# The NHS Health Check Practice Based Point (POCT Pilot)

The NHS Health Check is a population wide prevention programme aimed at reducing the impact of vascular disease on health. This article provides a local perspective and focuses on the implementation of a Point of Care Testing (POCT) pilot in primary care, identifying benefits, challenges and improvements. Findings suggest that utilising POCT in primary care has the potential to address population health and reduce inequalities.

by Sue Collins

Phased implementation of the NHS Health Check in England began in April 2009, with NHS Primary Care Trusts (PCTs) encouraged to offer preventative checks to people aged 40 to 74 years without established vascular disease [1]. The aim is to identify an individual's risk of developing heart disease, stroke, diabetes or chronic kidney disease, providing early intervention, treatment and management. The health check may take place over one or multiple appointments and consists of:

- simple questions and measurements such blood pressure and random blood test for cholesterol
- specific thresholds to trigger additional investigation/tests; and
- assessment, communication of risk, tailored advice, appropriate treatment and referrals to support services.

## Evidence

The Department of Health identifies that this strategy is both clinical and cost effective; nationally the NHS Health Check programme could:

- prevent 1 600 heart attacks and strokes;
- save up to 650 lives per year;
- prevent over 4 000 people from developing diabetes; and
- detect at least 20 000 cases of diabetes or kidney disease earlier each year.

## Local service

Situated in the North East of England, South of Tyne and Wear (SoTW) includes Gateshead, South Tyneside and Sunderland. We have a total population of approximately 630 000 and around 232 000 people eligible for an NHS Health Check.

In 2009 the main provider of the NHS SoTW vascular risk assessment local enhance service (LES) were general practitioners (GPs), with 91% (n=105) signing up to deliver the service; however data indicated wide variations between practices. In order to provide checks for unregistered populations and those people finding it difficult to access the service selected pharmacies, a nurse lead Community Delivery Team and Occupational Health were provided with equipment procured by Health Diagnostics to conduct point of care testing (POCT) checks in the community. The kit comprised the Health Options™ interactive computer software, LDX POCT analyser, associated consumables, quality testing services and training for community providers.

EXPLAIN Market Research was commissioned to undertake social marketing work to inform the development of the programme. Findings provided insights into barriers to engagement, branding and motivational messages, and market segmentation. The target audience could be classified into three main groups, termed "Proactives", "Denials" and "Rejectors" to reflect variations found according to attitudes towards health and lifestyles [Figure 1].

## Quality improvement work

The North East Transformation System (NETS) is a model adopted by NHS North East organisations to lead continuous quality improvement, incorporating tools and activities from the Virginia Mason Production System (VMPS).

A huge amount of work was undertaken to align the SoTW service to the NHS Health Check best practice guidance [1]. A Rapid Process Improvement Workshop (RPIW) was used to standardise the process, explore ways of maximising uptake and put the patient at the heart of the programme.

Five days of intensive interactive group work allowed practitioners to put aside boundaries and work together to identify problems and practical solutions to redesign the service. Team members generated ideas for improvement and implemented changes immediately, developing testing and refining products during the process.

Figure 1. Target audience market segmentation.

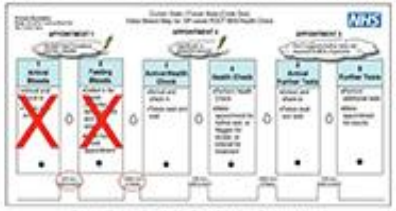


Figure 2. NHS Health Check Value Stream Map.

| GP: | Practice Manager: |
|---|---|
| • staff are taking ownership<br>• promoting team building<br>• improves uptake<br>• staff are excited and are actually looking at how they can implement the service and support colleagues e.g. making prompt cards or blood pressure for Health Care Assistant's | • looking at different staff skill mix<br>• exploring different methods of delivering NHS Health Checks<br>• opportunity to increase the number of checks were being<br>• being a potential pay for the PR identified 1 had high blood pressure and cholesterol – 7 yrs but weight, stopped smoking and exercise more |
| Nurse Practitioner / Practice Nurse: | Health Care Assistant: |
| • testing morning clinics<br>• picked up quite a lot of people needing other action<br>• productive and useful<br>• increasing availability of results enables patient testing and consultation during a single visit<br>• opportunity to be involved in the project to see how clinics could be made available<br>• instant results<br>• patients think it's a good initiative<br>• good to be able to put the patients mind at ease | • prompted me to change my lifestyle<br>• quickly became part of routine<br>• patients like it<br>• good that patients get their results then and there<br>• less invasive than taking venous blood |
| General: | |
| • happy with the pilot, no problems<br>• communicating risk and providing on the spot advice works well<br>• good for highlighting those with a potential high cholesterol<br>• lots of staff delivering the service have made personal changes<br>• support from PCT, training, having trained people to ring and come out and help you<br>• prompt delivery of commodities and projects / leaflets<br>• being able to target specific patient groups and offer them an stop appointments | |

Table 1. Summary of staff feedback.

## Outcomes of the RPIW

Remarkable progress was made during the five days with the following results:

- Standardised:
  - o Template (GP and community providers)
  - o Data collection and audit process
  - o Programme resources
- Training plan developed
- POCT a new approach for practices to deliver the check

## Reasons for pilot POCT

Locally the service was delivered over two or three appointments, with all practices taking venous blood; as many ordered a full batch of tests from hospital labs, it became evident that a whole step in the process could be removed if POCT for cholesterol was adopted [Figure 2].

The aim was to pilot POCT in a GP setting to test the feasibility of delivering NHS Health Checks in a single appointment. Patients would receive instant feedback and support, reducing the time for both patient and staff and improving the patient experience.

A business case was developed with input from GPs, pharmacists, practice nurses, commissioners and the local hospital pathology lead; implementation was agreed by the SoTW CVD Strategy group.

## Implementation

The proposal was to undertake a 12-month POCT pilot across SoTW with 15 practices who were currently delivering checks; NHS SoTW PCT would provide practices with the same testing equipment as community providers. A communication plan was devised to cascade the information to practice, including the NHS Health Check newsletter, e-mail, group presentations and visits to practices.

Initially GP and practice manager engagement was mixed: some were very enthusiastic and others not interested. Barriers were related to not being signed up to the LES and uncertainty of the accuracy of a fingerstick sample and LDX unit. Other issues included the perception of the need for multiple blood tests; and staff having to record audit data manually due to a lack of Read codes.

Activities to stimulate interest and overcome barriers included:

- linking to Quality and Outcomes Framework indicators;
- best practice guidance [1,3] and POCT buyers guide [4];
- involved staff in developing quality standards:
  - o standard operation procedure
  - o accredited External Quality Assurance Scheme and Internal Quality Control
  - o in-house training provided by a certified trainer; and
- working with staff to produce a simple data collection grid to record outcome measures.

Due to the high level of interest generated, the pilot was implemented in a staged approach, phase 1 involved a rolling programme of 18 practices, and phase 2 recruited an additional 19 practices.

## Impact of pilot and key outcomes

The impact of the pilot is demonstrated by analysis of practice data, the following is a summary from the annual evaluation:

- 3 617 health checks completed
- Risk classification:
  - o 27% (n=976) identified as high risk
  - o 34% (n=1,234) moderate risk, and
  - o 39% (n=1,403) low risk
- 70% (n=2,526) of patients experienced the NHS Health Check in one appointment

Staff feedback was positive and provided valuable learning; Table 1 provides a summary of staff feedback. A total of 1 820 patient questionnaires were received with a 50% response rate, of which 54% were female and 46% males.

Productivity was much improved: (a) POCT was an incentive for some practice to start delivering the service; (b) 50% of pilot practices had a 33%-87% increase in the number of checks performed; and (c) it was time efficient for practice staff.

Inequalities were much reduced as can be seen in the results: there was an increase in the number of men accessing the service, improved access to early intervention and management; and immediate results and support that can motivate people to make long-term changes to their lifestyle.

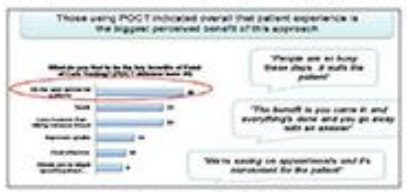


Figure 3. Summary of perceived benefits of POCT from a practitioner's point of view.

Figure 4. Overview of challenges experienced by POCT practitioners.



The project enabled innovation and creativity, resulting in a variety of models are emerging, with practices delivering health checks using a different skill mix, and "one stop" clinics; and the development of electronic patient report and referral forms.

The impact of the programme on behaviour change was demonstrated by the 1 093 responses received on proposed improvements to lifestyle. Patients' comments demonstrated high levels of satisfaction. Patient comments showed:

- 95% suggest they would recommend the health check to others;
- 82% thought it was less worrying; and
- 79% found it convenient.

## On-going evaluation

As part of an extensive evaluation of the NHS Health Check programme, EXPLAIN were commissioned to analyse the patient data from the POCT pilot. They also carried out in-depth interviews and an online survey with staff to identify benefits, challenges and key improvements.

## Benefits

The benefits of POCT are depicted in Figure 3. It was felt that on the on-the-spot results and advice were key elements in improving the patient experience.

## Challenges

Figure 4 illustrates the four difficulties identified with POCT, including the perceived narrow scope of the blood test, difficulty obtaining a blood sample, equipment faults, and that quality checks of the unit are time consuming.

## Improvements

The majority of those using the equipment did not identify any need for improvements. Those who did comment focused on two key areas: problems associated with collecting blood samples and the perception that additional blood tests are required. However, the main barrier identified was the perception that POCT does not allow for a holistic patient check to be completed. Comments included:

- "We're doing the more 'nitty-gritty' whole patient care".
- "We prefer to carry out a full check".
- "It doesn't give you the bigger picture... liver function tests and Us and Es and full blood count and full blood glucose".
- "We do full blood counts, glucose, lipids, liver and thyroids as well".

## Cost

A crude estimate of costs was calculated using the Dr Shane Gordon 2009 model to identify potential savings. Using timings obtained from the RPIW, the findings suggest a 16% reduction in cost for those patients experiencing the NHS Health Check in one appointment, a breakdown of costs is presented in Table 2.

## Current state

Full roll-out of across primary care commenced in January 2012; to date we have 73 (65%) of practices using POCT to deliver NHS Health Checks.

POCT has been a tool to support practices to start delivering the NHS Health Check and to address variation within primary care. Particularly within Sunderland, POCT has been the hook to get practices to start delivering the check resulting in 100% sign up to the LES for the first time.

## Future

In April 2013, the responsibility for commissioning the NHS Health Check service will shift to South Tyneside Local Authority as part of their new public health duties. Department of Health targets for 2012-2013 are 20% of the eligible population offered an NHS Health Check and 10% of those offered receiving a check.

There are two new additions to the NHS Health Check programme from April 2013. The check will include alcohol risk assessment and people aged 65 to 74 are to be given information to raise awareness of dementia and signposting to memory clinics.

## Conclusion

Providing POCT in primary care has the potential to increase the feasibility, acceptability and convenience of the NHS Health Check, reducing the need for multiple visits or repeat appointments. This flexibility has the potential to reduce inequalities and increase the number of checks delivered.

As a mandatory service, the NHS Health Check will assist South Tyneside LA in reaching its strategic priority of having healthier people. It also provides an opportunity to improve outcomes in other public health programmes related to lifestyle issues, and prevention and early identification of risk across the life span.

| Descriptions | Cost model standard NHS HC | | |
|---|---|---|---|
| | Mins | Rate | Cost |
| Estates | | £0.50 | £0.50 |
| Appt. A: Take blood | | | |
| Reception | 2 | £9.00 | £0.30 |
| Phlebotomist/H.A | 10 | £13.00 | £2.00 |
| Transport | | £0.01 | £0.01 |
| Lab cost | | £5.00 | £5.00 |
| Appt B: Health Check | | | |
| Reception | 2 | £9.00 | £0.30 |
| PN consultation | 25 | £30.00 | £8.75 |
| TOTAL | | | £16.85 |

| Descriptions | Cost model POCT NHS HC | | |
|---|---|---|---|
| | Mins | Rate | Cost |
| Estates | | £0.50 | £0.50 |
| Perform Health Check | | | |
| Reception | 2 | £9.00 | £0.30 |
| Phlebotomist/H.A | 20 | £13.00 | £4.00 |
| POCT consumable cost | | £9.00 | £9.00 |
| TOTAL | | | £13.80 |

Table 2. South of Tyne and Wear comparison of costs associated with the standard and POCT model of delivering the 1 NHS Health Check. These costs do not include setup costs, patient's savings or benefits of improved pathway.

## References

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