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Knowledge & Library Services (KLS) Evidence Briefing

What is the latest evidence on NHS Health Checks?

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(search dates: 27 April 2017 to 22 June 2017)

Issue 3

What is the latest evidence on NHS Health Checks?

This briefing summarises the findings from research papers identified from the most recent Expert Scientific and Clinical Advisory Panel (ESCAP) literature search on NHS Health Checks (search dates: 27 April 2017 to 22 June 2017) (1). It is presented in a summary format, using the three key research priorities of the NHS Health Check programme – recruitment, delivery and impact

Key messages

- Two relevant studies addressing at least one of the NHS Health Check research priorities were identified in the current ESCAP literature search (1).
- Opportunistic NHS Health Check attendees tend to have higher Cardiovascular Disease (CVD) risk and greater levels of deprivation, in a study involving 18 practices in South London (2)
    - Opportunistic NHS Health Checks contributed to more than half of all checks completed, and represented a higher proportion of all NHS Health Checks performed in younger adults and in more deprived areas
    - Participants taking up opportunistic checks were at higher risk of CVD than those taking up invited checks (2)
- Use of community outreach providers to deliver NHS Health Checks is an effective approach to reach more deprived areas and younger people. This model could help to reduce health inequalities associated with CVD. A study in 38 local authorities (LAs) across 8 regions of England found (3):
    - individuals in the most deprived quintile made up nearly half of all attendees receiving a local community-provided NHS Health Check, and nearly half of these were under 50 years old, (3)
    - more women than men had received a local community-provided NHS Health Check (3); and
    - no statistically significant differences among ethnic minority groups were observed between LAs – although some areas were very successful in recruiting ethnic minority groups (3)

Evidence briefings are a summary of the best available evidence that has been selected from research using a systematic and transparent method.

What doesn't this briefing do?
The findings from research papers summarised here have **not** been quality assessed or critically appraised.

Who is this briefing for?
It is designed for commissioners, providers and academics interested or involved in the NHS Health Check programme.

Information about this evidence briefing
The findings in this briefing come from the most recent quarterly NHS Health Check literature search which drew upon a literature search of the sources Medline, PubMed, Embase, Health Management Information Consortium (HMIC), Cumulative Index of Nursing and Allied Health Literature (CINAHL), Global Health, PsycInfo, the Cochrane Library, NICE Evidence Search, TRIP database, Google Scholar, Google, Clinical Trials.gov and the ISRCTN registry from 27 April 2017 to 22 June 2017.

Two highly relevant citations were used to produce this Evidence Briefing.

Background

In January 2017 ESCAP summarised the key findings of a rapid evidence synthesis conducted by RAND and the University of Cambridge (4, 5). The descriptive synthesis of quantitative data and thematic synthesis of qualitative data identified a total of 68 papers (from January 1996 to November 2016) that addressed at least one of six research questions posed by Public Health England (PHE).

ESCAP continues to identify evidence relevant to the NHS Health Check programme by producing a quarterly list of citations – the latest literature search is from June 2017 (1)(covering search dates 27 April 2017 to 22 June 2017). This briefing aims to translate the evidence from the NHS Health Checks section of the latest quarterly ESCAP literature search into a user-friendly summary format, in order to inform practice. The briefing is summarised under the three key elements of the NHS Health Check programme – recruitment, delivery and impact.

1. Recruitment

One study addressed the question of who is having an NHS Health Check.

According to this cross-sectional study involving 43,177 people from 38 LAs who had received a local community-provided NHS Health Check, attendees were more likely to be women, younger or from the most deprived quintile, when compared to the general population (3).

Individuals in the most deprived quintile made up nearly half of all NHS Health Check attendees, and nearly half of these were 40-49 years old. Woringer et al. suggest that offering the NHS Health Check Programme in community locations such as pharmacies, places of worship, libraries, shopping venues and football stadiums during the evening and at weekends may have enabled more younger, employed people to attend (3).

> **Compare**: *Issue 1* of this NHS Health Check Evidence Briefing series outlined two studies on deprivation levels of NHS Health Check attendees, one found attendees to be more deprived, the other less deprived.

No statistically significant differences among ethnic minority groups attending NHS Health Checks were observed between LAs, but Leicester, Thurrock, Sutton, South Tyneside, Portsmouth and Gateshead were particularly successful in recruiting ethnic minority groups

2. Delivery

In this issue, no research studies were found that addressed the delivery of NHS Health Checks.

3. Impact

One study addressed the impact of the NHS Health Check programme.

Participants aged 40-74 in 18/89 practices in two South London boroughs were invited to attend an NHS Health Check via either an invitation letter or opportunistically, in this cohort study (2):

- of the 2246 people having an NHS Health Check who were invited to attend via a letter, 392 (17.0%) had CVD risk score ≥10%;
- of the 3113 people who had an NHS Health Check opportunistically, 692 (22.2%) had CVD risk score ≥10%; and
- in the most deprived quintile, 15.3% of invited checks and 22.4% of opportunistic checks were associated with elevated CVD risk

As participants taking up opportunistic checks were found to be at higher risk of CVD, Gulliford et al. suggest that this may be an indication that general practices are successfully targeting groups that are at greater risk for the offer of an opportunistic NHS Health Check (2).

> **See also**: *Issue 1* of this NHS Health Check Evidence Briefing series outlined several studies on the take-up of NHS Health Checks, including the comparison of targeted invitations with non-targeted invitations.

Summary table showing key information for the research studies included in this evidence briefing

Title	Aim	Design	Participants	Results
Gulliford et al. 2017 (2) Cardiovascular risk at health checks performed opportunistically or following an invitation letter.	To compare cardiovascular risk estimates for NHS health checks conducted either opportunistically or through the population-based invitation system.	A cohort study of all health checks conducted at 18 practices in South London between July 2013 and June 2015.	Participants aged 40-74 in two South London boroughs invited the via population-based call–recall system or opportunistically.	6184 health checks recorded (2280 invited and 3904 opportunistic) with CVD risk scores recorded for 5359 (87%) participants. 17.0% of invited checks and 22.2% of opportunistic health checks had CVD risk score ≥10%; relative increment of 28% (95% CI, P<0.001). In the most deprived quintile, 15.3% of invited checks and 22.4% of opportunistic checks were associated with elevated CVD risk (adjusted OR 1.94, 1.37–2.74, P<0.001).

Title	Aim	Design	Participants	Results
Woringer et al. 2017 (3) Evaluation of community provision of a preventive cardiovascular programme - the National Health Service Health Check in reaching the under-served groups by primary care in England.	To assess whether the NHS Health Check attendees recruited by community providers differed from the general population in gender, age, ethnicity and socio-economic status	A cross-sectional observational study in 38 local authorities (LAs) in England.	50, 573 people aged 40-74 who had received a local community-provided NHS Health Check (available evenings and weekends as well as business hours) specifically using Health Options software and point of care testing, between Jan 2008 and Oct 2013.	Data on 43,177 individuals from 38 local authorities (12.81% of the total English population in 2011) across eight regions of England were analysed. The mean deprivation score of the population reached by community outreach providers was 6.01 higher ($p < 0.05$) than the general population. Screened populations in 29 of 38 LAs were significantly more deprived ($p < 0.05$). The mean proportion of men was lower among NHS Health Check attendees (37.79%) compared to the general population (49.18%) ($p < 0.001$). The mean proportion of 40–49 and 50–59 year olds was higher among NHS Health Check attendees (43.63% and 33.35%) than among general population (34.65% and 29.77%, $p< 0.001$ and $p< 0.01$). No statistically significant difference among ethnic minority groups was observed between LAs.

References

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