NHS Health Check National evaluation

John Robson

GP, Reader QMUL

Collaborators: Isabel Dostal, Aziz Sheikh, Sandra Eldridge, Vichithranie Madurasinghe,

Chris Griffiths, Carol Coupland, Julia Hippisley-Cox

Funding: NIHR PRP DOH study.

Published: BMJ Open. 2016; 6(1): e008840

The views expressed in this presentation are those of the presenter and do not necessarily represent those of those of the Department of Health or institutions that fund or support the authors.

QResearch data base
655 practices
13 million patients
4 years: 2009-13

NHS Health Check national study

Coverage of NHS Health Check programme in each year

Financial years	Patients with health check in financial year	20% of the eligible population on 1st April	% Coverage Attendance/ one-fifth of eligible population
2009/10	16,613	286,035	5.8%
2010/11	41,832	286,383	14.6%
2011/12	69,978	286,669	24.4%
2012/13	86,042	285,784	30.1%

% Total eligible population with NHS Health Check

Age	band	(years)
, .D _		() /

40-49	9.0%
50-59	13.7%
60-74	19.6%

Townsend quintile

1 (most affluent)	12.3%
2	12.0%
3	12.2%
4	12.4%
5 (most deprived)	14.9%

Ethnicity	
White	17.4%
Indian	17.7%
Pakistani	16.1%
Bangladeshi	29.6%
Caribbean	19.6%
Black African	15.7%

Recorded before or on date of NHS Health Check or index date

Recording	NHS Health No. (%)	Check	No NHS Hea	lth Check
Total		214,295		1,464,729
Smoking status recorded	214,020	(99.9)	1,384,707	(94.5)
Alcohol status recorded	205,506	(95.9)	1,175,900	(80.3)
Body mass index recorded	210,062	(98.0)	1,176,819	(80.3)
Systolic blood pressure recorded	213,690	(99.7)	1,316,926	(89.9)
Cholesterol recorded	195,994	(91.5)	633,548	(43.3)
Cholesterol/HDL recorded	174,345	(81.4)	433,594	(29.6)
Family history CHD	46,466	(21.7)	156,604	(10.7)

New diagnoses in attendees and non-attendees

	NHS Health Check No. (per 1000	No NHS Health Check No. (per 1000)	
Total patients	214,29	1,464,7	729
New diagnoses			
CKD eGFR <60ml/min	807	4 2310	2
Type 2 diabetes	1934	5647	4
Hypertension	7844 37	7 16,184	11

New cases of co-morbidity among attendees

Hypertension 1 in 27 Checks

T2 diabetes 1 in 111

CKD 1 in 265

Recorded at NHS Health Check, relevant index date or in 12 months following

N (%)	NHS Check attendee	Non-attendees
Smokers recorded	37808/214020	310034/1384707
	17.7	22.4
Fasting glucose≥7mmol/L	954 0. 4	2 983 0.2
Random glucose≥ 11mmol/L	421 0. 2	2 1291 0.1
Raised BP SBP ≥ 140mmHg or DBP ≥ 90mmHg	26,126 12. 2	2 52,236 3.6
Obesity BMI≥ 30 kg/m²	32,133 15. 0	3 9,774 2.7

Referrals in attendees/non-attendees with risk factors

Referrals	NHS Health Check No. (%)	No NHS Health Check No. (%)
Current smokers referred to smoking cessation clinic	6.8	3.2
	2571/37808	9944/310034
Weight referrals: BMI ≥ 30 kg/m ²	38.7	11.2
	12430/32133	4441/39774
Exercise referrals: BMI ≥ 30 kg/m ²	41.4	10.3
	12430/32133	4082/39774
Alcohol referrals: > 6 units/day	35.7	5.6
	1823/5101)	1459/26011

Recording of QRisk and risk distribution (in those with a record)

N (%)	NHS Health Che attendee 214,2		Non-attendee 1,464,729	
QRisk2 recorded	171,441	(80.0)	424,523	(29.0)
QRisk2 score				
<5%	47,794	(27.9)	195,253	(46.0)
5-9.99	43,687	(25.5)	114,70	(27.0)
10-14.99	32,452	(18.9)	55,306	(13.0)
15-19.99	22,639	(13.2)	31,356	(7.4)
20+	24,869	(14.5)	27,902	(6.6)

Statin and antihypertensives:

In attendees at high CVD risk N (%)		
STATINS	5325	
2+ prescriptions	19.3%	
HYPERTENSION	2438	
prescriptions 2+ prescriptions	8.8%	

East London study

Problem comparing attendees and non-attendees.

Non-attendees differ in several important respects -

- Fewer had risk factors measured because they were unwell
- Those who did not attend differed (ie age)

Matched attendees and no-attendees and found that newly diagnosed diabetes, hypertension and CKD still more frequent among attendees