

Exploring what happens after an NHS Health Check

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Sally Barlow (Public Health Lead, Hull City Council)

Background



The NHS Health Check programme is aimed at preventing premature mortality in line with a national focus on improving prevention and early diagnosis.

There is considerable variation in how the programme is implemented across different localities and limited understanding of the impact of local programmes on reducing and managing risk factors after the health check has taken place. This indicates a need to understand the impact of local programmes on reducing risk, by exploring what happens after a health check.

Hull City Council commissions ICE Creates to deliver a NHS Health Checks Community Outreach service. The outreach programme increases the accessibility of health checks by taking the programme to eligible individuals out in the community. In addition, health checks are carried out in local GP surgeries and in some workplaces.

Objectives



The key objective of this project is to **understand what individuals do next after a health check**. This includes exploring the following key topics:

- Individuals' experience of receiving a health check and their beliefs regarding their risk score.
- Individuals' experience of making lifestyle behaviour changes or accessing services.
- Individuals' experience of challenges to change following the health check and understanding what support or information is needed to overcome these challenges in future.

Target audience



In order to understand the impact of the local implementation of the health check programme in Hull, this project aimed to engage with two key target audience groups:

1. Individuals who have received their health check as part of the **Community Outreach programme**.
2. Citizens who have received their health check in the **workplace**.

For each target audience, interaction with individuals took place approximately six weeks after they received their health check in order to understand the impact the health check had on their lifestyle behaviours.

Methodology



Engagement with:

- **20 individuals** who received a health check in **community outreach** settings through in-depth interviews exploring their experiences and challenges.
- **26 individuals** who received a health check in **workplace** settings through an online survey and telephone interviews. The survey used a behavioural design to explore individuals beliefs, motives and intentions.

Discussion topics



All research methods explored the following topics:

- What happened after an NHS health check
- Lifestyle behaviour change - exploration of behaviours that were recommended to be changed, what change was recommended, if/how the individual tried to make a change and what happened next
 - Exploration of drivers/enablers for behaviour change
 - Exploration of barriers to behaviour change and associated needs to overcome these barriers
- Exploration of support/services accessed (including awareness/knowledge of support/services)
- Experience of the NHS health check
- Exploration of beliefs regarding risk score

Primary research findings

Community insight

What encourages individuals to attend a Health Check?



A number of questions were asked to explore what encouraged individuals to attend a health check in the community. The key themes were as follows:

Concern about current health/wanting to know more: Participants discussed that they were motivated to attend because they had concerns but had since been apathetic to visit the GP or didn't believe their concern was "worth a visit".

Accessibility: The offer of the community health check was *convenient, free and quick*, offered in a venue they were already visiting - an opportunity to have a check up that they may otherwise have not done.

Deliverer relationship: Others said they were *encouraged by the health check deliverer*. As the deliverer had visited the community venue on previous occasions, they had been able to establish a relationship with members of the community and were therefore well placed to encourage and advise individuals to have a health check.

Social norm: Participants also said they attended because *other people in their community were having health checks*. Behavioural theory tells us that people are more likely to follow the 'social norm' and are therefore more likely to have a health check if others like them are doing the same.

“

We come here anyway on a Wednesday and people were here having it done.

(Female, 55 – 64, community)

She came over and said would I like to, and I had been getting headaches and feeling a bit dizzy, so I thought I might as well get it checked out.

(Male, 45 - 54, community)

”

Beliefs regarding risk of future health problems

Receiving a risk score

The information collected during an NHS health check is used to calculate a person's risk score. This risk score is *expected to act as a motivation to change in order to reduce this risk*. It was hypothesized that 1) a low proportion of individuals in the community would remember their risk score, 2) individuals would struggle to interpret their risk score.

Risk score recall is poor: As hypothesized, many participants *could not remember their risk score*. Individuals did not spontaneously discuss their risk score and when prompted, could not remember what it was.

Risk score is difficult to interpret: Participants said it was “confusing” and “didn't mean anything” because they received a lot of other important information during the health check. Individuals with *low level English skills could not comprehend what a risk score was* and thus were unable to understand their risk of developing future health problems.

Motivation to change reduced if perceived risk is low: Upon receiving a risk score, some individuals *did not feel like they needed to make a change because their result was “better than expected”*. Even when individuals were advised to consider small lifestyle changes, they did not believe they needed to. This suggests that risk scores can reduce an individual's motivation to act, if they interpret their risk of future health problems to be low.

What is a risk score ?

The information collected during the health check, is used to calculate a person's risk of developing Coronary heart disease (CHD) within the next 10 years .

The [NHS guidelines](#) categorise an individual's risk into low, moderate or high:

- **Low risk score:** 0-10% chance of CHD in the next 10 years
- **Moderate risk score:** 10-20% chance of CHD in the next 10 years
- **High risk score:** greater than 20% chance of CHD in the next 10 years

Beliefs regarding risk of future health problems

Receiving a heart age

In addition to the risk score, at the end of the Health Check all individuals are given a heart age which is an alternative way to help people understand their future risk of developing cardiovascular disease (CVD), which includes coronary heart disease (CHD), in the next 10 years. It was hypothesized that heart ages would be a more effective than risk scores in conveying risk of future health problems and thus increasing motivation to change.

Heart age recall high: The findings show that many *individuals could remember their heart age*. The recall of the heart age was higher than that for the risk score.

Heart age score increases motivation to change or maintain positive behaviours: Participants who received a heart age lower than, or the same as their actual age said they felt “delighted” and were motivated to “keep up the good work”.

Individuals who received a heart age higher than their actual age said they felt “shocked” and “older than they should”. These individuals could recall the advice and information given to them regarding how they could reduce their heart age (e.g. focus on lowering their blood pressure). This suggests that *the receipt of a heart age prompted individuals to think about what they could do to reduce their heart age*.

When an individual starts to think about making a change, this is an indication that they intend to take action. This suggests that the heart age is an effective tool for increasing intention to change.

What is a heart age ?

Heart age is an assessment of risk factors collected during a Health Check to estimate an individual's risk of CVD. It is a useful way to explain the risk of CVD, particularly for younger people who need to change their lifestyle but who are at a low risk of CVD event in the next few years.

Motivation to change

To explore what would motivate an individual to change, several questions were asked to explore why being healthy is important, both in the short and long term. By understanding what motivates an individual to want to be healthy we can understand how to encourage them to change their behaviour. Key motivating factors included:

Family

- Participants discussed that being healthy was important in order to *have more energy to keep up with children* and to be able to go to work to provide for their family (short-term benefits).
- It was also important *to be healthy in later life* and live longer to be around for family and grandchildren. (long-term benefits).

Money

- Participants stated they wanted to be healthier and reduce unhealthy habits like smoking and drinking alcohol in order to *have more money* to spend on the things they enjoy (e.g. socialising, days out).

Career aspirations

- Others discussed that they were motivated to be healthier because they had new career aspirations and were currently undergoing training or looking to start a new job/career. Participants said they wanted to be healthier as part of “making a fresh start” and aspiring for a better quality of life.

“

At the minute I look after my grandson three times a week, and it's getting tiring but it's what I want to do, to help and be there for my family.

(Female, 55-64, community)

I want to work in a school where you can't be smoking anyway and the money I save, in the future I can take the kids out, go on holiday...

(Female, 45 - 54, community)

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What happened next?

Of the 13 individuals (70%) who intended to change following their Health Check, 100% reported making a change.

Some participants reported making small changes to their lifestyle including:

- *Changes to their diet/eating habits:* grilling not frying, cooking more whole foods rather than prepacked meals, eating at regular meal times, making food swaps (e.g. choosing brown instead of white bread at the food bank).
- *Engaging in more physical activity:* walking to the shops, playing outside with the children or going to the local park. Of note, examples given were of activities that were free and accessible.
- *Cutting down on unhealthy behaviours:* reducing the numbers of cigarettes smoked in a day.

Of note, no individuals reported quitting smoking. This suggests that the health check may provide an increase in intention to change that results in simple first steps being taken, but further support will be required to make changes to behaviours such as smoking and/or to move from the “action” stage into “maintenance”.

“

I used to skip meals but now I eat regularly and grill my food instead of frying.

(Female, 45-54, community)

I was told that I needed to cut down with it and knew I had to keep up to it, because Sarah, she'd be asking me next week 'how you getting on with the smoking'.

(Female, 55-64, community)

”

What happened next?



Some participants reported that they were advised by the health check deliverer to see a doctor and had *accessed, or attempted to access a GP appointment.*

Why did individuals go/attempt to go to the GP?

- To get a medical prescription in order to access and take medication.
- To get an “expert opinion” regarding their health check results in order to receive professional advice on what to do next.

Individuals who visited the GP reported that they started to use medication or made small changes based on the doctors recommendation. This suggests that encouraging attendees to *access further services may increase the likelihood of a behaviour change.* However, some individuals were unable to access the GP because of language barriers.

Some participants said they started attending community activity groups/clubs (e.g. art and crafts, cooking club) but *no individuals reported accessing other local support services* such as; smoking cessation or weight management services.

Are participants in the community aware of local support services?

Participants who spoke **English** as a first language **had some awareness** of where they could access further support in their local area. This included **health services.**

Participants who **did not speak English** as a first language, had **limited to no awareness of available support** to which they were entitled, other than the community project where the insight was conducted.

No individuals mentioned smoking cessation, weight management services, or peer support groups. This suggests **there is a need to increase awareness of available services** and support individuals in the community to access them.

What helped individuals successfully change?

Several questions were asked to explore what helped individuals successfully change their behaviour.

Participants discussed that **the health check deliverer played a key role in helping them change** for several reasons:

- *Listened to their needs* and signposted to support groups/services and *provided tailored information accordingly* (e.g. leaflet that advertised a service). Participants said they found it useful having someone to talk to *face-to-face* who could give recommendations specific to their needs.
- Providing individuals with useful information (e.g. leaflets). They said this was the most useful way of being provided information, as they may otherwise have not picked up a leaflet and many do not have access to the Internet.
- Provided useful *advice on how they could make small changes* to their lifestyle (e.g. choose brown bread instead of white at the foodbank, walk to the park instead of catching the bus – first steps into “action”).
- *Supported individuals to access further services*, including helping individuals to book GP appointments.
- Individuals *listened to and trusted the advice given to them* by the health check deliverer because they had built up a relationship with them and trusted their opinion.

“

She helped get my appointment sorted with the doctor, I wouldn't have got round to it myself.

(Female, 45-54, community)

She gave me this leaflet about the art and crafts, something that wouldn't have crossed my mind to pick up and think would of helped

(Male, 55-64, community)

”

Intention to change

*Why did some individuals **not** intend to change their behaviour?*

30% of participants did not intend to change their behaviour. The findings show that this is because they *did not believe they needed to make a change* for several reasons:

- Some participants believed the results of their Health Check were “better than expected” and that they didn’t need to change. They were therefore *less motivated to change* even when they were still advised to make small lifestyle changes.
- Some participants *believed they were already doing what was right* for them, driven by *religious and cultural beliefs*. For instance, participants discussed that their health was “in God’s hands” or that they believed taking a spoon full of honey everyday would maintain them in good health.
- Some participants, who *did not speak English as a first language*, did not understand they needed to change, because they could not fully comprehend the advice given to them by the Health Check Deliverer.

“

My blood pressure, it wasn’t great but it wasn’t bad either. I thought it was gonna be so much worse so I was pleased more than anything!”

(Male, 55-64, community)

The results I got given were better than I thought they would be. She said my health and everything was okay so it was nice to know I’ve nothing to worry about.

(Female, 35-44, community)

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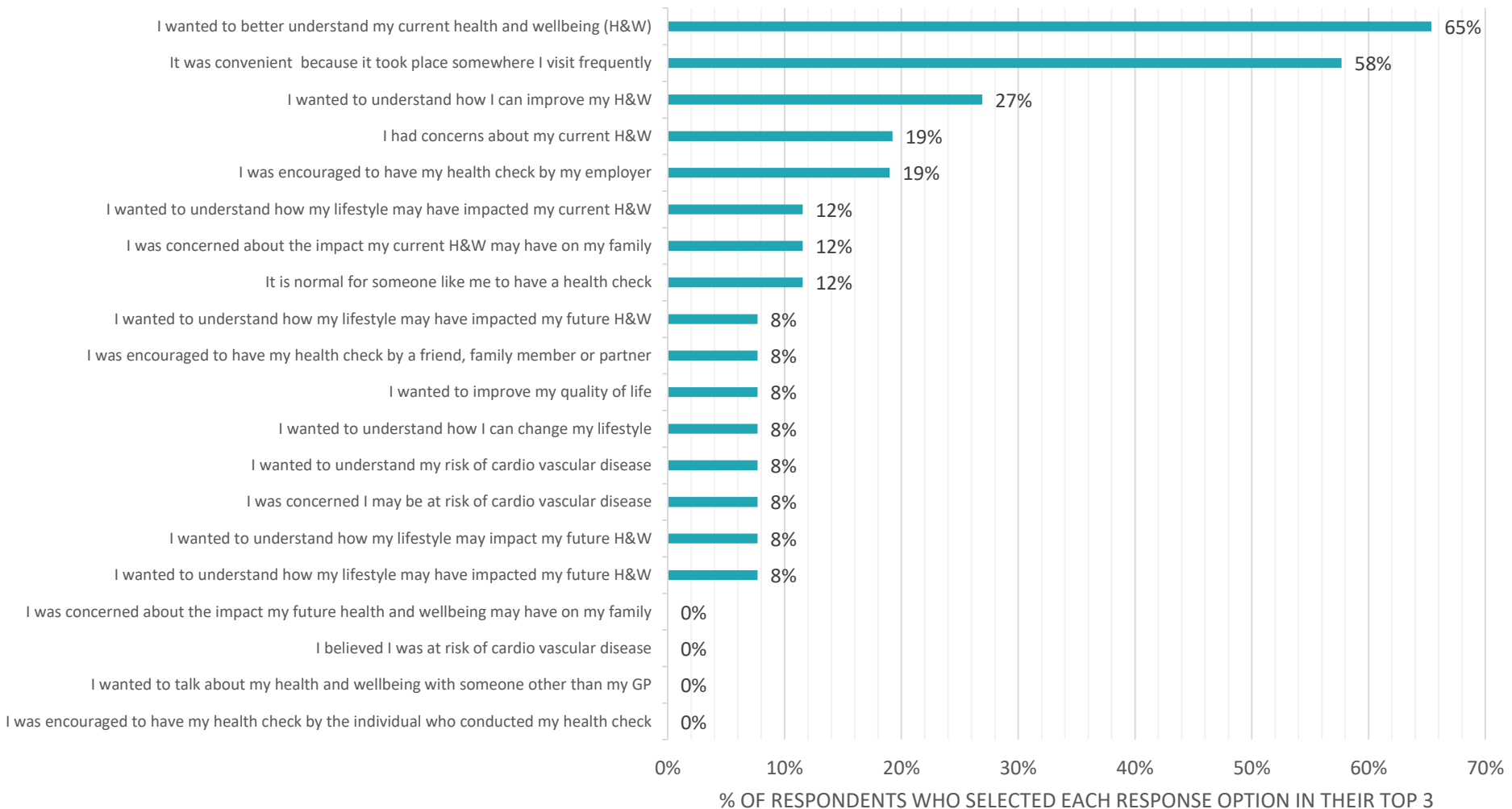
Primary research findings

Survey and telephone interviews

What encourages individuals to attend a health check?



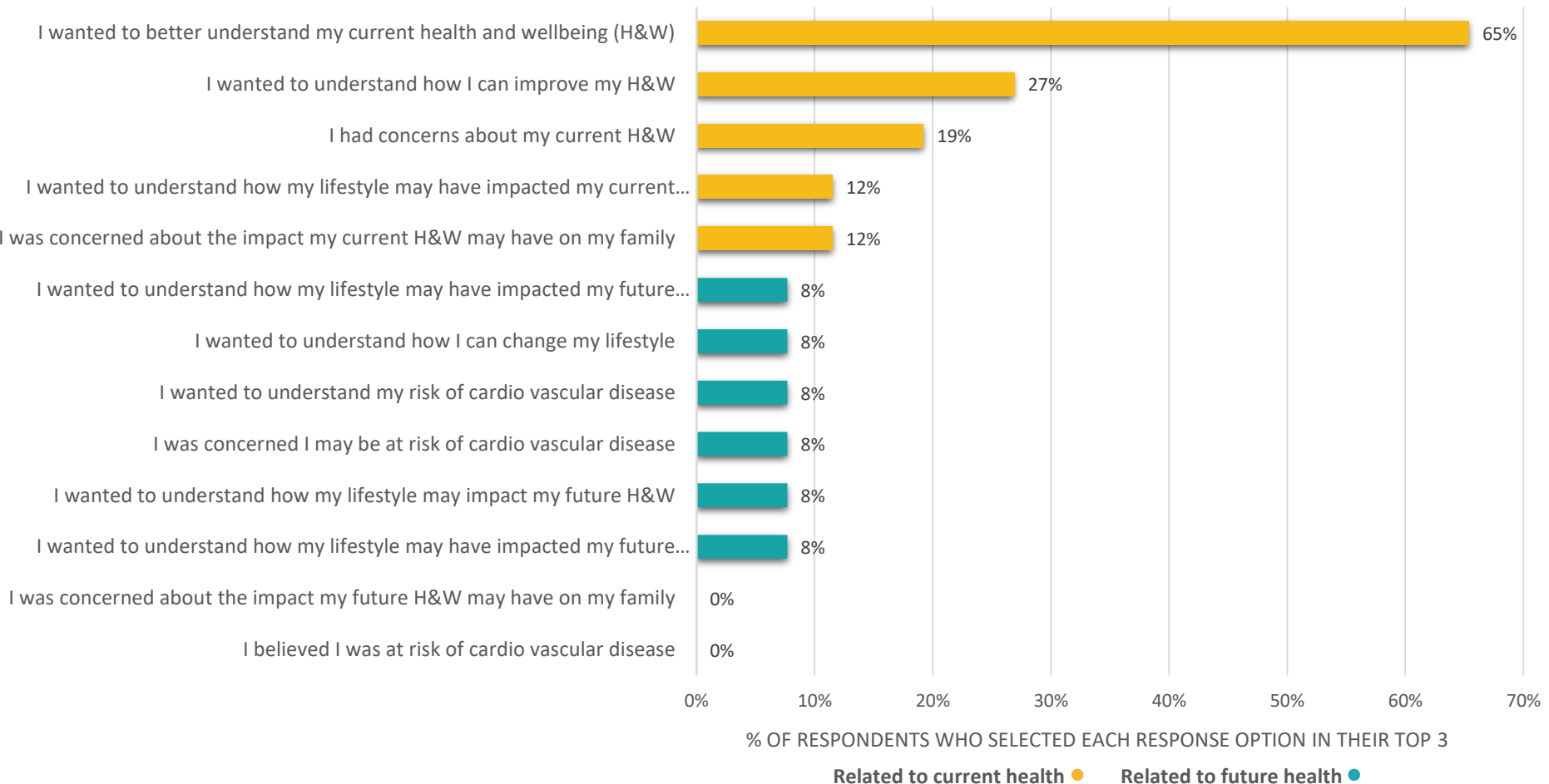
The following chart shows the response options that were selected in respondents (n=26) top 3 reasons to attend a health check. The data shows 2 key factors that encourage individuals to attend, 1) *to understand their current health and ways they can improve it* and 2) *the convenient location* of the health check.



What encourages individuals to attend a Health Check?



Hypothesis: that individuals would be more motivated to attend a health check by short-term, immediate gains over longer term benefits such as reducing the risk of CVD. The following chart presents the response options from Q1 that are related to current health and future health and demonstrates that *respondents more frequently selected options related to understanding and improving their current health* over options related to understanding their future health.



Beliefs regarding risk scores



Remembering the risk score

“At the end of your NHS health check, you will have been given a risk score as part of your results. Please indicate whether you know your risk score”

Out of all responses (n=26), *less than half could remember their score*, which is consistent with the hypothesis that a low proportion of individuals would remember their score.

All of the individuals who could remember (48%), believed they had a low chance of future health problems and unsurprisingly were “happy” and “pleased” with the outcome of their Health Check.

No individuals who believed they had a moderate-high chance of future problems and who felt “worried” and “surprised” after the health check, could remember their risk score. This highlights that *individuals who the risk score is designed to target, are less likely to remember their score 6-weeks after the Health Check*. This suggests that the receipt of a risk score is less likely to influence these individuals to change their behaviour.

Beliefs regarding risk scores



Understanding risk scores

To explore if individuals are able to understand their risk of future health problems based on their risk score, the responses to the following two questions were analysed:

“My NHS health check results state that I have...” (e.g. between 0 – 10% chance of CHD in the next 10 years)

“I believe that my health check results means I have...” (e.g. a low chance of CHD in the next 10 years)

Out of all respondents who completed both questions (n=26), *81% reported a low risk score* (between 0 - 10% chance of CHD in the next 10 years) and believed this meant they had a low chance of future health problems.

However, 19% of respondents reported a risk score greater than 10%, and approx. half of these underestimated their risk of CHD in the next 10 years. This suggests risk scores are open to interpretation, which can cause individuals to underestimate their risk of future health problems and thus may not act as a motivation to change.

Beliefs regarding risk scores

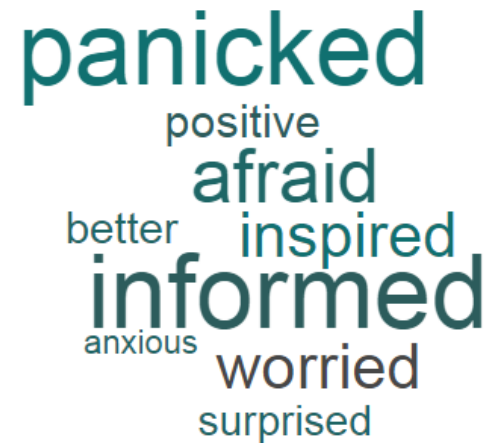


Respondents were asked “Thinking about how you felt after your health check... Please enter 3 words that best describe how you felt”. The following word clouds show the words that were reported by respondents who believed they have a low risk of CHD in the next 10 years vs those who believed they had a moderate or high chance.

I believe I have a *low chance*



I believe I have a *moderate or high chance*



Intention to change



Several questions were asked to understand if respondents had *thought about making a change after the health check*, to explore the participants intention to change their behaviour.

Out of all responses (n=26), *23% of respondents did not think about making a change*, the key reasons they gave included:

- The belief that they had a low risk of future health problems
- The belief that they already live a healthy lifestyle and thus did not feel they needed to change.

77% of respondents thought about making a lifestyle change.

Out of all respondents, 62%, 58% and 54% said they had thought about *increasing their physical activity, eating healthier and reducing their alcohol intake respectively.*

Importantly, **all** respondents who had thought about making a lifestyle change (77%), *all tried to change their behaviour* following the health check (n=21). This suggests 2 things: 1) that the health check may increase intention to change or at least that following a health check the vast majority of individuals are at least in the “contemplation” stage of behaviour change if not in the “preparation” stage. 2) That intention to change is strongly related to behaviour change attempts with individuals entering the “action” stage of behaviour change in the 6 weeks following a health check

What helped individuals successfully change?

To explore what helped individuals successfully change, respondents were asked the following question:

Please tell us about the things that helped you to successfully make changes to your lifestyle?

- Online articles about health, wellbeing, diet and exercise (e.g. info about exercise techniques)
- Online videos (e.g. YouTube exercise videos)
- Exercise initiatives offered in the workplace
- Advice and support offered by the health check deliverer on the “small things” that can help related to all aspects of a healthy lifestyle (e.g. walk more, cutting down on alcohol).
- Peer group support and encouragement (e.g. at weight watchers)
- Support from friends and family
- Using a health and fitness app – such as Nike Run and ‘Dry January’.
- Visiting the GP – to confirm health check results and receive further advice

I looked up information on better exercise techniques and modified my training as a result

(Male, 45- 54, survey response)

Vocalising desire to change and getting encouragement from friends really helped

(Female, 45 – 54, survey response)

I've started weight watchers and the people there are so encouraging

(Female, 45 – 54, survey response)

What challenges were experienced?

What, if any, challenges did you experience when trying to change your lifestyle?

Out of all responses (n=24), 1/3 of respondents said they faced no challenge. However, *67% reported several challenges including:*

Lack of motivation– respondents said they often lacked motivation particularly if they were feeling stressed and tired which made it difficult to keep up the small lifestyle changes and would often fall back into unhealthy habits.

Peer pressure – difficult to reduce alcohol intake when socialising as being encouraged by peers and often lacked the willpower to say no.

Time – respondents said they found it a challenge to make time for more exercise and to prepare healthier meals.

Money – healthy foods were perceived as more expensive and participants stated that they found it difficult to change food choices on a budget.

“

“My alcohol intake is still higher than I would like but the peer pressure when socialising is hard”.

(Male, 45 – 54, survey response)

“high state of stress at work leads me to unhealthy choices and its difficult to then find the motivation to keep up with it”.

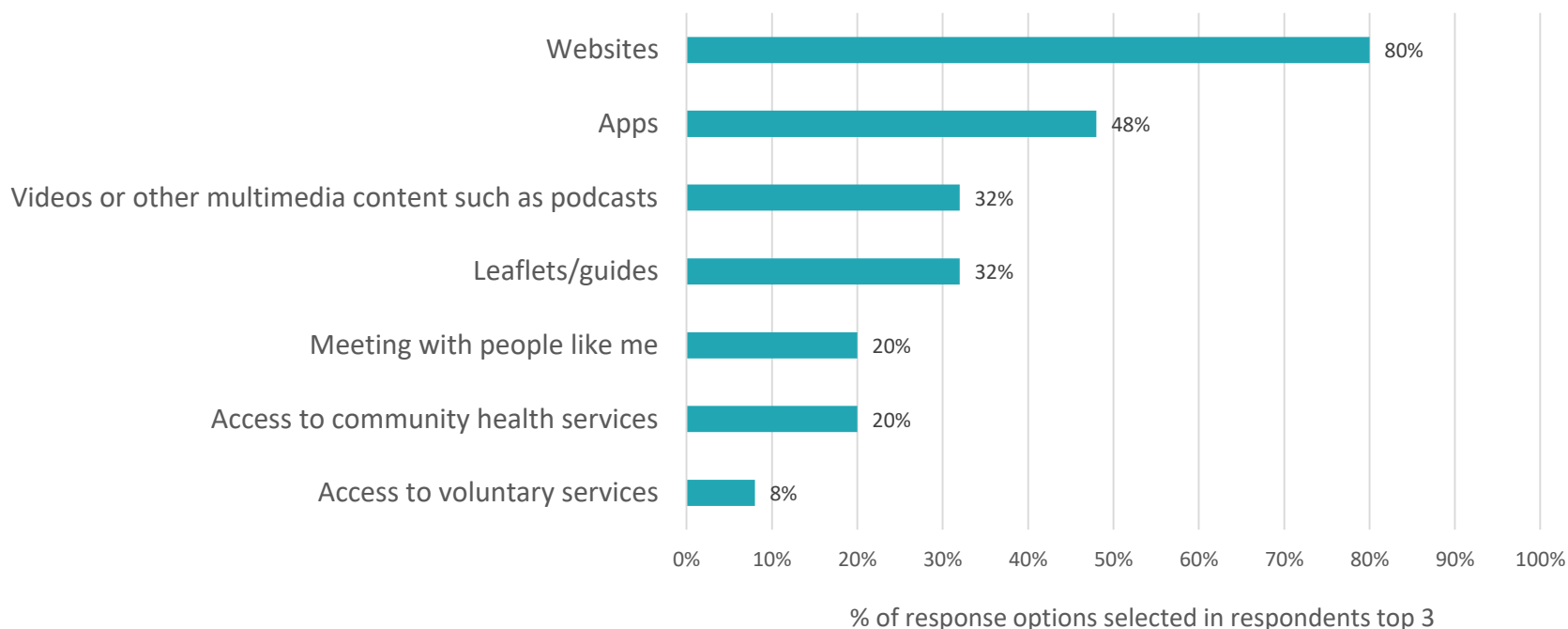
(Female, 55 – 64, survey response)

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What types of information or support do you need?



Respondents were asked to select the top 3 types of information or support they would find most useful to support them to successfully make a change. Out of the 25 participants who answered this question, 80% selected websites in their top 3, 48% selected Apps and 32% selected videos or multimedia content. This shows that *individuals want information and support that they can access online themselves*, primarily via useful websites and Apps. However, some respondents indicated that they would find it *useful to meet with people like them* and access community services.



Strategic recommendations

Recommendation 1



Apply the principles of the EAST Framework to advertise Health Checks across a range of communication channels (e.g. email, social media, leaflets) in order to increase attendances.

Individuals were encouraged to attend a health check because it was convenient and easy to attend and other people like them were having health checks. In addition, individuals were motivated to find out more about their current health or a health concern and ways they could improve it.

Recommendation to apply these principles (Easy, Attractive, Social, Timely) to advertise Health Checks in order to encourage individuals to attend and increase attendances. In applying these principles, behavioural messages should advertise that health checks are:

- Free, quick and easy, offered in a convenient location
- An opportunity to find out about your current health and receive advice and information on ways to improve it
- Social norm - people like me attend a health check

Recommendation 2

Ensure that individuals leave their NHS health check with an understanding of their 'heart age', not just a risk score

A low proportion of individuals remembered their risk score and many struggle to interpret what it means. It is important that individuals understand their risk of future health problems as there is a linear relationship between perceived risk and motivation change - individuals who perceive their risk to be high, are more motivated to change their behaviour.

There are fundamental differences between these two scores that are likely to influence how individuals recall them and interpret them. The risk score is a probabilistic score that effectively compares the individual to others. This leaves many individuals believing that they would be in the % that would not experience the negative outcome within the next 10 years. The heart age score provides a comparison between the individuals own chronological age and the age of their heart and therefore can feel like a personalised score and provides a me vs my heart comparison that was both recalled more easily and appears to increase intention to change better due to the increased ease of understanding.

“

I remember my age was 3 years younger, which is really positive and it certainly motivates you to keep it up

(Female, 45 – 54, telephone interview)

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Recommendation 3



Interpreters should be used to support the delivery of health checks in communities with a high proportion of individuals who do not speak English as a first language.

Many individuals who receive a health check in the community do not speak English. The language barrier experienced is a key challenge for several reasons including:

- Understanding the results and advice given at the health check
- Understanding the opportunities to access further services and support

Recommendation 4



Continue to support the Community Outreach health checks program

The findings of this study suggest that the Community Outreach programme is ensuring that individuals who would otherwise not access a NHS health check are being encouraged to access it.

Furthermore the community health check deliverer was able to help individuals change by giving them useful advice and information that they would otherwise have not accessed. Capitalising on the fact that they were contemplating making changes and supporting them to take actions. Many of these individuals do not have access to the Internet in order to find online information or advice, rather they found it more useful having someone to talk to face-to-face who they trusted would give lifestyle advice specific to their needs and help them access services (e.g. make a GP appointment).

“

She gave me this leaflet and said ‘here you go, why don’t you think about this’, but I wouldn’t have picked it up if it was something just left on the side.

(Male, 55 – 64, community)

”

Recommendation 5



Hold drop-in sessions in the community to support individuals to access further services would work well if they follow on the back of a health check programme.

The findings show that there is a need in the community for further advice and support to access services beyond the scope of the health check. The findings show that vulnerable groups in the community find it useful having information explained to them face-face to support them in making a change.

Drop-in sessions is held during existing Community projects could offer individuals further advice and support on the following:

- Registering at a GP
- Booking a GP appointment

This session would be an opportunity to share and connect with others who want to make healthy lifestyle changes as many individuals in the community lack peer support to help them change their behaviour.

Recommendation 6



Signpost individuals to digital resources following a workplace health check

The majority of individuals who had a workplace health check were at the contemplation or preparation stage of behaviour change following their health check. The findings showed:

- Only 1 in 4 respondents were accessing any information or support to help them change their lifestyle following their health check
- Respondents reported that they do not agree that they receive enough support to change their lifestyle following a health check. Awareness of where to access support is low.
- Respondents reported that they needed more relevant/tailored information in order to make successful changes.
- Respondents wanted to be aware of and track the changes they attempted to make and be able to stay focussed on their goals.
- Websites and apps were the most popular types of information or support that they stated they wanted – suggesting that the majority of these individuals would prefer to conduct independent research following a health check.

Recommendation to signpost individuals to digital resources that have been specifically designed to support individuals to take action and maintain behaviour change. Such resources need to include access to information that will support individuals to move from contemplation, to preparation and onto action, have the ability to set goals and track progress and signposting to local services. For example, One You campaign provides a suite of resources designed to support lifestyle behaviour change.

Recommendation 7



Signpost individuals to websites that provide information and advice on how individuals can improve their health following a health check.

The findings show that 80% of individuals would find it useful to access websites in order to find information that will support them to make a change. It was discussed that everything they need is online but individuals often don't know where to start to look for reliable information.

Recommend signposting individuals to the One You website following the health check in order to provide individuals with useful information on how to improve their health check result and signpost to content that individuals said would be useful (e.g. videos and articles), which could help overcome some of the challenges identified (e.g. time and money to eating healthy and exercising more).

Thank you