

NORTH YORKSHIRE COUNTY COUNCIL

SCRUTINY OF HEALTH COMMITTEE

15 October 2010

Stroke Awareness and Recognition

1.0 Purpose of Report

- 1.1 This report invites the Scrutiny of Health Committee (SoHC) to discuss the draft report on Stroke Awareness and Recognition from the Member task group that has been undertaking the project.

2.0 Introduction

- 2.1 The draft report is attached as Enclosure 1.
- 2.2 The bulk of the work has been undertaken by a Member task group led by County Councillor Tony Hall, working with:

Scrutiny of Health Committee:

- ❖ County Councillor Shelagh Marshall
- ❖ Richmondshire District Councillor Rob Johnson

Care & Independence Overview & Scrutiny Committee:

- ❖ County Councillor Brian Marshall
- ❖ County Councillor Peter Popple
- ❖ County Councillor John Fox

3.0 Aim of the Project

- 3.1 The aim of this project is to contribute to work being undertaken by the NHS locally to develop improved stroke services against the National Stroke Strategy published in 2007. Representatives from NHS North Yorkshire and York will be attending the meeting to summarise that work and to contribute to discussions on the draft report.

4.0 Recommendations

- 4.1 The Scrutiny of Health Committee considers the task group's draft report and:
- a. suggests any amendments;
 - b. agrees that the final version should be circulated to NHS North Yorkshire and York and the three cardiovascular networks in the County; and
 - c. invites NHS NY&Y to respond formally to the Committee indicating how the report will be used to inform work on Stroke pathways across the County.

HUGH WILLIAMSON, HEAD OF SCRUTINY & CORPORATE PERFORMANCE
COUNTY HALL, NORTHALLERTON,

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30 September 2010

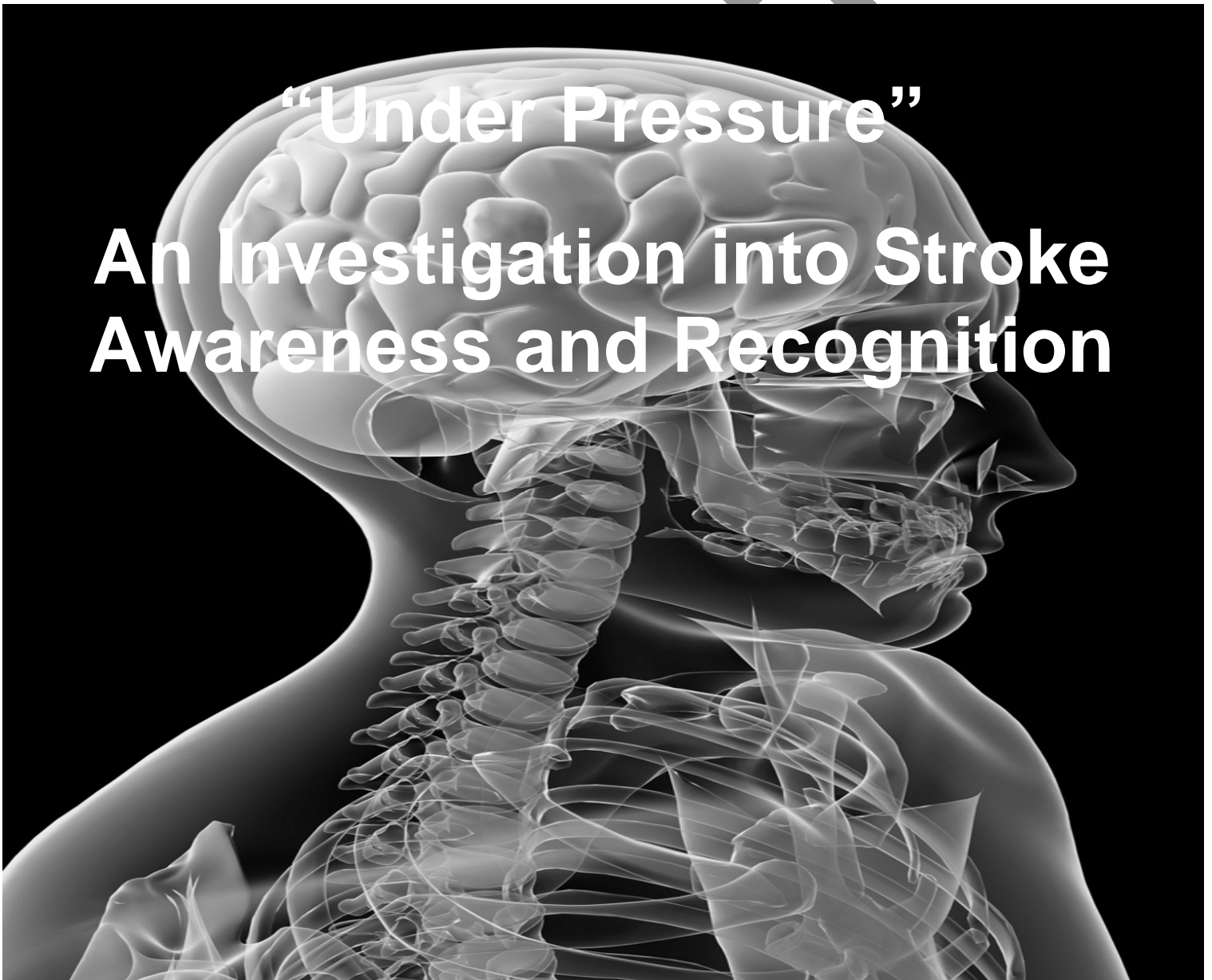
Background Documents: None

North Yorkshire County Council

Scrutiny of Health Committee and Care and Independence Overview and Scrutiny Committee

“Under Pressure”

**An Investigation into Stroke
Awareness and Recognition**



October 2010

DRAFT

“Under Pressure”

.....Pressure pushing down on me
Pressing down on you no man ask for
Under pressure that brings a building down
Splits a family in two
Puts people on streets.....

.....It's the terror of knowing
What the world is about
Watching some good friends
Screaming 'Let me out'
Pray tomorrow gets me higher.....

Can't we give ourselves one more chance?

Queen / David Bowie (1981)

Chairman's Foreword

I am pleased to present the task group's report on Stroke Awareness and Recognition.

In 2007 the Department of Health published its National Stroke Strategy. In 2009 as part of its involvement in the Hambleton and Richmondshire Strategic review the Scrutiny of Health Committee became aware of work taking place in North Yorkshire to develop stroke services using the National Strategy as a template. Whilst very much from a layman's perspective the objective of this investigation is to contribute to that work.

The work has taken us along a steep learning curve but we now understand the importance of healthy lifestyles and the problems created by high blood pressure. We now understand that a stroke occurs when blood supply to part of the brain is cut off and is in fact a "brain attack", the different types of stroke and terms such as atrial fibrillation and transient ischaemic attacks. Whilst there are things that we cannot change which make us susceptible to strokes such as age, gender, or family history there is much we can do to reduce the risk particularly around lifestyles. I really must thank the Stroke Association for their assistance throughout the project in terms of providing background information, training and facilitating our visits to stroke survivors in their own homes. Special thanks must go to the stroke survivors for allowing us to do this.

We have also met with a wide range of colleagues in the NHS to gain an understanding of what is happening locally to improve stroke pathways.

Key to our work and upon which the bulk of our conclusions are based have been the survey conducted through the County Council's citizens panel, analysis of Quality and Outcomes Framework for stroke and meetings with stroke survivors and their carers. As elected members we are very much laymen but we have tried to maintain an evidence based approach to our work.

Making sure that information and advice is available to the public on the importance of healthy lifestyles and what to do if a stroke occurs are key elements of the National Strategy and should also be local priorities. I hope that our report provides further impetus and stimulates debate on what can be done to increase stroke awareness and recognition and for this to be a key part of work to improve stroke pathways – a care pathway which does not start with blue lights and sirens but rather in the care we take in our everyday lives.

We have also found that once people are "in the system", perhaps due to a long term condition, factors which put them at risk of having a stroke such as high blood pressure or high cholesterol will be monitored regularly and they will be receiving appropriate medication. But these conditions are undetectable so society at large needs to be much more proactive in identifying people with this condition - that includes a concerted effort from individuals themselves, GPs and employers.

I firmly believe that by doing more of this type of investigation we can help to promote healthy lifestyles and reduce the need for people to be admitted to hospital. I'm sure we would all agree that no one actually likes going into hospital, NHS budgets are getting tighter and somehow we need to find funds to make sure we do not miss out on the fantastic developments in modern healthcare.

Whilst the primary objective is to influence commissioners I also feel that this type of project helps members to build up new networks and ensure that individual service users have a voice.

I hope readers of this report will greet its conclusions in the spirit they are intended and agree that the report itself will help to get people thinking about healthy lifestyles, controlling their blood pressure and knowing what to do in an emergency. Our conclusions around the need for healthy lifestyles are just as relevant to coronary heart disease and cancer so I am all the more confident our report can make a difference to people's health.

So my final message is:

- ❖ **Eat healthily**
- ❖ **Reduce alcohol consumption**
- ❖ **Exercise regularly**
- ❖ **Stop Smoking**

County Councillor Tony Hall
Task Group Chairman

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WHEN
STROKE STRIKES,
ACT **F.A.S.T.**



NHS

FACE.

HAS THEIR FACE
FALLEN ON ONE SIDE?
CAN THEY SMILE?



ARMS.

CAN THEY RAISE
BOTH ARMS AND
KEEP THEM THERE?



SPEECH.

IS THEIR
SPEECH
SLURRED?



TIME.

TIME
TO CALL **999**

IF YOU SEE ANY SINGLE
ONE OF THESE SIGNS

nhs.uk/actfast

Section 1: Introduction

1.0 Context

National Stroke Strategy

- 1.1 A National Stroke Strategy was published in 2007 and provides much of the national context to this investigation. The Strategy contains four chapters each of which sets out a range of quality markers of good practice. The scope of this investigation matches issues covered in Chapter 1 – *Everyone's challenge: raising awareness and informing and involving*. The quality markers under this theme and which have guided work the task group's work are:

Quality Marker 1: Awareness raising

- Members of the public and health and care staff are able to recognise and identify the main symptoms of stroke and know it needs to be treated as an emergency.

Quality Marker 2: Managing risk

- Those at risk of stroke and those who have had a stroke are assessed for and given information about risk factors and lifestyle management issues (exercise, smoking, diet, weight and alcohol), and are advised and supported in possible strategies to modify their lifestyle and risk factors.
- Risk factors, including hypertension, obesity, high cholesterol, atrial fibrillation (irregular heartbeats) and diabetes, are managed according to clinical guidelines, and appropriate action is taken to reduce overall vascular risk.

Quality Marker 3: Information, advice and support

- People who have had a stroke, and their relatives and carers, have access to practical advice, emotional support, advocacy and information throughout the care pathway and lifelong.

Quality Marker 4: Involving individuals in developing services

- People who have had a stroke and their carers are meaningfully involved in the planning, development, delivery and monitoring of services. People are regularly informed about how their views have influenced services.

National Face-Arm-Speech Test (FAST) Campaign

- 1.2 The hard hitting Act F.A.S.T. campaign launched in February 2009 which depicts a fire raging inside someone's head has had a big impact on improving stroke awareness and recognition and to encourage people to call 999 as soon as possible.

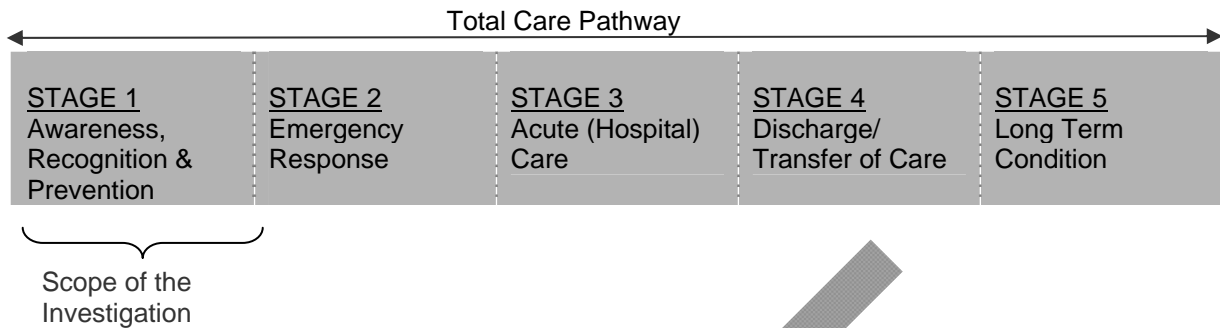
- 1.3 FAST uses three simple checks can help us recognise whether someone has had a stroke or TIA:
- F Facial weakness: Can the person smile? Has their mouth or an eye drooped?**
 - A Arm weakness: Can the person raise both arms?**
 - S Speech problems: Can the person speak clearly and understand what you say?**
 - T Time to call 999 immediately if you see one of thee symptoms.**
- 1.4 This approach is used by paramedics to diagnose stroke prior to a person being admitted to hospital. By diagnosing the possibility of stroke before reaching hospital, it is possible for appropriate referral to a stroke unit to be made as quickly as possible.
- 1.5 If the person has failed any one of these tests, a 999 call is essential. Stroke is a medical emergency and by calling 999 people reach hospital quickly and receive the early treatment they need.

2.0 Scope and Objectives of the Review

2.1 As part of the Scrutiny of Health Committee's (SoHC's) involvement in the Strategic Review in the Hambleton and Richmondshire area during 2009 it was brought to Members' attention that NHS North Yorkshire and York (NHS NY&Y) was working on a local Stroke Strategy*. Hearing of this and being aware of the National FAST campaign in the media the Scrutiny of Health Committee and the Care and Independence Overview and Scrutiny Committee agreed to set up a joint task group to examine stroke awareness and recognition with a view complementing this emerging local Strategy.

*It is acknowledged however that during the course of the Committee's work events have moved on somewhat and the NHS is taking a slightly different route in developing stroke services. NHS Yorkshire and the Humber SHA, working with the three cardiovascular networks covering North Yorkshire; using the National Strategy as a template, is leading a process under which commissioners are 'signing up' to a Quality Assurance Framework for Stroke. As part of this process commissioners are required to produce local action plans.

2.2 The intention of this report is provide to a health check from a layman's perspective of what is happening in North Yorkshire to ensure that members of the public and health and social care staff are aware of strokes and are able to recognise the symptoms when a stroke or TIA occurs. In terms of a care pathway the project has only focused primarily on the first stage:



2.3 Under Stage 1 the review has explored:

- ❖ Public understanding & knowledge of stroke
- ❖ Understanding impact of lifestyle
- ❖ The public being able to recognise the symptoms and knowing what to do in an emergency
- ❖ How people who are at risk of having a stroke are identified.

Under stage 2 of the pathway above the review has explored:

- ❖ How ambulance crews and hospital staff recognise they are dealing with a stroke situation.

2.4 It is also hoped that the very process of undertaking this project - by speaking to people about stroke and the publishing this report, will promote stroke awareness - thus serving a useful purpose in its own right and quite apart from any conclusions which report reaches.

3.0 Methodology

Task Group

3.1 Whilst the whole of the SoHC was involved in the launch of this project and in some of the early engagement with representatives from the Stroke Association the bulk of the research and consultation has been undertaken by a task group of Members drawn from the SoHC and the Care and Independence Overview who have examined stroke awareness and recognition. The group comprised:

Scrutiny of Health Committee:

- ❖ County Cllr Shelagh Marshall
- ❖ Richmondshire District Councillor Rob Johnson

Care and Independence Overview and Scrutiny Committee:

- ❖ County Cllr Tony Hall
- ❖ County Cllr Peter Popple
- ❖ County Cllr Brian Marshall

❖ County Cllr John Fox

Fact Finding – Information Gathering

3.2 A wide range of organisations and groups have contributed to the investigation by helping the Task Group scope its work and to provide relevant background information.

Primary Consultation

3.3 The County Council's citizens panel was used to canvass the views and responses of members of the public to a range of the questions. The base data from the panel is shown in Appendix 1.

3.4 Task group members also accompanied case workers from the Stroke Association to visit a small number of stroke survivors and their carers in their own homes to explore a range of issues, including if they felt there were things they know now that they wish they had known earlier on how to avoid a stroke or what to do if one stroke occurs.

Desk Research

3.5 The main documents which have informed this investigation are:

- ❖ Position statement from NHS NY&Y – shown in Appendix 2.
- ❖ North Yorkshire Joint Strategic Needs Assessment
- ❖ Reference to national initiatives and policy guidance, such as Department of Health National Stroke Strategy 2007, National Audit Office Report 2005
- ❖ National Carers Strategy
- ❖ NICE Public Health Guidance - Behaviour change
- ❖ Royal College of Physicians National clinical guideline for stroke, 3rd edition, July 2008
- ❖ "Our Health, Our Care, Our Say"

Section 2: Background – Facts about Stroke and Blood Pressure

4.0 What is a Stroke?

4.1 A stroke is a brain attack and occurs when blood supply to the brain.

4.2 The most common type of stroke (over 80% of cases) is caused by a blockage. This is called an ischaemic stroke, which happens when a clot blocks an artery that carries blood to the brain.

4.3 The second type of stroke (up to 20% of cases) is caused by a bleed, when a blood vessel bursts, causing bleeding (haemorrhage) into the brain. This is called a

haemorrhagic stroke.

4.4 Every year, an estimated 150,000 people in the UK have a stroke. Most people affected are over 65, but anyone can have a stroke, including children and even babies. Around 1000 people under 30 have a stroke each year.

4.5 A stroke is the third most common cause of death in the UK. It is also the single most common cause of severe disability. More than 250,000 people in the UK live with disabilities caused by a stroke.

5.0 Recognising the Symptoms

5.1 A stroke has an immediate effect on how both the body and mind work. Typical symptoms include:

- ❖ Numbness, weakness or paralysis on one side of the body;
- ❖ Slurred speech or difficulty finding words or understanding speech
- ❖ blurred vision or loss of sight; and
- ❖ confusion or unsteadiness.

6.0 Transient Ischaemic Attack (mini-stroke)

6.1 A transient ischaemic attack (TIA), often called a mini-stroke, happens when the brain's blood supply is interrupted for a very brief time.

6.2 The symptoms are very similar to a stroke (such as weakness on one side of the body, loss of sight and slurred speech) but they are temporary - lasting a few minutes or hours, and then disappearing completely within 24 hours.

6.3 In a TIA, the affected part of the brain is without oxygen for just a few minutes. A TIA is a sign that part of the brain is not getting enough blood and that there is a risk of a more serious stroke in the future. TIAs should not be ignored and people who suspect they have had one should seek medical help as soon as they can.

7.0 Risk Factors and Susceptibility to Stroke

7.1 High blood pressure (hypertension) is the most common cause of stroke.

7.2 A stroke can happen with no obvious cause to people of any age - but there are factors known to increase the likelihood of it happening. Some of these factors are things that can't be changed. Other risks may be reduced by lifestyle changes or medication.

7.3 What cannot be changed?

Sex

In people aged under 75, more men have strokes than women.

Age

Strokes are more common in people over 55, and the risk continues to rise with age. Arteries harden and become 'furred up' by a build-up of cholesterol and other debris (atherosclerosis) over many years.

Family history

Having a close relative who has had a stroke increases the risk, possibly because conditions such as high blood pressure and diabetes tend to run in families.

Ethnic background

People from Asian, African and African–Caribbean communities are at greater risk of having a stroke. Medical conditions like diabetes and high blood pressure are also more common in people from these communities.

7.4 What we can do to help ourselves to control our blood pressure:

Diet

A diet high in fatty foods contributes towards the build up of cholesterol in the blood and the arteries to narrow. Too much salt can lead to high blood pressure. Being very overweight (obese) puts extra strain on the heart.

Reduce alcohol consumption

Regular heavy drinking raises blood pressure. Binge drinking (drinking a lot of alcohol in a short time) can cause a blood vessel in the brain to burst.

Exercise

An inactive lifestyle can contribute to furring of the arteries. Regular exercise helps keep the heart and bloodstream healthy.

Stop Smoking

Smoking causes higher blood pressure and makes the blood thicker. The chemicals in tobacco smoke are absorbed into the body, damaging blood vessel walls. Smoking doubles the risk of having a stroke.

7.5 National Stroke Strategy estimated that around 20,000 strokes a year nationally could be avoided through preventative work on high blood pressure, irregular heart beats, smoking cessation and wider use of statins.

8.0 Atrial Fibrillation

8.1 Atrial fibrillation is a heart condition in which the upper left side of the heart beats out

of rhythm with the other three chambers. It increases the risk of a blood clot forming inside the heart, which can travel to the brain and cause a TIA or stroke.

9.0 The Stroke Association

9.1 The Stroke Association is the only UK charity solely concerned with helping everyone affected by stroke. Its vision “is to have a world where there are fewer strokes and all those touched by stroke get the help they need”.

9.2 The Stroke Association is a UK-wide organisation with offices in Scotland, Wales, Northern Ireland and the nine English regions. Its contact details are:

Website www.stroke.org.uk

Registered Office: The Stroke Association
Stroke House
240 City Road
London
EC1V 2PR

Email: info@stroke.org.uk

Textphone: 020 7251 9096

Stroke Helpline: 0845 3033 100

Section 3: Results of Investigation – What we have found

10.0 Citizens Panel Results

10.1 During April 2010 a questionnaire canvassing responses to a range of questions on stroke awareness and recognition was sent out. The summary below is based on 1,518 completed questionnaires.

10.2 Stroke Awareness:

- ❖ One fifth (20%) of all respondents either work for or have worked in the past for ‘the NHS or another organisation which provides healthcare’; 80% of respondents do not or have not worked for healthcare organisations.
- ❖ When asked about their personal experience in relation to strokes or Transient Ischaemic Attacks (TIAs), 3% of all respondents said that they themselves have

had a stroke or TIA, and half (50%) of respondents said that they 'know a family member or close friend who has had a stroke or TIA'. 46% of all respondents said 'I do not have any experience of stroke personally or through family or close friends', and 2% of respondents said 'I would prefer not to say'.

10.3 Preventing Strokes

- ❖ Respondents were asked to indicate which of a list of terms they think describes someone who is at increased risk of having a stroke. The most frequently mentioned term was 'high blood pressure' (94%), whilst more than four fifths of all respondents thought that 'smoker' (88%), 'family history of stroke' (84%), and 'overweight' (82%) were terms describing someone at increased risk.
- ❖ Three-quarters (74%) of all respondents thought that 'inactive' people are at increased risk of having a stroke, whilst around two-thirds said that 'high consumers of alcohol' (69%) and those with a 'poor diet' (63%) are at increased risk, and 54% felt that the 'elderly' are at increased risk. Only small minorities of respondents considered that 'males' (14%), 'females' (6%), people of 'working age' (5%), 'sporty' people (2%), and 'short-sighted' people (0%) are at increased risk of having a stroke.
- ❖ When asked who they would say has the main responsibility for ensuring a person's risk of having a stroke is minimised, the great majority (96%) of all respondents said it is the 'individuals themselves', whilst nearly two-thirds (63%) said that 'GPs' are among those having the main responsibility.
- ❖ Substantial minorities of respondents said that 'NHS Organisations' (38%), and 'family members, e.g. spouse' (37%) are among those having the main responsibility for minimising a person's risk of having a stroke, whilst a fifth (19%) referred to 'food producers and retailers', 8% to 'friends', and 7% to 'employers'.
- ❖ Respondents were asked about the effectiveness of five different possible measures for helping to prevent strokes. Each of the measures were thought to be 'very effective' or 'quite effective' by the large majority (84%+) of all respondents; with 'GPs identifying and advising people who may be at increased risk' (95% 'very/ fairly effective'), and 'targeting information at individuals at the highest risk' (90%) being regarded as the most effective options.
- ❖ A total of 86% of all respondents thought that 'information aimed at groups in the community who may be at higher risk' would be a 'very effective' or 'quite effective' measure in helping to prevent strokes; whilst slightly smaller majorities referred to 'helping people at high risk to get support, e.g. classes, activities' (84%); and to 'publicity campaigns telling the general public how to reduce their risk' (84%). The latter measure was the one which was felt to be 'not very effective' or 'not at all effective' by the largest proportion of respondents - total of

15%.

10.4 Stroke Symptoms

- ❖ Respondents were asked in an open-ended question to list three symptoms they would look for to tell them if someone was having a stroke. The principle responses related to difficulties with 'speech', particularly 'slurring' of words, (76% of all respondents), and to 'facial changes (e.g. drooping on one side/ person being unable to smile)' (70%). Nearly half (45%) of all respondents said that someone having a stroke would have difficulty moving their 'arms/ limbs' or 'hands (unable to grip)' (particularly holding arms above their head), whilst 13% of respondents mentioned the 'one-sided effects - paralysis/ loss of function' that may be observed.
- ❖ Four fifths (80%) of all respondents said that if they thought they were having a stroke, the first action they would take would be to 'call 999' (this is the 'correct' answer as provided to NWA by the Council). Fewer than one-in-ten (8%) of all respondents said that their first action would be to call their 'GP', whilst 4% said they would 'go to A&E', 3% that they would 'call NHS Direct', 3% would 'call family or a friend', and 1% would 'wait 1-2 hours'.
- ❖ The major group of all respondents said that if they thought they had had a stroke, but the effects had passed after an hour or two, then the first action they would take would be to call their GP (44%), (this is the 'correct' answer, provided by the Council). However, nearly a quarter (23%) of respondents said they would 'go to A & E', 14% said they would 'call 999', and 13% would 'call NHS Direct'. Small minorities of respondents said they would 'call family or a friend' (2%), 'look for advice on the Internet' (1%), 'wait another 1-2 hours' (1%), or take some 'other' action (1%).
- ❖ Respondents were asked in respect of six statements about strokes whether they think the statements are true or false; in each case the majority of all respondents gave the correct answer. The great majority of all respondents correctly think that 'a stroke can happen at any age' (95% 'true'); that 'emergency treatment reduces incidences of death and permanent disability' (95% 'true'); and that 'specialised care makes a difference to improvement after stroke' (95% 'true').
- ❖ Around three-quarters of all respondents correctly indicated that the statements 'recovery from stroke is a matter of luck' (74% 'false'), and 'disabilities caused by stroke are unlikely to respond to rehabilitation therapy' (79% 'false') are 'false', whilst 72% of respondents correctly indicated that the statement 'people who have had a stroke are more likely to have another stroke' is 'true'.

10.5 Information about Strokes

- ❖ Around three-quarters of all respondents said they would be 'very interested' or 'quite interested' in receiving information about 'what to do if seeing a stroke'

(77% 'very/ fairly interested), 'how to recognise symptoms of a stroke' (75%), 'steps you can take to reduce the risk of stroke' (72%), and 'effects of stroke and care available' (71%).

- ❖ Respondents were asked about effective means of communicating information about strokes. Of the eleven ways of communicating information listed on the questionnaire, the most effective were thought to be via 'GP/ Practice Nurse' (93% 'very/fairly effective') and 'TV adverts or news items' (89%). Three-quarters or more of all respondents felt that communicating information about strokes through 'people with stroke experience' (81%), 'leaflets at GP surgeries' (76%), and 'community health staff' (75%) would be 'very effective' or 'fairly effective', whilst around two-thirds referred to 'the NHS Direct website' (66%), 'leaflets at pharmacies' (64%), and 'local radio' (63%).
- ❖ Opinions were more divided as to whether the 'Internet (in general)' (57% 'very/ fairly effective'), 'local newspapers' (55%), and 'leaflets in public places' (54%) would be effective means for communicating information about strokes.
- ❖ Finally, respondents were asked to select the three methods for communicating information about strokes which would be most useful to them. The top three methods among all respondents were 'GP/ Practice Nurse' (62%), 'TV adverts or news items' (59%), and 'leaflets at GP Surgery' (38%).
- ❖ A fifth of respondents said that 'people with stroke experience' (21%), and the 'Internet' (19%) would be among their top three methods for communicating information about strokes, whilst one-in-six referred to 'local newspapers' (16%), 'leaflets in public places' (16%), and 'the NHS Direct website' (16%). Fewer respondents referred to 'leaflets in pharmacies' (12%), 'local radio' (12%), and 'community health staff' (8%).

10.6 Observations/Comments:

Knowledge of what to do if a stroke occurs

- a. There is a good level of awareness of the symptoms to look for if it is suspected that someone is having a stroke.
- b. Whilst 80% of people know what to do (call 999) when a stroke is occurring this does mean that 20% would not automatically do this which is a significant figure.

Knowledge of the impact of lifestyle

- c. There is a good level of awareness of the fact that regular exercise, a healthy diet, not smoking and reducing alcohol consumption can significantly reduce our susceptibility to strokes.

- d. 96% of people thought that individuals themselves have the main responsibility for reducing a person's risk of having a stroke but also recognised was the importance of GPs in helping people to minimise those risks.

Knowledge and management of the risk factors

- e. High blood pressure is widely recognised as a factor which puts people at risk of having a stroke.

11.0 Quality and Outcomes Framework

11.1 The Quality and Outcomes Framework (QOF) is a voluntary annual reward and incentive programme for all GP surgeries in England, detailing practice achievement results. It gives an indication of the overall achievement of a surgery through a points system.

11.2 QOF contains four main components, known as domains. Each domain consists of a set of indicators, against which practices score points according to their level of achievement.

11.3 The three domains relevant to this investigation in terms of terms providing an indication of the extent to which people who are at risk of having a stroke are identified and monitored in primary care are:

- ❖ Atrial fibrillation
- ❖ Hypertension
- ❖ Stroke or Transient Ischaemic Attack

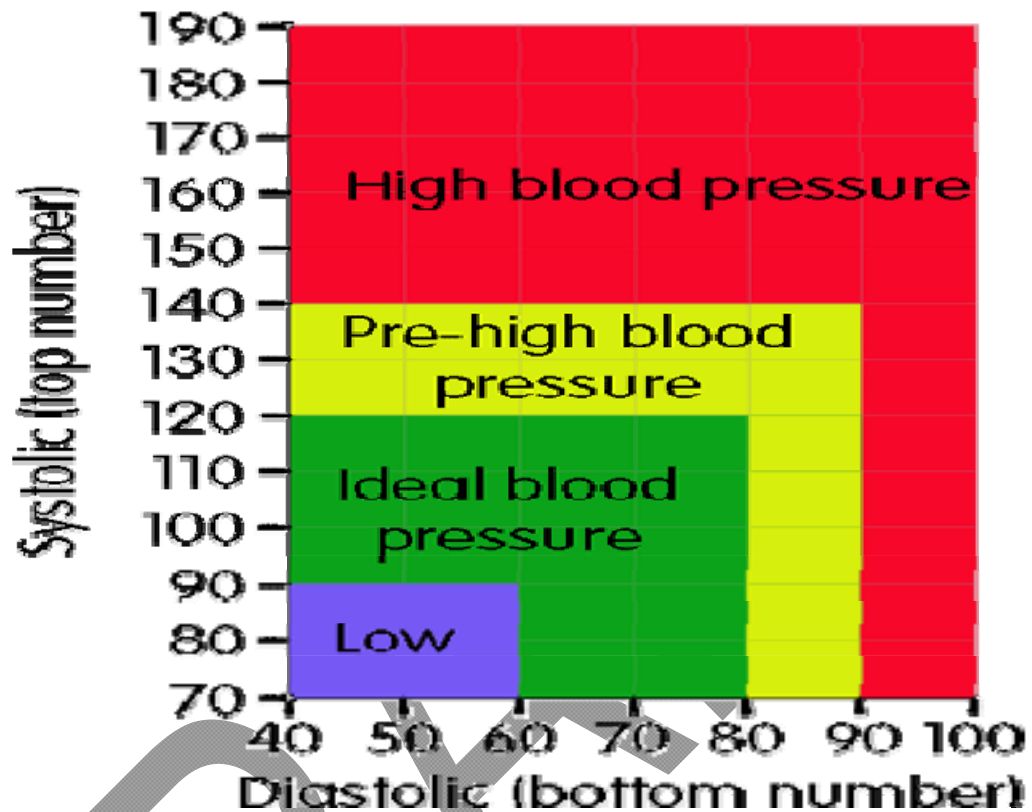
11.4 The results for GPs in the North Yorkshire are summarised in APPENDIX 2.

11.5 Observations/Comments:

Knowledge and management of the risk factors

- a. People who are already known to their GPs due to their long term condition such as diabetes, high blood pressure, obesity or who have a history of stroke and TIAs are monitored closely.
- b. The task group feels there could, however, be a significant number of people whilst being registered with a GP, for whom these conditions have not been detected.
- c. What about the people who are not registered with a GP?

Blood pressure chart for adults



The first (or top) number is your systolic blood pressure. It is the highest level your blood pressure reaches when your heart beats.

The second (or bottom) number is your diastolic blood pressure. It is the lowest level your blood pressure reaches as your heart relaxes between beats.

So:

if your top number is 140 or more - then you may have high blood pressure, regardless of your bottom number.

- if your bottom number is 90 or more - then you may have high blood pressure, regardless your top number.
- if your top number is 90 or less - then you may have low blood pressure, regardless of your bottom number.

if your bottom number is 60 or less - then you may have low blood pressure, regardless of your top number.

12.0 Blood Pressure Association

12.1 The Blood Pressure Association is the UK charity dedicated to lowering the nation's blood pressure. Its vision is that everyone will know their blood pressure numbers, in the same way that we know our height or weight, and take steps to keep them healthy both now and in the future.

12.2 Know your Numbers! Week, the nation's largest annual blood pressure testing and awareness event takes place in the second week of September each year and provides free checks for around 250,000 adults across the UK. Since its launch in 2001, Know your Numbers! Week has ensured more than 1.5million people have had their blood pressure checked so that they know their blood pressure numbers in the same way as their height and weight. As part of the event hundreds of nationwide organisations sign up to provide free blood pressure tests and information at venues located throughout the community including pharmacies, workplaces, GP surgeries, hospitals, health clubs, leisure centres, shopping centres and supermarkets.

12.3 Know your Numbers! Week 2010 took place from 13 to 19 of September.

12.4 Observations/Comments:

Knowledge and management of the risk factors

- a. Most people do not know their blood pressure and as mentioned in paragraph 11.5 above even though people may be registered with a GP, frequently, their high blood pressure only comes to light as a result of another problem.
- b. The task group supports, in principle, the Association's vision that we should all know our blood pressure in the same way we are aware of our height and weight.
- c. An annual activity in the local stroke strategy should be to publicise initiatives such as the Know your Numbers! Week and the list of venues where people can have their blood pressure taken.

13.0 Cholesterol and Statins

13.1 Cholesterol is a waxy substance that is produced naturally in our liver and other organs. We also absorb cholesterol from eating foods such as red meat, high fat cheese, butter, eggs and liver.

13.2 Our bodies need a certain amount of cholesterol to make cell membranes, insulate nerves and to produce hormones but too much cholesterol can build up fatty deposits in the walls of the arteries.

13.3 Statins reduce the amount of cholesterol that our cells make, forcing them to instead gather cholesterol from the blood stream, and thereby reducing our blood cholesterol level.

13.4 Observations/Comments:

Knowledge and management of the risk factors

- a. As with high blood pressure high levels of cholesterol can go undetected until there is a problem.

14.0 NHS Health Checks

14.1 NHS Health Checks are available to for people aged 40-74, who haven't already been diagnosed with high blood pressure, diabetes, chronic kidney disease, heart disease or have had a heart attack or stroke. The will be invited for a check once every five years and will go a long way to addressing undetected high levels of blood pressure and cholesterol discussed above.

14.2 At the check peoples' risk of heart disease, stroke, kidney disease and diabetes will be assessed, and they will be offered personalised advice and support to help lower that risk.

14.3 The introduction of NHS Health Check across England started in 2009. But full implementation of the programme will take some time and is not expected until 2012/13.

14.4 Observations/Comments:

Knowledge and management of the risk factors

- a. The roll out of health checks by 2012/13 across North Yorkshire should be a key element of plans to improve stroke pathways.

Section 4: Making Awareness and Recognition Key Parts of a Stroke Pathway

15.0 Suggested Priorities

15.1 The task group fully supports work that is taking place to improve stroke pathways across the County and in terms of this review, particularly, the approach of thinking more broadly than just services that are commissioned from the ambulance service and the acute trusts. This is consistent with the national strategy and covers the whole of the patient pathway, starting with the individual and it should acknowledge the importance of building up awareness of the risk factors and knowledge of what to do if a stroke occurs.

15.2 So we offer the following comments and thoughts as a way of contributing to work that is being undertaken locally to improve stroke pathways:

Knowledge of the impact of lifestyle

- a) have a strong emphasis on public health and promote healthy lifestyle choices such as not smoking, eating healthily, controlling alcohol consumption and taking regular exercise.

Knowledge and management of the risk factors

- b) include measures under which there is a more proactive approach towards identifying people with high blood pressure, Atrial Fibrillation or high cholesterol so they can start to receive appropriate medication earlier.
- c) publicise the annual Know Your Numbers week sponsored the Blood Pressure Association.
- d) take forward the national 'FAST' campaign through annual media releases and ensuring that literature is available at GP surgeries, care and nursing homes, day centres across the county.

Knowledge of what to do if a stroke occurs

- e) support the training of care workers, GP receptionists, school nurses etc in how to recognise stroke symptoms and the importance of calling 999.
- f) how do help people recognise TIAs are not to just discount them as a "funny turn"? TIAs - are a "grey" area in terms of recognition and taking the appropriate action. Whilst the symptoms pass very quickly, ie. possibly before a 999 call has been made, a local strategy should support measures to emphasise the

importance of people contacting their GP/out of hours doctor for possible referral for urgent medical assessment in a local stroke clinic or equivalent.

Final thought:

***CAN WE REDUCE THE RISK OF HAVING A
STROKE?***

YES WE CAN.

IT'S ABOUT CHOICES AND CHANCES!

DRAFT

Citizens Panel – Base Data

Stroke Awareness

As part of the implementation of the national stroke strategy in North Yorkshire we would like to find out how aware Panel members are on issues relating to strokes and Transient Ischaemic Attacks. (Note: A Transient Ischaemic Attack (TIA) is a transient stroke that lasts only a few minutes, and is sometimes referred to as a “mini stroke”). In the following questions where we refer to ‘stroke’ we mean ‘stroke or Transient Ischaemic Attack’.

About You

Q23 Do you work for (or have worked for in the past) the NHS or another organisation which provides healthcare? (Please tick one box)

Yes 20% No 80%

Q24 What is your personal experience? (Please tick all that apply)

I have had a stroke or Transient Ischaemic Attack (TIA) 3%
 I know a family member or close friend who has had a stroke or Transient Ischaemic Attack 50%
 I do not have any experience of stroke personally or through family or close friends..... 46%
 I'd prefer not to say 2%

Preventing Strokes

Q25 Which of the following terms do you think describes someone who is at increased risk of having a stroke? (Please tick all that apply)

High blood pressure 94%	High consumer of alcohol 69%
Smoker 88%	Elderly 54%
Inactive 74%	Male 14%
Poor diet 63%	Working age 5%
Female 6%	Short-sighted 0%
Sporty 2%	Don't know 1%
Overweight 82%	None of these 0%
Family history of stroke 84%	

Q26 Who would you say has the main responsibility for ensuring a person's risk of having a stroke is minimised? (Please tick all that apply)

GP's 63%	NHS Organisations 38%
Individuals themselves 96%	Family members, e.g. spouse 37%
Friends 8%	Other (Please specify below) 1%

Food producers and retailers.....	19%	Don't know	1%
Employers	7%		

Q27 How effective do you think the following measures would be in helping to prevent strokes?
(Please tick one box for each measure)

	<u>Very effective</u>	<u>Quite effective</u>	<u>Not very effective</u>	<u>Not at all effective</u>	<u>Don't know</u>
a) Publicity campaigns telling the general public how to reduce their risk	29%	55%	14%	1%	1%
b) Information aimed at groups in the community who may be at higher risk.	29%	57%	11%	1%	3%
c) Targeting information at individuals at the highest risk	47%	43%	6%	1%	3%
d) GPs identifying and advising people who may be at increased risk	62%	33%	2%	0%	1%
e) Helping people at high risk to get support e.g. classes, activities	39%	45%	11%	1%	3%

Stroke Symptoms

Q28 Please list three symptoms you would look for to tell you if someone was having a stroke. Please tick "Don't know" if you can't think of any.

Speech (slurred)	76%	Unsteady/uncoordinated	3%
Facial changes	70%	Vision	3%
Arms/limbs/hands (unable to move)	45%	Weakness/numbness (general)	3%
One sided effects	13%	Breathing	2%
State of consciousness/faint/dizzy	7%	Unresponsive.....	1%
General loss of mobility/movement	7%	Sweating	1%
Pain	7%	Pallor	1%
Confused/disoriented/memory loss	6%	Vomiting.....	0%
Paralysis (general)	5%	Other.....	5%
Headaches	4%		
Collapse/fall.....	4%	Don't know	5%

Q29 If you thought you were having a stroke, what action would you take first?

Wait 1-2 hours	1%	Call family/ friend	3%
Wait 1-2 days		Go to A & E.....	4%
Call GP.....	8%	Other <i>(Please specify below)</i>	0%

Call NHS Direct	3%	
Call 999	80%	
Look for advice on the Internet	0%	Don't know
		2%

Q30 If you thought you had had a stroke, but the effects had passed after an hour or two, what action would you then take? *(Please tick one box only)*

Wait another 1-2 hours	1%	Call family/ friend	2%
Wait 1-2 days	0%	Go to A & E	23%
Call GP	44%	Other <i>(Please specify below)</i>	1%
Call NHS Direct	13%		
Call 999	14%		
Look for advice on the Internet	1%	Don't know	2%

Q31 Do you think the following statements about strokes are true or false. *(Please tick one box for each statement)*

	<u>True</u>	<u>False</u>	<u>Don't know</u>
a) A stroke can happen at any age	95%	2%	3%
b) Recovery from stroke is a matter of luck	14%	74%	13%
c) Emergency treatment reduces incidences of death and permanent disability	95%	2%	3%
d) People who have had a stroke are more likely to have another stroke	72%	9%	18%
e) Specialised care makes a difference to improvement after a stroke ...	95%	1%	4%
f) Disabilities caused by stroke are unlikely to respond to rehabilitation therapy (therapy which aims to help patients regain skills they have lost)	10%	79%	11%

Information about Strokes

Q32 How interested would you be in receiving information about ...? *(Please tick one box on each line)*

	<u>Not at all interested</u>	<u>Not very interested</u>	<u>Quite interested</u>	<u>Very interested</u>
a) Steps you can take to reduce risk of stroke	14%	14%	41%	31%
b) How to recognise symptoms of a stroke	13%	12%	41%	34%

c)	What to do if seeing a stroke	12%	11%	39%	38%
d)	Effects of stroke and care available.....	12%	17%	41%	30%

Q33 How effective do you think the following would be for communicating information about strokes?
(Please tick one box on each line)

	<u>Very effective</u>	<u>Quite effective</u>	<u>Not very effective</u>	<u>Not at all effective</u>	<u>Don't know</u>
1) GP/ Practice Nurse	56%	37%	5%	1%	1%
2) Leaflets - GP Surgery	27%	49%	20%	2%	2%
3) Leaflets - Pharmacies	19%	45%	30%	3%	2%
4) TV (adverts/ news items)	48%	41%	7%	2%	1%
5) People with stroke experience	34%	47%	11%	3%	4%
6) Community Health Staff	22%	53%	16%	3%	6%
7) Local newspapers.....	15%	40%	34%	7%	3%
8) Leaflets – in public places.....	14%	40%	37%	7%	3%
9) Internet	15%	42%	30%	7%	7%
10) Local radio.....	16%	47%	26%	7%	5%
11) NHS Direct website.....	21%	45%	20%	6%	7%

Q34 Which three methods for communicating information about strokes would be most useful for you?
Please tick THREE boxes only.

GP/ Practice Nurse.....	62%	Leaflets – in public places.....	16%
Leaflets - GP Surgery	38%	Internet	19%
Leaflets - Pharmacies.....	12%	Local radio	12%
TV (adverts/ news items).....	59%	NHS Direct website	16%
People with stroke experience	21%	Some other method (Please specify).....	2%
Community Health Staff	8%		
Local newspapers	16%	Not sure.....	2%

Implementing the National Stroke Strategy

NHS North Yorkshire and York

September 2010

Briefing for North Yorkshire County Council

Purpose of Document

The purpose of this document is to provide an update on the briefing which was submitted to North Yorkshire and York County Council in October 2009 regarding the implementation of the National Stroke Strategy across North Yorkshire and York.

Development of Local Action Plans to Stroke Quality Assurance Framework

Following Strategic Health Authority wide agreement of OA standards for stroke services, primary care trusts, in partnership with their providers were required to submit jointly agreed action plans which addressed these standards. Submitted action plans included. This process was initiated by Yorkshire and Humberside Strategic Health Authority.

Cardiovascular Network	Locality	NHS Provider	Lead NHS Commissioner
West Yorkshire	Craven	Airedale Foundation Trust	NHS Bradford and Airedale
West Yorkshire	Harrogate	Harrogate District Foundation Trust	NHS North Yorkshire and York
North Yorkshire and North Lincolnshire	York and Selby	York Foundation Trust	NHS North Yorkshire and York
North Yorkshire and North Lincolnshire	Scarborough	Scarborough and North East Yorkshire NHS Trust	NHS North Yorkshire and York

** Whilst the main NHS provider for Hambleton and Richmondshire is South Tees Foundation Trust, this organisation resides within the North East Strategic Health Authority. However, similar local action plans have been developed for Hambleton/ Richmondshire/ Whitby and Esk Valley areas – facilitated by the North of England Cardiovascular Network.*

These action plans have been 'peer reviewed' by neighbouring cardiovascular networks to ensure they are sufficiently robust and deliverable. In common with most primary care trusts, these plans have been 'amber rated'.

Individual 'Confirm and Challenge' meetings have been held with SHA and Cardiovascular Network

representatives with all primary care trusts in the region and revised/updated action plans have been submitted. NHS North Yorkshire and York is awaiting feedback regarding revised action plan.

Summary of Current Position

- The role of telemedicine is being explored to facilitate the delivery of hyperacute stroke services by a provider trusts.
- Development and implementation of plans to provide early supported discharge/ rehabilitation teams in all localities.
- Build on vascular risk check service in Scarborough regarding implications for awareness raising in general population.

DRAFT

Quality and Outcomes Framework

<u>KEY</u>	
ATRIAL FIBRILLATION	AF1: The practice can produce a register of patients with Atrial Fibrillation
	AF2: The percentage of patients with atrial fibrillation who are currently treated with anti-coagulant drug therapy or an anti-platelet drug therapy
	AF3: The percentage of patients with atrial fibrillation diagnosed from 1st April 2008 with ECG or specialist confirmed diagnosis
HYPERTENSION	HT1: The practice can produce a register of patients with established hypertension
	HT2: The percentage of patients with hypertension in whom there is a record of the blood pressure in the previous 9 months
	HT3: The percentage of patients with hypertension in whom the last blood pressure (measured in the previous 9 months) is 150/90 or less
STROKE OR TRANSIENT ISCHAEMIC ATTACKS (TIA)	TIA1: The practice can produce a register of patients with Stroke or TIA
	TIA2: The percentage of patients with TIA or stroke who have a record of blood pressure in the notes in the preceding 15 months
	TIA3: The percentage of patients with a history of TIA or stroke in whom the last blood pressure reading (measured in the previous 15 months) is 150/90 or less
	TIA4: The percentage of patients with TIA or stroke who have a record of total cholesterol in the previous 15 months
	TIA5: The percentage of patients with TIA or stroke whose last measured total cholesterol (measured in the previous 15 months) is 5 mmol/l or less
	TIA6: The percentage of patients with TIA or stroke who have had influenza immunisation in the preceding 1 September to 31 March
	TIA7: The percentage of patients with a stroke shown to be non-haemorrhagic, or a history of TIA, who have a record that an anti-platelet agent (aspirin, clopidogrel, dipyridamole or a combination), or an anti-coagulant is being taken (unless a contraindication or side-effects are recorded)
	TIA8: The percentage of new patients with a stroke or TIA who have been referred for further investigation

GP Practice	ATRIAL FIBRILLATION			HYPERTENSION			STROKE OR TRANSIENT ISCHAEMIC ATTACKS (TIA)							
	AF 1	AF2	AF3	HT1	HT2	HT3	TIA1	TIA2	TIA3	TIA4	TIA5	TIA6	TIA7	TIA8
ABBEY MEDICAL GROUP, TANG HALL LANE SURGERY, 190 TANG HALL LANE, YORK YO10 3RL	✓	99.4%	100.0%	✓	97.0%	76.6%	✓	99.6%	87.6%	94.9%	72.5%	88.2%	98.8%	93.3%
BEECH TREE SURGERY, 68 DONCASTER ROAD, SELBY YO8 9AJ	✓	95.6%	100.0%	✓	92.7%	79.0%	✓	98.3%	93.2%	92.9%	81.7%	89.4%	94.0%	100.0%
BELGRAVE SURGERY, LAWRENCE HOUSE MED CTR, 1 BELGRAVE CRESCENT, SCARBOROUGH YO11 1U	✓	94.7%	91.7%	✓	96.4%	82.1%	✓	94.9%	84.4%	95.9%	76.7%	88.5%	94.9%	100.0%
BENTHAM MEDICAL PRACTICE, THE HEALTH CENTRE, GRASMERE DRIVE, HIGH BENTHAM LA2 7JP	✓	92.9%	100.0%	✓	94.0%	78.7%	✓	98.4%	89.4%	95.9%	84.4%	88.4%	94.0%	90.0%
CHURCH LANE SURGERY, CHURCH LANE, BOROUGHBRIDGE, YORK YO51 9BD	✓	90.0%	96.0%	✓	94.3%	86.3%	✓	99.5%	94.8%	88.4%	72.3%	90.2%	90.5%	75.0%
CROSSHILLS HEALTH CENTRE, HOLME LANE, CROSSHILLS BD20 7LG	✓	95.9%	95.5%	✓	94.3%	80.0%	✓	97.4%	87.9%	95.3%	81.6%	91.5%	97.6%	83.3%
DERWENT PRACTICE, NORTON ROAD, NORTON, MALTON YO17 9RF	✓	93.7%	96.4%	✓	95.2%	84.0%	✓	94.5%	88.5%	94.9%	91.2%	90.4%	95.8%	88.4%
DR A C MURRAY, 89 EAST PARADE, HEWORTH, YORK YO31 7YD	✓	100.0%	100.0%	✓	95.5%	82.9%	✓	100.0%	95.2%	95.1%	75.7%	100.0%	100.0%	80.0%
DR A S C CALDER AND PARTNERS, CLIFTON HEALTH CENTRE, WATER LANE, YORK YO30 6PS	✓	92.9%	100.0%	✓	95.0%	86.9%	✓	98.6%	92.6%	90.4%	76.1%	89.0%	92.9%	88.9%
DR B BLACKLIDGE & PARTNERS, THE HEALTH CENTRE, ROSEHILL, GREAT AYTON TS9 6BL	✓	94.3%	100.0%	✓	91.0%	72.5%	✓	96.2%	82.5%	91.0%	67.1%	86.9%	95.4%	93.3%
THE SURGERY, 54 CHURCH AVENUE, HARROGATE HG1 4HG	✓	93.6%	100.0%	✓	90.4%	78.8%	✓	95.0%	90.3%	91.6%	98.6%	86.8%	94.9%	100.0%

GP Practice	ATRIAL FIBRILLATION			HYPERTENSION			STROKE OR TRANSIENT ISCHAEMIC ATTACKS (TIA)							
	AF 1	AF2	AF3	HT1	HT2	HT3	TIA1	TIA2	TIA3	TIA4	TIA5	TIA6	TIA7	TIA8
DR BURTON MCEVOY MCEVOY & WEBB, THE SURGERY, PARK STREET, RIPON HG4 2BE	✓	93.1%	92.3%	✓	95.7%	83.2%	✓	100.0%	90.0%	95.9%	87.5%	87.7%	96.7%	85.7%
DR BUTLIN & PARTNERS, THE ESCRICK SURGERY, ESCRICK, YORK YO19 6LE	✓	93.8%	100.0%	✓	92.1%	78.2%	✓	95.9%	89.2%	90.4%	65.3%	89.0%	96.1%	87.5%
DR C H FLETCHER & PTNS, THE SURGERY, 7-8 PARK STREET, RIPON HG4 2AX	✓	91.5%	95.0%	✓	90.5%	82.8%	✓	94.7%	90.4%	92.0%	68.6%	91.6%	91.3%	94.7%
DR C N COLLIER & PARTNERS, GLEBE HOUSE SURGERY, 19 FIRBY ROAD, BEDALE DL8 2AT	✓	91.5%	90.6%	✓	93.1%	82.1%	✓	93.3%	90.8%	95.5%	80.1%	87.3%	92.2%	94.4%
DR CARRIE AND PARTNER, ST.HILDA'S SURGERY, 50 ST.HILDA'S STREET, SHERBURN, MALTON YO17 8PH	✓	91.3%	100.0%	✓	84.5%	66.9%	✓	97.2%	83.3%	91.5%	77.0%	92.4%	100.0%	100.0%
DR CASEY & PARTNERS, THE HEALTH CENTRE, CHAPEL STREET, THIRSK YO7 1LG	✓	93.8%	100.0%	✓	95.3%	90.1%	✓	100.0%	97.7%	95.5%	88.0%	93.8%	95.5%	90.0%
DR CROFT AND DR JOHNSON, STAITHES SURGERY, SEATON CRESCENT, STAITHES, SALTBURN-BY-THE-SEA TS13 5AY	✓	100.0%	100.0%	✓	95.6%	90.6%	✓	98.9%	95.6%	95.6%	79.2%	92.0%	96.4%	100.0%
DR D I JOBLING & PARTNERS, THE SURGERY, 21 STOCKWELL ROAD, KNARESBOROUGH HG5 0JY	✓	90.8%	100.0%	✓	93.8%	80.0%	✓	99.2%	92.9%	95.2%	75.2%	87.9%	94.4%	92.3%
DR D J COOP & PARTNERS, GLENTWORTH, DALTON TERRACE, YORK YO24 4DB	✓	93.6%	100.0%	✓	95.3%	81.6%	✓	97.9%	89.4%	94.4%	83.2%	90.8%	92.9%	91.7%
DR D J KNOWELDEN AND PARTNERS, CLAREMONT SURGERY, 56-60 CASTLE ROAD, SCARBOROUGH YO11 1XE	✓	94.4%	100.0%	✓	89.1%	75.8%	✓	95.8%	85.6%	91.0%	76.0%	90.2%	94.4%	100.0%
DR DUDEK & PARTNERS, ELVINGTON SURGERY, YORK ROAD, ELVINGTON, YORK YO41 4DY	✓	90.9%	100.0%	✓	94.2%	83.2%	✓	97.3%	86.2%	91.8%	72.7%	86.1%	91.6%	100.0%

GP Practice	ATRIAL FIBRILLATION			HYPERTENSION			STROKE OR TRANSIENT ISCHAEMIC ATTACKS (TIA)							
	AF 1	AF2	AF3	HT1	HT2	HT3	TIA1	TIA2	TIA3	TIA4	TIA5	TIA6	TIA7	TIA8
DR E M BRADLEY, TERRINGTON SURGERY, TERRINGTON, YORK YO60 6PS	✓	90.0%	100.0%	✓	92.0%	86.9%	✓	100.0%	95.2%	95.2%	75.0%	95.0%	100.0%	100.0%
DR EDON AND PARTNERS, MOWBRAY HOUSE SURGERY, MALPAS ROAD, NORTHALLERTON DL7 8FW	✓	92.8%	96.4%	✓	91.2%	72.2%	✓	96.2%	86.8%	90.7%	73.9%	89.3%	93.8%	97.6%
DR EMAD AND PARTNERS, CHURCHFIELD SURGERY, IBURNDALE LANE, SLEIGHTS, WHITBY YO22 5DP	✓	93.6%	100.0%	✓	91.1%	77.3%	✓	96.6%	83.5%	96.5%	68.7%	97.3%	93.7%	100.0%
DR G E PARK AND PARTNERS, THE HEALTH CENTRE, NORTH ROAD, STOKESLEY, MIDDLESBROUGH TS9 5DY	✓	92.3%	97.1%	✓	95.2%	76.7%	✓	97.6%	85.9%	95.1%	69.4%	87.4%	93.5%	100.0%
DR H J ENEVOLDSON & PARTNERS, MAYFORD HOUSE SURGERY, BOROUGHBIDGE ROAD, NORTHALLERTON DL7 8AW	✓	95.2%	100.0%	✓	94.1%	88.0%	✓	96.9%	92.9%	91.4%	77.9%	90.8%	95.5%	100.0%
DR I ASAAD AND PARTNER, JENNYFIELD HEALTH CENTRE, GRANTLEY DRIVE, HARROGATE HG3 2XT	✓	95.5%	100.0%	✓	90.6%	87.9%	✓	94.3%	94.3%	88.2%	75.8%	78.1%	89.7%	50.0%
DR J A BOFFA (PMS PILOT), 31 MONKGATE, YORK YO31 7WA	✗	No results	No results	✓	50.0%	25.0%	✗	No results	No results	No results	No results	No results	No results	No results
DR J S FESTER & PARTNER, EGTON SURGERY, EGTON, WHITBY YO21 1TX	✓	100.0%	100.0%	✓	97.6%	89.1%	✓	97.1%	95.7%	95.5%	84.6%	87.5%	95.1%	100.0%
DR K G PRICE AND PARTNERS, WENLOCK TERRACE SURGERY, 18 WENLOCK TERRACE, FULFORD, YORK YO10 4DU	✓	87.6%	93.3%	✓	95.0%	79.9%	✓	97.7%	83.7%	92.7%	64.3%	89.7%	93.0%	85.7%
DR K M HALLORAN, SOUTH CLIFF SURGERY, 56 ESPLANADE ROAD, SCARBOROUGH YO11 2AU	✓	92.1%	100.0%	✓	91.6%	73.9%	✓	96.0%	81.1%	91.2%	78.3%	87.3%	98.6%	85.7%

GP Practice	ATRIAL FIBRILLATION			HYPERTENSION			STROKE OR TRANSIENT ISCHAEMIC ATTACKS (TIA)							
	AF 1	AF2	AF3	HT1	HT2	HT3	TIA1	TIA2	TIA3	TIA4	TIA5	TIA6	TIA7	TIA8
DR K MECHIE AND PARTNERS, AMPLEFORTH SURGERY, BACK LANE, AMPLEFORTH, YORK YO62 4EF	✓	90.7%	100.0%	✓	93.0%	77.8%	✓	100.0%	85.7%	96.4%	80.4%	86.8%	97.8%	100.0%
DR KEMP AND PARTNERS, THE SURGERY, 32 CLIFTON, YORK YO30 6AE	✓	95.4%	93.3%	✓	94.4%	82.5%	✓	97.7%	90.5%	92.7%	64.5%	93.3%	96.6%	88.9%
DR M D HODGSON & PARTNER, DOCTORS LANE SURGERY, ALDBROUGH ST JOHN, RICHMOND DL11 7TH	✓	91.9%	100.0%	✓	88.9%	69.5%	✓	92.6%	77.4%	92.5%	80.0%	80.8%	93.0%	100.0%
DR M HARFORD-CROSS & PARTNERS, ASHFIELD HOUSE, KIRKBY MALZEARD, RIPON HG4 3SE	✓	95.5%	100.0%	✓	89.8%	65.1%	✓	99.2%	80.7%	96.6%	71.6%	83.0%	92.5%	100.0%
DR MOSS & PARTNERS, 28-30 KINGS ROAD, HARROGATE HG1 5JP	✓	90.9%	100.0%	✓	93.3%	79.2%	✓	94.7%	84.7%	78.9%	61.6%	73.5%	89.9%	100.0%
DR N J WILSON & DR J F MATTHEWS, THE MEDICAL CENTRE, CARLTON ROAD, HELMSLEY, YORK YO62 5HD	✓	94.8%	100.0%	✓	93.0%	85.8%	✓	97.9%	91.5%	93.6%	81.9%	97.6%	92.5%	100.0%
DR OLDROYD & PTNRS, FALSGRAVE SURGERY, LAWRENCE HOUSE MED CTR, 1 BELGRAVE CRESCENT, SCARBOROUGH YO11 1UB	✓	92.0%	96.0%	✓	91.7%	76.8%	✓	95.4%	80.0%	96.9%	88.8%	89.1%	92.3%	100.0%
DR P J BURGESS, MEDICAL CENTRE, 3A WHITBY DRIVE, YORK YO31 1EX	✓	95.5%	100.0%	✓	94.8%	86.1%	✓	96.3%	88.9%	96.0%	73.9%	85.2%	94.7%	100.0%
DR P J ROBINSON & PARTNERS, THE SURGERY, 53 PICKERING ROAD, WEST AYTON, SCARBOROUGH YO13 9JF	✓	92.3%	93.8%	✓	87.8%	74.6%	✓	95.0%	84.1%	89.9%	66.3%	91.3%	92.0%	88.9%
DR P K A WEST AND PARTNERS, CENTRAL DALES PRACTICE, THE HEALTH CENTRE, HAWES DL8 3QR	✓	92.2%	100.0%	✓	90.5%	79.9%	✓	93.9%	86.8%	92.9%	75.2%	89.1%	91.5%	93.8%

GP Practice	ATRIAL FIBRILLATION			HYPERTENSION			STROKE OR TRANSIENT ISCHAEMIC ATTACKS (TIA)							
	AF 1	AF2	AF3	HT1	HT2	HT3	TIA1	TIA2	TIA3	TIA4	TIA5	TIA6	TIA7	TIA8
DR R A PENMAN & PARTNERS, THE SURGERY, EAST PARADE, HARROGATE HG1 5LW	✓	97.1%	100.0%	✓	84.2%	73.1%	✓	95.2%	89.3%	84.8%	68.8%	89.3%	94.6%	93.8%
DR R PEARCE AND PARTNER, THE DANBY PRACTICE, BRIAR HILL, DANBY, WHITBY YO21 2PA	✓	91.7%	100.0%	✓	91.7%	81.6%	✓	96.9%	93.8%	93.5%	67.7%	96.3%	93.8%	100.0%
DR R W M WRIGHT & PARTNERS, GILLYGATE SURGERY, 28 GILLYGATE, YORK YO31 7WQ	✓	96.0%	100.0%	✓	94.4%	84.5%	✓	98.9%	95.5%	93.9%	67.2%	92.4%	96.2%	91.7%
DR R WESTERMAN AND PARTNERS, MILLFIELD SURGERY, MILLFIELD LANE, EASINGWOLD, YORK YO61 3JR	✓	92.0%	100.0%	✓	92.0%	80.0%	✓	97.3%	83.4%	93.8%	74.1%	88.5%	90.5%	92.3%
DR S SCHOFIELD & PARTNER, ACOMB HEALTH CENTRE, 1 BEECH GROVE, ACOMB, YORK YO26 5LD	✓	92.0%	100.0%	✓	94.1%	83.1%	✓	96.6%	90.9%	92.6%	79.2%	96.4%	93.0%	100.0%
DR SIMPSON & PARTNERS, SPRING BANK SURGERY, YORK ROAD, GREEN HAMMERTON YO26 8BN	✓	93.5%	94.1%	✓	90.5%	76.9%	✓	97.9%	90.3%	94.8%	76.5%	88.8%	91.9%	97.5%
DR SUCKLING, THE SURGERY, EAST ROW, SANDSEND, WHITBY YO21 3SU	✓	93.9%	100.0%	✓	95.9%	92.7%	✓	100.0%	95.3%	97.7%	74.4%	89.5%	97.1%	80.0%
DR T R HUGHES & PARTNERS, THE SURGERY, TINLEY GARTH, KIRKBYMOORSIDE, YORK YO62 6AR	✓	95.0%	100.0%	✓	92.2%	80.2%	✓	98.1%	88.4%	91.8%	76.8%	94.0%	92.0%	72.7%
DR T W TROUGHTON & PARTNERS, THE HEALTH CENTRE, HIGH STREET, CATTERICK VILLAGE, RICHMOND DL10 7LD	✓	94.1%	100.0%	✓	90.8%	78.9%	✓	97.4%	89.4%	93.9%	70.3%	88.1%	90.9%	100.0%

GP Practice	ATRIAL FIBRILLATION			HYPERTENSION			STROKE OR TRANSIENT ISCHAEMIC ATTACKS (TIA)							
	AF 1	AF2	AF3	HT1	HT2	HT3	TIA1	TIA2	TIA3	TIA4	TIA5	TIA6	TIA7	TIA8
DR W F WATSON AND PARTNERS , BEECH HOUSE SURGERY, 1 ASH TREE ROAD, KNARESBOROUGH HG5 0UB	✓	91.5%	100.0%	✓	92.7%	77.2%	✓	97.0%	85.4%	92.0%	74.3%	86.1%	94.5%	85.7%
DRS MEESON & PENFOLD , HUNMANBY SURGERY, HUNGATE LANE, HUNMANBY, FILEY YO14 0NN	✓	94.4%	100.0%	✓	95.9%	79.8%	✓	98.8%	87.2%	99.3%	87.5%	87.8%	94.6%	100.0%
DRS N S P ENEVOLDSON & J H MOUNTJOY , SCORTON MEDICAL CENTRE, STAGGS WAY, SCORTON, RICHMOND DL10 6HB	✓	92.9%	100.0%	✓	90.7%	83.2%	✓	97.7%	92.0%	84.9%	76.8%	92.0%	94.3%	100.0%
DRS P R JONES AND B MCPHERSON , THE SURGERY, BACK LANE, STILLINGTON, YORK YO61 1LL	✓	94.0%	100.0%	✓	92.1%	80.3%	✓	100.0%	91.4%	100.0%	72.2%	86.8%	96.0%	85.7%
DRS P ROBINSON AND A J HARK , HACKNESS ROAD SURGERY, 19 HACKNESS ROAD, NEWBY, SCARBOROUGH YO12 5SD	✓	95.7%	91.7%	✓	99.6%	92.1%	✓	100.0%	98.0%	96.0%	79.5%	100.0%	94.1%	100.0%
DRS POTRYKUS AND UTTING , 5 HAMBLETON VIEW, TOLLERTON, YORK YO61 1QW	✓	95.8%	100.0%	✓	93.5%	70.3%	✓	95.2%	84.2%	91.8%	78.6%	91.4%	90.9%	100.0%
DRS SHAW AND PARKER , THE SURGERY, LONG STREET, TOPCLIFFE, THIRSK YO7 3RP	✓	93.1%	100.0%	✓	96.5%	84.5%	✓	100.0%	93.9%	94.3%	93.5%	97.0%	93.3%	100.0%
DYNELEY HOUSE SURGERY , NEWMARKET STREET, SKIPTON BD23 2HZ	✓	90.7%	100.0%	✓	91.3%	75.8%	✓	96.0%	86.4%	88.3%	79.8%	89.3%	92.7%	100.0%
EASTFIELD MEDICAL CENTRE , 14 HIGH STREET, EASTFIELD, SCARBOROUGH YO11 3LJ	✓	94.2%	94.4%	✓	88.1%	74.4%	✓	93.9%	83.2%	91.1%	82.1%	87.8%	92.2%	93.8%
EASTGATE MEDICAL GROUP , EASTGATE SURGERY, 31B YORK PLACE, KNARESBOROUGH HG5 0AD	✓	92.8%	95.2%	✓	91.9%	77.0%	✓	97.9%	87.4%	95.3%	70.6%	88.9%	92.4%	88.2%

GP Practice	ATRIAL FIBRILLATION			HYPERTENSION			STROKE OR TRANSIENT ISCHAEMIC ATTACKS (TIA)							
	AF 1	AF2	AF3	HT1	HT2	HT3	TIA1	TIA2	TIA3	TIA4	TIA5	TIA6	TIA7	TIA8
FILEY SURGERY, THE SURGERY, STATION AVENUE, FILEY YO14 9AE	✓	96.2%	100.0%	✓	92.7%	79.8%	✓	97.5%	88.3%	92.0%	80.1%	95.0%	92.1%	80.0%
FISHER MEDICAL CENTRE, MILLFIELDS, COACH STREET, SKIPTON BD23 1EU	✓	92.4%	91.4%	✓	93.0%	84.2%	✓	99.7%	93.7%	94.8%	89.0%	88.5%	97.8%	92.3%
FRONT STREET SURGERY, THE SURGERY, 14 FRONT STREET, ACOMB, YORK YO24 3BZ	✓	94.6%	100.0%	✓	92.2%	82.1%	✓	96.9%	88.9%	93.9%	68.7%	95.2%	93.7%	90.0%
GALE FARM SURGERY, 109- 119 FRONT STREET, ACOMB, YORK YO24 3BU	✓	97.8%	91.3%	✓	94.8%	83.4%	✓	99.7%	92.9%	96.8%	80.0%	89.1%	94.3%	87.0%
GRASSINGTON SURGERY, GRASSINGTON MEDICAL CTR., 9 STATION ROAD, GRASSINGTON BD23 5LS	✓	92.9%	100.0%	✓	94.7%	70.2%	✓	96.5%	79.6%	96.4%	72.7%	84.4%	83.1%	90.9%
THE HAREWOOD MEDICAL PRACTICE, 42 RICHMOND ROAD, CATTERICK GARRISON DL9 3JD	✓	100.0%	100.0%	✓	93.9%	84.7%	✓	97.7%	95.5%	93.0%	70.3%	92.6%	95.0%	100.0%
HAXBY GROUP PRACTICE, HAXBY/WIGGINTON HEALTH CENTRE, 2 THE VILLAGE, WIGGINTON, YORK YO32 2LL	✓	92.1%	97.4%	✓	95.8%	80.9%	✓	97.2%	89.1%	91.4%	74.1%	90.0%	95.3%	97.1%
KINGSWOOD SURGERY, 14 WETHERBY ROAD, HARROGATE HG2 7SA	✓	90.9%	100.0%	✓	93.5%	80.7%	✓	96.1%	87.1%	90.1%	67.3%	83.7%	96.5%	100.0%
THE LAMBERT MEDICAL CENTRE, 2 CHAPEL STREET, THIRSK YO7 1LU	✓	94.2%	100.0%	✓	91.9%	77.8%	✓	97.5%	87.8%	93.0%	77.2%	85.7%	96.5%	88.2%
LEYBURN MEDICAL PRACTICE, BRENTWOOD, LEYBURN DL8 5EP	✓	95.5%	94.7%	✓	92.2%	82.7%	✓	98.5%	89.1%	95.3%	83.1%	89.9%	94.0%	100.0%
MINSTER HEALTH, 35 MONKGATE, YORK YO31 7WE	✓	94.4%	90.9%	✓	92.8%	80.7%	✓	97.1%	83.1%	91.7%	78.7%	89.9%	92.5%	92.3%
NIDDERDALE GROUP PRACTICE, FEASTFIELD MEDICAL CENTRE, KING STREET, PATELEY BRIDGE HG3 5AT	✓	100.0%	100.0%	✓	92.5%	80.8%	✓	98.2%	92.8%	93.2%	75.1%	95.5%	97.4%	87.5%

GP Practice	ATRIAL FIBRILLATION			HYPERTENSION			STROKE OR TRANSIENT ISCHAEMIC ATTACKS (TIA)							
	AF 1	AF2	AF3	HT1	HT2	HT3	TIA1	TIA2	TIA3	TIA4	TIA5	TIA6	TIA7	TIA8
NORTH HOUSE SURGERY, NORTH HOUSE, NORTH STREET, RIPON HG4 1HL	✓	99.5%	100.0%	✓	91.5%	74.4%	✓	98.1%	84.0%	95.5%	71.3%	92.2%	96.1%	100.0%
NORWOOD HOUSE SURGERY, BELLE VUE STREET, SCARBOROUGH YO12 7EJ	✓	94.4%	100.0%	✓	92.0%	70.3%	✓	97.5%	77.2%	91.8%	75.5%	81.9%	98.4%	100.0%
PARK PARADE SURGERY, 27- 28 PARK PARADE, HARROGATE HG1 5AG	✓	93.2%	93.3%	✓	92.2%	73.6%	✓	95.2%	83.9%	92.8%	69.7%	88.7%	97.7%	87.5%
PEASHOLM SURGERY, 98 TENNYSON AVENUE, SCARBOROUGH YO12 7RE	✓	98.4%	100.0%	✓	96.7%	88.7%	✓	100.0%	93.5%	100.0%	94.7%	95.2%	98.0%	0.0%
THE PETERGATE SURGERY, TOWER COURT HEALTH CENTRE, OAKDALE ROAD, CLIFTON MOOR, YORK YO30 4RZ	✓	100.0%	100.0%	✓	94.2%	83.3%	✓	98.5%	95.4%	97.1%	86.2%	92.4%	100.0%	100.0%
PICKERING MEDICAL PRACTICE, SOUTHGATE, PICKERING YO18 8BL	✓	93.2%	100.0%	✓	97.7%	75.5%	✓	96.6%	78.4%	95.5%	77.2%	97.8%	94.3%	89.5%
POSTERNGATE SURGERY, PORTHOLME ROAD, SELBY YO8 4QH	✓	96.4%	100.0%	✓	94.5%	83.3%	✓	99.1%	91.6%	96.8%	78.7%	91.5%	98.4%	100.0%
PRIORY MEDICAL GROUP, CLEMETHORPE HEALTH CENTRE, CHERRY STREET, YORK YO23 1AP	✓	91.7%	95.9%	✓	92.0%	74.7%	✓	97.8%	84.6%	91.7%	76.3%	87.1%	94.9%	94.4%
PROSPECT ROAD SURGERY, 174 PROSPECT ROAD, SCARBOROUGH YO12 7LB	✓	94.4%	100.0%	✓	93.8%	77.7%	✓	100.0%	83.6%	95.9%	89.3%	94.8%	94.7%	87.5%
QUAKER'S LANE SURGERY, RICHMOND DL10 4BB	✓	90.6%	94.7%	✓	93.6%	75.7%	✓	94.1%	80.2%	92.4%	75.4%	85.7%	91.7%	90.9%
REETH MEDICAL CENTRE, THE SURGERY, REETH, RICHMOND DL11 6SU	✓	100.0%	100.0%	✓	98.3%	89.0%	✓	100.0%	83.3%	96.2%	82.6%	100.0%	100.0%	100.0%
SCARBOROUGH MEDICAL GROUP, DANES DYKE SURGERY, 463A SCALBY ROAD, NEWBY, SCARBOROUGH YO12 6UA	✓	95.4%	100.0%	✓	91.1%	76.8%	✓	97.4%	88.7%	93.0%	74.6%	90.1%	94.1%	90.5%

GP Practice	ATRIAL FIBRILLATION			HYPERTENSION			STROKE OR TRANSIENT ISCHAEMIC ATTACKS (TIA)							
	AF 1	AF2	AF3	HT1	HT2	HT3	TIA1	TIA2	TIA3	TIA4	TIA5	TIA6	TIA7	TIA8
SCOTT ROAD MEDICAL CENTRE , SCOTT ROAD, SELBY YO8 4BL	✓	95.8%	100.0%	✓	94.4%	82.4%	✓	96.5%	90.5%	93.8%	71.7%	91.7%	94.5%	100.0%
SHERBURN GROUP PRACTICE , THE MEDICAL CENTRE, BEECH GROVE, SHERBURN-IN-ELMET LS25 6ED	✓	94.7%	93.3%	✓	93.8%	77.2%	✓	97.8%	83.3%	92.1%	78.1%	94.6%	97.3%	77.8%
SOUTH MILFORD SURGERY , THE SURGERY, HIGH STREET, SOUTH MILFORD, LEEDS LS25 5AA	✓	96.6%	91.7%	✓	91.2%	77.3%	✓	96.7%	88.0%	92.7%	74.7%	90.4%	97.6%	91.7%
ST LUKE'S MEDICAL PRACTICE , 110 KINGS ROAD, HARROGATE HG1 5HW	✓	91.8%	100.0%	✓	92.6%	77.7%	✓	98.9%	92.2%	91.2%	81.3%	90.7%	95.9%	100.0%
STRENSALL MEDICAL PRACTICE , SOUTHFIELDS ROAD, STRENSALL, YORK YO32 5UA	✓	94.4%	100.0%	✓	94.2%	84.1%	✓	97.6%	90.2%	92.5%	80.4%	91.1%	96.4%	100.0%
TADCASTER MEDICAL CENTRE , CRAB GARTH, TADCASTER LS24 8HD	✓	91.8%	93.8%	✓	93.3%	79.8%	✓	100.0%	93.8%	98.1%	81.5%	94.8%	94.9%	100.0%
THE FRIARY SURGERY , QUEENS ROAD, RICHMOND DL10 4UJ	✓	95.6%	90.9%	✓	93.1%	75.2%	✓	95.3%	83.0%	84.3%	72.2%	93.8%	96.8%	100.0%
THE JORVIK MEDICAL PRACTICE , WOOLPACK HOUSE, THE STONEBOW, YORK YO1 7NP	✓	95.1%	100.0%	✓	95.4%	78.8%	✓	98.7%	84.6%	92.2%	69.0%	86.4%	92.0%	89.3%
THE LEEDS ROAD PRACTICE , 49-51 LEEDS ROAD, HARROGATE HG2 8AY	✓	93.2%	94.1%	✓	91.3%	83.0%	✓	98.0%	93.1%	91.4%	76.0%	89.6%	91.3%	84.6%
THE OLD SCHOOL MEDICAL PRACTICE , HORSEMAN LANE, COPMANTHORPE, YORK YO23 3UA	✓	90.6%	100.0%	✓	91.4%	70.8%	✓	97.3%	88.8%	96.4%	70.5%	100.0%	85.5%	92.9%
THE SPA SURGERY , MEDICAL CENTRE BURTON LODGE, 86 STATION PARADE, HARROGATE HG1 1HH	✓	94.8%	100.0%	✓	90.9%	75.0%	✓	97.3%	87.3%	90.8%	70.8%	92.0%	94.1%	100.0%
TOWNHEAD SURGERIES , SETTLE BD24 9JA	✓	93.3%	95.2%	✓	89.0%	75.4%	✓	95.5%	86.9%	92.1%	80.5%	88.1%	90.6%	100.0%

GP Practice	ATRIAL FIBRILLATION			HYPERTENSION			STROKE OR TRANSIENT ISCHAEMIC ATTACKS (TIA)							
	AF 1	AF2	AF3	HT1	HT2	HT3	TIA1	TIA2	TIA3	TIA4	TIA5	TIA6	TIA7	TIA8
TRAFALGAR MEDICAL PRACTICE, TRAFALGAR HOUSE, 41-44 TRAFALGAR ST WEST, SCARBOROUGH YO12 7AS	✓	95.1%	100.0%	✓	94.5%	72.0%	✓	95.6%	84.5%	98.8%	82.4%	92.9%	94.0%	87.5%
WHITBY GROUP PRACTICE, SPRING VALE MEDICAL CENTRE, WHITBY YO21 1SD	✓	92.1%	100.0%	✓	91.4%	79.4%	✓	98.2%	88.0%	94.8%	79.2%	92.0%	95.4%	100.0%
YORK MEDICAL GROUP, ACOMB MEDICAL PRACTICE, 199 ACOMB ROAD, ACOMB, YORK YO24 4HD	✓	90.4%	94.4%	✓	96.3%	77.5%	✓	97.2%	84.7%	92.2%	71.1%	87.2%	92.8%	81.0%