. I attended Temple today and was surprised to see a stand set up in the hall advertising NHS Health Checks – they even had a sign in Hindi! I’d been vaguely aware of these ‘checks’ from waiting at the bus stop but my English isn’t too great so I didn’t fancy all that embarrassment. They had a nice man and woman on the stand who both spoke Hindi. It’s so much easier to be able to be able to talk to another woman about your health so I chose her.

2. The woman (who turned out to be a local practice nurse) explained that us Asian women are more at risk of problems like diabetes – just like my neighbour suffers from. She explained about the NHS Health Check and how important it is to look after our health – particularly so we can enjoy our grandchildren. That sold it to me so I decided to go ahead. We went to a separate room and she started clicking on her computer – it looked very impressive – but she used it to explain things to me.

3. The practice nurse took some details from me and next minute, was telling me my NHS number and even which GP I was registered with! She asked lots of questions and did a few tests and as we went along, we talked about simple things I could do to look after myself. At the end, she was able to tell me about my chance of having a heart attack in the future and I was determined that I would do everything to avoid that for the sake of my grandchildren. My cholesterol was a bit high so she recommended I go and see my GP.

4. The GP’s a nice man and he was pleased to see me. He arranged for more checks on my cholesterol and sugar and I arranged to see him again. In the meantime, he asked me to go to the Healthy Living Hub to talk about joining a local ladies walking group and to discuss lower fat ways of cooking Asian food. It seemed like a good idea.

5. It’s a year down the line and I feel much better than before. I did turn out to have diabetes so I’ve been seeing my own practice nurse regularly and have lots of different check-ups - for my feet, my eyes and of course, my blood sugar. My husband, I and even my grandchildren have all lost some weight as I use a different way of cooking these days. I always encourage friends and family I know to have an NHS Health Check – we’ve got to look after ourselves!