

Estimating the population impact of screening strategies for identifying and treating people at high risk of cardiovascular disease: modelling study

Parinya Chamnan, PhD student,¹ Rebecca K Simmons, research fellow,¹ Kay-Tee Khaw, professor of clinical gerontology,² Nicholas J Wareham, director,¹ Simon J Griffin, programme leader¹

Conclusions: Compared with the UK government's recommended national strategy to screen all adults aged 40-74 for cardiovascular risk, an approach using routine data for cardiovascular risk stratification before inviting people at high risk for a vascular risk assessment may be similarly effective at preventing new cases of cardiovascular disease, with potential cost savings.

Estimating the potential population impact of stepwise screening strategies for identifying and treating individuals at high risk of Type 2 diabetes: a modelling study.

[Chamnan P¹](#), [Simmons RK](#), [Khaw KT](#), [Wareham NJ](#), [Griffin SJ](#).

Abstract

CONCLUSIONS:

Compared with mass screening, an approach using routine data for risk stratification followed by an HbA(1c) test with a threshold of 42-< 48 mmol/mol (6.0-< 6.5%) for identifying individuals suitable for preventive interventions might prevent slightly fewer cases of Type 2 diabetes but with potential cost-savings.

FEATURE

TOO MUCH MEDICINE

Where's the evidence for NHS health checks?

The NHS in England must now offer health checks to swathes of the adult population. But is this programme really clinically or cost effective? asks **Margaret McCartney**

Margaret McCartney *general practitioner*

Glasgow, UK

EDITORIALS

Government's plans for universal health checks for people aged 40-75

No certainty that they'll do more good than harm

Felicity Goodyear-Smith *academic head*

Department of General Practice and Primary Health Care, University of Auckland, PB 92 019 Auckland 1142, New Zealand

EDITORIALS

General health checks don't work

It's time to let them go

Peter C Gotzsche *professor*, Karsten Juhl Jørgensen *doctor*, Lasse T Krogsbøll *doctor*

Nordic Cochrane Centre, Rigshospitalet, Blegdamsvej 9, DK-2100 Copenhagen, Denmark

Court warns CCG over disagreeing with NICE guidance

Clinical Commissioning Groups (CCGs) cannot choose not to follow NICE guidance because they merely disagree with it, even where there is no statutory duty to do so, a court has ruled.

This follows the case of Elizabeth Rose, a 25 year old woman who has suffered from a severe form of Crohn's disease since she was 14. Her condition had deteriorated and her doctors recommended bone marrow transplantation and chemotherapy to hopefully bring the disease into remission. This treatment can, however, lead to infertility and the early onset of the menopause.

.....

The NICE fertility guidance was not in the form of a technology appraisal or specialised technology appraisal which CCGs must legally comply with and provide funding for within three months of publication. Instead, the recommendations were made as part of a clinical guideline, and so CCGs do not have a legal duty to comply with NICE guidelines.

Despite this, the court ruled that the CCG was under an obligation in public law to have regard for the NICE guidance and to provide clear reasons for any general policy that does not follow NICE guidance.

The issue in this case was whether CCGs may legitimately disagree with NICE on matters concerning the current state of medical science. It was NICE's view that the evidence base supported the effectiveness of the procedure, and the CCG's sole basis for not following NICE's recommendation was that it disagreed.

.....

Sir Andrew Dillon, Chief Executive of NICE, said: "This court ruling highlights that CCGs cannot simply ignore NICE guidelines without having a clear clinical case for doing so. NICE guidelines are based on the best available evidence. Our fertility guideline was recently updated and provides clear support for the use of oocyte cryopreservation."

6 May 2014



NHS Health Check programme: *The* answer to CVD prevention in England?

Andrew R H Dalton

Nuffield Department of Primary Care Health Sciences, University of Oxford

Fuse Quarterly Research Meeting: Thursday 17th July 2014

NHS Health Checks: making inequalities better or worse?

Outline

- Why the NHSHC must address disparities
- Some theory
- NHSHCs – The Evidence to date
- Absolute impact of NHSHCs
- The future

Health disparities & CVD

Putting prevention first

Vascular Checks:
risk assessment and
management

- offer a real opportunity to make significant inroads into health inequalities, including socio-economic, ethnic and gender inequalities.

Trends in acute myocardial infarction admissions.

Graph using data from HES showing inequities in CVD admissions by job status in 1999 & 2007



132 per 100,000

39 per 100,000

CHD deaths per 100,000

Data from BHF



Prevalence of cardiovascular disease high-risk status by primary care trust,

Map of England showing estimates of the prevalence of >20% risk using a CVD risk calculator

OPEN ACCESS Freely available online

PLoS MEDICINE

Policy Forum

Will Cardiovascular Disease Prevention Widen Health Inequalities?

Simon Capewell^{1*}, Hilary Graham²

¹Department of Public Health, University of Liverpool, Liverpool, United Kingdom, ²Department of Health Sciences, University of York, Heslington, York, United Kingdom



Relationship between CVD prevention and disparities

- **Structural prevention** – changes environment, therefore passive changes to individual (e.g. banning trans-fats)

⇒ Tend to ▼ inequalities

WHY?

- ✦ Simple arithmetic principles
 - ✦ Strong evidence interventions impact proportionally to prev of risk factor
- **Agentic prevention** – relies on individuals making changes (e.g. the NHSHC)

⇒ Evidence of ▲ inequalities

WHY?

- ✦ Those with more resources better mobilise them => gain more
- ✦ ~to Inverse Care Law

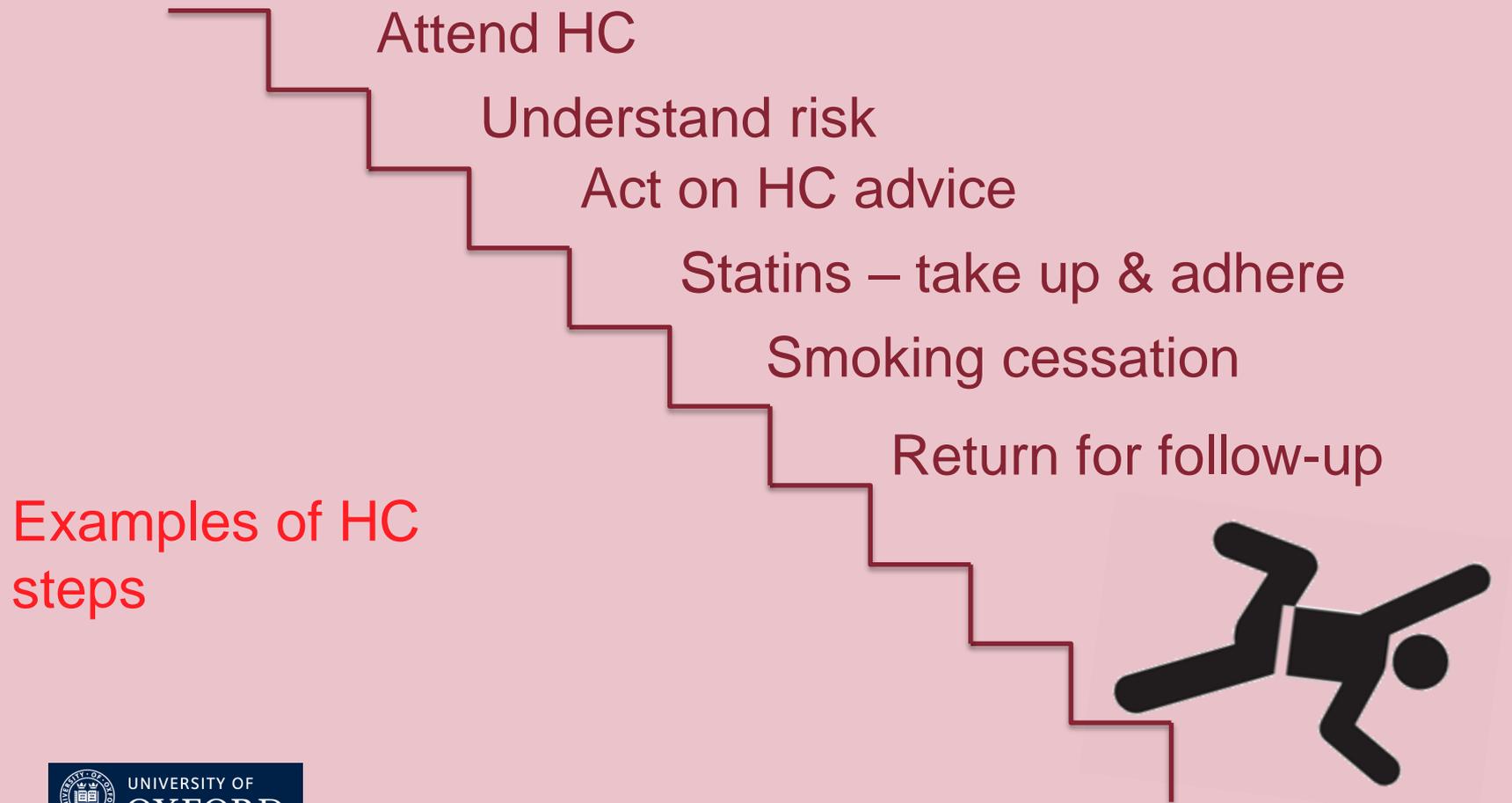
A staircase effect



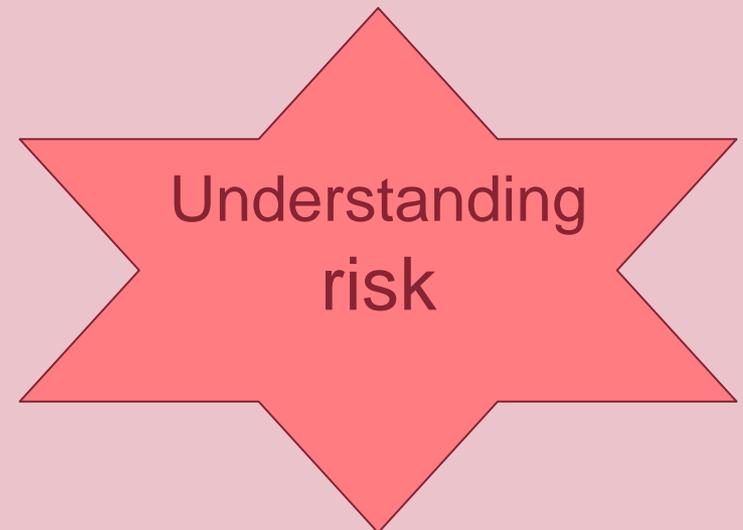
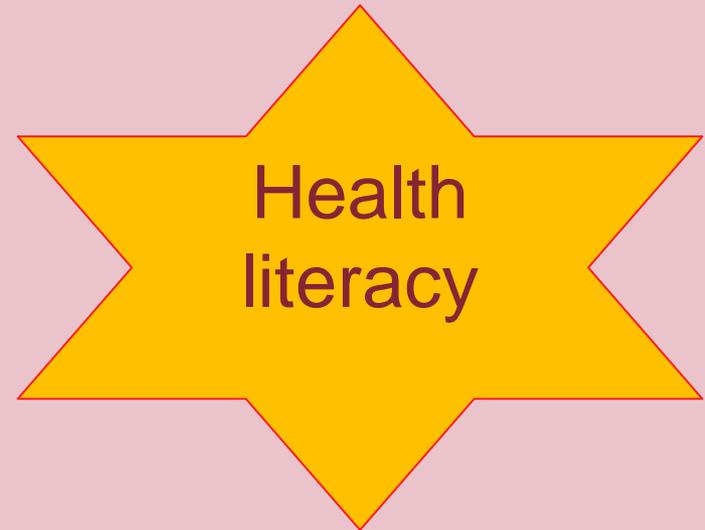
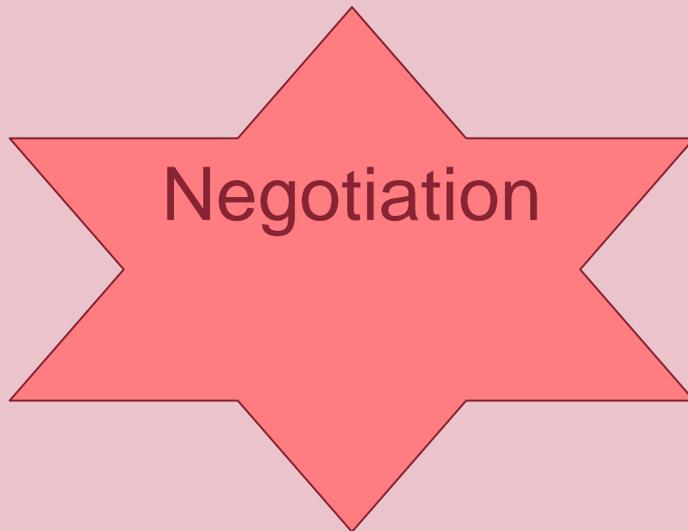
Every stage of the screening /prevention process can bring disadvantage to an individual with limited resources

=> Each is an opportunity for them to stumble

A staircase effect



3 (possibly 1) Critical Steps



The 'Inverse Prevention Law'

“Communities most at risk of ill health tend to experience the least satisfactory access to the full range of preventive services” [Acheson Report 1998]

Examples

- More affluent women attend breast screening¹
- Statin prescribing – even under the NHS²
- Some evidence in hypertension management³
- Smoking cessation
- 2012 narrative review on health checks⁴

The 'Inverse Prevention Law'

“Those least likely to attend health checks were men on low incomes, low socio-economic status, unemployed or less well educated.”

“Although these terms may be closely related, one study found that each had an independent effect on the attendance rate.”

“In general, white individuals were more likely to engage with preventive health services than individuals from other ethnic backgrounds”

Dryden R et al. BMC Public Health 2012, **12**:723

NHSHCs – The Evidence to date

Uptake

Table 2 Associations between patient and practice characteristics and Health Check attendance; multivariate analysis

Fixed effects		AOR	P	95% CI		Fixed effects		AOR	P	95% CI		
Sex (with age interaction)	35–54 Female	1.71	0.037	1.03	2.85	Practice list size	<3000	2.53	0.030	1.09	5.84	
							3000–5999	1.00				
							≥6000	0.79	0.599	0.33	1.88	
		Male	1.00				Hypertension	No	1.00			
		55–64 Female	1.22	0.212	0.89	1.67		Yes	1.31	<0.001	1.15	1.51
		Male	1.00				Smoker	No	1.00			
Age group	65–74 Female	0.96	0.756	0.76	1.22		Yes	0.88	0.097	0.75	1.02	
	Male	1.00				Random effects	Var	(SE)				
	35–54	1.00				Practice intercept	1.30	(0.44)				
	55–64	1.74	<0.001	1.34	2.25	MOR	2.97					
	65–74	2.27	<0.001	1.47	3.50	Ethnicity (slope)	0.046	(0.016)				
Ethnicity	White British	1.00				VPC (ρ)	0.28					
	South Asian	1.71	<0.001	1.29	2.27							
	Black	1.34	0.136	0.91	1.98							
	Other	1.15	0.519	0.76	1.74							
	Mixed	2.42	<0.001	1.50	3.89							
	Missing	0.51	0.015	0.30	0.88							

Note: odds ratios are adjusted for all variables in the table.

Dalton A R et al. *J Public Health* (2011) 33 (3): 422-429.

TABLE 3 Health Check uptake variation by patient and practice characteristics; multivariable analysis

		Year 1—High risk		Year 2—Others	
		%	AOR	%	AOR
Sex	Male ^a	32.6	1.00	17.0	1.00
	Female	33.0	0.80 (0.67–0.94)	22.5*	1.27 (1.20–1.35)
Age Group	40–54 ^a	26.9	1.00	17.7	1.00
	55–64	30.5**	1.34 (1.11–1.61)	25.6*	1.79 (1.67–1.93)
	65–74	39.2*	2.05 (1.67–2.52)	33.1*	2.79 (2.49–3.12)
Ethnicity	White ^a	35.7	1.00	22.5	1.00
	Black	31.8	1.05 (0.78–1.41)	28.9*	1.58 (1.43–1.75)
	South Asian	47.4*	1.27 (0.88–1.87)	29.0*	1.50 (1.25–1.78)
	Other	34.2	0.94 (0.76–1.17)	24.3*	1.16(1.07–1.25)
	Missing ^b	4.75*	0.11 (0.07–0.17)	2.13*	0.08 (0.07–0.10)
Local deprivation third ^c	1 ^a	32.5	1.00	22.9	1.00
	2	32.8	0.94 (0.79–1.13)	19.7*	0.84 (0.78–0.90)
	3	32.7	0.84 (0.69–1.01)	17.5*	0.80 (0.73–0.87)
Non-CVD co-morbidities ^d	No ^a	30.2	1.00	17.3	1.00
	Yes	40.8*	1.53 (1.31–1.80)	28.3*	1.75 (1.64–1.87)
Family history of CHD	No ^a	27.4	1.00	17.7	1.00
	Yes	45.9*	2.49 (2.15–2.90)	30.8*	2.01 (1.87–2.16)
Smoking Status	No ^a	36.9	1.00	20.3	1.00
	Yes	28.5*	0.71 (0.61–0.83)	18.6*	0.83 (0.77–0.90)
Practice list size	<6000 ^a	32.6	1.00	15.7	1.00
	6000–10 000	30.3	0.74 (0.37–1.50)	14.9	1.32 (0.23–7.57)
	>10 000	36.1	1.16 (0.51–2.65)	29.9*	6.05 (0.84–43.3)
Total		32.7		20.0	
Random effects					
Median odds ratio			2.38 (2.11–2.73)		3.91 (3.23–4.89)
Variance partitioning coefficient			19.4 (15.2–24.4)		37.3 (30.6–44.6)

Note: Odds ratios are adjusted for all variables in the table.

^aReference group in z-test, * $P < 0.01$ and ** $P < 0.05$ for z-test.

^bPatients with either no ethnicity recording or patients who did not want to state their ethnicity.

^cIndex of Multiple Deprivation 2007 (1 = most deprived, 3 = least deprived).

^dNon-CVD co-morbidities – asthma, mental health, depression, hypothyroidism and chronic obstructive pulmonary disease.

Artac M et al. Family Practice (2013) 30 (4): 426-435.

Interviews about NHSHC non-attendance in London produced 5 themes:

- 1) Lack of awareness
- 2) Beliefs about CVD susceptibility
- 3) Beliefs about civic responsibilities
- 4) Access to appointments
- 5) Beliefs about the consequences of having a check

Burgess et al. Health Expectations 2014; doi: 10.1111/hex.12212

Statins

Table 4 Differences in statin prescribing before and after the Health Check in patient subgroups

		<i>Statin prescription (%)</i>		<i>Relative increase</i>
		<i>Pre-Health Check</i>	<i>Post-Health Check</i>	
Sex	Male	21.1	42.5	2.01
	Female	25.4	57.9	2.28
Ethnicity	White	23.0	33.4	1.45
	South Asian	24.9	54.0	2.17
	Black	29.4	47.1	1.60
	Mixed	25.5	46.0	1.80
Deprivation third ^a	1 deprived	22.0	40.1	1.82
	2 intermediate	26.3	46.8	1.78
	3 affluent	27.3	48.9	1.79
Risk	<20%	27.0	39.5	1.46
	20–29.9%	23.1	41.9	1.81
	30–39.9%	29.9	47.3	1.58
	≥40%	22.4	53.3	2.38

^aLocal third, where 1 = most deprived.

Dalton A R et al. *J Public Health* (2011) 33 (3): 422-429.

Statins

Table 5a

Statin prescription before (prior July 2008) and after Health Check (at Year 1: July 2008–November 2009 and Year 2: December 2009–March 2011) in eligible patients who had a complete Health Check at baseline (Year 1), and were followed up in Year 2, London, England.

		Complete Health Check					
		Pre-Health Check N = 1101		Post-Health Check Year 1 N = 1101		Post-Health Check Year 2 N = 1101	
		% ^a	AOR ^b	% ^a	AOR ^b	% ^a	AOR ^b
Ethnicity	White	14.8	1.00	48.8	1.00	59.3	1.00
	Black	9.09	0.54 (0.20–1.42)	63.6	1.56 (0.87–2.81)	72.7	1.66 (0.88–3.12)
	South Asian	15.4	1.01 (0.44–2.32)	51.9	1.05 (0.58–1.87)	57.7	0.88 (0.48–1.59)
	Other ^c	10.0	0.68 (0.36–1.29)	50.0	0.94 (0.64–1.38)	65.1	1.23 (0.81–1.84)
Local deprivation third ^d	1	14.7	1.00	53.1	1.00	62.2	1.00
	2	13.7	0.44 (0.23–0.83)	50.4	1.00 (0.73–1.36)	62.0	1.16 (0.85–1.59)
	3	13.6	0.55 (0.27–1.12)	46.3	0.85 (0.62–1.17)	57.0	0.95 (0.68–1.33)
Total		14.0		49.9		60.6	

^a Percentage of patients using statins in the group.

^b AOR = Adjusted Odds Ratio.

^c Other ethnicity group also includes patients with missing or not stated ethnicity.

^d Index of Multiple Deprivation (2007) (1 = most deprived, 3 = least deprived).

Artac et al. *Preventive Medicine* (2013) 57(2):129-334



Absolute CVD risk

Table 4

Changes in absolute cardiovascular risk (JBS2) from baseline (Year 1: July 2008–November 2009) to follow-up (Year 2: December 2009–March 2011) in patient groups who had a complete Health Check at baseline, and complete rescreen at follow-up (N = 643), London, England.

		Absolute risk				
		N = 643	Year 1	Year 2	Relative risk reduction	P-value ^a
Sex	Male	501 (77.9)	29.7	27.6	0.93	0.004
	Female	142 (22.1)	23.2	21.4	0.92	0.143
Age group	40–54	60 (9.30)	25.9	21.9	0.85	0.016
	55–64	274 (42.6)	27.0	24.7	0.91	0.018
	65–74	309 (48.1)	29.8	28.4	0.95	0.151
Ethnicity	White	475 (73.9)	28.3	25.9	0.92	0.001
	Black	50 (7.80)	25.1	25.0	1.00	0.972
	South Asian	28 (4.30)	34.9	35.2	1.01	0.932
	Other ^b	79 (12.3)	27.8	25.9	0.93	0.253
Local deprivation	1	226 (35.2)	29.4	26.4	0.90	0.010
	2	223 (34.7)	28.0	25.9	0.93	0.035
	third ^c	194 (30.2)	27.1	26.5	0.98	0.561

^a P-value: two-pairs *t*-test for significance of difference in CVD risk between baseline and follow-up.

^b Other ethnicity group includes patients with not stated ethnicity.

^c Index of Multiple Deprivation (2007) (1 = most deprived, 3 = least deprived).

Artac et al. *Preventive Medicine* (2013) 57(2):129-334

Service level variation

-Disparities ... Inequities?

- Studies find 'unexplained' practice variation in performance

Median odds ration for practice (level 2 variable) in multilevel model

	Uptake		Statin prescribing	
	Targeted	General	Targeted	General
Dalton et al 11.	2.69			
	3.10	5.06	2.34	1.89
Artac et al. 13	(2.65–3.72)	(3.85–7.06)	(1.98–2.91)	(1.63–2.30)

- 2013 survey of practice in 2 London PCTs¹
 - ✦ Variations in training, referrals, follow-up, advice, tests offered...
- 2011 survey of 8 NW London PCTs²
 - ✦ "Postcode Lottery" – Variation in budgets, payments, follow-up, test & tools
- PCT level coverage in 2011 ranged from 0 to 29.8 percent³

Summary

- No “red flags” at the patient level for uptake
 - ⇒ But down stream steps may be harder to negotiate – some evidence from statins
- Little evidence about other follow-up and actual outcomes
- No “population based” data
- Impacts outside of the high risk?
- There are marked disparities between providers and regions

Absolute impact of NHSHCs

Guidelines support current NHSHC?



Public Health
England

NHS Health Check: our approach to the evidence

10. For interventions aimed at assessing and reducing individual risk of vascular disease, guidance based on current best evidence has been produced by the World Health Organization (WHO),¹⁰ NICE,¹¹ and the National Screening Committee.¹² The strong consensus in this body of guidance is that finding and managing those at high risk of vascular disease is likely to be effective and cost-effective. The NHS Health Check in this context adds value as a population approach, in conjunction with other

A reminder – concepts of screening

“presumptive identification of unrecognized disease or defects”

But – “There should be an effective treatment or intervention for patients identified through early detection, with evidence of early treatment leading to better outcomes than late treatment.”

Otherwise the very **ethics** of screening are undermined

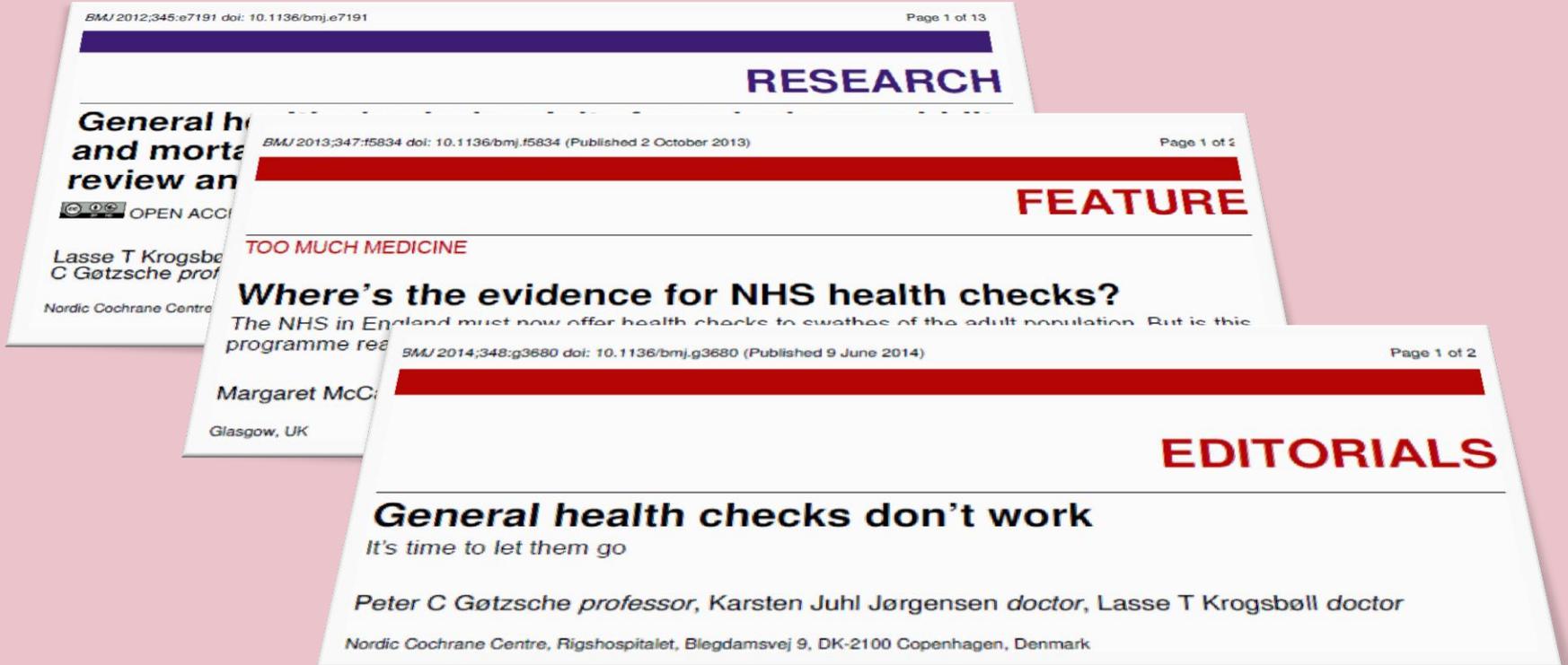
The “treatment” & NHSHCs

“However, there was variation in the way HCs were linked to non-medical support or services.... One PCT commissioned a nurse coordinated multidisciplinary programme... Another used community-based health trainers... Two others commissioned programmes specifically for patients diagnosed with prediabetes.”¹

“For lower risk patients, referral to other services was ‘usually’ offered at 10 (15%) practices and ‘sometimes’ at 23 (35%) practices.”²

“and described their experience as a series of clinical tests, rather than an assessment of risk and lifestyle factors.”³

Evolving evidence



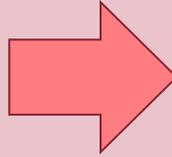
- 2014 Systematic review - general practice-based health checks¹
 - ✦ Some evidence of risk factor reductions –concentrated in high risk
 - ✦ No impact on mortality

Overall NHSHC impacts

Graph showing change in mean 10 years CVD risk score one year after a Health Check in those over and under 20% risk at baseline

Only significant decrease is in those initially $>20\%$ risk

The future



What is funded under LAs' public health remit – the 'Health Check' – and what is routine management of CVD risk?

LAs responsible for “NHS Health Check assessments”

Letters

NHS health checks

Why must NHS health checks be commissioned by local authorities?

BMJ 2013 ; 347 doi: <http://dx.doi.org/10.1136/bmj.f6476> (Published 29 October 2013)

Cite this as: BMJ 2013;347:f6476

Anthony J Morkane, public health consultant¹

Alternatives

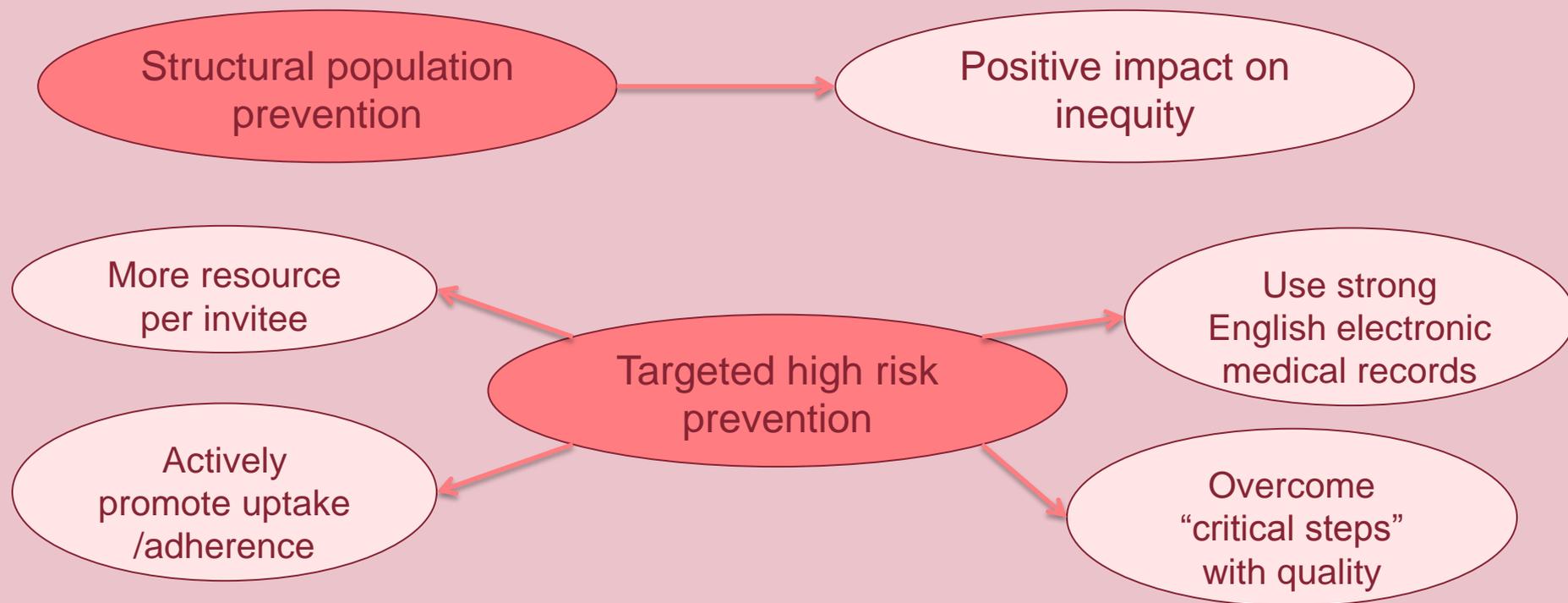
- There is no evidence universal health checks will reduce CVD risk in the whole population
 - ✦ ‘Universal’ approach NOT ‘population’

Table showing results from the Archimedes model indicating targeted health check are cost saving in England and other European countries, whilst universal health checks are not

Schuetz CA, Alperin P, Guda S, van Herick A, et al. (2013) A Standardized Vascular Disease Health Check in Europe: A Cost-Effectiveness Analysis. PLoS ONE 8(7): e66454. doi:10.1371/journal.pone.0066454

Alternate options & disparities

- A truer partnership of targeted high risk & population approaches to prevention would ensure CVD prevention is good for CVD inequity



andrew.dalton@phc.ox.ac.uk

@aroo17



Many thanks for you time
-Questions?



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NHS Health Checks in Tees: Acknowledging the patient journey

Rebekah McNaughton and Janet Shucksmith
Teesside University

www.fuse.ac.uk

Overview

- Introduction
 - Tees NHS HC work
 - Current evidence from the UK
- Importance of patient journey
- Findings: Making sense of the 'news'
- Challenges and conclusions



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Evaluation

- **Phase 1: 2009-2011** focussed on implementation in pharmacies, community venues and GP practices. Design deliberately chosen to allow continuous feedback into implementation process
- **Phase 2 evaluation: 2011-2012** focussed on assessment of cost effectiveness using local data and patient compliance

Current evidence from the UK

1. DH modelling estimated would be cost effective (DH, 2008)
2. Local modelling suggests the same (McNaughton, Gray & Shucksmith, 2013)
3. Early estimates show uptake is lower than expected (Artac et al, 2013; Cochrane et al, 2013)
4. Criticism about the evidence base (Krogsboll, Gotzsche, 2013)
5. Universal v targeted approach (Lawson et al, 2010; Dalton, 2013)



Current evidence – statin use

1. Adherence to statins is **low** (Taylor et al, 2011)
2. Only 50% of those prescribed drug take **statin daily** (Poluzzi et al, 2008)
3. Primary prevention – patients more likely to **discontinue** (Ellis et al, 2004; Jackevicius et al, 2002)
4. Side effects commonly cited as reason for **discontinuation** (Mann et al, 2007)



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Importance of the 'journey'

1. Any projected benefits are essentially theoretical
2. To reap any health gains, patients must:
 - Engage
 - Comply
 - Sustain
3. First stage: understanding/coherence



Methods



Findings: making sense of 'the news'

1. Feeling 'fit and well'
2. A diagnosis of what?
3. Identifying as 'at risk'
4. Am I really a candidate?
5. Prevention, a step too far?
6. Risk as reassurance



Challenges

1. Patients are asymptomatic, yet expected to make changes based on a probability
2. Interpreting risk in relation to self, current lifestyle and health status is problematic
3. Patients have trouble understanding what being at risk actually means
4. Lack of formal 'clinical' diagnosis



What next?

1. Deeper, conceptual analysis of data underway and forms basis of Rebekah's PhD
2. Further analysis of the Tees uptake data desirable?
3. Explore issues amongst hard to reach populations
 - a) 'non responders'
 - b) 'disengaged'
4. Longer term follow up of patients that are 'compliant'
5. Develop appropriate methods to communicate risk to patients





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Thank you!

**Please contact us if you would like to talk further about the study
or its implications**

www.fuse.ac.uk





Fuse Quarterly Research Meeting: Thursday 17th July 2014
Venue: The National Glass Centre, Liberty Way, Sunderland University, SR6 0GL

NHS Health Checks: making inequalities better or worse?

A vascular risk assessment, reduction and management programme was adopted by the NHS in 2009 to aid assessment and early detection of cardiovascular disease, diabetes and chronic kidney disease. This was heralded as part of a new preventative approach to health within the NHS and one which would save the country from much greater expense by forestalling serious clinical conditions at a later date. Under the new guidance, those aged between 40 and 74 should be invited to their GP once every five years to have their risk assessed, before being given tailored lifestyle advice and possibly prescription drugs if their risk is deemed to be high (>20% over the next 10 years).

To achieve Department of Health targets, two million NHS Health Checks should be carried out annually in England and Wales, but figures show that only 1.3 million underwent assessment over the last year. Though the programme has been slow to launch in some areas, some parts of the North East have led with innovative schemes which have reached out to the most disadvantaged or difficult to engage. Recently the Government committed themselves again to the programme, urging public health authorities and clinical commissioning groups to work better together.

The benefits of the scheme are contested by some, however. Researchers from the Nordic Cochrane Centre claim the £300 million-a-year risk assessment programme does not benefit patients and in fact puts them at risk of unnecessary treatment, basing their claim on a systematic review of a number of studies worldwide. The original publication of their findings in the BMJ was refuted by the NHS as relying on out of date trials (many dated back to the 1960s) and on studies of poor quality interventions which relied on simple lifestyle changes in response to detected risk. However the review authors – who have questioned the validity in the past of other and screening programmes (e.g. routine breast screening) - have found outspoken champions amongst the general practice community.

So, what does the evidence tell us about the effectiveness and cost effectiveness of these programmes? Are there ways in which we should be reviewing how we offer the programme to make it more effective, either as a risk assessment tool, or in terms of ensuring that those discovered to be 'at risk' are supported to make the changes needed to deliver a health gain?

Who should attend?

The meeting is aimed at both academic researchers, and policy and practice partners with an interest in risk assessment programmes and their use in public health. Fuse members and

associate members are cordially invited. Public health commissioners, members of Health and Wellbeing Boards and CCG leads would all find the programme of interest and would benefit from the opportunities the meeting will offer to explore the debates in this area and examine some of the work which sheds light on how to respond.

Booking your place

The event is free to attend, but you do need to book your place online by going to <http://forms.ncl.ac.uk/view.php?id=5916>

Joining instructions

Driving: The post code for SatNav is SR6 0GL.

A map can be found on the venue's website here:

<http://www.nationalglasscentre.com/visit/planyourvisit/directions/>

Cycling: National Glass Centre is part of the Coast to Coast (C2C) cycle route from Cumbria to Sunderland.

By Train or Metro: Regular Metros and Trains operate between Sunderland and Newcastle. There is a direct rail link to Sunderland from Middlesbrough every hour. National Glass Centre is a seven minute walk from St Peter's Metro Station. Journey time from Newcastle to St Peter's Station is 25 minutes.

By Bus: The E1 takes you from Sunderland City Centre to Roker Avenue which is only a few hundred metres distance from the main entrance.

The 700 Sunderland Connect bus is also available to take from park Lane Campus and City Campus.

By Air: Newcastle Airport, Teesside Airport and Durham Tees Valley Airport are all about 45 minutes from Sunderland.

By Taxi: Station Taxis provide accessible taxis and can be contacted on 0191 555 5555.

9.00-9.30	Registration with refreshments
9.30-9.45	Welcome to the day <i>Claire Sullivan, Public Health Consultant in Health Improvement at the North East Public Health England Centre</i>
9.45-10.15	The case for NHS Health Checks <i>Jamie Waterall, Public Health England lead for NHS Health Checks</i>
10.15-10.45	NHS Health Checks: a case for caution? <i>Andrew Dalton, University of Oxford</i>
10.45-11.15	Choose from table top workshops exploring: <ul style="list-style-type: none"> • The evidence base for the NHS Health Check <ul style="list-style-type: none"> ○ <i>Mark Lambert, North East Public Health England Centre</i> • Adopting a targeted approach to risk assessment <ul style="list-style-type: none"> ○ <i>Mike Lavender, Durham City Council</i> • Point of care testing <ul style="list-style-type: none"> ○ <i>Tony Gibson, North East Pathology Network</i>
11.15-11.45	Refreshment break
11.45-12.15	Choose from table top workshops exploring: <ul style="list-style-type: none"> • The evidence base for the NHS Health Check <ul style="list-style-type: none"> ○ <i>Mark Lambert, North East Public Health England Centre</i> • Adopting a targeted approach to risk assessment <ul style="list-style-type: none"> ○ <i>Mike Lavender, Durham City Council</i> • Point of care testing <ul style="list-style-type: none"> ○ <i>Tony Gibson, North East Pathology Network</i>
12.15-12.40	Acknowledging the 'high risk' patient journey <i>Rebekah McNaughton, Teesside University</i>
12.40-13.00	An opportunity to ask questions of a panel of all our speakers and discuss issues from the day



Public Health
England

NHS Health Check Programme

**An opportunity to engage 15 million people
to live well for longer**

**Jamie Waterall
NHS Health Check National Lead
Public Health England**



Public Health
England

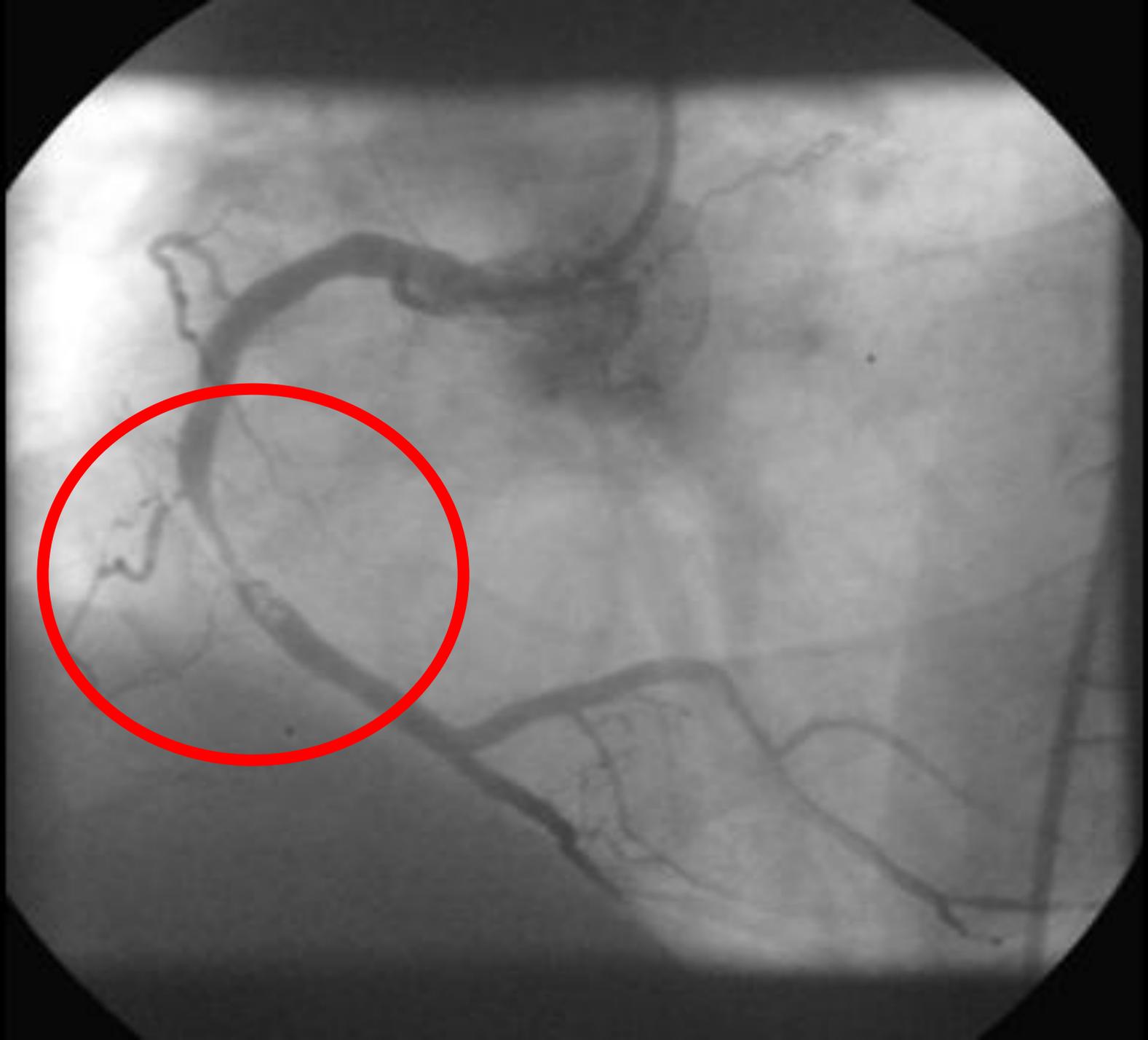
First a question to consider:

What percentage of risk factors associated with someone having their first heart attack are modifiable?

90% Men

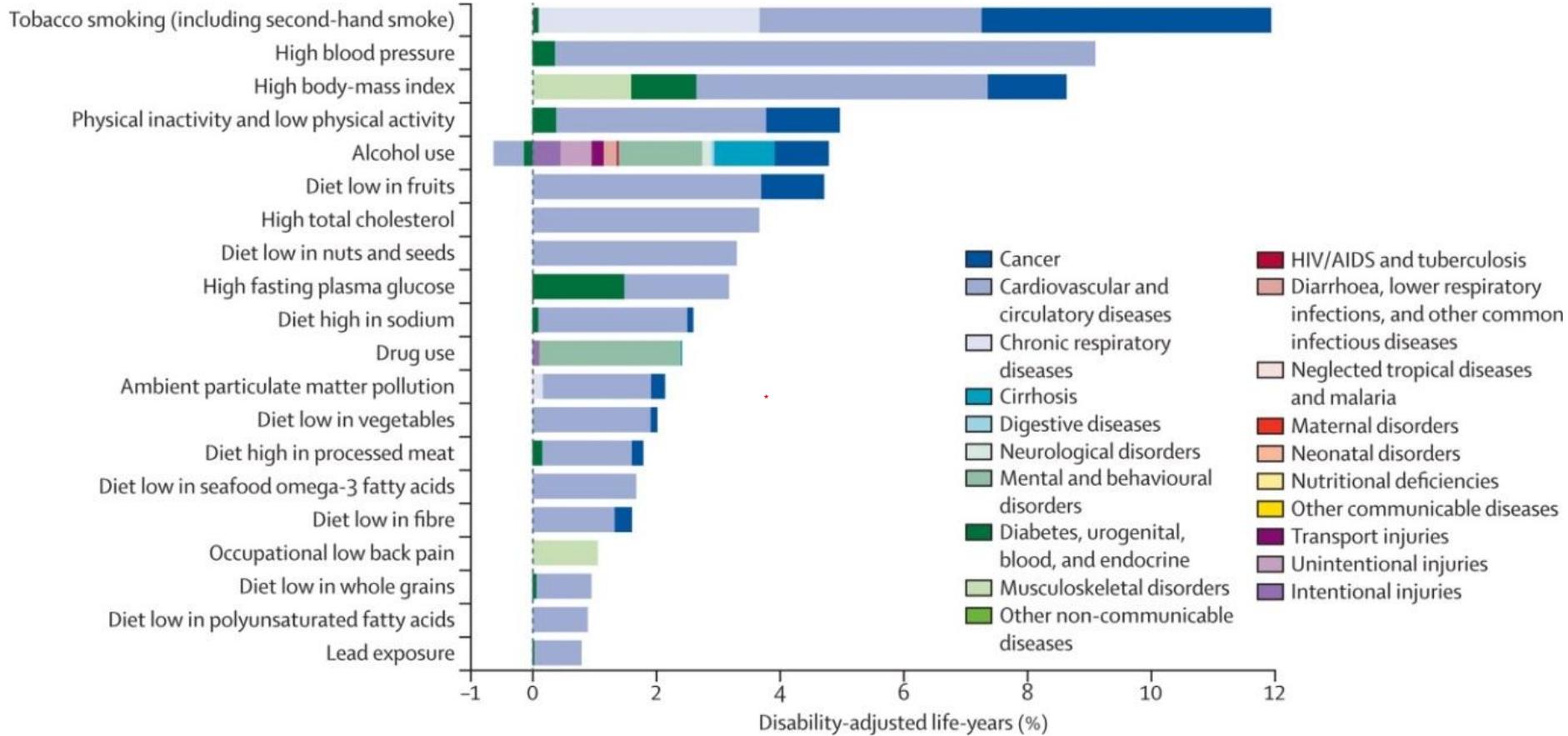
94% Women

Effect of potentially modifiable risk factors associated with myocardial infarction in 52 countries (the INTERHEART study): case-control study



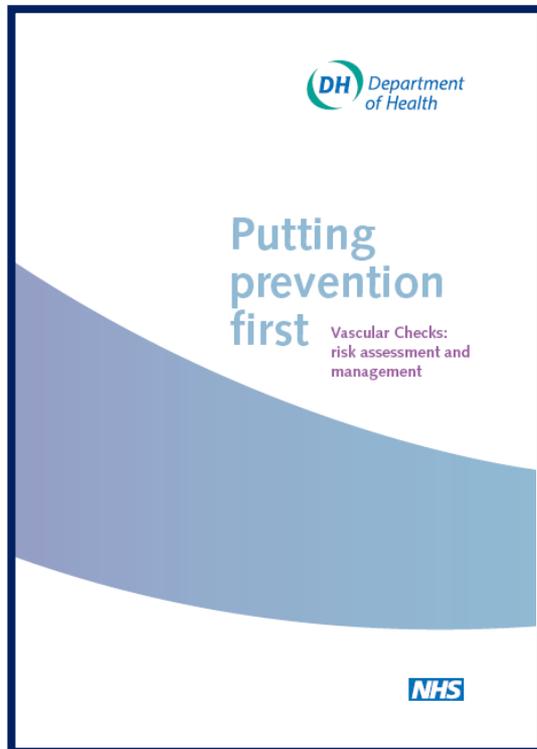


Burden of disease attributable to 20 leading risk factors for both sexes in 2010, expressed as a percentage of UK disability-adjusted life-years





Policy background:



- Policy proposal published 1st April 2008
- 170,000 (36%) deaths caused by vascular disease in England
- Responsible for 20% of hospital admissions
- Largest single cause of long term illness
- Prevalence falls disproportionately in people living in deprived circumstances and certain ethnic groups

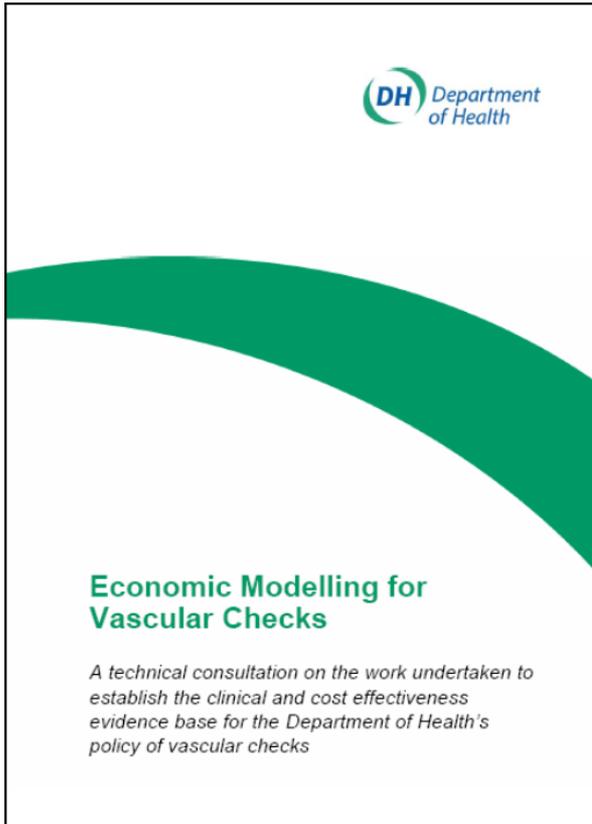


Programme objectives:

- **enable more people to be identified at an earlier stage of vascular change, with a better chance of putting in place positive ways to reduce substantially the risk of premature death or disability;**
- **enable the prevention of diabetes in many of those at increased risk of this disease;**
- **sustain the continuing increase in life expectancy and reduction in premature mortality that are under threat from the rise in obesity and sedentary living; and**
- **offer a real opportunity to make significant inroads into health inequalities, including socio-economic, ethnic and gender inequalities.**



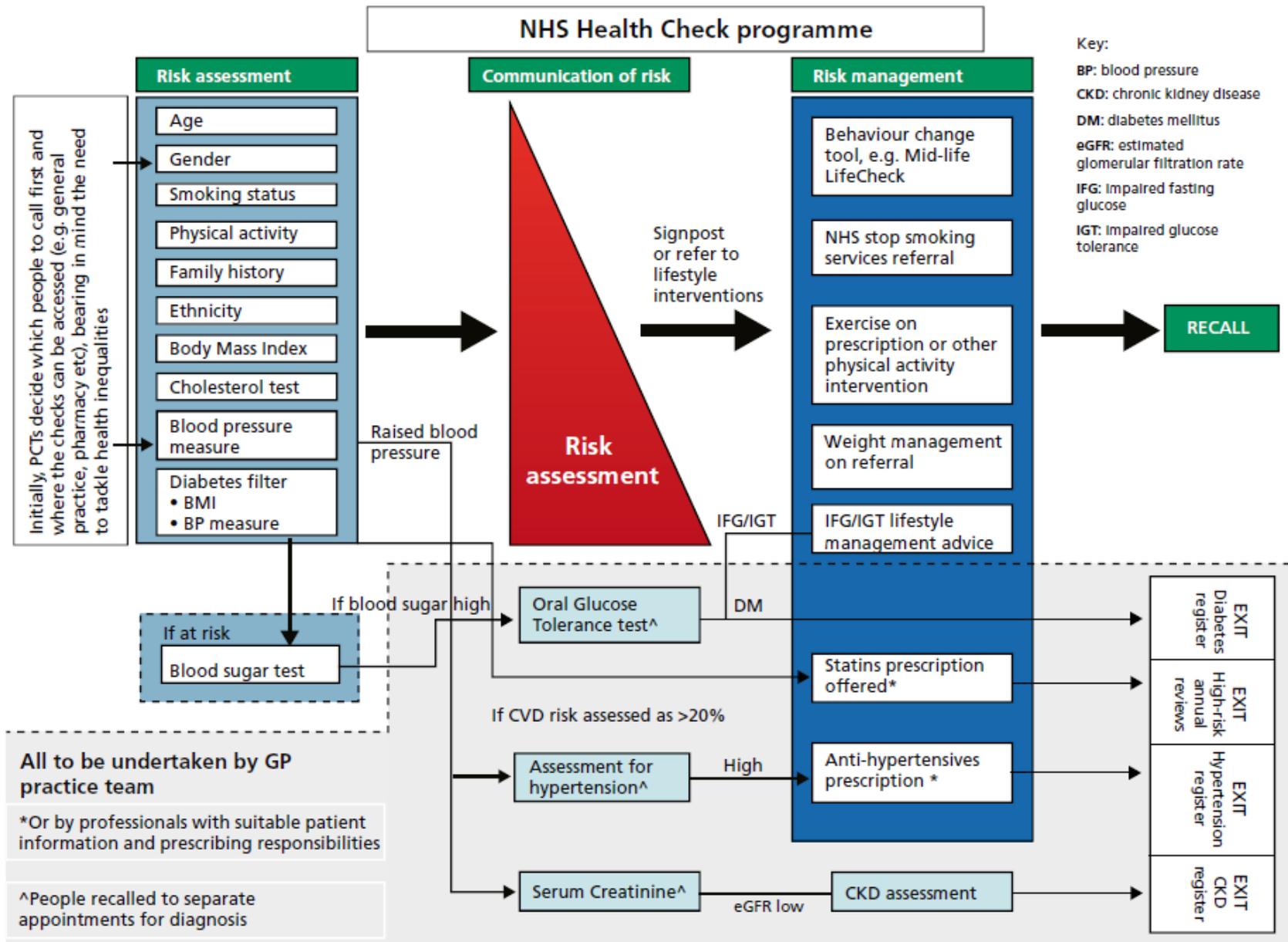
Economic modelling



Prevent

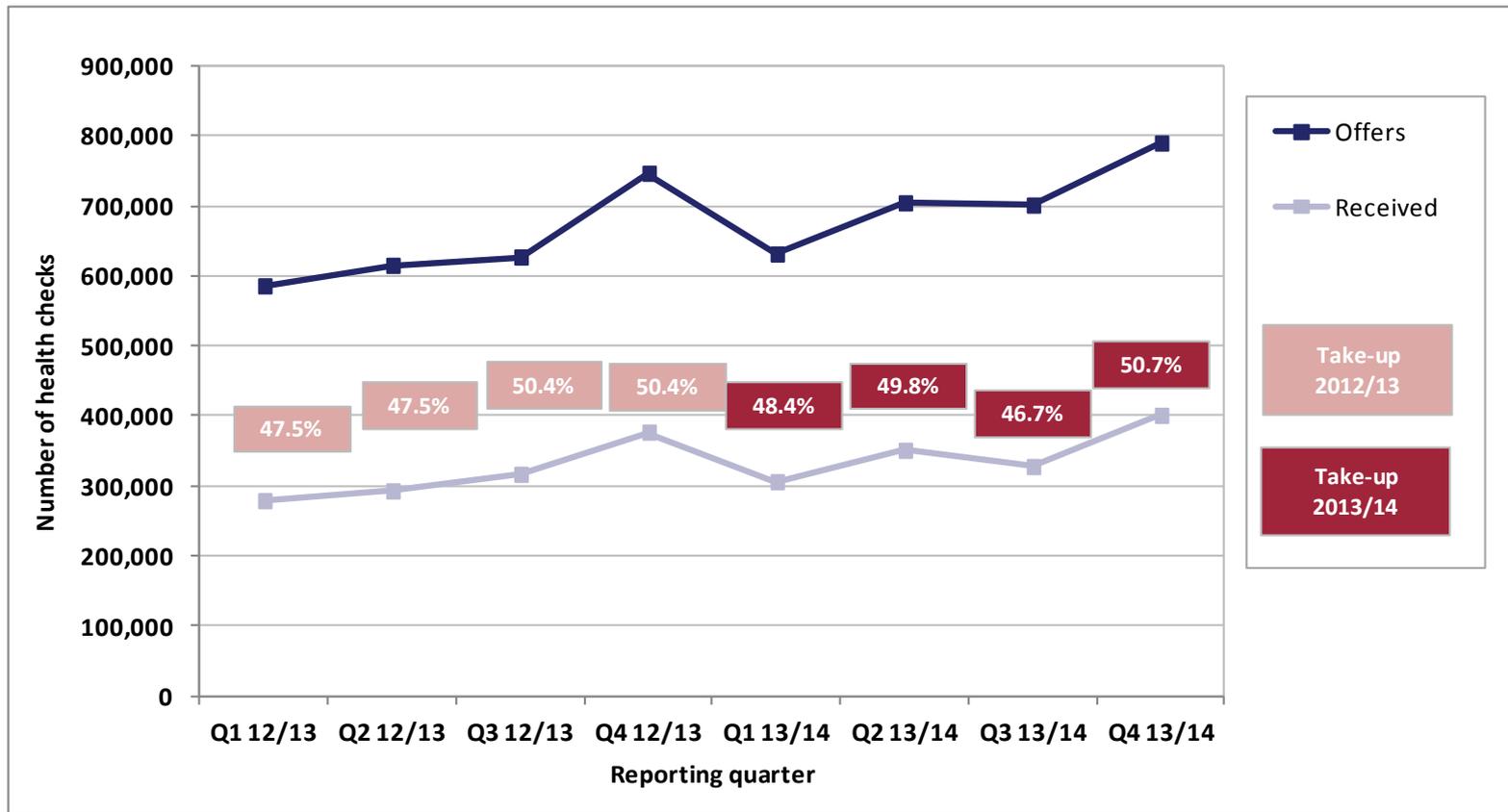
- 1,600 MI & strokes annually
- 650 CVD related deaths
- 4,000 new case diabetics
- 20,000 DM + CKD diagnosed early in the disease pathway
- Using NICE QALY model <£3,000 “very cost effective”

Figure 1. Diagrammatic overview of the vascular risk assessment and management programme



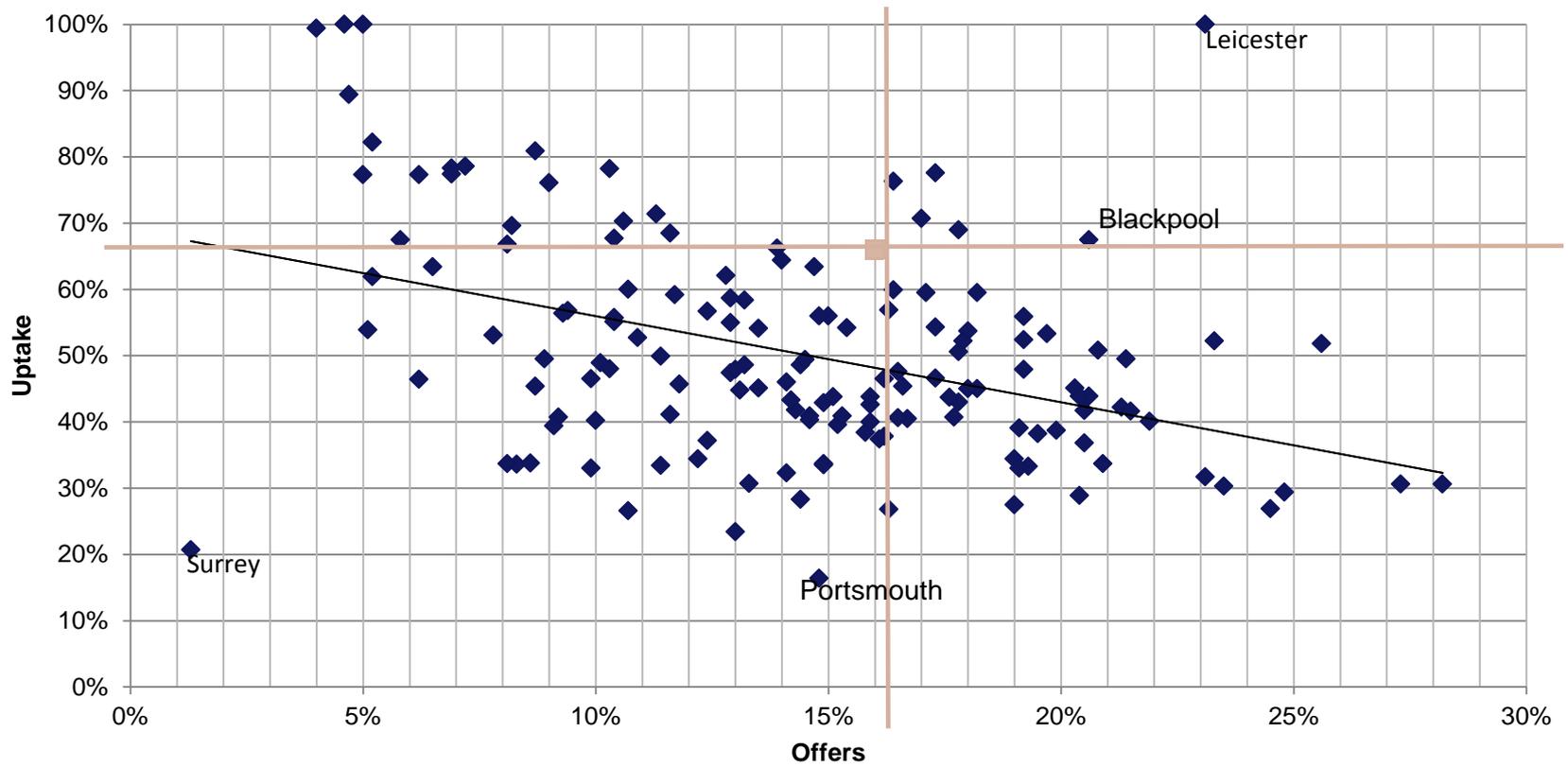


NHS Health Check in England offered and received (and take-up) in Q1-Q4 2012-13 and Q1 – Q4 2013-14





Offers and uptake by local authority





North East 2013/2014



Total eligible population 2013-2018	774197
Number of people who were offered a NHS Health Check	178748 (23.1%)
Number of people that received a NHS Health Check	80337 (10.4%)
Percentage of people that received an NHS Health Check of those offered	44.9%



Public Health
England



Health and Social
Care Act 2012

CHAPTER 7

Explanatory Notes have been produced to assist in the
understanding of this Act and are available separately

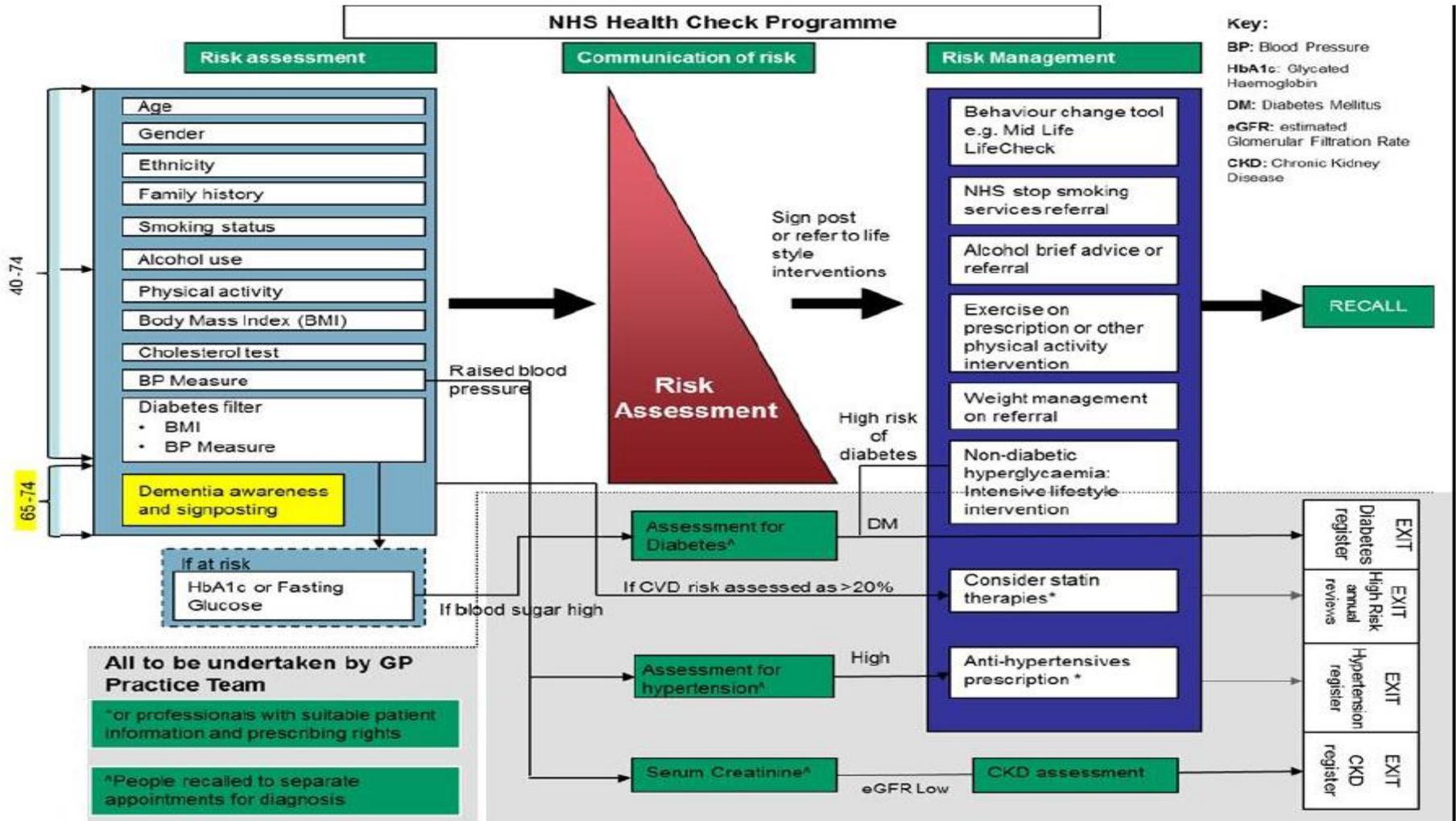
NHS Health Check Programme Since April 2013



The Local Authorities Regulations 2013

In the exercise of its functions under section 2B of the Act(f) (functions of local authorities and Secretary of State as to improvement of public health), each local authority shall provide, or shall make arrangements to secure the provision of, health checks to be offered to eligible persons in its area.

- 1:5 mandated functions
- NHS Health Check offered 100% of eligible population over 5 years
- Year on year improvement in uptake





Public Health England

STATUTORY INSTRUMENTS

2013 No. 218

NATIONAL HEALTH SERVICE, ENGLAND

SOCIAL CARE, ENGLAND

PUBLIC HEALTH, ENGLAND

The Local Authority (Public Health, Health and Wellbeing Boards and Health Scrutiny) Regulations 2013

Made - - - - - 31st January 2013
Laid before Parliament 8th February 2013
Coming into force in accordance with regulation 1(2) to (4)

The Secretary of State makes these Regulations in exercise of the powers conferred by sections 92A(5), 92, 93A and 105(2) of the Local Government Act 2000(a), sections 244(2), (2ZA), (2ZB), (2ZC), (2ZE) and (3), 245(2) to (4A), 247(2) and (8) of, and paragraph 7B(1) and (2) of Schedule 1 to, the National Health Service Act 2006(b), sections 81(5) and 235(2)(a) of the Localism Act 2011(c) and sections 194(12) and 194(9) and (10) of the Health and Social Care Act 2012(d).

PART I GENERAL

Citation, commencement and interpretation

1.—(1) These Regulations may be cited as the Local Authority (Public Health, Health and Wellbeing Boards and Health Scrutiny) Regulations 2013.

(2) Subject to paragraphs (3) and (4), these Regulations come into force on 1st April 2013.

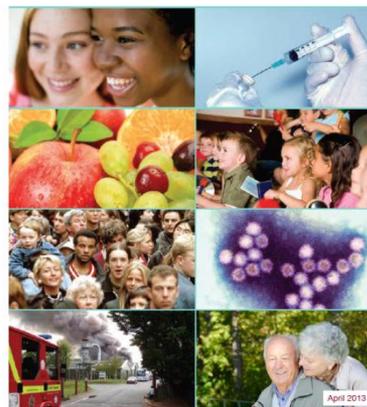
(a) 2000 c.22 ("the 2000 Act"). Sections 92A, 93 and 93A were inserted by paragraph 1 of Schedule 2 to the Localism Act 2011 (c.20) ("the 2011 Act"). There are no relevant amendments to section 105 of the 2000 Act.
(b) 2006 c.33 ("the 2006 Act"). Section 244 is amended by sections 121(6) of the Local Government and Public Involvement in Health Act 2007 (c.28) ("the 2007 Act"), paragraphs 73 and 74 of Schedule 1 to the 2011 Act and section 190(1) to (7) of the Health and Social Care Act 2012 (c.7) ("the 2012 Act"). Section 245 is amended by section 123(1) of the 2007 Act, paragraphs 73 and 74 of Schedule 1 to the 2011 Act and section 191(1) to (5) of the 2012 Act. Section 247 is amended by section 191(1)(iv) to (v) of the 2012 Act. Paragraph 7B of Schedule 1 to the 2006 Act is inserted by section 143(1) of the Health and Social Care Act 2012 (c.14) ("the 2012 Act") and is amended by section 17(2) and (3) of the 2012 Act. The powers conferred by the 2006 Act which are exercised in making these Regulations are exercisable by the Secretary of State under section 205 of the 2012 Act.
(c) 2011 c.20.
(d) 2012 c.7.



Living Well for Longer: A call to action to reduce avoidable premature mortality



Our priorities for 2013/14



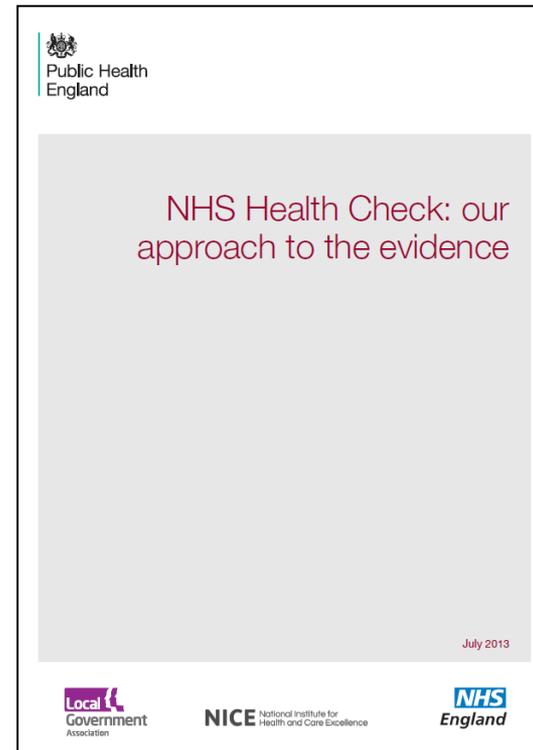
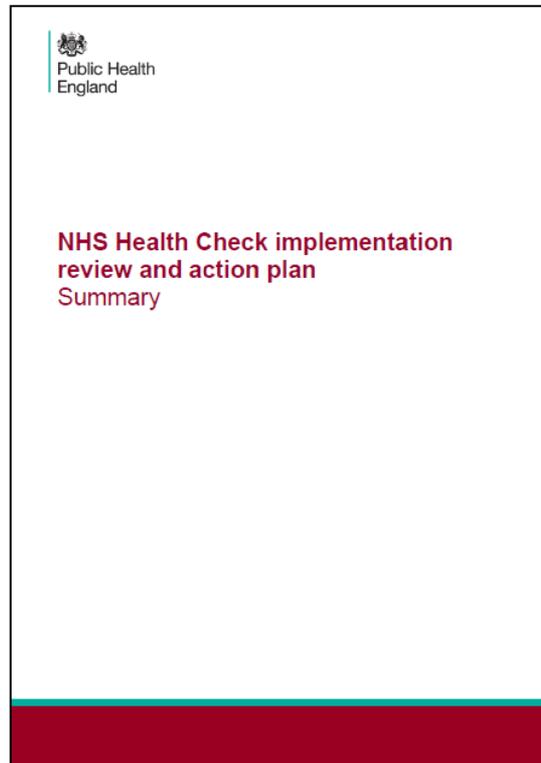
Cardiovascular Disease Outcomes Strategy

Improving outcomes for people with
or at risk of cardiovascular disease



Public Health
England

Implementation Review + Evidence Paper



Accessed via www.healthcheck.nhs.uk

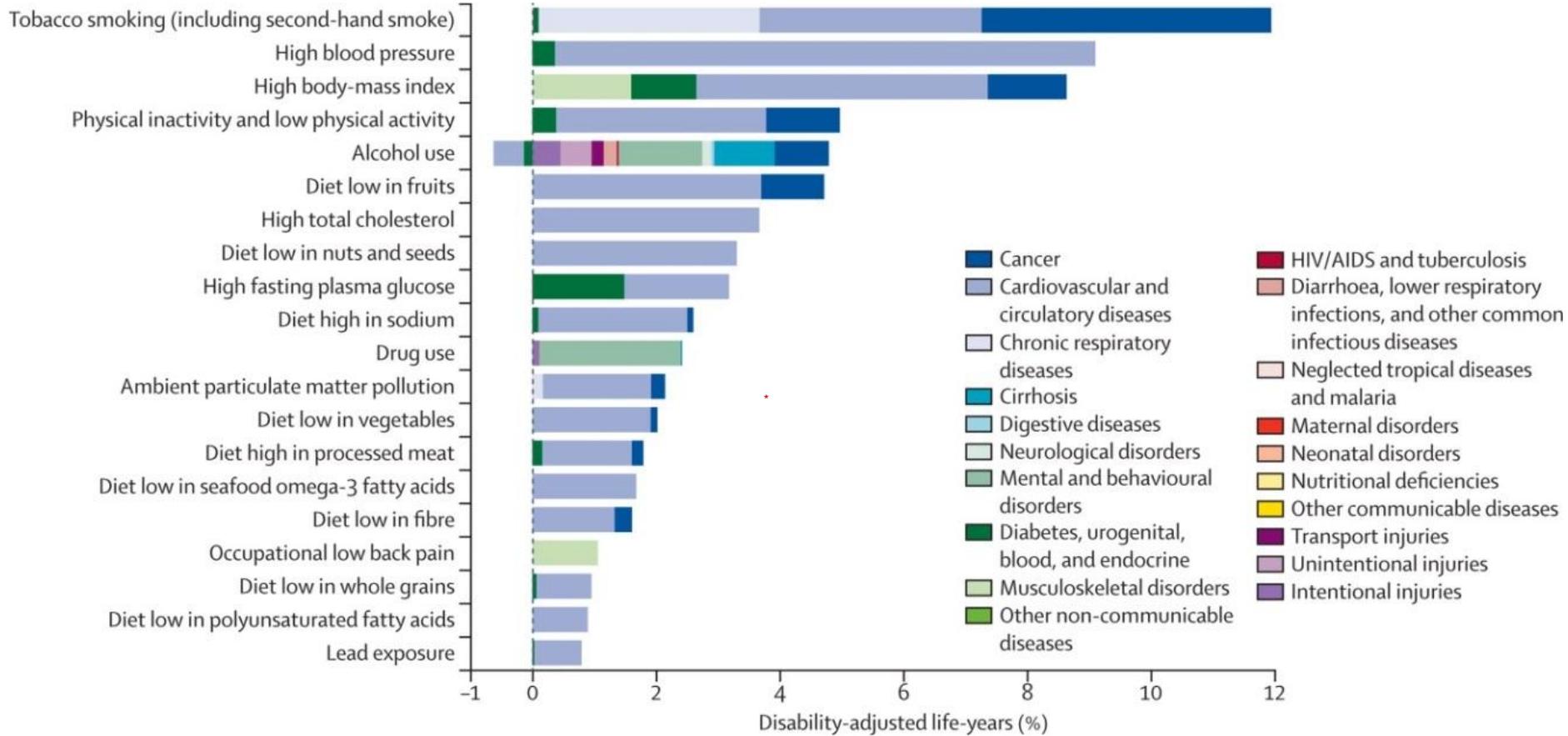


Our approach to the evidence:

The NHS Health Check programme is fully supported by Public Health England, NHS England, the National Institute for Health and Care Excellence and the Local Government Association.



Burden of disease attributable to 20 leading risk factors for both sexes in 2010, expressed as a percentage of UK disability-adjusted life-years





Precautionary principle

The need to address the health challenges in England, including inequalities, is pressing. The responsible authorities do not have the luxury of being able to wait for long-term trials before deciding what to do. In this situation we believe the precautionary principle is the correct framework for making decisions.



PHE will bring strong scientific rigour to the programme

Key actions:

- Expert Clinical and Scientific Advisory Panel
- Review emerging evidence and research needs. In addition to the two DH national evaluations, PHE will also promote future research, development and evaluation of this programme
- PHE will also coordinate a refresh of the economic modelling conducted in 2008, updating the assumptions in the light of new data and experience



NHS Health Check

Areas of focus

‘NHS Health Check implementation review and action plan 2013’ set out PHE’s commitment to local implementation and drive for improved quality, consistency, governance and outcomes. Ten commitments underpin work in 2014-15, including:

- **Leadership:** introduce new governance structure including expert scientific and clinical advisory panel, information governance and data sub-group
- **Improve uptake:** support behavioural insight research and develop national marketing and branding toolkit to support local delivery (new website presence)
- **Information governance:** overcome barriers to data sharing – publish a national guidance and IG toolkit
- **Support delivery:** establish national and local learning networks
- **Consistency:** develop national quality improvement framework
- **Provider competency:** establish national competency framework
- **Prove the case:** support research and evaluation of NHS Health Check to provide evidence for future investment





Public Health
England

Success depends on effective commissioning



[Go](#)

Home - NHS Health Check
<http://www.healthcheck.nhs.uk/>

Free NHS Health Check

Helping you prevent heart disease, stroke,
diabetes, kidney disease and dementia

[Members Login >>](#)



Public



Commissioners and healthcare professionals



Local Government

Welcome to the NHS Health Check website

The NHS Health Check programme aims to help prevent heart disease, stroke, diabetes, kidney disease and certain types of dementia. Everyone between the ages of 40 and 74, who has not already been diagnosed with one of these conditions or have certain risk factors, will be invited (once every five years) to have a check to assess their risk of heart disease, stroke, kidney disease and diabetes and will be given support and advice to help them reduce or manage that risk. [Learn more inside.](#)

This website is a collaborative resource between the [Department of Health](#), [Public Health England](#), [NHS Improving Quality](#), [Local Government Association](#) and local health and social care teams which brings together national and local resources aimed to support those involved in commissioning and providing the NHS Health Check programme.

Explore NHS Health Check Data





Public Health
England

'I was a walking heart attack'



Ron Morris: "Who knows what could have happened"



Public Health
England

Thank you

Working together for the public's health

Jamie Waterall
NHS Health Check National Lead

e-mail: jjamie.waterall@phe.gov.uk
website: www.healthcheck.nhs.uk



Quarterly Research Meeting – Summary Report

NHS Health Checks: making inequalities better or worse ?

Thursday 17th July 2014 – 9:30am-1:00pm

The Glass Centre, St Peter's Campus, Sunderland University

Introduction

This report summarises the keynote speaker's presentations, parallel workshops, and the concluding panel discussion session at the July Quarterly Research Meeting held on the topic of "NHS Health Checks: making inequalities better or worse?" The QRM was organised by Fuse in conjunction with Public Health England (PHE). This summary report is to be read in conjunction with the slide sets kindly provided by our speakers, also on the Fuse website. The slides are cross-referenced in the summary account, below.

PLENARY SPEAKERS

NHS Health Check Programme: An Opportunity to engage 15 million people to live well for longer: Jamie Waterall, NHS Health Check National Lead, Public Health England

Jamie Waterall presented the case for NHS Health Checks from a national perspective. He began his presentation by asking the audience to participate in a poll answering the question "What percentage of risk factors associated with someone having their first heart attack are modifiable?". On the day, the audience began to vote for figures of 70% and above, before being shown the actual answers which are 90% for men and 94% for women (see Slide 2 for the reference to the study with these findings). These figures alone are an argument for taking some action. A breakdown of the risk factors and their respective contribution to disability-adjusted life years is shown in Slide 4, used at the event as a reminder of their role in a range of disorders.

The question was posed, "Why does PHE support this policy?" and the reasons why presented in Slide 5, some of which pre-dated the formation of PHE and have been inherited by the organisation. The audience were reminded that the earliest proposals for some kind of health (then vascular) check were made in 2008 and the headline objectives of this programme are listed in Slide 6. In addition economic modelling was undertaken to project the value of health checks in terms of illness and deaths prevented and cost-effectiveness concluding that the checks would be "very cost effective" (Slide 7). A detailed diagram showing how the health checks operate and fit into the NHS system was shown in Slide 8. Slide 9 shows the percentage of checks offered and taken up over time in the last two years. The point was made that although the performance could always be better, during a period of intense organisational change, there was, nonetheless the highest percentage of attendances for checks ever achieved. However, there is a lot of variation within the overall figures when broken down by local authority (Slide 10 depicts the national position and Slide 11 the north east regional position). There remains one other important consideration – what actually happens to those who are found at their check to be at risk, and the issue of their onward trajectory needs to be better understood.

The policy has remained a priority for the current government, and additional questions have been added on alcohol and dementia. The audience were reminded about the duties laid on local authorities (Slide 13) and that the overall processes for health checks remain in place (Slide 14). Public Health England has published an implementation review and evidence paper on the subject (Slide 16). In overall terms the Health Check programme is fully supported by not only PHE but also NIHCE and the Local Government Association, because the risk factors are there to be addressed and are unchanged (Slide 18). The speaker said that it was recognised that multiple interventions were needed and not just Health Checks alone, but in the meantime the general approach was a precautionary one. In summary this means that the responsible thing is to continue with Health Checks whilst awaiting for the outcome of the long term trials to be reported (see Slide 19 for the full text of this policy). An important dimension is that we know about the evidence base for individual interventions (for example smoking cessation) but not for collective interventions, which is a completely new environment.

Nonetheless the intention of PHE is to bring scientific rigour to the programme through three measures (see Slide 20), setting up an Expert Clinical and Scientific Advisory Panel, reviewing evidence and promoting new research and re-doing the economic modelling. At a more operational level specific actions were referred to as listed in Slide 21. Success will depend on effective commissioning and innovative approaches like using mobile units (vans/buses) and undertaking checks in novel locations like dentists, as pictured in Slide 22. In conclusion, attention was drawn to the national website on Health Checks (within the NHS Choices website). This was described as one of the best kept secrets and that public knowledge needed to be increased – one possibility being through this website. The website was illustrated by showing a video of “Ron”, someone who had been through the Health Check leading to immediate treatment and help with preventative measures because an exceptionally high level of risk was found at the Check. In closing it was explained that a syndication tool would be available for local government to extract elements of the programme. The final slide, Slide 25 gives contact details for Jamie Waterall and the website.

**NHS Health Check Programme: *The answer to CVD prevention in England?*
Andrew RH Dalton, Nuffield Department of Primary Care Health Sciences,
University of Oxford**

Andrew Dalton introduced himself and the outline of his talk:

- Why the NHSHC must address disparities
- Some theory
- NHSHCs – The evidence to date
- Absolute impact of NHSHCs
- The future

He stressed that it was important to be clear about the definitions being used – thus disparities are differences whilst inequities have the connotation of being morally wrong. Trying to address disparities were at the core of the original vascular check programme, but whilst disparities are falling over time, there are still differences based on socio-economic

status and black and minority ethnic communities suffer disproportionately as well. A comparison was shown between the rate of CHD deaths per 100,000 in Tameside (amongst the worst communities) and Kensington (amongst the best) to illustrate geographical differences. In the background to these continuing differences lies the question, “Will Cardiovascular Disease Prevention Widen Health Inequalities?” (Capewell & Graham, 2010).

The speaker then introduced two key concepts:

Structural Prevention – for example; introducing society wide changes affecting, for instance salt in food, where the individual is passive

Agentic Prevention – for example; anything that relies on the individual changing their lifestyle, where the person is the prime mover

He argued that structural measures tended to reduce inequalities and agentic measures the opposite. Thus, individuals with greater resources get more from a prevention programme. The speaker compared this with the inverse care law, whereby those in least need of a particular health care service, nonetheless are most likely to obtain the treatment. Even if a programme is applied universally the same problem could still arise, although he added that this was a caveat, not a reason for suspending such services.

The speaker used the idea of a staircase to illustrate how many steps there were between for example, attending a health check, taking various intermediary actions and complying with appointments for follow up, and that, at every point (like every tread on a staircase) someone invited for a health check could “stumble” and be lost to the programme. A critical starting point is the extent to which people are “health literate”, ie; able to interact with the system – it was suggested that between 34-59% of the population (Eichler *et al.* 2009) have poor health literacy. Disadvantaged people are less likely to negotiate what they want out of the system, and the South Asian population was mentioned as one particular example of a population group in this position. Any person involved in the programme needs to have a good understanding of risk in order to be motivated to take action. The evidence of individual programmes (eg; smoking cessation) introduced prior to the health checks programme all showed disparities, pointing in the direction of being used successfully by the more affluent. The speaker went onto describe the ‘Inverse Prevention Law’, with those least likely to attend health checks being men on low incomes, low socio-economic status, unemployed or less well educated (Dryden *et al.*, 2012).

The presentation then moved on to specific evidence from the NHS Health Checks. A series of measures were shown which had found in different studies both that more deprived populations had taken up health checks and also the opposite, giving an inconclusive picture. Overlying this, the beliefs that people invited to attend a health check had, also needed to be taken into consideration, for example, their prior knowledge, or physical access to appointments. One interesting finding was that some people interviewed about their beliefs stated that they thought that they were taking resources away from the state by attending, especially if they felt fit and well, and the implication was that this could be a deterrent to attending. For statin prescribing there was no difference in prescribing by deprivation but neither had any inequality gap closed. Finally, the only study examining disparities in risk reduction (set in one local area) did suggest greater benefit in ethnic minority groups, notably South Asian. In addition, there was a lot of service level variation

by GP practice, affecting uptake of services. In summary there was little evidence about the effect “downstream”, ie; well beyond the first appointment for a check.

The speaker then considered current guidance and presumptions about the programme. PHE take the view “that finding and managing those at high risk of vascular disease is likely to be effective and cost-effective ... [and thus] ... The NHS Health Check in this context adds value as a population approach.” He suggested, however that guidelines do support managing “high risk”, but this far from supports the current universal Health Checks. He also reminded the audience that case finding depended on their being a good treatment which was useful if implemented at an early stage in the progression of the disease, but for health checks there’s a lack of consistency regarding whether people are sent for any follow up, and secondly, what that is.

Criticism of health checks has appeared in the medical press. No evidence that universal health checks will reduce CVD risk in the whole population, he described how it is a ‘universal’ approach not a ‘population’. The speaker stated how problems with follow up are likely to get worse in the next few years due to current NHS changes. In concluding, Andrew Dalton put forward an alternative which involved using existing medical record data to find high risk groups and restricting the invitations to those groups. This would mean that there would be a smaller group to invite and therefore scope to target resources with higher quality interventions to help people ascend the “staircase” of preventative measures. He argued for this on the basis of the quality of the UK records system in primary care. In concluding he suggested that there may be a possibility of the health checks detracting from other population measures like reducing salt and trans-fats in foods.

Discussion:

The following general areas were covered:

- It emerged that there didn’t appear to have been any evaluation on well person checks which had been introduced in the 1990s beyond clinical audit. A contributor from the audience suggested that this lack of evaluation would undermine GPs’ enthusiasm for health checks today.
- There was a discussion about the staircase, which was complimented, and further debate about how to target the population at most risk. It was suggested that this would be a combination of using medical records data, applying risk algorithms and thresholds to make sure that no-one was missed. Reference was made to this being done historically in the Tees Valley. It was suggested that there was now a question in QOF (Quality and Outcome Framework-the annual reward and incentive programme detailing GP practice achievement results) about understanding of risk.
- Comment was made about the lack of effective levers for the low risk population to encourage improvements in their health.
- There was reference to alternative venues for providing health checks outside GPs surgeries.

NHS Health Checks in Tees: Acknowledging the patient journey: Rebekah McNaughton, Research Associate (Public Health), Teesside University and Fuse member.

Rebekah presented work that was conducted with a number of patients who had been identified as high risk through the NHS Health Checks (NHS HC) programme. Since 2009 a team of researchers from Fuse have been working to provide independent evaluation of the NHS HC programme. The data presented at the event was collected in the second phase of evaluation from 2011-2012. This phase of work was a qualitative investigation of patient understanding of the NHS HC assessment, understanding of their predicted cardiovascular risk and ultimately compliance with lifestyle advice and prophylactic intervention.

Rebekah discussed the current evidence from the first years of the NHS HC programme and evidence around compliance to medication for the purposes of prevention, before noting how we need to be cautious when interpreting cost effectiveness analyses since they are essentially theoretical projections over many years. In order to achieve the gains in both reduced morbidity and mortality that are suggested by such analyses we need to develop ways to communicate risk to patients in a way that prompts sustained changes to behaviour and engagement with medical intervention. Simply identifying at risk patients is not enough to achieve the aims of the programme, work must be done to actively engage with patients, and sustain that engagement over the long term.

Data were presented from semi-structured interviews with patients who had:

- Accepted their invitation for an NHS HC
- Been identified as at high risk
- Received lifestyle advice and/or been prescribed a statin and
- Had attended at least one annual review.

Findings were presented under six main themes:

1. Feeling fit and well
2. Lack of clinical diagnosis
3. Identifying as an at risk individual
4. Candidacy for disease
5. Medicating for preventative purposes
6. The reassuring nature of risk

For further information about this work, please contact the author.

PARALLEL WORKSHOP SPEAKERS

The evidence base for the NHS Health Check: facilitated by Mark Lambert, Consultant in Specialised Services at North East Public Health England Centre

Mark began by introducing himself as a public health physician with experience of examining the evidence base for health checks in the NE, and asking workshop attendees what they wanted to cover in the session. A number of people asked about the benefits of a universal v. targeted approach, and evidence at each step of the programme. One attendee fed in local research about what people with multiple health risks want and what's 'fair'.

Mark acknowledged health checks can be seen as a 'populist' intervention, a political priority, in part because of the importance of being seen to respond. He drew on Tugwell's (2006) staircase model to explain the early steps of getting people to engage was the first stage of risk reduction, before exploring whether appropriate referrals are made, medications supplied (and taken), and how these interventions affect mortality. The focus of the presentation was on the middle steps of the staircase.

Mark was asked by three Directors of Public Health to explore efforts to reduce excess mortality in the NE, and examine what contribution health checks had made to these efforts, by how much and when. Mark advised against looking at mortality rates as there were too many other factors influencing these. He proposed instead looking at primary health care data, and the extent to which more people were identified with particular diseases, hypertension, diabetes etc. in the three areas concerned. This was considered the best approach in the short term.

Practice level data from 130 GP practices in Sunderland, South Tyneside and Gateshead, undertaking 20,000 Health Checks in 2011 / 2012 were used to explore the potential impact on disease recognition and management. Mark circulated 3 slides to highlight key points;

1. The strong relationship between NHS Health Checks undertaken, and 'new' (otherwise unknown) people identified at risk.

There were questions about how people were identified and Mark confirmed that all practices were encouraged to offer a universal approach, although each area's programme has developed slightly differently to accommodate local differences.

2. The lack of relationship between growth in hypertension register size and number of Health Checks undertaken

There followed some discussion about how good Health Checks are at identifying people, compared to other approaches.

3. 'New' cases of hypertension *may be* influenced by Health Checks

This analysis was made possible by the records submitted by GP practices to account for different routes of funding, available as GPs are paid for identifying and responding to 'new' cases of hypertension. This prompted questions and discussion about relevant QOF payments and thresholds and the effects these have on practice.

There was discussion about the practicalities of the Health Checks programme, whether and how they are offered in and out of GP practices, and by which health professionals. For example in Gateshead, pharmacies were involved using scratch cards to check people's eligibility in recognition that those least more at risk would be less likely to use GPs.

Adopting a targeted approach to risk assessment Facilitated by Dr Mike Lavender, Durham City Council

Summary presentation - please see attachments referred to/used at this workshop

Dr Mike Lavender started the workshop by explaining that NHS Health Checks rely on GPs to achieve the expected coverage of the programme. However, a small proportion of GP practices are not willing to carry out health checks and there is a large variability between practices.

He raised the importance of engaging GPs to deliver the program and explained that GPs are facing rising demands and changes to their work environment. He also stated that scientific information generally accessed by GPs from the BMJ (usually restricted to titles and brief statements from editorials) do not support the NHS health checks (McCartney, 2013; Goodyear-Smith, 2013; Gotzsche et al., 2014). Therefore, persuading GPs that health checks should be implemented in their practice is a very difficult task.

He then pointed to some articles stating that other screening strategies (i.e. using routine data) provide similar effects with potential cost-savings (Chamnan et al., 2010; Chamnan et al., 2012). He raised the point that data from the literature might be skewed because of variation of implementation between practices. He suggested that screening should be flexible in relation to age.

Dr Lavender explained that GPs tend to read and follow NICE guidelines. However, this is not a normal practice for Local Authorities. He then referred to an article with a specific call for CCGs to follow NICE guidance (please see Appendix with this report). He also referred to a guideline for cardiovascular risk assessment revised by NICE in 2010 explaining that people should be prioritised based on an estimate of their CVD risk from electronic medical records before a formal risk assessment. The same document also stated that formal risk assessment should be prioritised if their estimate 10-year risk of CVD is 20% or more (NICE, 2008). However, a more recent (NICE, 2014), update of this guideline stated that “Strategies to prioritise people for assessment are not part of this guideline update” which maybe means that local authorities, GPs and commissioning groups should think about strategies for prioritisation. NICE guidance published the day of the workshop confirmed the previous guidance recommending that patients should be prioritised on the basis of an estimated CVD risk.

Finally, he questioned that contrast between the money involved in Health Checks and the government reducing budgets for population lifestyle interventions. He raised a concern relating to carrying out risk assessments without being able to provide the follow up interventions.

Point of Care Testing

Facilitated by Tony Gibson, Scientific Director, North East Pathology Network

This workshop began with an exploration of the definition of point of care testing. There was a discussion about the different ways of being closer to the client and that this was not restricted to being at a bedside. A range of devices were placed on the table to illustrate the wide range of instruments used for point of care testing, and the different kinds of analysis they were used to perform. There was an open discussion about the potential advantages of point of care testing, including, for example:

- The ability to reach people quickly
- Portability (although not every device is necessarily compact)
- Robust and not prone to break down
- Provision of instant results

- Accuracy (which might be in comparison with the gold standard in the field, and also accurate enough to pick up worrying cases in the field)
- Providing a one stop shop
- Convenient
- Cost effective (there was a debate around whether the overall cost of treatment could be brought down through using point of care testing within an overall package of care)
- Ability to record and transmit data into a main system (this might be a critical feature on which the value of point of care testing could depend)

It was noted that the disadvantages would be the converse of all the above.

There was a discussion about the extent to which having completed a point of care test, there were the resources to follow up or signpost appropriately, which would in turn impinge on how valuable and useful the testing was in the first instance. With reference to earlier testing programmes (pre-dating health checks) it was apparent that some staff are better informed than others on follow up. The inter-personal skills of the operative conducting the test are also of significance in assuring the value of testing.

Advantages to the patient/client were considered and those emerging were:

- Less intimidating to receive point of care testing, which might also have a more user friendly, less professionalised ambience
- No waiting as results are available (this led on to the best way to present results and the potential value of visual representations, especially where figures giving a risk level could be confusing or meaningless to the patient. It became clear that counselling skills to help advise people would be important. Apps can also be useful as motivational tools)
- Considerable improvements in durability and quality of point of care devices was noted as being achieved since they were first introduced in the 1980s. (A caveat was added that the training of professionals in their use was vital to maintaining the quality of results. This led onto a discussion about the implications for training in communication and teaching skills, and pastoral requirements, for example, including the breaking of bad news “on the spot”. Planning of the response to the results when communicating with the patient would also be important)

Comment was made that popular TV programmes may have an influence in terms of what people think can be done, once a diagnosis is made to which point of care testing has contributed.

There was a debate about the possibility of information about the results getting back to the records and then not being taken further. One senior researcher present at the workshop commented that interviewees tended to think that the doctor would contact them proactively about results, whereas in practice they don't. There is a need to educate the public to ring in for results, although some might still refuse to do so, because of a belief that the responsibility rested with the doctor. Reflecting on the presentation from Andrew Dalton and the concept of the “staircase”, it was noted that there were main points at which care could break down because a particular step wasn't taken.

PANEL DISCUSSION

Panel members: Andrew Dalton, University of Oxford; Tony Gibson, North East Pathology Network; Mark Lambert, North East Public Health England Centre; Mike Lavender, Durham County Council; Rebekah McNaughton, Teesside University; and Jamie Waterall, Public Health England lead for NHS Health Checks.

Risk

- It was acknowledged that there was no one way of effectively communicating risk. There was discussion of whether “heart age” was more effective than quoting a percentage risk of having a CVD event within the next ten years.

Ongoing research

- A question was raised about other evaluations planned or underway in the region, in addition to that which had been showcased at the meeting. Mark Lambert talked about doing some work with Newcastle University, relating to a tool to assist GPs and nurses on calculating and communicating risk which would be built into the GP desktop. It was suggested that this should be evaluated. Peter Van Der Graaf (Askfuse Research Manager) noted that [AskFuse](#) (Fuse’s responsive research and evaluation service) was brokering an evaluation of the NHS Change4Life programme in Co Durham, looking at the delivery of health checks in community settings.
- Martin White was asked about about NIHR School for Public Health Research (SPHR) funding streams. He noted that the general principle in these funding streams was that intervention costs would not be covered (only evaluation costs) but that the overall topic was certainly within remit. Some noted a bias against the health checks programme as a public health measure due to the dispute around the evidence base for the programme as a whole. Nonetheless it was acknowledged as being within the NIHR remit because health checks are part of government policy.
- It was noted that the understanding of evidence was different in local authorities, and it was proposed that academia needed to develop guidance to help public health staff in local authorities make the case for undertaking research studies locally or participating in larger studies.

NHS Health Checks in general

- There was a debate about the ‘precautionary principle’ introduced by Jamie Waterall in his presentation. There was some ambiguity around whether it was better to continue with health checks unchanged and build the evidence base simultaneously or keep the checks but use them in a more targeted way. Jamie Waterall put the question to the audience and in a quick show of hands the overall consensus was supportive of his viewpoint, namely that the checks programme should be sustained whilst vigorously building the evidence base. Any research needed to be definitive and Jamie Waterall reminded the audience of the establishment of the expert committee which is developing the research agenda and to which he had referred in his presentation.
- Comment was made that attention needed to be paid within the programme to delivering a good medical service as a whole beyond the ‘event’ of the health check itself.

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