# The NHS Health Check Practice Based POCT Pilot: An NHS Perspective



South of Tyne and Wear

SMi International Conference 2012 Point-of-Care Diagnostics



Working together to make South of Tyne and Wear healthy for you Contact: Sue Collins 283 1155

sue.collins@sotw.nhs.uk

Gateshead Primary Care Trust • South Tyneside Primary Care Trust • Sunderland Teaching Primary Care Trust







South of Tyne and Wear

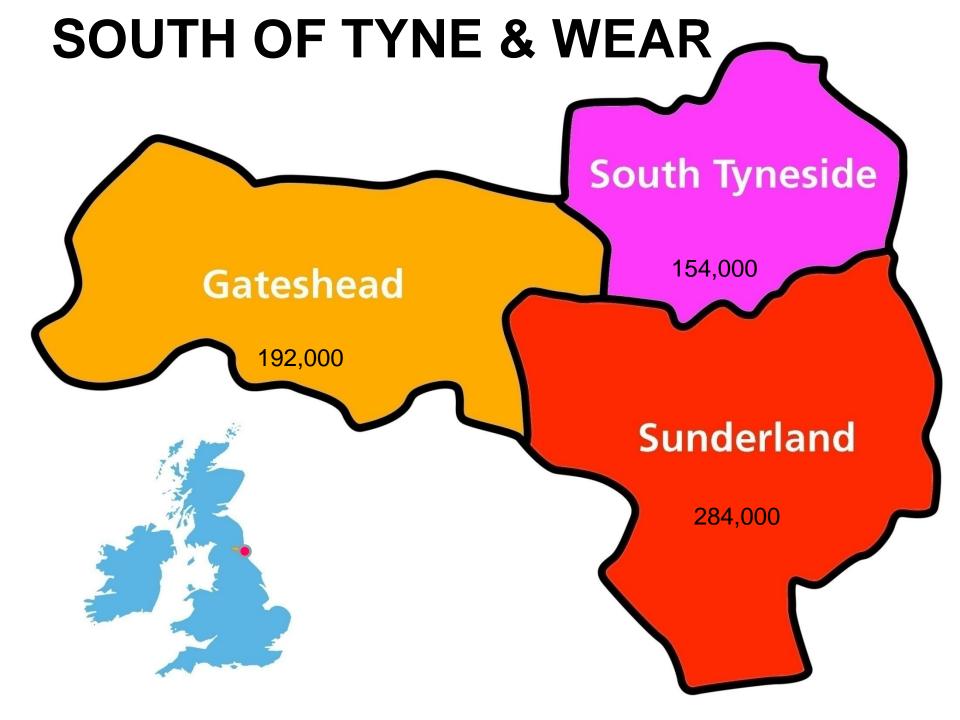
## BACKGROUND

## LOCAL PROGRAMME

## **QUALITY IMPROVEMENT**

## **NEXT STEPS**

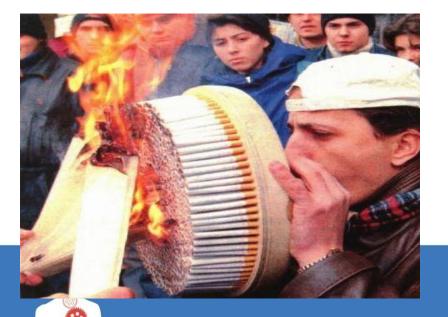
### **FUTURE**





#### NHS South of Tyne and Wear









## NATIONAL PROGRAMME

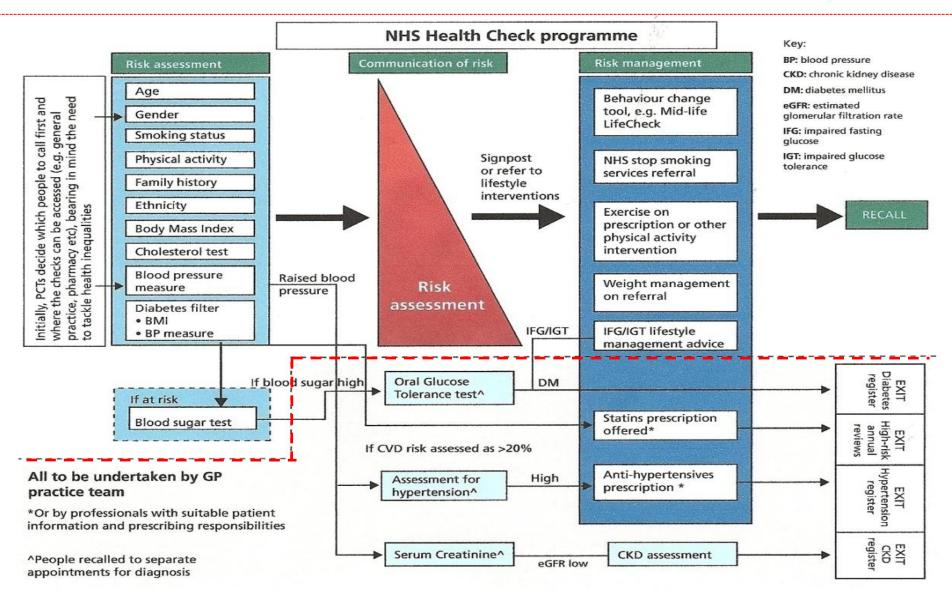


- PCTs encouraged to offer cardiovascular checks to 40-74 year olds with no established disease
- Level of CVD risk within next 10 years established
- Treatment, management, and referral to appropriate services



## PATHWAY





## EVIDENCE



South of Tyne and Wear

- The programme could prevent:
  - 1,600 heart attacks and strokes
  - save up to 650 lives per year
  - prevent over 4000 people from developing diabetes

Cost of £3,500 per QALY it is considerably below the NICE £20,00– £30,000 per threshold indicating the programme is very cost effective.

Source: Department of Health (2008) Economic Modelling for Vascular Checks (DH-085917)

## NUMBERS ELIGIBLE FOR NHS HEALTH CHECK IN SOTW?



NHS South of Tyne and Wear



### = 232,000

GH – 74,500 ST – 55,800 SUN – 101,700

### **Free NHS Health Check**

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



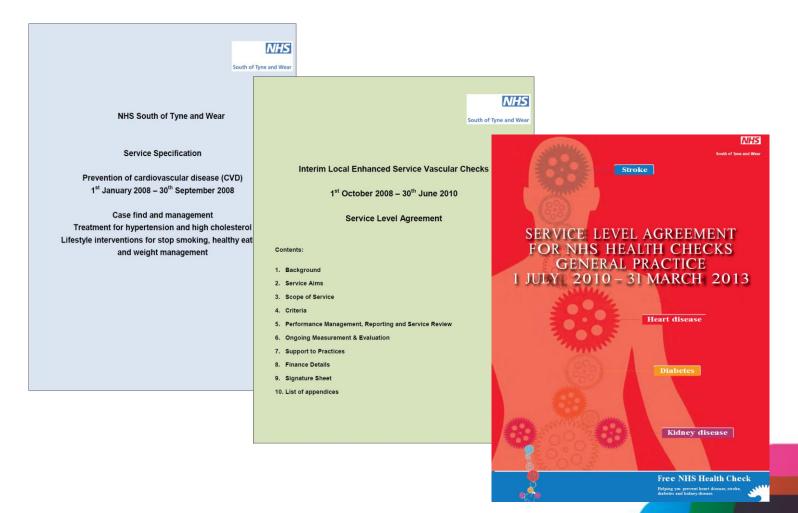


## LOCAL PROGRAMME



South of Tyne and Wear

### Early identification and management of CVD risk



## **COMMUNITY SERVICE**







WORKING TOGETHER TO MAKE SOUTH OF TYNE AND HEALTHY FOR YO			NHS S	N South of Tyne and V	<b>HS</b> Wea
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### **SOCIAL MARKETING** South of Tyne and Wear **RESEARCH & EVALUATION**



## FINDINGS



Practitioners/Stakeholders opinion	Public opinion
<ul> <li>Depended on individual</li> </ul>	pecific people/communities al lifestyle NOT community nic communities
Add	itional:
<ul> <li>Middle aged</li> <li>Teenage binge drinkers</li> <li>Older house-bound people</li> <li>Deprived communities</li> <li>Family history</li> </ul>	<ul> <li>High pressure occupation (stress)</li> <li>Cultural background – diet</li> <li>All ages – relevant to 'everyone' including the young</li> <li>Refugees/Asylum Seekers</li> </ul>

## **TASKS & SEGMENTS**



SEGMENT	AWARENESS	INFORMATION	MOTIVATION
The Proactives	<b>Good</b> awareness of CVD Little effort required	If know about Pathway patients WILL use	Invitation enough to motivate these people
The Denials	<b>Good</b> awareness of CVD focus on educating of risk factors	Inform about Pathway and relevance	Need motivation to <b>accept</b> <b>relevance</b> and take part
The Rejecters	Low awareness of CVD Needs developing to recognise own risk	Inform about Pathway and relevance	Essential to <b>shock</b> into action 'Remove their head from the sand'

### **BARRIERS TO INVOLVEMENT**



Practitioners	Public
Т	ime
<ul> <li>Resource - staff</li> <li>Increased workloads</li> <li>Consultation rooms (Pharmacist)</li> <li>Training</li> <li>Patient's low awareness of service</li> <li>Other agreed targets with PCT</li> <li>Impact on existing roles</li> <li>Incentive necessary</li> </ul>	<ul> <li>Fear – process, reality and change</li> <li>Denial</li> <li>Convenience/distance</li> <li>Language</li> <li>Embarrassment</li> <li>Difficulty of getting appointment</li> <li>Cost of healthy living</li> <li>Motivation</li> <li>Lack of knowledge/interest</li> <li>Disability</li> <li>Lack of peer support</li> </ul>





## RAPID PROCESS IMPROVEMENT WORKSHOP (RPIW)

- The event took place between 10–14th August 2009
- Five days of intensive interactive group work and going out on the gemba (workplace) to test ideas
- Putting the patient a the heart of the process



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# AIM

- Systematic NHS Health Checks within primary care
- Standardised process for community based health check providers
- Streamlined signposting and referral process for lifestyle services





#### NHS South of Tyne and Wear Primary Care

Gateshead, South Tyneside & Sunderland





NHS South of Tyne and Wear

**Patient and Public involvement** 



**Occupational Health** 

NHS

NHS South of Tyne and Wear Primary Care Commissioning





#### South of Tyne and Wear





NHS South of Tyne and Wear Medicine Management



#### NHS Improvement Heart



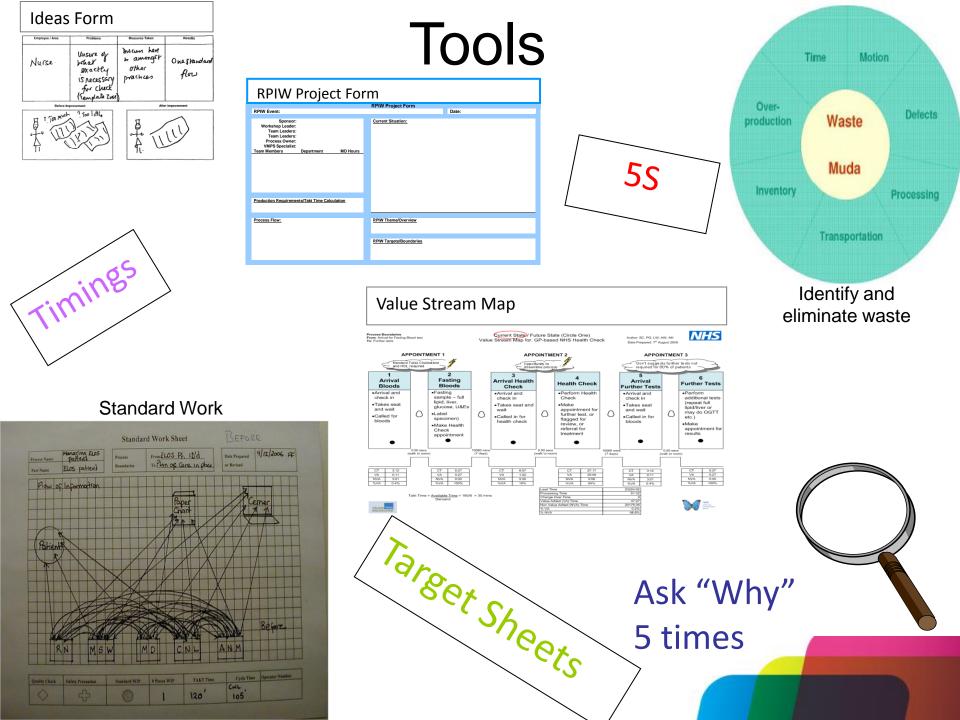
NHS South of Tyne and Wear Business Information Team



Patients



North of England Cardiovascular Network



Process Boundaries From: Arrival for Fasting Blood test To: Further tests

#### Current State/ Future State (Circle One) Value Stream Map for: GP-based NHS Health Check

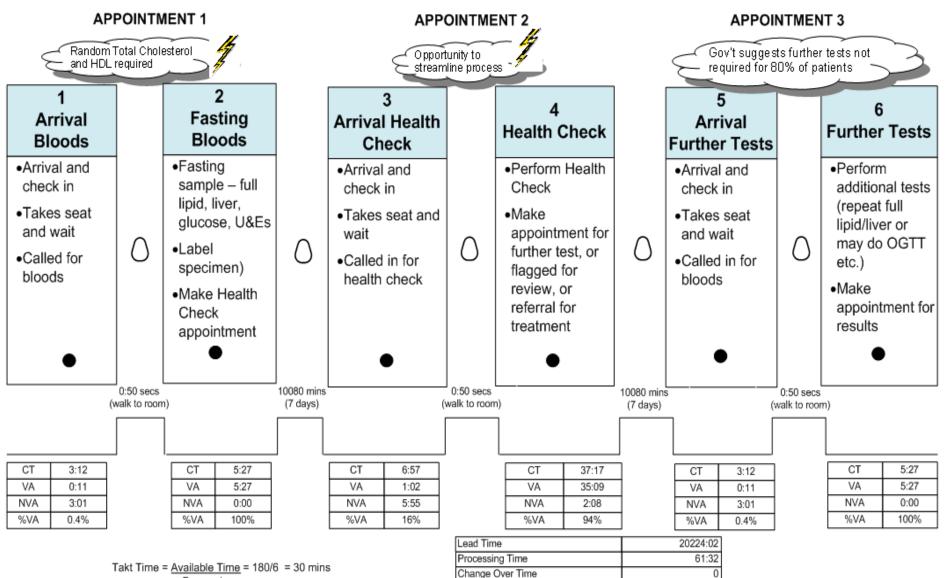
Author: SC, PG, LW, AW, AH Date Prepared: 7<sup>th</sup> August 2009

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20176:35





Value Added (VA) Time

% VA

% NVA

Non Value Added (NVA) Time







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## Three main areas of work



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## OUTCOMES



### Standardised:

- Template (GP and community feedback)
- Data collection / audit process
- Draft Standard Operating Procedure (SOP)
- Resources
- Develop bespoke training programme
   POCT a new approach to delivering health checks in primary care



### Free NHS Health Check

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



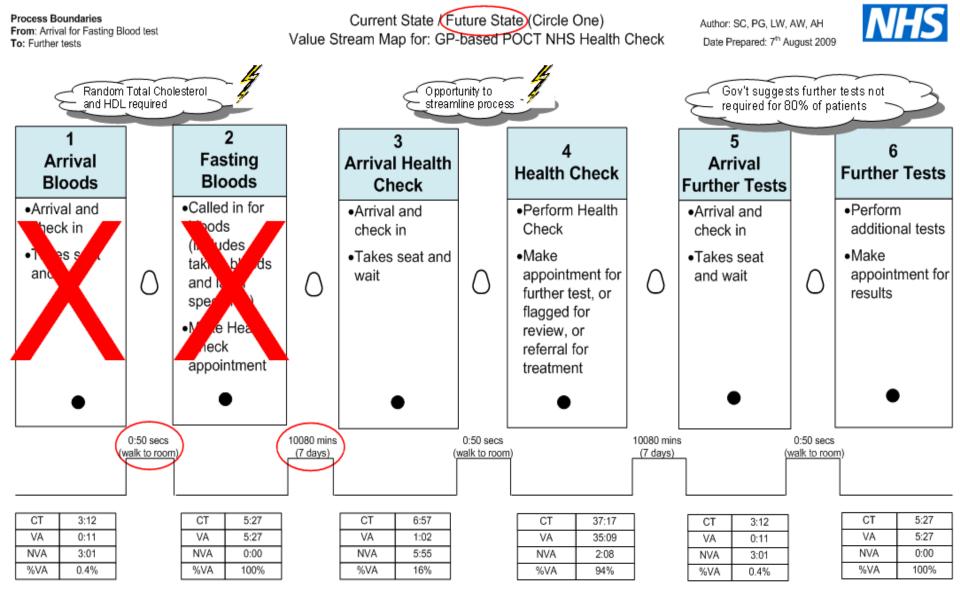


Delivering the NHS Health Check: A Practical Guide to Implementation A Practical Guide to Point of Care Testing

### Free NHS Health Check

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





Takt Time = <u>Available Time</u> = 180/6 = 30 mins Demand

MEDICINE

Lead Time	20223:62
Processing Time	61:32
Change Over Time	0
Value Added (VA) Time	47:27
Non Value Added (NVA) Time	20176:35
% VA	99.8%
% NVA	0.2%

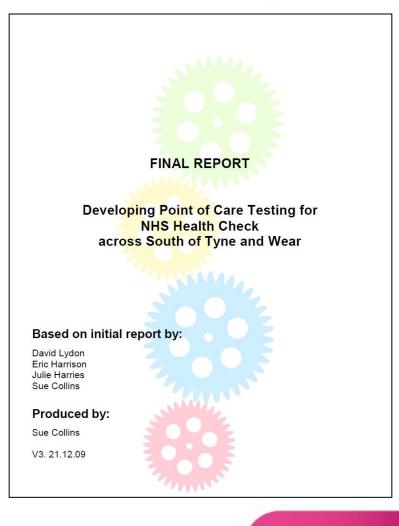


# POCT PILOT



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The pilot would run April 10 – March 11 Recruit 5 practices in GH, 3 in ST and 7 practices in SUN Provide in-house training





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## Pilot near patient testing in a GP setting to test the feasibility of delivering the NHS Health Check in a single appointment

AIM





### **GP POCT KIT**





# QUALITY CONTROL



South of Tyne and Wear

## STANDARD OPERATION PROCEDURE (SOP)

- IQA, EQC
- IN-HOUSE STAFF TRAINING





### NHS Health Check pilot practice based point of care testing

It became evident during the RPIW that a whole cycle in the NHS Health Check process could be removed by performing point of care testing (POCT) for measurement of cholesterol.

The sub-group working on this area had input from a local hospital pathology department manager and POCT lead, as well as from workshop attendees. All with long experience of vascular risk assessment (including pharmacists GPs, primary care business managers, public health specialists, practice nurses, information managers).

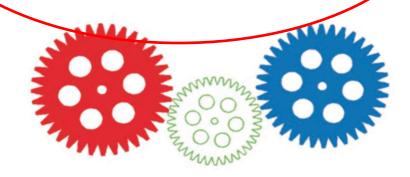
The benefits of adopting point of care cholesterol testing include:

- Testing a standardised approach and feasibility of POCT in GP practices
- Streamlining and standardising the process to inform / complement community health checks ensuring that people will receive the same standard of service regardless of where check is carried out
- The full health check can be completed in one consultation eliminating the need for recall following an initial blood test

- Short turnaround times, results are available within 5 minutes
- People can be seen, tested and consulted face to face within a short time frame
- Increasing the number of opportunistic tests carried out
- More convenient for staff and patients
- The next steps are to further develop the business case, project plan and finalise planning meetings.

We are looking for five practices from each area to take part in the pilot, participation will be on a first come, first served basis.

For additional information or to register your interest contact: Sue Collins on 0191 529 7200, e-mail: sue.collins@SOTW.nhs.uk



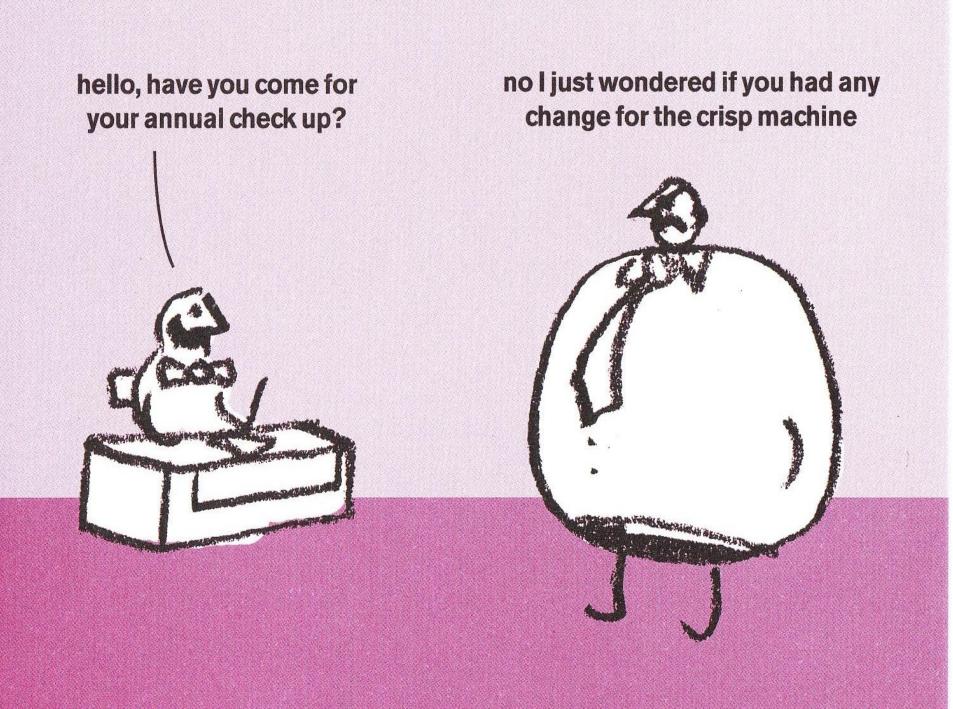


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## **INITIAL CHALLENGES**



- POCT Coding (manual data collection)
- Queries regarding accuracy (unit and fingerstick)
- Perception that a random cholesterol test is not enough



## Phase 1



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- 8 18 practices engaged (7 in GH, 3 ST and 8 in SUN)
- Opportunity to test:
  - Template
  - SOP
  - Manual data collection
  - Patient survey

# Phase 2

An additional 19 practices joined

# SIX MONTH REPORT



- 8 35 practices engaged (12 in GH, 7 ST and 16 in SUN)
- 1,150 health checks completed (from 22 practices due to rolling programme of implementation)
- 69% of patients experienced the check as a 'one stop shop'

### Improved productivity:

- Practices utilising different skill mix
- 50% of pilot practices had 33%–87% increase in number of checks for example, one practice increased the number of checks from 22 to 118
- Reducing inequalities:
  - Increasing the number of men accessing the service
  - improving access to early intervention and management



### **PATIENT'S COMMENTS**





## Enabling innovation & creativity:

- A variety of models are emerging, with practices delivering health checks using a different skill mix, and 'one stop' clinics proving successful
- Achieved consistent manual monthly data collection
- Development of electronic patient summary report and referral form

### NHS Health Checks - Personal Health Profile

### Mrs Minney Mouse

Age: 52 years

The following print out summarises the results of your free NHS Health Check and gives you a brief overview if you are currently at risk of developing conditions such as heart disease, stroke, diabetes or chronic kidney disease. The information provided can be used to help plan changes to your lifestyle to maintain or improve your health; there are a wide range of help and support services that you can access across South of Tyne and Wear. If you have any queries regarding your results or would like further information, please speak to a member of the practice staff.

#### **Blood Pressure results**

21.09.2010 140/90 mm Hg

Desirable Level: Less than 140/90 mmHg

Untreated high blood pressure (values of 140/90 or above) is an increased risk factor for heart disease or stroke, by making simple changes to your lifestyle or by taking medication you can significantly reduce this risk. Risk factors include: family history, smoking, lack of exercise, being overweight and poor diet (particularly too much salt).

#### **Cholesterol results**

Date	Coded Data	
21.09.2010	Serum cholesterol 6.5 mmol/l	
21.09.2010	Serum HDL cholesterol level 3 mmol/l	
21.09.2010	Total cholesterol:HDL ratio 5	
Total Cholesterol	desirable level	less than 5
HDL (Good Cholesterol)	desirable level	men greater than 1, women greater than 1.2
Total Chol/HDL ratio	desirable level	less than 5

Cholesterol levels are improved by maintaining a healthy weight, being regularly active and not smoking.

### NHS Health Check Risk Score

#### 21.09.2010 Framingham CVD 10 year risk score 22 %

Your risk score is based on a number of lifestyle risk factors and shows your chance of having a heart attack or stroke or developing diabetes or kidney disease in the next ten years. The score is shown as a percentage and takes into account risk factors which you can improve such as: blood pressure, cholesterol, smoking and physical activity.

A risk score of greater than 20% is classed as high, meaning that without treatment there is a 1 in 5 chance of having a heart attack or stroke within the next ten years. A risk score of less than 10% is classed as low, meaning a 1 in 10 chance of developing these conditions. If you have any queries regarding your risk score please do not hesitate to contact one of the practice staff.

#### Lifestyle results

Heart disease and stroke are the leading cause of premature death in both men and women in the South and Tyne and Wear and changing or improving lifestyle habits can have a significant impact on these conditions.

#### Smoking Status

21.09.2010 Cigarette smoker 1 /day

**Recommended action for people who smoke:** Cut down or stop – a member of the practice team can give you information and support to help you quit.

#### Physical activity

21.09.2010 Enjoys light exercise 3 light d/wk

**Recommended action for people with low activity levels:** Making physical activity a part of your everyday routine is important, ask a member of the practice team to help you increase your activity levels safely. Thirty minutes five times a week will significantly improve your health.

#### Alcohol 21.09.2010

Alcohol consumption 2 units/week

Recommended Max 3-4 units per day for men or 2-3 units for women

Alcohol consumed within the guidelines can have some beneficial effects on health and wellbeing. Avoid binge drinking and aim to have at least two alcohol free days in the week.

### Weight management results

21.09.2010 Body Mass Index 24.3

Desirable level: 18.5 - 24.9

Being overweight (body mass index greater than 25) is known to be a significant contributing factor in a number of life threatening diseases including: heart disease, stroke, diabetes and certain types of cancers. Maintaining a good body weight requires a combination of healthy eating and physical activity.

Asian populations have a lower body mass index threshold (greater than 23) because they are genetically more at risk. Asians have a higher proportion of body fat in comparison to people of the same age, gender and body mass index in the general population.

# CHALLENGES



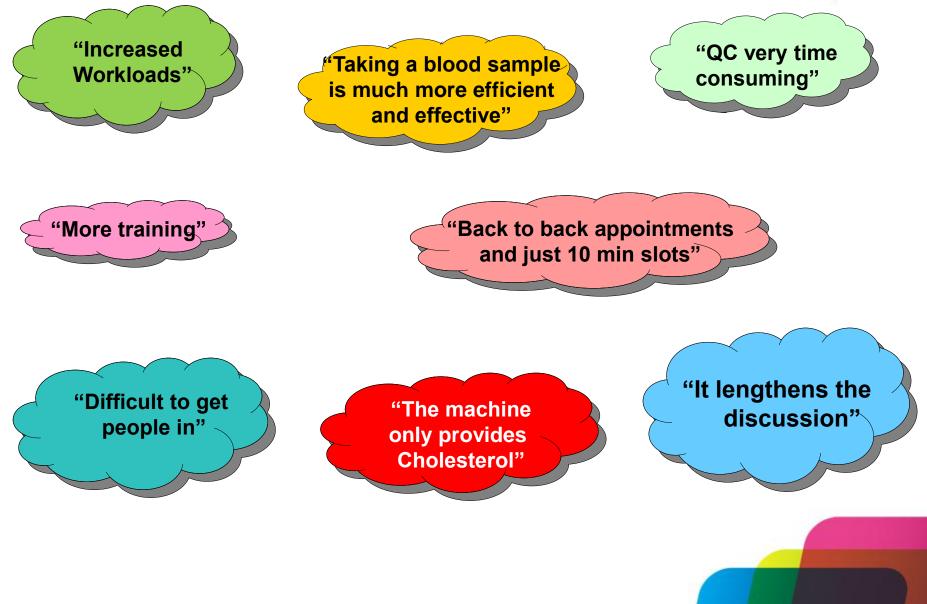
Capacity – loss of staff and training for new staff

- Additional work
  - quality control
  - Inputting data
  - manual data collection
- Ompeting pressures
- Misconceptions



## **STAFF COMMENTS**





# **LESSONS LEARNED**



- On tunderestimate the time it takes to set up the project
- Ongoing support is key to the success of the pilot.
- Training, updates & quality control are essential for accurate results.
- Practice staff require enough time to deliver check in one appointment and to perform quality checks.

# **ANNUAL REPORT**

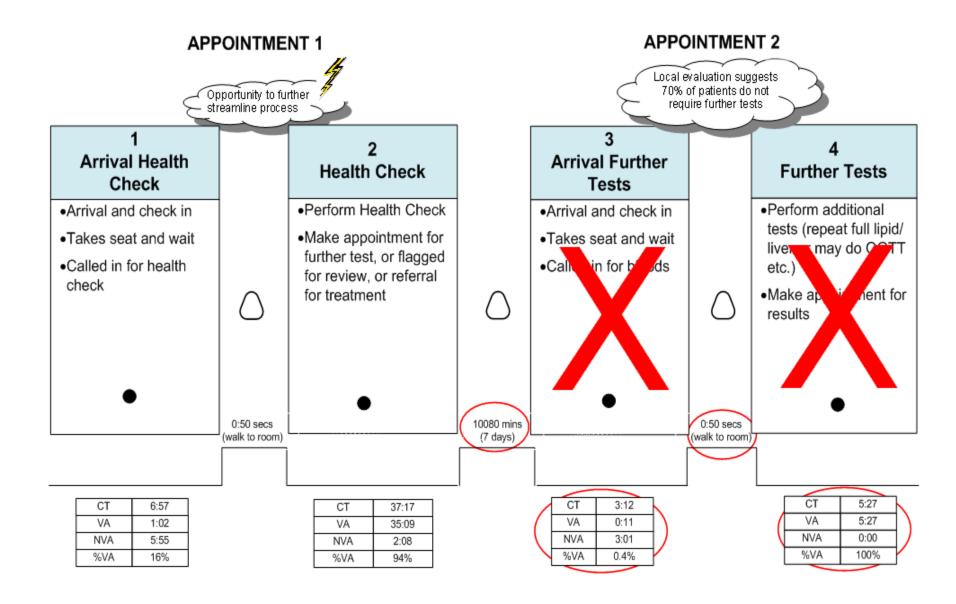


- Ø 3,617 NHS HCs completed using POCT
- Ø 27% (n=976) classed as high risk
- 34% (n=1,234) moderate risk
- 39% (n=1,403) low risk
- 8 70% (n=2,526) of patients experienced the check as a 'one stop shop'
- I,820 questionnaires have been received a 50% response rate

Process Boundaries From: Arrival for NHS Health Check To: End of Health Check Current State / Future State (Circle One) Value Stream Map for: GP-based POCT NHS Health Check

Author: Sue Collins Date Prepared: 17<sup>th</sup> June 2011





### NHS

## **COST PER CHECK**

NHS South of Tyne and Wear

Description	Standard Model NHS HC			
	Mins	Rate	Cost	
Estates		£0.50	£0.50	
Take bloods				
Reception	2	£9.00	£0.30	
Phlebotomist/HCA	10	£12.00	£2.00	
Transport		£0.01	£0.01	
Lab cost		£5.00	£5.00	
Health Check				
Reception	2	£9.00	£0.30	
PN consultation	25	£20.00	£8.33	
TOTAL			£16.44	

Description	POCT Model NHS HC		
	Mins	Rate	Cost
Estates		£0.50	£0.50
Perform HC			
Reception	2	£9.00	£0.30
Phlebotomist/HCA	20	£12.00	£4.00
POCT cost		£9.00	£9.00
TOTAL			£13.80

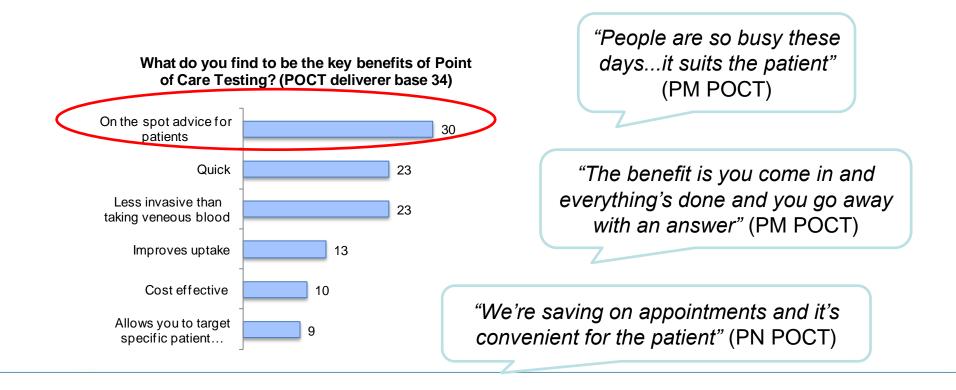
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## FURTHER EVALUATION



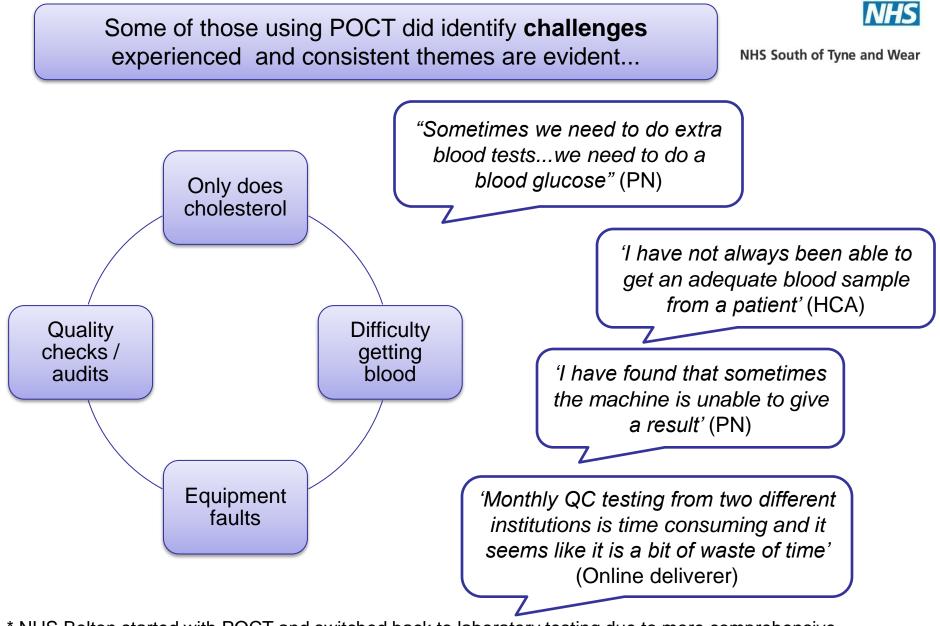
NHS South of Tyne and Wear

Those using POCT indicated overall that patient experience is the biggest perceived benefit of this approach



\* Patients reluctant to come back following check to discuss outcome, not using POCT identified as a flaw in commissioning model (Cambridgeshire)

\* POCT long term proves to be cost effective by reducing number of patient visits (NHS Improvement)



\* NHS Bolton started with POCT and switched back to laboratory testing due to more comprehensive blood tests required and cost

## **IMPROVING POCT**

NHS

NHS South of Tyne and Wear

The majority of those using POCT did not identify any need for improvements

Those that did comment focussed on two key areas

'I think that point of care testing needs to include blood glucose levels' 'I feel that there should be a more effective way of collecting a sample'

'I think that point of care testing should include tests for blood glucose levels (diabetes testing)' 'There needs to be an easier sampling method such as the dropping of capillary blood onto a test strip or venous sample'



NHS South of Tyne and Wear

The majority of those using POCT did not identify any need for improvements

Those that did comment focussed on two key areas

Biggest barrier to non-POCT is preference for 'holistic' check

*'We prefer to carry out a full check'* (Online deliverer)

"We're doing the more 'nitty-gritty'... whole patients care" (PM)

*"We do full blood counts, fats and glucose, lipids and thyroids as well" (PN)* 

"It doesn't give you the bigger picture... liver function tests and Us and Es and full blood count and full blood glucose" (PN)

## **CURRENT STATE**



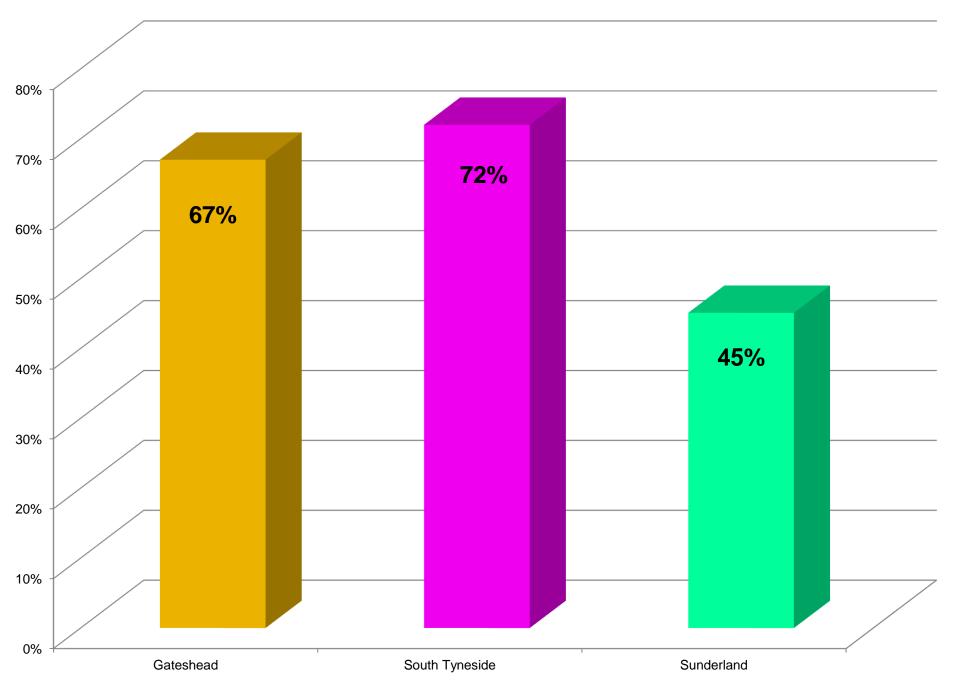








### PERCENTAGE OF PRACTICES USING POCT





## **THIRD SECTOR**

NHS South of Tyne and Wear



### **Free NHS Health Check**

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



## TRAINING



South of Tyne and Wear

### First Contact Clinical

### NHS Health Checks Training

First Contact Clinical would like to invite you to attend NHS Health Checks Theory Training

The training session is made up of 4 modules:

Module 1 - What is an NHS Health Check? - Pre-learning module.

Module 2 - Clinical knowledge updates for NHS Health Checks. (Pre-learning optional module as appropriate for clinical staff only).

Module 3 – Delivering the NHS Health Check.

Module 4 – Motivating people to change their lifestyle.

Please note: This training is completely free and available throughout NHS South of Tyne and Wear.

Modules 1&2 are pre-learning workbooks these are sent to delegates prior to attending, Modules 3 & 4 are being delivered on:

Tuesday 14 <sup>th</sup> June	6:30-9:0 <mark>0</mark> pm
Tuesday 20 <sup>th</sup> Sept	6:30- <mark>9:00pm</mark>
Tuesday 22 <sup>nd</sup> Nov	6:30-9:00pm

At Barmston-mere Fire Station, Nissan Way, Sunderland, SR5 3QY

To book your place on any of the above session's please contact Jen Green on 0191 427 4685 or jengreen@firstcontactclinical.co.uk

If you are interested in organising this training for a specific working group please contact me on the above telephone number/email address to discuss this further.





### **NHS Health Checks Training**

NHS Gateshead, Sunderland and South Tyneside, in conjunction with Health Diagnostics would like to invite you to attend a FREE NHS Health Checks Training day

The training session will cover:

- Measurement and evaluation of all health parameters
- Use of testing equipment
- Referral guidelines
- Care and calibration of equipment
- Entering results into the Health Options Software
- Uploading of results and administration

#### The course will be delivered on the following dates:

Wednesday, 1<sup>st</sup> June 2011 Wednesday, 7<sup>th</sup> September 2011 Wednesday, 9<sup>th</sup> November 2011 9am - 4pm (New attendants) 1.30 – 4pm (Refresher training)

at

Barmston-mere Training Centre, Nissan Way, Sunderland, SR5 3QY

Places are limited and will be booked on a first come first serve basis. To book your place please email Renuka Godawatta on renuka.godawatta@sot<mark>w.nhs.uk</mark>



### Free NHS Health Check



Helping you prevent heart of diabetes and kidney disease

# **NEXT STEPS**

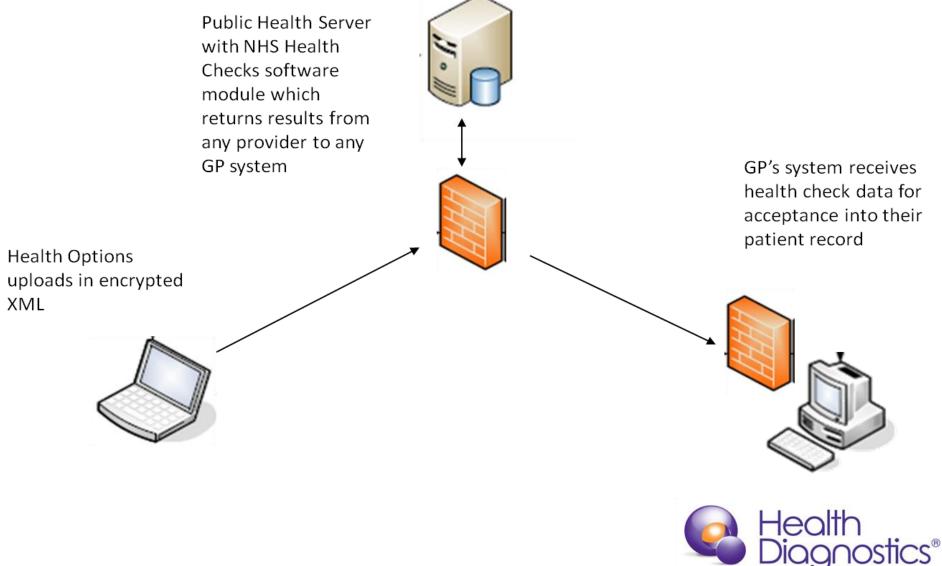


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Continue to promote POCT to practices – work with CCG Incorporation of CV Decide risk communication model Maximise use of PC Dashboard Oata streaming via EMIS web Output of the second community providers

### Returning data to any GP system





# FUTURE



- ONDERING NOTIFIED NOT NOTIFIED NOTIF
- Department of Health targets for 2012/13 are 20% of the eligible population offered an NHS Health Check and 10% of those offered receiving a check.
- Potential changes to NHS Health Check content











