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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: 1 February 2017 to 26 April 2017)

Issue 2

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: 1 February 2017 to 26 April 2017). 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)
- a questionnaire intended to prompt behaviour change made little difference to the take-up of NHS Health Checks either with or without a financial incentive; those people that did attend were at lower risk of cardiovascular disease (2)
- NHS Health Checks are highly cost-effective, with an incremental cost effectiveness ratio of £900/quality-adjusted life year (QALY), according to an economic evaluation (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 1 February 2017 to 26 April 2017.

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

Disclaimer
The information in this report summarises evidence from a literature search - it may not be representative of the whole body of evidence available. Although every effort is made to ensure that the information presented is accurate, articles and internet resources may contain errors or out of date information. No critical appraisal or quality assessment of individual articles has been performed. No responsibility can be accepted for any action taken on the basis of this information.

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 May 2017 (1) (covering search dates 1 February 2017 to 26 April 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 paper addressed the take-up of NHS Health Checks.

An expert commentary on a previously reported trial (6) on enhanced invitation methods and uptake of NHS Health Checks concluded that currently questionnaires or incentives cannot be recommended, but does raise the question of whether invitations can be better targeted at high risk patients? (2). Key points of this National Institute for Health Research summary and commentary are:

- a questionnaire intended to prompt behaviour change made little difference either with or without a financial incentive
- persuading an extra 1.5% of patients to attend is clinically unimportant
- take-up of an NHS Health Check after invitation is generally low and those that attend are disproportionately at lower risk of cardiovascular disease - these patients benefit least from health checks and may not benefit at all

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.

This economic evaluation is thought to be the first study to use observed data on the effectiveness of the NHS Check Programme, and considers whether NHS Health Checks represent a cost-effective use of limited resources (3). This is the full publication of a previously published conference abstract from 2016 (7).

This study used the publicly available evaluation tool EConDA (Economics of Chronic Diseases) www.econdaproject.eu/tools.php, to conduct an analysis of NHS Health Checks to establish the long-term cost and health-related outcomes of a cohort of patients. The evaluation concluded that:

- considering the full cost of the Health Checks but none of the population health benefits associated with non-weight related illness, NHS Health Checks were shown to reduce the prevalence of all four diseases modelled by the EConDA tool, with peak prevalence reduced by 2.1% for coronary heart disease (CHD), 1.6% for diabetes, 1.5% for stroke and 0.8% for hypertension
- NHS Health Checks are highly cost-effective, associated with an incremental cost effectiveness ratio of £900/QALY

The authors state two limitations to their study –

i) the immediate cost is paid now, while the benefits in terms of population health and savings occur in the distant future
ii) the evaluation is based on little data and significant assumptions, so although the study has been conducted robustly, significant research is still required

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

Title	Aim	Design	Participants	Results
National Institute for Health Research (2017). Signal: Postal invitations, even with added incentives, don't improve NHS health check attendance	To summarise and comment upon a previously reported trial (6) looking at the effects of enhanced invitations methods on take-up of NHS Health Checks.	The study was a three-armed randomised controlled trial and linked cohort study based in 18 general practices in London.	12,459 people were included in the randomised part of the study	Being sent an invitation which included questions about intention and readiness to attend did not encourage people to have an NHS health check. This was true even when people were offered a financial incentive. More people had an opportunistic health check when offered one while they were attending their surgery for another reason, than people who received an invitation letter. People who had health checks after the written invitations had a lower risk of cardiovascular disease than those who had opportunistic checks. Fewer than half of people invited for NHS health checks actually have them.

Title	Aim	Design	Participants	Results
Hinde et al. 2017. The cost-effectiveness of population Health Checks: have the NHS Health Checks been unfairly maligned?	To use observed data on the effectiveness of NHS Health Checks to consider whether they represent a cost-effective use of limited NHS resources. The primary focus of the analysis was to establish whether the impact of the Checks on BMI was sufficient to justify their cost.	An economic evaluation using a publicly available evaluation tool, to establish the long-term cost and health-related outcomes of a cohort of patients.	-	The Checks were associated with a reduction in mean BMI of 0.27 (95% CI 0.20 to 0.34) compared to no Check. When applied to the evaluative tool, a small but positive QALY gain of 0.05 per participant was observed, coupled with a reduction in disease-related care costs of £170. When the estimated cost per Check (£179) is taken into account, we estimate an incremental cost-effectiveness ratio of £900/QALY

References

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