



FULL COUNCIL
FINAL REPORT
CARDIOVASCULAR DISEASE (CVD)
MARCH 2015

COUNCIL

16 March 2015



Report of: Full Council

Subject: FINAL REPORT – INVESTIGATION INTO
CARDIOVASCULAR DISEASE (CVD)

1. PURPOSE OF REPORT

1.1 To present the findings of Full Council following its investigation into Cardiovascular Disease (CVD).

2. BACKGROUND

2.1 The Audit and Governance Committee met on the 7 August 2014 to consider their Work Programme and agreed that the Committee would in 2014/15 focus on CVD as the health topic for investigation. In scoping the investigation task and finish groups were established to undertake specific areas of work, with the outcome of the task and finish groups to inform the CVD Final report. With effect from 24 November 2014, the Council's Statutory Health Scrutiny responsibilities were transferred from the Audit and Governance Committee to Full Council. From this date the conduct of the investigation continued through the agreed task and finish groups, with all Members of Council invited to participate, with the Final Report to be from Full Council as the body responsible for Statutory Health Scrutiny.

2.2 Circulatory and heart disease, also known as cardiovascular disease (CVD), refers to a group of related conditions of the heart and blood vessels. These conditions include:

- Coronary heart disease (CHD): a disease of the blood vessels supplying the heart muscle which can lead to angina, heart attack and heart muscle damage;
- Cerebrovascular disease: a disease of the blood vessels supplying the brain which leads to transient ischaemic attacks (TIA) and strokes;
- Peripheral vascular disease (PVD): a disease of blood vessels supplying the arms and legs that can lead to claudication;

- Atrial fibrillation (AF) and arrhythmias: abnormal pulse rhythm which can be a major cause of strokes; and
 - Other conditions such as vascular dementia, chronic kidney disease, cardiac arrhythmias, sudden cardiac death, and heart failure are related because they either share common risk factors or have an impact on the prognosis and outcome of CVD.
- 2.3 CVD is the main cause of death in the UK and accounts for almost 191,000 deaths each year (one-third of all deaths). Almost half of deaths (46%) are from CHD and nearly one quarter (23%) from stroke. CVD-related conditions are estimated to cost the economy £25.8 billion annually. The health of people in Hartlepool is generally worse than the England average. Deprivation is higher than the England average and life expectancy for both men and women is lower than the England average. Mortality rates from CVD are significantly higher than the national rate. Mortality rates have decreased by 55.6% since 1995-97.
- 2.4 Non-modifiable and non-behavioural risk factors including age, sex, family history/genetic factors, ethnicity and deprivation are considered to estimate the overall risk of CVD for an individual. Modifiable and behavioural risk factors such as smoking, physical inactivity, poor diet and obesity reflecting individual circumstances and choices can be prevented or changed by lifestyle changes. Conditions associated with an increased risk, hypertension, raised cholesterol, diabetes and chronic kidney disease, can be prevented or reversed in their early stages but usually need medical treatment.
- 2.5 Factors accounting for the large majority (86%) of risk of CVD (and therefore inequalities in life expectancy) are potentially reversible, and appropriate services to address CVD within Hartlepool reflect this.
- 2.6 Quality and outcomes framework (QOF) data shows a considerable gap between observed and estimated prevalence on a number of CVD measures. This is acknowledged in efforts to find the 'missing thousands'.
- 2.7 Prevention of CVD is a high priority. A comprehensive CVD risk screening programme (NHS Health Checks/ Healthy Heart Check), aims to identify and manage people with undiagnosed CVD. There continues to be an issue in uptake of the screening programme by people in deprived groups and by men.
- 2.8 With trends in obesity levels rising, it is anticipated that there will be a significant increase in the number of people with diabetes and pre-diabetes which is likely to have an impact on the incidence of CVD¹

¹ ¹ Hartlepool JSNA - <http://www.teesjsna.org.uk/hartlepool-circulatory-diseases>

3. OVERALL AIM OF THE SCRUTINY INVESTIGATION

- 3.1 To consider the approaches being taken to prevent and treat CVD, to ensure longer term reduction in incidence and prevalence, and improve quality of life and health outcomes for those individuals who already have the disease.

4. TERMS OF REFERENCE FOR THE SCRUTINY INVESTIGATION

- 4.1 The Terms of Reference for the Scrutiny investigation were as outlined below:-

- (a) To gain an understanding of CVD and the pathways available to people diagnosed with CVD (including the causes; signs and symptoms; prevention; and treatment);
- (b) To examine the incidence and prevalence of CVD across Hartlepool, and how this compares to regional and national levels, and in doing so, consider why Hartlepool has a particularly high rate of CVD;
- (c) To explore the risk factors that contribute to the development of CVD including the impact of lifestyle choices;
- (d) To explore and examine the CVD services provided in:-
 - (i) Primary Care;
 - (ii) Secondary Care;
 - (iii) Tertiary Care; and
 - (iv) A pulmonary and rehabilitation setting.
- (e) To seek the views of CVD patients and their families and carers; and groups / bodies who provide services for people diagnosed with CVD

5. MEMBERSHIP OF THE CARDIOVASCULAR DISEASE TASK AND FINISH GROUP

- 5.1 The membership of the Task and Finish Groups are as detailed below:-

Group 1 - Councillors S Akers-Belcher, R Martin-Wells, Lynn Allison (HealthWatch) and N Rollo (Independent Person)

Group 2 – Councillors J Ainslie, R Cook

Group 3 – Councillors S Akers-Belcher, K Sirs and Lynn Allison (HealthWatch)

The membership of Full Council is as detailed below:-

Councillors Ainslie, C Akers-Belcher, S Akers-Belcher, Atkinson, Barclay, Beck, Brash, Clark, Cook, Cranney, Dawkins, Fleet, Gibbon, Griffin, Hall, Hargreaves, Hind, Jackson, James, Lauderdale, Lilley, Loynes, Martin-Wells,

Morris, Payne, Richardson, Riddle, Robinson, Simmons, Sirs, Springer, Thomas and Thompson.

6. METHODS OF INVESTIGATION

- 6.1 Members of the CVD Task and Finish Groups met formally from 21 August 2014 to 2 March 2015 to discuss and receive evidence relating to this investigation. A record of the issues raised during these meetings is available on request.
- 6.2 A brief summary of the methods of investigation are outlined below:-
- (a) Setting the Scene presentation from the Public Health Team and the Tees Valley Public Health Shared Service;
 - (b) Presentation and verbal evidence received from North Tees and Hartlepool NHS Foundation Trust, Cardiology Department;
 - (c) Presentation and verbal evidence received from South Tees NHS Foundation Trust, Cardiology Department;
 - (d) Presentation and verbal evidence received from the Tees Valley Public Health Shared Service;
 - (e) Presentation and verbal evidence received from the North East Ambulance Service; and
 - (f) Visits to a Stop Smoking Clinic, a rehabilitation exercise class and the Health Bus.

7. FINDINGS

WHAT IS CVD AND THE PATHWAYS AVAILABLE TO PEOPLE DIAGNOSED WITH CVD (INCLUDING THE CAUSES; SIGNS AND SYMPTOMS; PREVENTION; AND TREATMENT)

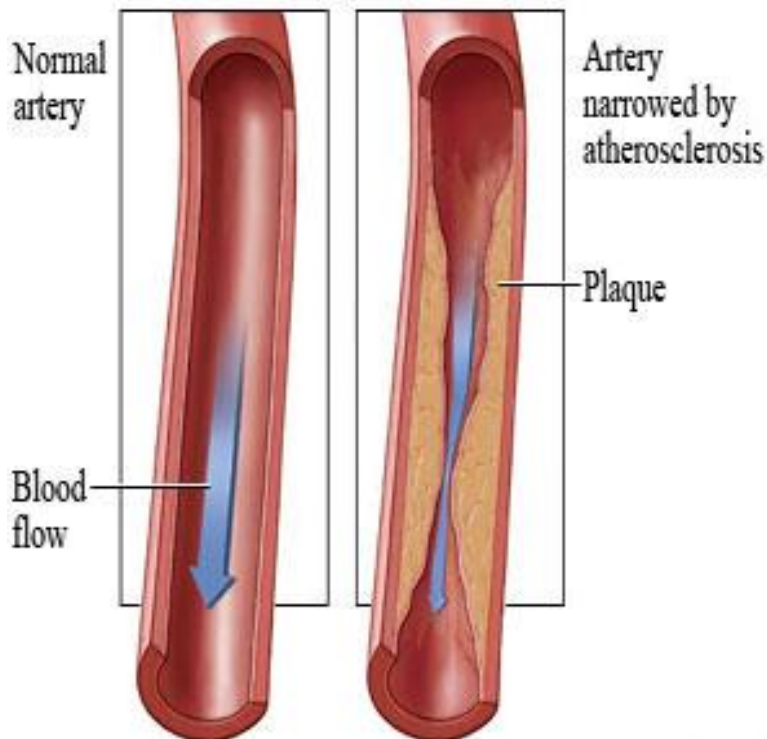
- 7.1 Members at their meeting of 16 October 2014 received a setting the scene presentation from the Tees Valley Public Health Shared Service and Hartlepool Council's Public Health Department to gain an understanding of CVD and the pathways available to people who have been found at risk of CVD through the Healthy Heart Check (NHS Health Check) including the causes; signs and symptoms; prevention; and treatment.

Causes, signs, symptoms

- 7.2 CVD is defined as a disease of the heart and circulatory system predominantly caused by the process of atherosclerosis. Atherosclerosis is the gradual build-up of fatty plaques within the walls of the arteries called atheroma. As atheromatous plaques develop and increase in size, they

narrow the lumen of the artery and reduce blood flow to the tissues. Plaques may be small or extend several centimetres along the length of the artery.

- 7.3 Atherosclerosis can affect any artery in the body. The process of atheroma is triggered off by an initial injury to the lining of the artery. This can be caused by the effects, for example, of high blood pressure or smoking. Cholesterol is absorbed into the injury and forms a fatty streak; this in turn develops into a fibrous atheromatous plaque, as illustrated in the diagram below. The artery may slowly obliterate or plaque can rupture at any time.



- 7.4 Members were informed that deaths from CVD have fallen by over a third between 2001 and 2010, but CVD is still one of the main causes of death in the UK and accounts for about one-third of all deaths. In 2011, almost 160,000 people in the UK died from CVD. 74,000 of these deaths were caused by coronary heart disease which is the UK's single biggest killer.

- 7.5 The most prevalent CVD diseases are outlined below:-

Coronary Heart Disease (CHD) – a disease of the blood vessels supplying the heart muscle which can lead to angina, heart attack and heart failure.

Cerebrovascular Disease – a disease of the blood vessels supplying the brain which leads to stroke and TIA's (transient ischaemic attack).

Peripheral Vascular Disease (PVD) – a disease of the blood vessels supplying the arms and legs which can lead to claudication (pain), ulcers, gangrene etc.

Atrial Fibrillation (AF) – abnormal heart rate and rhythm which can be a major cause of stroke.

Prevention

7.6 Members welcomed evidence from the Public Health team who outlined the methods of prevention.

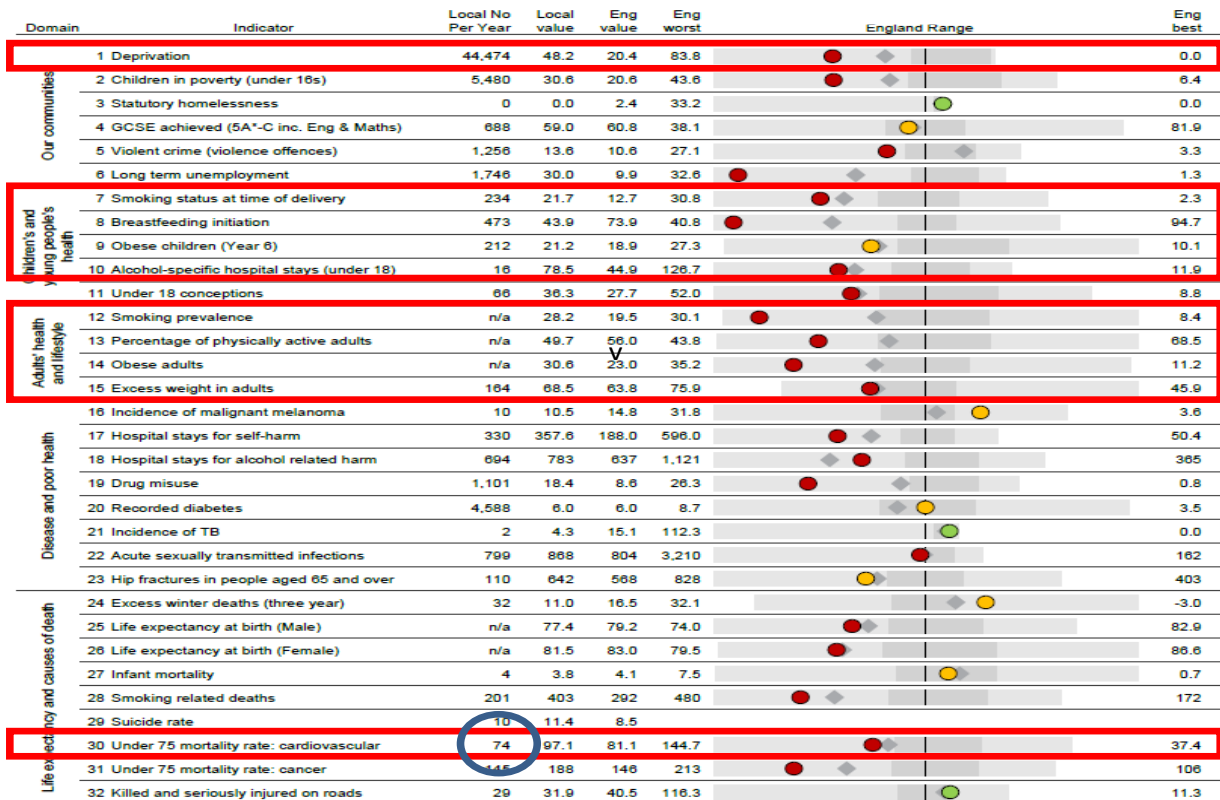
- **Stopping smoking is a preventative measure.** There is an effective evidence-based model of smoking cessation delivered by a Specialist Service in 8 different community venues and 5 community pharmacies across the town. There is an active local Smoke Free Alliance made up of a range of partners supporting and advocating for all tobacco control issues not just smoking cessation. There is also a vibrant Regional Office – FRESH – to inform and support local delivery of International, National and Regional activity on tobacco control.
- **NHS Health Check (branded locally as Healthy Heart Checks)** - A mandated function for Local Authorities to offer a check to the population aged between 40 – 74 not already diagnosed with CVD. There is also a mini-health check available for people aged 25 – 39. NHS Health Checks are currently provided mainly in Primary Care through GP practices, but also workplaces and in other community venues through a nurse bank located at South Tees Trust. There is mobile outreach through the Health Bus which includes opportunities for Healthy Heart Checks.
- **Weight Management** – The Health Trainer Service currently provided by North Tees and Hartlepool NHS Foundation Trust (which will move into the Local Authority in April 2015) provides free weight management support (healthy eating, behaviour change support and access to physical activity) to adults in a range of community venues and GP practices in Hartlepool. The Families in it Together Hartlepool ('FiiT Hart') provides one-to-one support to families around nutrition and group-based physical activity opportunities.
- **Physical Activity** - Hartlepool Exercise for Life Programme (HELP) – GP Exercise on Referral scheme provides specific cardiac-rehab and heart failure sessions for CVD and heart disease patients. This is Community-based Phase IV Cardiac rehabilitation. Patients have the opportunity to continue with supervised exercise when referred to the service by the Specialist Coronary Care Nurse team. The HELP service also operates as a preventative intervention encouraging a more active lifestyle for those patients identified through the CVD screening as at risk of developing coronary heart disease.

8. THE INCIDENCE AND PREVALENCE OF CVD ACROSS HARTLEPOOL, AND HOW THIS COMPARES TO REGIONAL AND NATIONAL LEVELS

8.1 Members welcomed evidence from the Public Health Intelligence Specialist. Members were informed that heart and circulatory disorders are one of the leading causes of death in the country; ischemic heart disease and strokes

being the two leading causes. The disorders account for 8,730 deaths out of a total 24,400 of those in the North East area.

8.2 In Hartlepool, deprivation indicators are high with more than 50% of electoral wards in the bottom 20% in the country. Since 1993, the prevalence of obesity in adults has increased significantly across the country and there is a correlation between obesity rates and diabetes. Other risk factors for CVD such as smoking, excessive alcohol intake, inactivity are all significantly higher than the England average, as shown on the chart below.

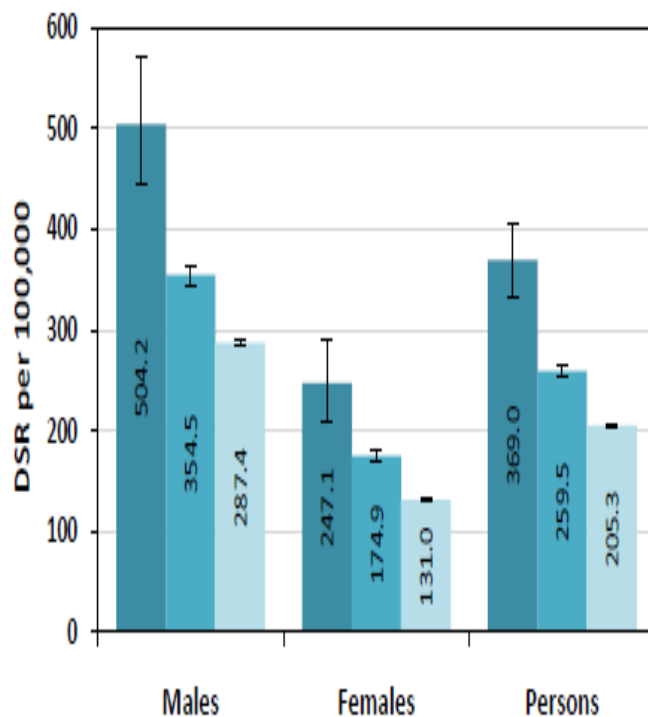


8.3 Members questioned the obesity statistics and commented that if they were based on Body Mass Index (BMI) then often this was not a true reflection. For example, rugby players were often classed as obese when their BMI was calculated yet they were very fit and active men. BMI is evidence based and for the vast majority of people it is the best indicator currently available. In people of South Asian ethnicity the additional measurement of waist circumference is advised. The problem with BMI measurements in rugby players is due to their relatively high proportion of muscle tissue which is usually not a problem of the general population. The Director of Public Health indicated that there are a range of data sources and measures and whichever measure was used, specialists are sure that the problem is as significant as it is portrayed. Members raised concerns regarding the letter that is sent out to families following a child's BMI measurement at school and thought that the wording of the letter was not particularly compassionate or friendly. Members were informed that this was a national programme with national guidance but the Council did have an officer on the national team managing the project.

The Group requested that an approach be made to change the letter. Hartlepool's Health and Wellbeing Board is focussing on childhood obesity and a strategy is currently in development.

- 8.4 The emergency admission rates for 2009/10 for Hartlepool are significantly higher than the North East and England averages, as shown in the graph below. The emergency admission rate for people from the most deprived wards in Hartlepool is 2.6 times higher than for people from the least deprived wards.

CHD emergency admission rates (DSRs), for all ages, 2009/10



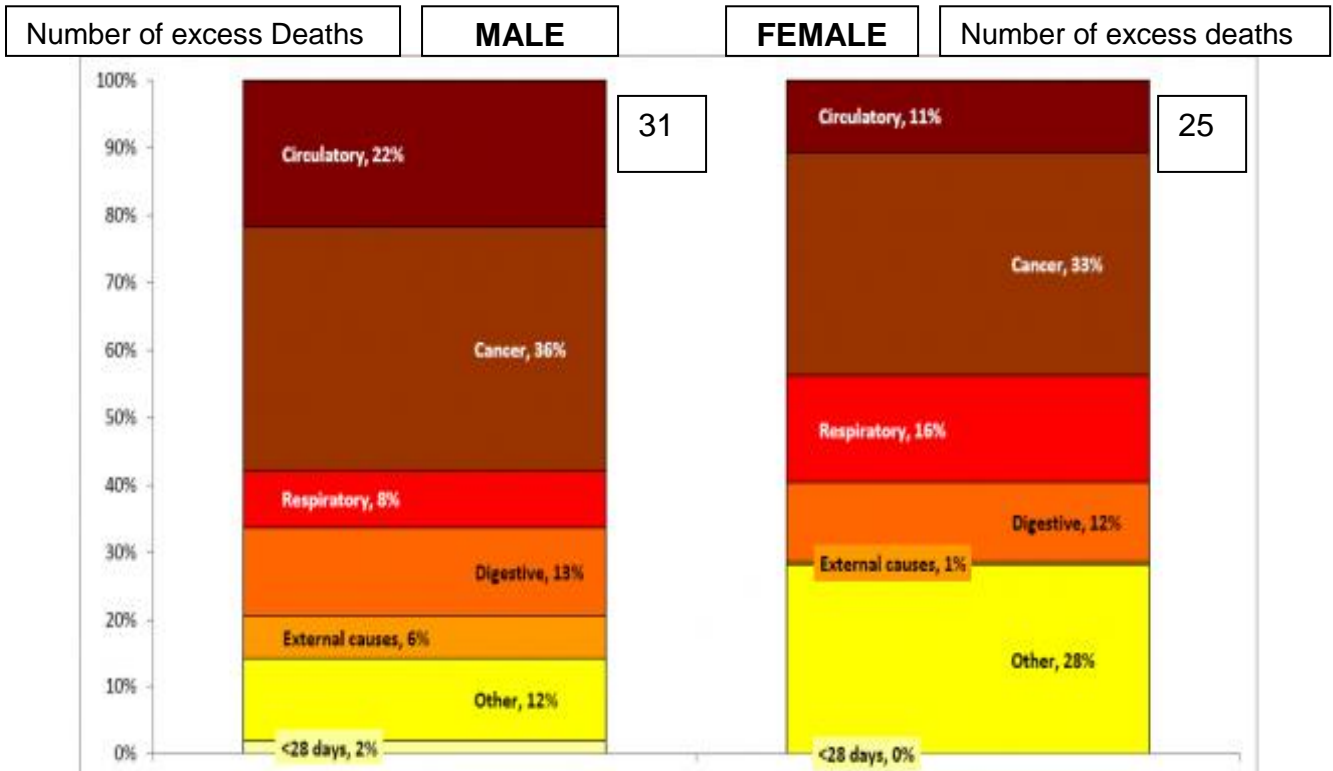
In 2009/10 the emergency admission rate for CHD, all persons, in Hartlepool was 369.0 per 100,000 (428 admissions). This is significantly higher than England (205.3 per 100,000) and significantly higher than North East (259.5 per 100,000).

Male CHD emergency admission rates are significantly higher than female CHD emergency admission rates.

Source: Hospital Episode Statistics (HES), The NHS Information Centre for health and social care, ONS

- 8.5 Members were interested to hear about the costs of emergency and elective admissions to the NHS for CVD. These figures are based on Hartlepool and Stockton Clinical Commissioning Group's area. Male CVD elective admissions cost £783k and male emergency admissions £274K. Female costs are lower, as admissions are not as high.
- 8.6 Circulatory diseases and cancer are the most significant contributors to the gap in life expectancy between Hartlepool and the England average. Essentially, there are 31 male and 25 female unnecessary deaths each year in Hartlepool caused by factors that are avoidable. The Public Health Intelligence Specialist indicated that in Hartlepool people tended to live two years fewer than the national average; if those 31 deaths did not occur, then Hartlepool would meet the national average. The chart overleaf indicates the contributors to the gap in life expectancy between Hartlepool and England.

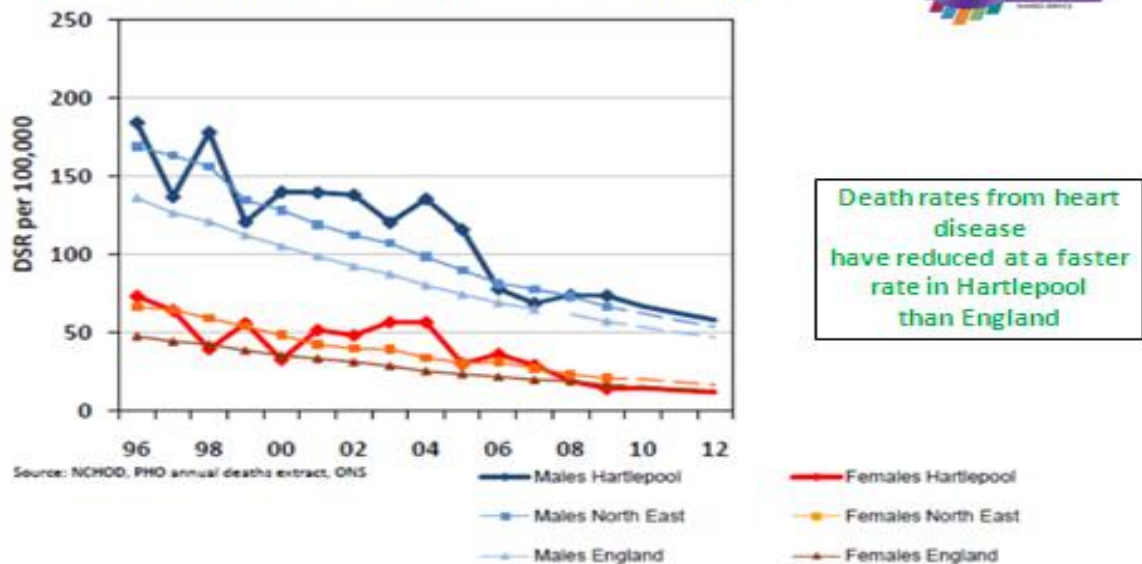
Contributors to the gap in life expectancy between Hartlepool and England



8.7 The statistics show that people in Hartlepool experience illness earlier, for longer and die early because of it. Life expectancy in Hartlepool is two years less than the national average and Members were of the view that the life expectancy gap needs to be addressed.

8.8 Death rates from heart disease have reduced at a faster rate in Hartlepool than England, as shown in the graph over the page.

Trend in CHD mortality rates, under 75yrs, 1996-2012



9. THE RISK FACTORS THAT CONTRIBUTE TO THE DEVELOPMENT OF CVD INCLUDING THE IMPACT OF LIFESTYLE CHOICES

9.1 The CVD risk factors are identified below. A risk factor is something that increases your likelihood of getting a disease. It was noted that non-modifiable risk factors need to be accepted and that focus has to be on the modifiable risk factors.

Modifiable risk factors: smoking, excessive alcohol consumption, physical inactivity, poor diet and obesity. Conditions associated with an increased risk are high blood pressure (hypertension), raised cholesterol, diabetes and chronic kidney disease.

Non-modifiable risk factors: family history of CVD, ethnic background (South Asian origin), gender (men are more likely to develop CVD at an earlier age than women), age (the older you are the more likely you are to develop CVD).

Other: socio-economic status – people living in more deprived areas are more exposed to the risk factors of CVD and are less likely to make healthy lifestyle choices.

9.2 In terms of prevention there are several actions which can be taken, including:-

Surveillance – analysing and monitoring incidence, prevalence and mortality

Primary prevention – Healthy Heart Check (NHS Health Check) to identify risk factors of CVD, lifestyle interventions, medication (statins).

Early diagnosis – Treating diseases earlier can slow down or halt progression.

Secondary prevention/care – Events (i.e. heart attacks) can be prevented from happening again.

Tertiary care – Support and rehabilitation for patients.

10. NHS HEALTH CHECK PERFORMED IN PRIMARY CARE

- 10.1 Members welcomed information from the Tees Valley Public Health Shared Service regarding the NHS Health Check, also known as the Healthy Heart Check. The check is a mandated programme introduced by the Government in 2009 and it started locally in Hartlepool in October 2008. The Check is performed locally in GP surgeries and workplace/community venues. The responsibility for the delivery of the check is now within the remit of the Local Authority, since Public Health was transferred to the Local Authority in 2013.
- 10.2 The NHS Health Check is offered to people in England who are aged between 40 and 74, and have not already been diagnosed with cardiovascular disease, not on a statin or not had a check within the last 5 years.
- 10.3 The check includes:-
- Blood test to measure cholesterol
 - Pulse and blood pressure
 - Height, weight and waist circumference measurement
 - Lifestyle advice about diet, alcohol, exercise and smoking
 - Family history
 - Ethnicity/age/gender
- 10.4 The check takes account all the risk factors that may affect the person, rather than focusing on just one thing, such as, cholesterol level. Dementia awareness is now included in the check for the older age group because risk factors that increase the chance of developing cardiovascular disease also increase the chance of developing dementia.
- 10.5 The check is face to face with a trained nurse or health care assistant, who will advise the patient about their risk score. The risk is calculated as a percentage and if the risk is less than 20%, lifestyle advice is given and a review is scheduled for 5 years time. If the person's risk is 20% or higher, they are recommended to take a statin, given lifestyle advice and referred into lifestyle services such as stop smoking services. Further blood tests and a yearly review are carried out until a disease develops. If the check is carried out in a location other than the GP surgery, then the agreed practice is for a record of the check to be sent to the GP for follow up and documentation in their records. However, indications were that there is the potential for a discrepancy between the number of community checks actually undertaken and the numbers recorded by GPs.

10.6 A team of nurse facilitators located at the Tees Valley Public Health Shared Service (TVPHSS) support GP practices to improve uptake and quality of the NHS health check. An example of the support provided for practices is highlighted below:-

- Quarterly visits are offered to all GP practices to improve the administration and delivery of the check;
- Underperforming practices are contacted by the TVPHSS GP Clinical Lead to discuss opportunities to improve performance and reach targets;
- Educational resources are provided for practices to enhance the quality of the check;
- 1:1 training for new staff and update in practices;
- Joint visits to practices are undertaken by the Public Health Nurse Facilitator and Primary Care Intelligence if the practice has recurring issues with templates and reports;
- Information on available lifestyle services;
- Sharing of good practice e.g. successful processes in other practices; and
- Further training sessions on CVD care are being designed at present by the TVPHSS

10.7 The Healthy Heart Check has a good track record across the Tees Valley. However, continuous improvement is always a priority and a service review of the Healthy Heart Check Programme is currently being undertaken by the TVPHSS. This will identify strengths and weaknesses of the current service model and delivery and the scope of the review is as follows:-

- (i) Review the evidence base and best practice;
- (ii) Review the national programme objectives and quality requirement;
- (iii) Review population need;
- (iv) Evaluate how effective the current service models are and how effective current providers are in engagement and delivery (strengths and weaknesses) including but not limited to:
 - a) Provider variation
 - b) Quality of delivery
 - c) Inequalities and access
 - d) Capacity to deliver
 - e) Joint commissioning arrangements
 - f) Integration with lifestyle / behaviour change providers
 - g) Payment mechanisms
- (v) Scope/test alternative commissioning models, this will include:
 - Single provider;
 - Multiple provider; and
 - Any qualified provider.

(vi) Consult, engage and market test; and

(vii) Recommend models of delivery; define the quality of delivery; suggest payment models; model programme costs; and explore commissioning options.

10.8 A final report is expected in August 2015 and the outcome of this investigation is to be fed into the service review.

10.9 The table below illustrates in Quarters 1 to 3 in 2014/15 that in Hartlepool 22,934 were eligible for a healthy heart check, the total invitations at Quarter 3 were 3,882 and the total assessments at Quarter 3 were 1515, which equates to 39% of people responding and having the check. The NHS health check guidance recommends to invite a maximum of 20% of the eligible population per year. The average national response rate to the invitation is 48.6%. Members acknowledged that awareness of the Healthy Heart Check does need to be raised and people need to know and understand the importance of the check. Public Health England is encouraging people to find out the age of their heart by using a new tool called 'My Heart Age'. By using the tool people can find out the age of their heart by inputting simple lifestyle information, such as their weight and whether they smoke, and see how this compares to their actual age. They can then take action to improve their health. The personalised results, combined with the NHS Health Check, give an opportunity for people to take action to reduce their risk of developing serious but preventable conditions. The tool is available on the NHS Health Check website and also includes information about what happens at the NHS Health Check.

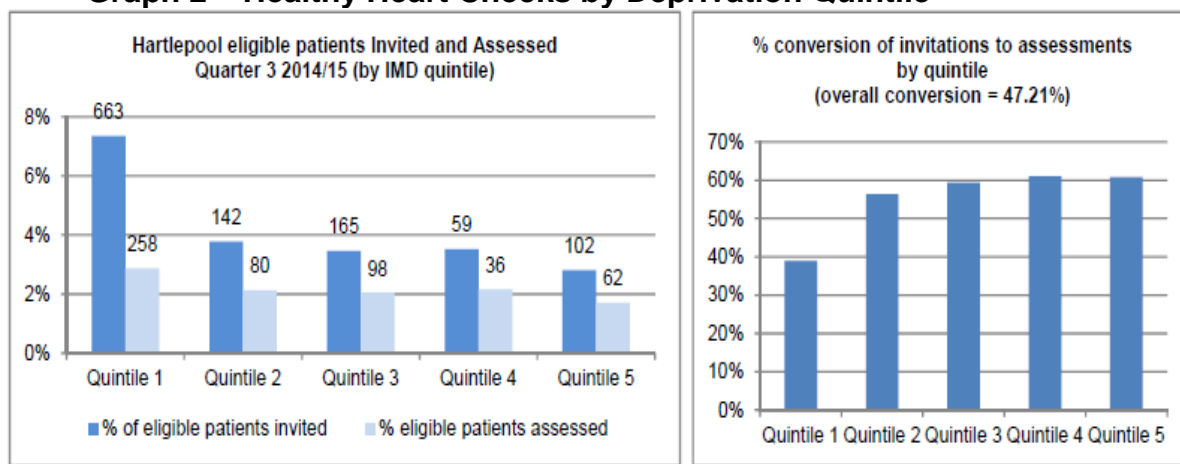
Table 1 – Healthy Heart Check Q1-3 2014/15

	Eligible patients	Total invitations at Quarter 3 2014/15	Total assessments at Quarter 3 2014/15
Middlesbrough	36266	6906	3273
Redcar & Cleveland	35463	6996	2489
Stockton	50070	10381	3588
Hartlepool	22934	3882	1515
Totals	144733	28165	10865

10.10 The data in relation to the eligible patients invited and assessed in each deprivation quintile is shown overleaf. Eligible patients from quintile 1 (most deprived) are prioritised. GP practices receive lists of eligible patients to be invited to health checks from Public Health. Patients from quintile 1 are less likely to respond to the invitation for a health check. This could be due to a number of reasons such as not wanting to visit the GP practice, maybe a lack of understanding / benefits of the check, not reading the invitation, not

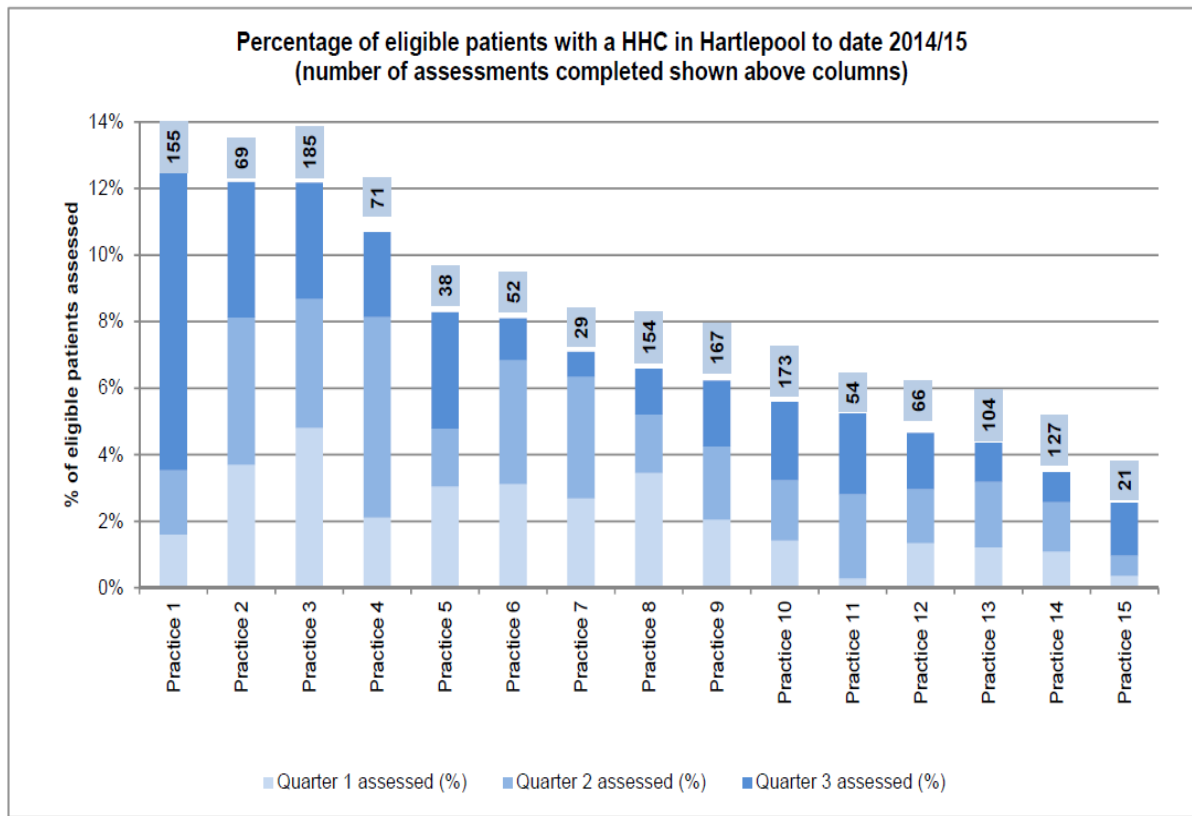
responding to postal invitations, not having time to respond or not wanting to attend a pre-booked meeting. It is known that people in quintile 1 respond better to telephone invitations and when offered walk in facilities in community venues.

Graph 2 – Healthy Heart Checks by Deprivation Quintile



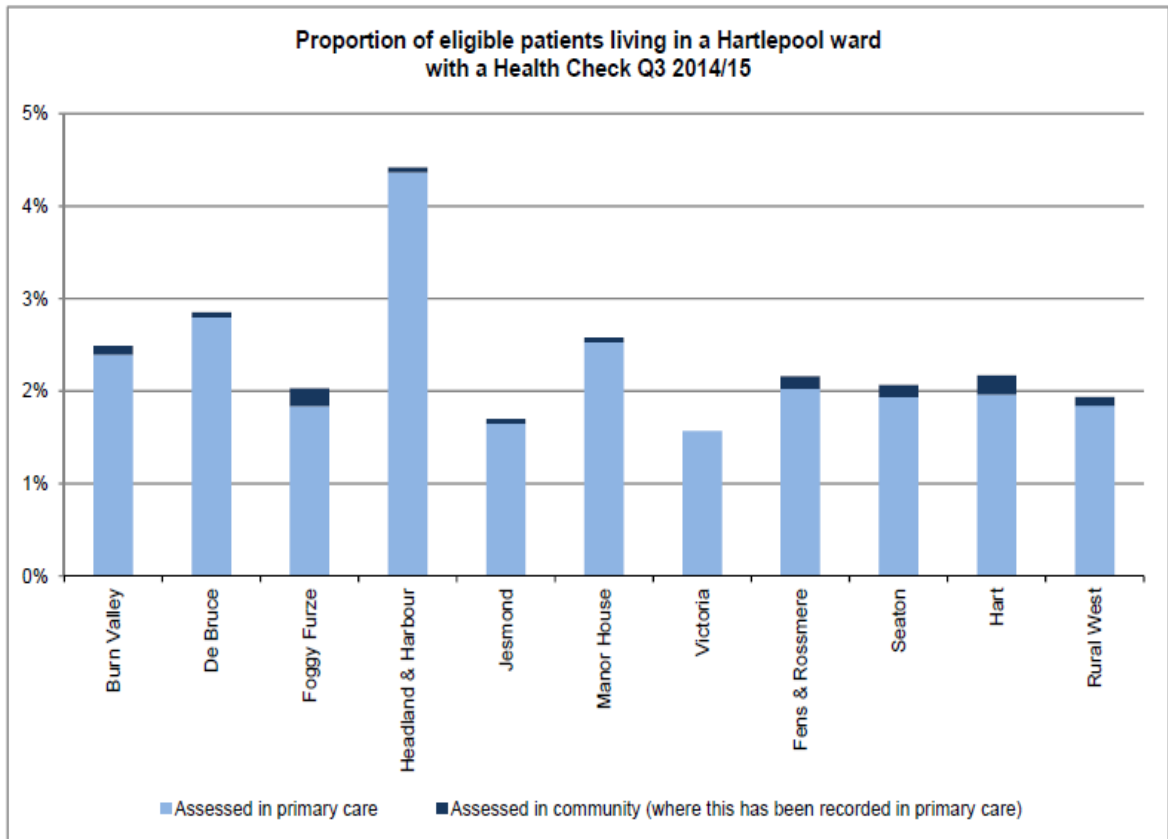
10.11 Graph 3 shows significant variation between GP practices across Hartlepool. However, figures need to be looked at with caution, as bigger practices will obviously have a higher number of eligible patients. Practice names are anonymised but practices are currently being approached to allow benchmarking information to be shared in the future. Members noted that it would be beneficial to know the practice names. Once the practice names are released it may increase the competition amongst practices and perhaps increase attendance at Healthy Heart Checks. The Council has developed a directory of services which is hoped that GPs will use to refer practices onto other services if needed, for example, the Stop Smoking Service. The HealthWatch representatives commented that while there were many GPs in the town taking proactive measures, some were not.

Graph 3 – Healthy Heart Checks in GP Practices April – December 2014



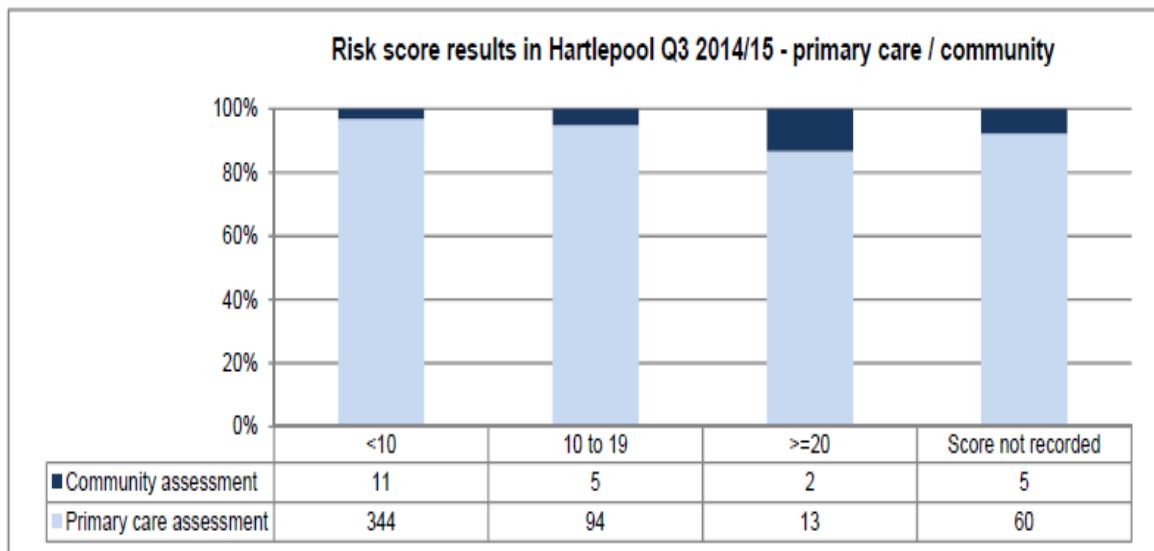
10.12 Graph 4 illustrates the number of Healthy Heart Checks undertaken in each ward in quarter 3, and indicates those assessed at a GP practice and those assessed in the community (where this has been recorded in primary care). Data has to be interpreted with caution as uptake and numbers of assessments vary considerable between quarters.

Graph 4 – Healthy Heart Checks by Ward



10.13 Table 5 illustrates the Healthy Heart Check outcomes. This data is for quarter 3 of 2014/15, therefore should be interpreted with caution as data varies considerably between quarters. From the collated information 15 (3%) patients were diagnosed with high risk for CVD (with nearly half of these receiving a statin), 99 (19%) patients with moderate risk and 355 (66%) patients with low risk.

Table 5 Healthy Heart Check Outcomes



- 10.14 Members requested details about the Lifestore in Middlesbrough. The Lifestore is based in the Cleveland Centre and was established in 2006 by the former Primary Care Trust with the intention of providing information and advice about health and health services to the local population. The intention was also to offer health services/clinic from the unit. However, this has been limited due to the scope of the lease. The service is currently provided by the Pioneering Care Partnership and commissioning responsibility has transferred to the CCG. It is understood that the service is currently under review. Members suggested the possibility of a similar model in Hartlepool in the Middleton Grange Shopping Centre.
- 10.15 Members questioned what work was ongoing in Redcar relating to Healthy Heart Checks. The work in Redcar uses GP records and demographic data to identify areas/population groups where Primary Care provision of health checks is not reaching. A Nurse Facilitator within the Tees Valley Public Health Shared Service has been working with Redcar Council to identify appropriate sites to extend the reach of the service and establish partnerships with organisations who engage with the target group to increase awareness and proactively signpost. Health Checks have been delivered on a trailer on the high street and in other settings such as libraries. The checks have been delivered by a Healthy Heart Check Nurse Bank located at South Tees Trust who is commissioned to provide Health Checks. This 'outreach' approach is currently being evaluated. The outcomes of the pilot project will be shared with the other Tees authorities.

Work in Schools

- 10.16 Members were interested to hear about the work in schools relating to cardiovascular disease. Between April 2012 and end of March 2015, the British Heart Foundation (BHF) funded a project to raise awareness among school children between the ages of 7 and 14 of the risk factors that contribute to coronary heart disease. Every school, bar one, in Hartlepool participated. It became apparent that many schools were already doing a lot of health-related work but the project provided a focus and offered support, resources, publicity, motivation and ideas to school staff in delivering CVD prevention messages mainly around healthy eating, being more active, not smoking and overall heart health and how the heart works. The idea was that after the 3 years of the project, the good practice embedded would be sustainable through delivery by staff in school.
- 10.17 Both public health staff members employed in the project left in August 2014 to take up other posts, but the Health Improvement Team has been able to sustain some of the work. The HBC Community Nutritionist in the Team continues to work with schools on healthy eating including looking at school meals provision and delivery to support the children to make healthier choices at lunchtime. For example, using colour coded menus for children to pick foods from particular food groups. In addition, the remaining money left in the BHF grant has been used to provide a Healthy Cooking in the Community programme aimed at children and parents and carers. This follows on from a

series of successful cooking in schools sessions where it was recognised that parents would benefit from a community programme.

- 10.18 BHF money has also been used to continue to commission a theatre in education group called 'Gibber' that provides a drama performance workshop called 'The Truth for Year 7' pupils in all secondary schools to raise awareness of the consequences of smoking and the tactics of the tobacco industry to recruit young smokers. These have been running for 5 years and prove very popular with pupils and staff.
- 10.19 With regard to physical activity in schools, the BHF project enabled the introduction of a range of physical activity opportunities and challenges for children in schools and provided opportunities for the Council's own Sport and Recreation staff to get into schools and develop work, which will be ongoing. To date, there has been no central call to lobby for increasing physical activity time within the curriculum. Members were concerned that only 1 lesson a week was dedicated to PE.
- 10.20 Through the mainstream Public Health budget, a tobacco intervention is currently being developed for delivery in the school and youth setting to provide opportunities for young people who want to quit to access appropriate help and support linking with the Specialist Stop Smoking Service. This is based on insight work carried out with young people in Hartlepool identifying their preferred means of support. The intervention will also encourage all young people, whether they smoke or not, to be involved in the tobacco agenda aiming to make smoking 'not cool' in their school / youth club. As part of this intervention 'Gibber' has been commissioned to produce a drama and workshop for Year 10 pupils. Members reiterated that CVD messages needed to be continued to be reiterated through schools in a language that school children would understand. Members questioned if the Council could influence Headteachers to encourage healthy eating, for example, only allowing children to eat on the school premises rather than at food outlets outside of the school.

11. **BUDGET**

- 11.1 Members questioned the Council's budget provision for CVD services. The Director of Public Health provided the following information. The total budget for the provision of NHS Checks and Health Improvement interventions for 2014/15 is as follows:-
- £88k for GP surgeries NHS Health Checks (General Prevention Health Checks)
 - £40k for Cardio Vascular Disease Bank Nurse (Community and Workplace Health Checks)
 - £58k for Mobile Health Improvement Service (which provide Healthy Heart Checks as part of an integrated Health Improvement Service). This budget is not exclusively for Healthy Heart Checks as these are delivered within a package of Health Improvement Services, not in isolation.

- 11.2 The Director of Public Health advised that the budgets / resources allocated to CVD are sufficient and all partners are fulfilling their statutory roles.
- 11.3 The Council commission a Mobile Health Improvement Service which is known as the 'Health Bus' to deliver a broad spectrum of health improvement services, not exclusively for Healthy Heart Checks. The total cost of this service is £57,680. It has engaged with 2308 individuals, in the community, in the first 9 months of service and significantly through the screening programmes it delivers; 2 of which identifying life threatening conditions, which led to immediate response referrals, potentially saving the lives of those individuals concerned.
- 11.4 Members visited the Health Bus on 2nd March 2015 and were impressed with the overall service being provided. Members received anecdotal evidence from the nurse practitioner to demonstrate the value of the service and levels of patient support. Examples included the success of the service in identifying a gentleman who had been found to have extremely high blood pressure, resulting in a referral to his GP for further investigations and subsequent admittance to hospital. Also, the treatment of a man walking past the bus with chest pain that was looked at by the nurse and an ambulance was called due to a suspected heart attack.
- 11.5 Following discussions regarding the ability of the nurse on the bus to deal with heart attacks, Members questioned whether a defibrillator was installed on the vehicle. Members noted that at the present time a defibrillator was not placed on the bus and that a request had been submitted as part of the programme for the installation of devices in community settings across the town. Members expressed their support for the installation of a defibrillator on the bus as part of the programme across the town.

12. SECONDARY AND TERTIARY CARE SERVICES

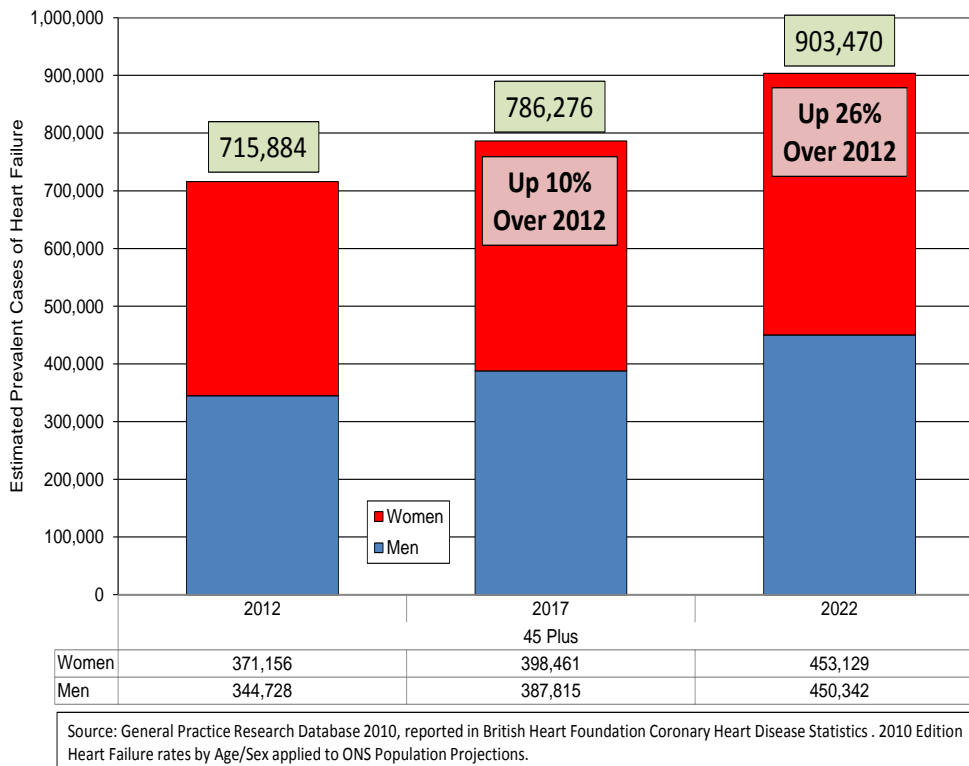
- 12.1 Members received evidence regarding secondary and tertiary care services from South Tees NHS Foundation Trust, North Tees and Hartlepool NHS Foundation Trust and the North East Ambulance Service.

South Tees NHS Foundation Trust – Cardiology Department

- 12.2 Members received a presentation from the Consultant Cardiologist and Chief of Cardiothoracic Services at South Tees Hospital. Members were informed that CVD causes 200 thousand deaths per annum and 4.9m adults have CVD, which is 11.7% of the population. There was 1.4m hospital admissions in 2010/11 and 65% were patients under 75 years with more than 50% being emergencies. CVD costs the NHS and UK economy £30billion per annum. Prevalence of CVD increases with deprivation and due to lifestyle, i.e. diet / obesity, CVD is starting to become more prevalent. Children are now being diagnosed with diabetes, which a major concern. The future prevalence of heart disease is shown over the page.

Long Term Conditions: Heart Failure - Future Prevalence

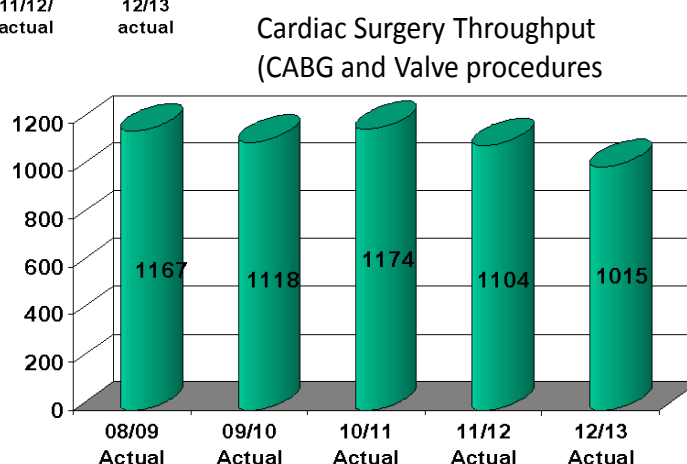
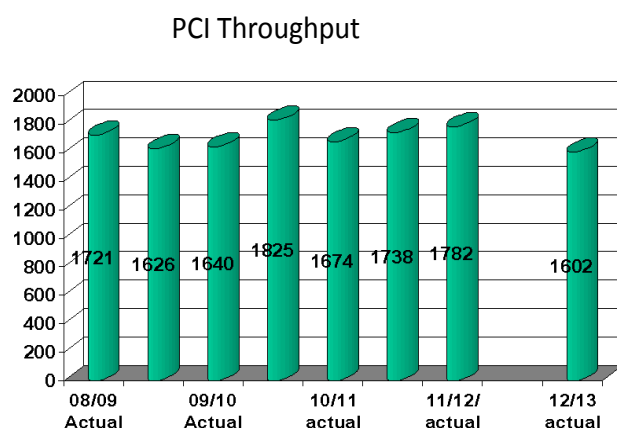
England – Heart Failure – Prevalence Cases – Projected Numbers to 2022 – Based on General Practice Research Database 2010



12.3 There are a range of services offered at the Cardiothoracic Division at James Cook University Hospital, which include:-

- Cath Lab
- CT surgery / ITU
- Electrophysiology
- Rehabilitation
- Heart failure
- Cardiac imaging
- Valve Surgery
- Arrhythmias/AF Pacing / Device
- Prevention
- Heart failure
- Diagnosis and monitoring
- Chest pain
- Acute coronary syndromes

The throughput of the services is shown in the graphs below.



12.4 Members were informed that there have been major improvements in cardiac services since 2000. The National Service Framework for Coronary Heart Disease – National Service Framework (2000) states that “this framework will transform the prevention, diagnosis and treatment of coronary heart disease. It will help professionals to give better, fairer and faster care everywhere, to everyone who needs it. We want a service that is amongst the best in the world. Our people deserve nothing less” (Alan Milburn, Secretary of State for Health).

12.5 In 2000, the UK did not have high rates of diagnostic catheterisation compared to the rest of Europe. Since 2000, there has been significant financial investment in the coronary heart disease infrastructure, clinical pathways, cardiac networks and commissioning of services. Mortality rates have halved from 1970 to 2009. Members commented that early diagnosis was essential.

Cardiovascular Disease Pathways

The Cardiology division provides the following services:-

12.6 **Acute chest pain management.** Patients who call 999 with suspected cardiac chest pain will have an electrocardiograph performed by the

paramedic and this will be faxed directly to the coronary care unit (CCU). The paramedic will then contact the CCU senior sister providing details about the patient and their symptoms. The CCU senior sister will decide on the most appropriate department for admission based on the information provided. The patients with heart attacks and unstable angina or unstable heart rhythms will be admitted directly to CCU. The patients with other types of chest pain will be admitted to the acute admissions unit (AAU) or accident and emergency (A&E) and investigated appropriately. Patients suffering from a particular type of heart attack known as a STEMI (ST-Segment Elevation Myocardial Infarction) will usually be offered angioplasty treatment immediately regardless of time of day. Those patients who self present in A&E with STEMI will also be offered immediate angioplasty.

- 12.7 **Cardiac rehabilitation.** The team is a multi-disciplinary team which includes nurses, physiotherapists, clinical exercise physiologists, health care assistants and clerical staff. The aim is to help people who have suffered a heart-related illness work towards healthier lifestyles.
- 12.8 **Cardiology.** There is a full and comprehensive range of modern, diagnostic and therapeutic techniques at The James Cook University Hospital for a large population. These include facilities for, echocardiography, exercise stress testing, ECG and BP monitoring, angiography and percutaneous coronary Interventions, insertion and follow-up of pacemakers electrophysiology including radiofrequency, ablations and implantable defibrillators. There are also specialist clinics for chest pain, arrhythmia, heart failure, cardiac genetics and adults with congenital heart disease. On average the team perform 3,000 cardiac catheters, 1,700 angioplasties (using a balloon to unblock the arteries) and fit 350 pacemakers a year. The team also help the care of patients with chronic heart disease that develop other major illnesses and are supported by the cardiac rehabilitation department that provides a seven-week programme for patients recovering from heart conditions or surgery.
- 12.9 **Cardiothoracic surgery – cardiac intensive care.** A full range of cardiac surgical interventions, including coronary bypass, arrhythmia and valve operations are offered, with the current exception of heart transplantation. Surgical intervention is also provided as emergency care to patients who suffer traumatic chest injuries. Patients who are referred for surgery will meet members of the team before their operation and receive plenty of information and advice. Pre-admission clinics are regularly held for surgical patients, at which relatives are also welcome.
- 12.10 **Rapid access chest pain clinic.** There is a rapid access chest pain clinic that is run on a daily basis and appointments will be offered within 2 weeks of referral. The rapid access chest pain clinic (RACPC) at The James Cook University Hospital has a daily service dedicated to patients with recent onset chest pain (within 12 weeks) where cardiac origin is likely or suspected. Patients can be referred to the service by their GP or occasionally via the A&E department or AAU. During clinic attendance, which lasts for 40-60 minutes, patients will be seen by the nurse/doctor, a history will be taken of their

symptoms of chest pain, physical examination and exercise tolerance test will be performed. Following this a treatment plan will be formulated in conjunction with the patient. Prescribing will be performed as necessary, but this will mainly be the remit of the GP. Treatment plans will be faxed to the GP within one working day of clinic attendance. Patients requiring angiogram/angiography will be listed and pre-admitted during their attendance at RACPC to ensure waiting times for procedures are kept to a minimum.

12.11 **Cardiac function clinics.** The clinics offer heart failure diagnostics including community clinics and immediate echocardiology.

12.12 Members questioned why many services were being concentrated in one locality, for example, heart attack services. This is because concentrated services are proven to have better outcomes and if surgeons treat less than 500 patients then the service is not as good. It is costly to deliver services in a range of localities and as IT systems are now better advanced, it is possible to diagnose people in community settings. The direction of travel has to be in a community setting, not in a hospital. Better treatment and better outcomes come with centralised services. It is about getting more diagnostic services, initial assessments and treatment out into the community, as close to patients as possible.

12.13 The Joint Strategic Needs Assessment is used to help tackle inequalities and working with health services to help shape the JSNA will help tackle health inequalities at a strategic level.

12.14 On 5 March 2013, the Department of Health published a CVD Outcomes Strategy² which recommended a number of measures:-

- Manage CVD as a single family of diseases
- Improve prevention and risk management
- Improving and enhancing case finding in primary care
- Better identification of very high risk families/individuals
- Better early management and secondary prevention in the community
- Improve acute care
- Improve care for patients living with CVD
- Improve intelligence, monitoring and research and support commissioning

12.15 Some of the actions to address these measures include:-

- Integration of services
- Raising awareness
- Improve survival from out of hospital cardiac arrest
- 24x7 cardio vascular services

² Department of Health – Cardiovascular Disease Outcomes Strategy, Improving outcomes for people with or at risk of cardiovascular disease

12.16 The Cardiologist concluded:-

- There is falling CVD mortality but this may reverse due to an increase in obesity, diabetes
- Important to have an integrated approach to prevention and care and the importance of data
- The future challenges are as follows:-
 - Medical inflation and healthcare funding
 - Ageing population and lifestyles
 - Integration of services
- The 5 Year Forward Plan stresses prevention, models of care and use of information/data
- Local services have started journey towards:-
 - Specialist care
 - Community clinics for diagnostics, initial assessment and treatment
 - Look at the next steps
- Success will require collaboration:-
 - Primary, secondary and tertiary care
 - Local authorities
 - Charities
 - Specialist societies and Royal Colleges
 - NHS England
 - Health Education England
 - Commissioners

North Tees and Hartlepool NHS Foundation Trust – Cardiology Department

12.17 Members received evidence from the Consultant Cardiologist at North Tees and Hartlepool NHS Foundation Trust. Members were informed that coronary heart disease is the most common cause of death in the UK and the UK underperforms most of Europe. There are high rates of Coronary Heart Disease in Scotland and North East England.

Cardiovascular Disease in Hartlepool

12.18 Compared to the England average in Hartlepool there is a 55% increase in admission to hospital and 57% more heart attacks (there are similar levels for cancer and respiratory illnesses). In Hartlepool there is a 10% increase in CVD death and a 16% increase in premature CVD deaths.

12.19 Members questioned the causes of CVD and why they were highest in the North East of England. It was confirmed that it was a combination of many factors including smoking and poverty.

12.20 Members were informed that there has been significant investment in the cardiology department at North Tees and Hartlepool NHS Foundation Trust (NTHFT) including:

- increased numbers of cardiologists
- improved diagnostics
- local services
- enhanced community services
- streamlined pathways
- Investment in new equipment – for example, a new CT scanner

12.21 There is a cardiology outpatient service based at the University Hospital of Hartlepool with Consultant led clinics that look into general cardiology, heart failure, arrhythmia (pacemakers) and structural heart disease. The clinics have approximately 800 new patients a year and over the past two years the clinics have started to expand. There are also nurse led clinics, which are the rapid access chest pain clinic (which has 600 patients per year and GPs can refer to the service and patients will usually be seen within 2 or 3 days and guaranteed to be seen within two weeks), the Community Heart Failure Liaison Clinic, the Valve Clinic and the Arrhythmia Clinic.

12.22 In 2010, NTHFT had one cardiologist, no speciality clinics and limited urgent capacity. Now, in 2015 there are 4 cardiologists with speciality clinics and increased urgent capacity.

12.23 Diagnostic testing services are offered at the University Hospital of Hartlepool in the Cardiac Investigations Unit which offers a full range of non-invasive testing, which includes a ECG reporting service for local GPs, echocardiography, heart monitors and BP monitors, exercise testing and pacemaker follow-up.

12.24 The cardiac services offered at North Tees Hospital are the same as those offered at Hartlepool but at the North Tees site they carry out complex imaging and the cardiology day unit and catheter lab offers diagnostic angiography (800 patients a year) and pacemaker implants (200 patients a year). There is an acute cardiology ward at North Tees hospital, with up to 6 high monitored beds. There are daily consultant led ward rounds on a weekday, which has improved care (quality and safety) and shorter admissions. The aim of the cardiology unit is to provide 7 day cardiologist cover.

Community Based Services

12.25 Members were informed that CVD patients are well served by community CVD services and the Cardiology Team are trying to expand local services further / enhance community programmes. The data collected from GP's shows that there is an increase from 30% to 70% of referrals to the clinics, therefore the demand is there and the expectation is to expand services to

meet demand. The community heart failure clinic is a service for severe heart failure, 200 patients in Hartlepool use the service and home visits are undertaken where needed. The service offers supported discharge from hospital and has links to palliative care services. Most patients are seen in local clinics where the investigations are undertaken. Offering services to patients earlier in their pathways will help to prevent people being admitted to hospital. Cardiac rehabilitation is offered to all patients following a heart attack, which provides patients with lifestyle advice, point of contact and a graded exercise program. When measuring cardiac rehabilitation on improved medical outcomes, the data shows that it does not have a great impact, but patients enjoy the rehabilitation as it contributes to improved quality of life. One of the roles of the Cardiology Team is to educate GP's about services available to CVD patients.

- 12.26 Members questioned whether care offered at GP surgeries is helping to detect heart disease. In response to the question, the Cardiologist said that care delivered in primary care is valued, although care provided by some GP's is better than others. There was a discussion about GPs carrying out / reading ECG's, and in Stockton nearly all GP's have access to ECG's and can read them, whereas in Hartlepool patients are referred to the hospital for an ECG and then back to the GP with the results. Members asked if the Cardiology Team could influence GPs about the use of ECGs in their surgeries, and the Cardiologist confirmed that he had made suggestions to GPs about this but he was not aware of any GPs who were offering ECGs.
- 12.27 The group discussed targeting primary prevention and trying to get all GPs to recognise that prevention does work i.e. the Healthy Heart Checks.

Tertiary Services

- 12.28 The North East has a strong cardiac network, who meets three times a year, topics discussed include collaborative working, agreed pathways of care, managed expansion and devolution. NTHFT has close links to James Cook University Hospital with cross site posts, participation in education program and multi-disciplinary meetings between James Cook and NTHFT.
- 12.29 Members were informed that people are living longer in 2014 even though they are travelling further for treatment.

13. THE ROLE OF AMBULANCES IN RELATION TO CARDIOVASCULAR DISEASE

- 13.1 Members received evidence from a Consultant Paramedic at the North East Ambulance Service. In relation to CVD the ambulance service treats the following conditions:-

- **Acute Coronary Syndrome (angina, myocardial infarction (MI))**
Angina is a narrowing of the coronary arteries which can be relieved by rest but may need drugs to widen the arteries.
MI is captured by the ECG and requires primary percutaneous coronary intervention (PPCI) and drug therapy on route to hospital
- **Stroke**
The FAST (Face, arms, speech, time) is used and if positive then the patient is transported to a hyperacute stroke unit and given oxygen on route, the hospital is alerted of the emergency.
- **Cardiac Arrest**
This is a complete stop of the heart and the most important action is for the patient to receive CPR immediately and this is normally by a bystander, although the North East is one of the worst areas for bystander CPR. Treatment for a cardiac arrest can include defibrillator and drug treatment and 70 to 80% are treated at the scene. The drug that is used to treat a cardiac arrest is adrenaline, although there is no evidence to suggest that this is the most effective drug to use. Therefore, NEAS, along with 4 other ambulance services in the country are trialling a new drug.

- 13.2 The Consultant Paramedic is currently developing a Cardiac Arrest Strategy and within this he intends to include how to increase bystander CPR along with more public access to defibrillators. Members discussed CPR training and the lack of people trained in CPR and suggested that secondary school children would be appropriate people to be trained in CPR. Also, members suggested that it would be beneficial if more staff within the local authority were CPR trained.
- 13.3 Members supported the use / access of defibrillators in public places but stressed the need for defibrillators in the workplace, which was supported by the Consultant Paramedic. Members supported Public Health's approach to encourage employers to place defibrillators in the workplace and also to provide training for Council staff and Councillors on the use of defibrillators. Members stressed the importance of not only having a defibrillator in the workplace but also to register it with NEAS, as this will then make paramedics aware of when it is in use. In keeping with this, Community Defibrillators are currently in the process of being placed in Council-owned buildings and Parish Council locations with training for the staff and community to follow.
- 13.4 Members were informed that NEAS staff in their own time were piloting the use of a cardiac arrest car. The car is being piloted at Newcastle and the paramedic indicated that if the patient is treated by the cardiac arrest car then the patient has a 3 times higher chance of being discharged from hospital following the cardiac arrest. It is hoped that further cars can be made available across the North East, although this will be subject to funding. It was anticipated that 3 to 4 cars would be needed to cover the North East, which would cost on average 1.5 to 2 million pounds. It was recognised that the car was a success because of its specialism in treating certain conditions;

it was about getting the best responder in place. In general paramedics do not attend many cardiac arrests but the paramedics on the car, only attend cardiac arrests therefore they build up their knowledge and learn each time from their experience.

- 13.5 Members questioned the use of the Fire Brigade as first responders to cardiac arrests, as concern was raised about the resource implications and funding issues. This method of using the Fire Brigade as first responders has proven successful in America but Members were concerned that often a 'mix and match' service fails to deliver.

NEAS Performance

- 13.6 The ambulance service quality indicators collate data from a variety of incidents and are categorised as emergency service unplanned care for cardiac arrest, ST segment elevation myocardial Infarction (STEMI), and stroke. The indicators are aimed at accessing the treatment provided by ambulance clinicians, based on their initial assessment and diagnosis of the patient when attending the incident.
- 13.7 In relation to STEMI, the indicator measures the percentage of patients suffering a STEMI and who, following direct transfer to a PPCI centre receive primary angioplasty within 160 minutes of the emergency call. NEAS are below the national average for this indicator. The national average is 89.5% and NEAS is at 86.6%. NEAS are currently ranked 8th in the country for this indicator. The Consultant paramedic explained that NEAS are not getting patients to hospital in good time and explained that this was due to a shortage of paramedics and delayed hospital turn around times. Third party ambulance providers, such as Red Cross and St John's Ambulance were being used to transport patients to hospital when a rapid response car was on scene. The rapid response paramedic will then go with the patient in the third party ambulance to hospital.
- 13.8 NEAS are above the national average for the indicator which measures the percentage of patients suffering a STEMI who receive an appropriate care bundle. The national average is 80.2% and NEAS are performing at 85.1% and are ranked 3rd in the country.
- 13.9 In relation to stroke, the percentage of FAST positive stroke patients potentially eligible for stroke thrombolysis, who arrive at a hyperacute stroke unit within 60 minutes of emergency call is 70%, and the national average is 60%. NEAS are ranked 2nd in the country for this indicator.
- 13.10 98.4% of suspected stroke or unresolved transient ischaemic attack patients (assessed face to face) receive an appropriate care bundle, this compares to a national average of 97%.

- 13.11 Regarding cardiac arrest performance, NEAS are measured on patients who arrive at hospital with a heart beat. NEAS is performing at 35.7% and the national average is 30.1%. NEAS are ranked 3rd in the country.
- 13.12 NEAS are also measured on survival to discharge. This is the percentage of patients who survive after admission to hospital; this figure is very low at 4.9%, compared to 8.2% nationally. Although, if a patient receives treatment from the specialised cardiac arrest car this figure rises significantly to 12%. If the patient has a 'shockable rhythm' there is a 20% of survival to discharge. NEAS are ranked 10th in the country for this performance indicator.

14. REHABILITATION PROGRAMMES / LEISURE CENTRES

- 14.1 Leisure Centres in Hartlepool offer a wide range of activities, for example, free swimming for school children, GP referrals to exercise classes (detailed below), subsidised charges for activities through the use of the Active Card. Members questioned if Healthy Heart Checks could be undertaken in community venues, such as leisure centres, libraries and community centres. The Healthy Heart Checks do take place in community and workplace venues including Hartlepool Borough Council, as well as GP practices and clinical settings.
- 14.2 Members asked about the NHS Health Trainer Service. The NHS Health Trainer Service in Hartlepool, currently provided by North Tees and Hartlepool NHS Foundation Trust, will move into the Local Authority as of 1st April 2015. The service is the only Tier 2 (Community) Weight Management Service for adults currently operating in Hartlepool, where obesity and overweight currently affects 68.5% of adults. As such, the service forms an integral part of the Healthy Weight Healthy Lives Strategy and obesity pathway for Hartlepool. There are 5 health trainers plus one team leader, strategically placed at key areas in the community to offer free one to one and group based support around nutrition, healthy lifestyle and behaviour change. People can self refer into the service or seek a referral from other clinical services. Health Trainer-led weight management clinics are also provided in several GP practices across the town. The move into Public Health within the Local Authority will enable more flexibility and control over the future development of the service, to ensure there are closer working links with key council services such as adult social care and sport and recreation teams. There is also scope to consider how the service could support delivery of the Healthy Heart Check agenda and also support families, not just adults with nutrition and healthy lifestyle advice.

Visit to the Cardiac Rehabilitation Community Exercise class

- 14.3 Members were offered the opportunity to visit the Cardiac Rehabilitation Exercise Class at the Mill House Leisure Centre. The Exercise for Life Programme provides opportunities at weekly supervised sessions for those patients with Coronary Heart Disease (CHD) to continue exercising on completion of their Phase 3 NHS Cardiac Rehabilitation programme. This

Phase IV provision is an extension to the secondary care offered by the NHS services, offering long term maintenance of physical activity and life style change to reduce the risk of recurrent events. The HELP scheme has a good working partnership with the Community Coronary Heart Disease Specialist Nurse team who are based at the McKenzie House surgery.

- 14.4 The British Association for Cardiac Rehabilitation protocols are followed regarding the referral process, with the confidential exchange of the relevant patient information from the Phase 3 teams to the GP Referral Coordinator. Patients give their consent for this to happen, the patient's GP is then informed that this process has taken place. Any instructors who hold this nationally recognised advanced qualification have to revalidate their teaching certificate every three years.
- 14.5 Groups of patients seen are:-
- Post Heart Attack - M.I's
 - Coronary arteries bypass graft and valve surgeries
 - PCI's (stents or balloon insertions)
 - Pacemakers and other implanted devices
 - Heart Failure patients
 - Stable angina
- 14.6 Phase IV exercise offers the opportunity for patients to maintain and increase their fitness levels. This in turn increases their confidence and supports them as individuals as well as helping their families. The sessions also offer a social element to support those who otherwise may live quite a solitary life. GPs and CHD Nurse Practitioners also refer to the Phase IV provision direct from the surgeries. These patients may have Angina or be at risk of increasing risk of developing heart problems. The NHS - CVD Cardiovascular Disease screening programme identifies those patients who could benefit from the HELP scheme service and all referred patients are given the opportunity to engage.
- 14.7 People who are anxious are encouraged to observe sessions prior to participation so that they and their family members are more comfortable with the transition from the NHS clinical teams to the community exercise professionals who work in this area. On completion of an initial 10 week period of attending, allowing time for assessment on cardiovascular function patients are then sign posted to further opportunities in the councils leisure centre services offering a menu of choice. This provides more flexibility and variety to their physical activity sessions. At the present time clients do pay a small fee to attend their exercise sessions this is £1.80 per session if the patients are over 60 years of age in line with the Council's Sport and Recreation Concession Active Card scheme. If a patient does not fit this category the cost to take part is £2.70 per visit. To date, the Exercise Co-ordinator has had little feedback to suggest this is a barrier to access, but it is something that is always considered when receiving new referrals.

14.8 The benefits for patients who maintain regular cardiac rehabilitation structured exercise in the long term are:-

- Reduced hospital admissions
- Reduced Angina
- Improved Lipid Profile
- Reduced Blood Pressure
- Improved functional capacity
- Improved compliance with positive lifestyle behavioural changes
- Reduced anxiety and depression
- Increased confidence and well being
- Improved likelihood of a return to work and leisure activities
- Improved health education for families and friends

14.9 Some comments received from the patients are listed below:-

“really thorough and brilliant, trainer keeps a good check on you. Help and guidance is offered, very worthwhile class, everyone is cared for “.

Smoking Cessation Clinics

14.10 Members visited a smoking cessation clinic. North Tees and Hartlepool NHS Foundation Trust is commissioned through local authorities to provide stop smoking clinics across Teesside at a number of convenient venues in Stockton, Hartlepool, Middlesbrough and Redcar and Cleveland. There are also a number of pharmacies that can offer stop smoking treatments along with various GP practices. There is a team of specialist advisors who provide friendly and non-judgmental help to smokers. The support is tailored to each individual to provide the best possible chance of quitting.

14.11 Members were concerned that smoking among young people seemed to be on the increase and were concerned that many could be using e-cigarettes as they thought them to be less harmful. The use of flavoured e-cigarettes as well was also thought to appeal to young people. Members were informed that smoking cessation work was carried out through youth workers.

14.12 Members questioned whether all services provided to help prevent cardiovascular disease were sufficiently joined up and questioned whether smoking clinics and healthy heart checks could be offered at the same time / same place. Logistically, offering the service at the same time would not be of benefit. It was also questioned whether there is sufficient “joined up” thinking/action both within the Council and with partner agencies, for example, altering lifestyle choices through Economic Development and housing initiatives and other critical factors? It was acknowledged that there is some evidence of joined up working, however, as organisations, roles and responsibilities are now clearer and embedded post April 2013, there is scope to deepen joint working and integrate further.

15. CONCLUSIONS

15.1 Council concluded that:-

Inequalities, Access and Provider Variation

- (a) CVD is one of the significant issues facing the provision of Health Services in Hartlepool and is compounded by high levels of deprivation and health inequalities;
- (b) Healthy Heart Checks / NHS Health Checks are a key tool in the early identification of CVD and signposting to treatment services. However:
 - Take up is low, particularly in the most disadvantaged wards, with a significant difference between the number of invitations sent and the number of checks carried out;
 - Invitations are predominantly sent to people living in the most deprived communities and evidence shows that these groups are historically less likely to respond; and
 - It is known that people living in deprived communities respond better to telephone invitations and when offered walk in facilities in community venues.
- (c) Patient numbers at GP practices, and the take up of Healthy Heart Checks, vary across Hartlepool. On this basis, the provision of data on a practice by practice basis would be beneficial in the evaluation of service provision and the sharing of good practice in the future;
- (d) The provision of services from Community locations is a valuable alternative / addition to the provision of services at GP practices and will form part of the blueprint for service provision in the future;
- (e) Data in relation to the conduct and outcome of Health Checks undertaken in community facilities is relayed to GP's as a matter of course. It is imperative that this occurs across all practices if the provision of services in community locations is to be a truly effective part of Healthy Heart Checks in the prevention and early detection of CVD;

Quality of delivery

- (f) Work undertaken in schools has been effective in raising awareness of CVD, and whilst this was initially supported by the British Heart Foundation Project, it will in the future be embedded into delivery by staff in schools. It is essential that this good practice continues as schools are well placed to promote and encourage healthy lifestyle choices;

- (g) Focus needs to be placed on the modifiable risk factors for CVD and how to prevent the disease in order to make people aware that CVD is a serious but preventable disease;
- (h) Defibrillators for use within the workplace and community venues along with trained first aiders are crucial to help save lives and Members expressed their support for the installation of a defibrillator on the Health Bus as part of the programme being implemented across the town.

Integration with lifestyle / behaviour change providers

- (i) The prevalence of CVD in Hartlepool is high due to a combination of factors including deprivation and lifestyle choices;
- (j) There are a wide range of very effective lifestyle services provided by the Council and its partners in terms of prevention and early detection. This includes the Stop Smoking Service which is effectively linked in with the Healthy Heart Checks.

16. RECOMMENDATIONS

- 16.1 The Task and Finish Groups have taken evidence from a wide variety of sources to assist in the formulation of a balanced range of recommendations. With due regard to the evidence considered by each of the Groups, Council's key recommendations to the Health and Wellbeing Board are as outlined below:-

Provision of Services

- (a) That following the transfer of Public Health responsibilities to the Local Authority and the inclusion of sports and recreation services within the Public Health Department, CVD provision commissioned by the Council be reviewed to ensure that:-
 - (i) It is effectively joined up and integrated to take advantage of the opportunities across service areas, with due regard to the wider piece of work being undertaken in relation to the Better Care Fund;
 - (ii) Community provision for the delivery of Healthy Heart Checks is developed and the use of community buildings, such as community centres and libraries be explored to improve accessibility and sustainability of services and facilities; and
 - (iii) There are no gaps/shortfalls in provision.

- (b) That as part of the service review of the Healthy Heart Check Programme currently being undertaken by the TVPHSS consideration be given to:
 - (i) Why the take up of Healthy Heart Checks varies across GP practices, particularly in the most disadvantaged wards, with a significant difference between the number of invitations sent and the number of checks carried out;
 - (ii) How those from the most deprived communities can be better engaged, including the exploration of the most effective means of establishing initial contact;
 - (iii) How the process for the transmission of data to GPs practices in relation to Health Checks undertaken in the community facilities could be improved to better record community checks.

Prevention of CVD

- (c) That the Health and Wellbeing Board support the approach to amend the childhood measurement letter, for use in the next roll out of measurements, in order to make it compassionate and friendly by using suitable wording;
- (d) That an evaluation be undertaken of the work carried out in schools relating to CVD awareness, with focus on ensuring the continued provision of activities. The evaluation to include:-
 - (i) What schools are doing well;
 - (ii) How schools can promote CVD messages;
 - (iii) How schools can further raise awareness of healthy eating and lifestyle choices; and
 - (iv) How the Council can work with secondary schools to encourage schools to offer CPR training to their pupils.
- (e) That the Council continue to raise awareness of CVD by:-
 - (i) Continuing to offer the Healthy Heart Check to Council staff;
 - (ii) Encouraging Council staff to become CPR trained; and
 - (iii) Publicising the Healthy Heart Checks in all Council buildings and GP practices.

Treatment of CVD

- (f) That the Health and Wellbeing Board:-
 - (i) Encourage businesses across Hartlepool to install defibrillators within their workplace and register the defibrillators with NEAS; and

- (ii) Explore the installation of defibrillators in venues for community provision usage, including the Health Bus.

**COUNCILLOR STEPHEN AKERS-BELCHER
CHAIR OF COUNCIL**

ACKNOWLEDGEMENTS

The Task and Finish Group is grateful to all those who have presented evidence during the course of our investigation. We would like to place on record our appreciation, in particular of the willingness and co-operation we have received from the below named:-

Hartlepool Borough Council:

Louise Wallace – Director of Public Health

Carole Johnson – Head of Health Improvement

Steven Carter – Health Improvement Practitioner (Workplace, Obesity, Physical Activity)

Jennifer McDermott – Community Nutritionist

Lorraine Harrison – GP Referral Co-ordinator

External Representatives:

Hartlepool residents

Lynne Allison, Healthwatch Hartlepool

Elaine Salvati – Nurse Clinical Lead. Tees Valley Public Health Shared Service

Rachel Forgan – Nurse, Tees Valley Public Health Shared Service

Dr Tanja Braun – Consultant in Public Health Medicine

James O'Donnell – Public Health Intelligence Specialist

Dr Michael Stewart – Consultant Cardiologist and Chief of Cardiothoracic Services, South Tees Hospitals NHS Foundation Trust

Dr Vineet Wadehra – Consultant Cardiologist – North Tees and Hartlepool NHS Foundation Trust

Paul Fell – Consultant Paramedic – North East Ambulance Service

Evidence provided to the Task and Finish Groups

The following evidence was presented throughout the course of the investigation into CVD:-

Date of Meeting	Evidence Received
16 October 2014	Setting the Scene Presentation from:- <ul style="list-style-type: none"> - Public Health representatives - Tees Valley Public Health Shared Service
14 November 2014	Visit to a Stop Smoking Clinic venue
17 November 2014	Primary care services and the healthy lives project / work in schools <ul style="list-style-type: none"> - Tees Valley Public Health Shared Service - Public Health representatives
9 December 2014	Visit to Cardiac Rehabilitation Class
10 December 2014	Presentation and verbal evidence from South Tees NHS Foundation Trust
8 January 2015	Presentation and verbal evidence from North Tees and Hartlepool NHS Foundation Trust
11 February 2015	Presentation and verbal evidence from the North East Ambulance Service
2 March 2015	Visit to the Health bus