

# Health Equity Audit: NHS Health Checks

#### **November 2021**

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### Background

The NHS Health Check is a prevention programme which aims to reduce the chance of a heart attack, stroke or developing some forms of dementia in people aged 40-74. It achieves this by assessing the top seven risk factors driving the burden of non- communicable disease in England, – risk factors that are associated with premature death, disability and health inequalities. The programme provides individuals with behavioural support and, where appropriate, pharmacological treatment<sup>1</sup>.

#### Programme Objectives

The objectives of the NHS Health Check Programme<sup>1</sup> are:

- To promote and improve the early identification and management of the individual behavioural and physiological risk factors for vascular disease and the other conditions associated with those risk factors.
- 2. To support individuals to effectively manage and reduce behavioural risks and associated conditions through information, behavioural and evidence based clinical interventions.
- 3. To help reduce inequalities in the distribution and burden of behavioural risks, related conditions and multiple morbidities.
- 4. To promote and support appropriate operational research and evaluation to optimise programme delivery and impact, nationally and locally.

#### Eligibility Criteria

Eligibility criteria for the programme, as set out in The Local Authorities Regulations<sup>2</sup> includes: That people aged 40 - 74 years who do **not** have any of the following conditions are eligible for a check:

- coronary heart disease
- chronic kidney disease (CKD), which has been classified as stage 3, 4 or 5 within the meaning of the National Institute for Health and Care Excellence (NICE) clinical guideline 182 on CKD
- diabetes
- hypertension
- atrial fibrillation
- transient ischaemic attack
- hypercholesterolemia defined as familial hypercholesterolemia
- heart failure
- peripheral arterial disease
- stroke
- is currently being prescribed statins for the purpose of lowering cholesterol
- people who have previously had an NHS Health Check, or any other check undertaken through the health service in England, and found to have a 20% or higher risk of developing cardiovascular disease over the next ten years

<sup>&</sup>lt;sup>1</sup> Public Health England (2019). NHS Health Check. Best practice quidance. London: Public Health England

<sup>&</sup>lt;sup>2</sup> Local Authorities (Public Health Functions and Entry to Premises by Local Healthwatch Representatives) Regulations 2013 S.I. 2013/351

Figure 1 shows the NHS Health Checks process.

#### **NHS Health Check** Results must be recorded 本体 on the primary care record What is good for Body Mass Index Smoking Ethnicity Alcohol Identification your heart is good and invite eligible for your brain population Weight Age range smoking management Physical Blood Family 40 - 74 years activity history Alcohol brief Pre-diabetes intervention (Ç KEY Chole NHS Health Physical activity Dementia awareness & Primary Care signposting follow up CVD risk Diabetes filter: Results recorded Use validated diabetes risk on the primary assessment tool. If a person is idenified as being at high risk care record. Exit the programme if of type 2 diabetes, offer HbA1c or fasting glucose test. exclusions apply Chronic Kidney Disease filter: If BP >140/90 assess for Chronic Kidney Disease and offer Serum Creatinine. ➌ Medication Cirrhosis If blood pressure high also Diabetes need HBA1c or FPG, offer Lifestyle Signposting Serum Creatinine Hypertension If CVD advice Kidnev Disease risk >109 referral

Figure 1: NHS Health Check Process

#### **Uptake Targets**

Public Health England aspires to achieve a national take-up rate in the region of 75% of the eligible population having an NHS Health Check once every five years<sup>1</sup>. Ensuring a high percentage of the eligible population have the check is key to optimising the clinical and cost- effectiveness of the programme. This is especially important for populations with the greatest health needs and will impact on the programme's and local area's ability to narrow health inequalities.

Reducing health inequalities is key principle of Public Health practice. Despite the grave impact of health inequalities being outlined in the original 2010 Marmot Review<sup>3</sup>, The 10 Year Review of recommendations made in 2010<sup>4</sup> underlines a lack of national leadership, whole-of-government approaches, funding reductions in critical social determinants of health and difficult economic circumstances at a local level which continue to underpin and in some areas, magnify damaging health inequalities. Locally, the health of people in Blackburn with Darwen is significantly worse than other areas of England<sup>5</sup>. There is a need to ensure that services are accessible and acceptable to the population at greatest risk of poor health outcomes, and that service design and delivery does not contribute to the widening of local health inequalities. This Health Equity Audit aims to understand

<sup>&</sup>lt;sup>3</sup> Marmot, M., Allen, J., Goldblatt, P., Boyce, T., McNeish, D. & Grady, M. (2010). *Fair Society, Healthy Lives: The Marmot Review*. London: Institute of Health Equity.

<sup>&</sup>lt;sup>4</sup> Marmot, M., Allen, J., Boyce, T., Goldblatt, P. & Morrison, J. (2020). *Health Equity in England: The Marmot Review 10 Years On.* London: Institute of Health Equity.

<sup>&</sup>lt;sup>5</sup> Public Health England (2019). Local Authority Health Profile: Blackburn with Darwen. London: PHE.

how the current service delivery model impacts (both positively and negatively) on health inequalities<sup>6</sup>.

#### Local Context

This health equity audit has been undertaken to provide assurance that people from all groups can access NHS Health Checks in Blackburn with Darwen, and to identify any areas for service development that might support better equity of access, and the opportunity to reduce inequalities relating to this. It is important that there are no avoidable gaps in access and that appropriate uptake is contributing to improved health outcomes for the people of Blackburn with Darwen. Locally, outcomes relating to premature mortality and mortality from cardiovascular diseases considered preventable are poor, and the NHS Health Checks programme is part of the wider programme of work to address this.

For example, prior to the Covid19 Pandemic (in 2016-2018) Blackburn with Darwen had a preventable mortality rate of 260 per 100,000 people, which is much higher than the North West rate of 218, and the England rate of 181<sup>7</sup>. These deaths include all of those which, "in the light of the understanding of the determinants of health at the time of death... could potentially be avoided by public health interventions in the broadest sense"<sup>8</sup>.

The pre Covid19 'under-75 mortality rate from cardiovascular diseases considered preventable (2017-2019)' is also high in Blackburn with Darwen at 41.5 per 100,000 people, compared with the North West rate of 35, and the England rate of  $28.2^7$ . Demonstrating that there is much to be done across all areas of prevention. The NHS Health Checks Programme offers a universal opportunity for Primary and Secondary Prevention of Cardiovascular Disease in people who meet the inclusion criteria. This should be considered alongside wider strategies to reduce the burden of Cardiovascular Disease including strategies which address the Social Determinants of Health.

#### **Aims**

The aim of this Health Equity Audit is to identify any potential inequalities in access to the NHS Health Checks Programme in Blackburn with Darwen and to make recommendations for future programme commissioning and delivery to minimise the impact of these on wider health inequalities. This supports Blackburn with Darwen Public Health to meet The Local Authorities (Public Health Functions and Entry to Premises by Local Healthwatch Representatives) Regulations

<sup>&</sup>lt;sup>6</sup> Public Health England (2020). Health Equity Assessment Tool (HEAT). London: PHE.

<sup>&</sup>lt;sup>7</sup> PHE (2021). *Public Health Profiles*. [online] available from <u>Public Health Profiles - PHE</u> last accessed 28<sup>th</sup> September 2021.

<sup>&</sup>lt;sup>8</sup> PHE (2019). *Mortality rate from causes considered preventable (2016 definition). Indicator Definitions and Supporting Information.* [online] available from <u>Public Health Profiles - PHE</u> last accessed 28<sup>th</sup> September 2021.

2013 S.I. 2013/351<sup>9</sup>. These regulations require the Local Authority to make arrangements for call and recall to the NHS Health Checks programme for eligible residents, assure the quality and content of the programme, and continuously improve the percentage of eligible individuals having an NHS Health Check. The Health Equity Audit aims to support with this.

As per Equity Audit guidance<sup>10</sup>, this report will consider the following categories:

- 1. Geography (utilising Lower Super Output Area and taking into consideration deprivation)
- 2. Ethnicity
- 3. Disability
- 4. Gender
- 5. Age

Equity audits also often consider protected groups<sup>11</sup>. These include:

- 6. Gender reassignment
- 7. Marriage and civil partnership
- 8. Pregnancy and maternity
- 9. Religion or belief
- 10. Sexual orientation

It is important that services do not discriminate against protected groups. At the current time, the national service specification for NHS Health Checks does not include collation of any of protected characteristics as listed above (characteristics 6-10). As a result, local service uptake for these characteristics will not be included in this Health Equity Assessment. However, the evidence base around potential inequalities for these groups will be considered in recommendations made for future local consideration within the service.

#### Methods

#### Evidence

A number of studies have been undertaken to understand the potential impact of the NHS Health Checks programme on Health Inequalities. This Health Equity Assessment will apply potential areas for increasing inequalities through the delivery of and access to the NHS Health Checks Programme, as identified in the evidence base, to local population and service uptake data to assess potential local impact.

<sup>&</sup>lt;sup>9</sup> HM Government (2013). *The Local Authorities (Public Health Functions and Entry to Premises by Local Healthwatch Representatives) Regulations 2013.* [online] available from URL <u>The Local Authorities (Public Health Functions and Entry to Premises by Local Healthwatch Representatives) Regulations 2013 (legislation.gov.uk) last accessed 29<sup>th</sup> September 2021.</u>

<sup>&</sup>lt;sup>10</sup> Health Development Agency (2005). *Making The Case: Health Equity Audit.* [online] available from URL [ARCHIVED CONTENT] (nationalarchives.gov.uk) last accessed 29<sup>th</sup> September 2021.

<sup>&</sup>lt;sup>11</sup> HM Government (2010). *The Equality Act 2010.* [online] available from URL <u>Equality Act 2010</u> (<u>legislation.gov.uk</u>) last accessed 6<sup>th</sup> October 2021.

#### **Data Sources**

In order to assess whether access to the NHS Health Checks Service in Blackburn with Darwen is equitable, the following population data sources will be used:

- Public Health England Fingertips Public Health Profiles<sup>7</sup>
- Blackburn with Darwen Joint Strategic Needs Assessment<sup>16</sup>

Service uptake and access will then be considered using:

- Anonymised patient level service data collated by the commissioned service
- NHS Digital Data for delivery year 2017-2018 (the most recent data available)<sup>12</sup>

#### The Impact of Covid19

Due to the impact of the Covid19 Pandemic on the delivery of NHS Services, on residents' ability to access services due to 'lockdown restrictions', and the impact of the pandemic on the wider determinants of health, this Health Equity Audit will consider the full annual service data taken from the year immediately prior to the Pandemic (2019-2020), so as to offer a view on the 'service as usual' offer.

It is important that, in the recovery from Covid19, we understand how best to maximise the opportunities presented by preventative services such as NHS Health Check, in order that we build back an offer even stronger than that pre pandemic. Further, it is imperative that we continue to focus on the reduction of health inequalities, and specifically the social determinants of health, which have been starkly exposed for their impact on increased risk of poor health outcomes for those most marginalised. However, the pandemic offers new opportunities to engage residents in health improvement services, including through online service offers. This should now all be considered for the NHS Health Checks Programme going forwards, with the aim of narrowing the inequalities gap<sup>13</sup>.

### Distribution of Health

Cardiovascular disease is the leading cause of premature mortality in England, and despite much improvement over recent years, this has now begun to slow<sup>14</sup>. Further, the impacts of the Covid 19 Pandemic have highlighted the cyclical relationship between Covid19 and Cardiovascular Disease, with each being a risk factor for the other, and contributing to poor health outcomes<sup>15</sup>.

<sup>&</sup>lt;sup>12</sup> NHS Digital & Public Health England. *NHS Health Check Programme* [online] available from URL Microsoft Power BI last accessed 17th November 2021.

<sup>&</sup>lt;sup>13</sup> Local Government Association. A perfect storm- health inequalities and the impact of COVID-19 [online] available from URL A perfect storm - health inequalities and the impact of COVID-19 | Local Government Association last accessed 8<sup>th</sup> November 2021.

<sup>&</sup>lt;sup>14</sup> Public Health England (2019). *Health Matters. Preventing cardiovascular disease: saving hearts and minds together* [online] available from URL <u>Health Matters: Ambitions to tackle persisting inequalities in cardiovascular disease - UK Health Security Agency (blog.gov.uk)</u> last accessed 8<sup>th</sup> November 2021.

<sup>&</sup>lt;sup>15</sup> Fulchand, S. (2020) Covid-19 and cardiovascular disease. *British Medical Journal*, 369: m1997.

#### Deprivation

The pre Covid19 'under-75 mortality rate from cardiovascular diseases considered preventable (2017-2019)' is also high in Blackburn with Darwen at 41.5 per 100,000 people, compared with the North West rate of 35, and the England rate of 28.2<sup>7</sup>. Whilst we do not have the data for this indicator by deprivation in Blackburn with Darwen, we do know that there are great inequalities according to deprivation for cardiovascular disease preventable mortality across England. The most deprived 50% of areas see significantly worse mortality compared with the England average (Figure 2).

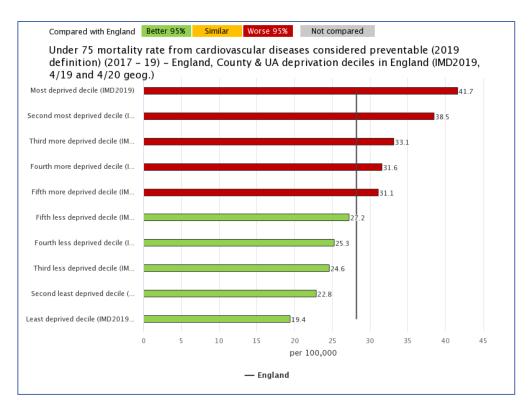


Figure 2: Under 75 Mortality rate from cardiovascular diseases considered preventable<sup>7</sup>

Over a third of areas in Blackburn with Darwen are in the 10% most deprived areas in England (33 out of 91 Lower Super Output Areas (LSOAs)), with 2 LSOAs in the 1% most deprived in England, and 12 in the 5% most deprived in England<sup>16</sup> (Figure 3). This makes the deprivation inequalities for preventable cardiovascular mortality even more relevant for Blackburn with Darwen.

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<sup>&</sup>lt;sup>16</sup> Blackburn with Darwen Borough Council (2020). *Joint Strategic Needs Assessment*. [online] available from JSNA: Summary Review 2020 (blackburn.gov.uk) last accessed 29<sup>th</sup> September 2021

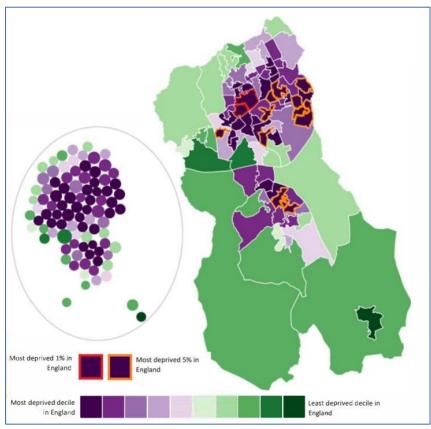


Figure 3: Map showing deprivation decile for Blackburn with Darwen by residence<sup>Error!</sup> Bookmark not defined.

Studies have shown that the NHS Health Checks Programme is preventing approximately 300 premature deaths (before 80 years) and resulting in an additional 1,000 people at age 80 years being free of cardiovascular diseases, dementia and lung cancer each year in England. Furthermore, due to the progressive universal nature of The Programme, the absolute effect on health was greatest for those living in the most deprived areas<sup>17</sup>.

From the locally available service data for  $2019/20^{23}$ , there does not appear to be any relationship between deprivation of area of residence and those who are either invited to or attend for an NHS Health Check (see Figures 4 and 5).

<sup>17</sup> Mytton, O.T., Jackson, C., Steinacher, A., Goodman, A., Langenberg, C., Griffin, S., Wareham, N. & Woodcock, J. (2018). The current and potential health benefits of the National Health Service Health Check cardiovascular disease prevention programme in England: A microsimulation study. *PLoS Medicine*, vol. 15(3).

# Location of patients, from GPs in Blackburn with Darwen, who were invited to health checks in 2019/2020

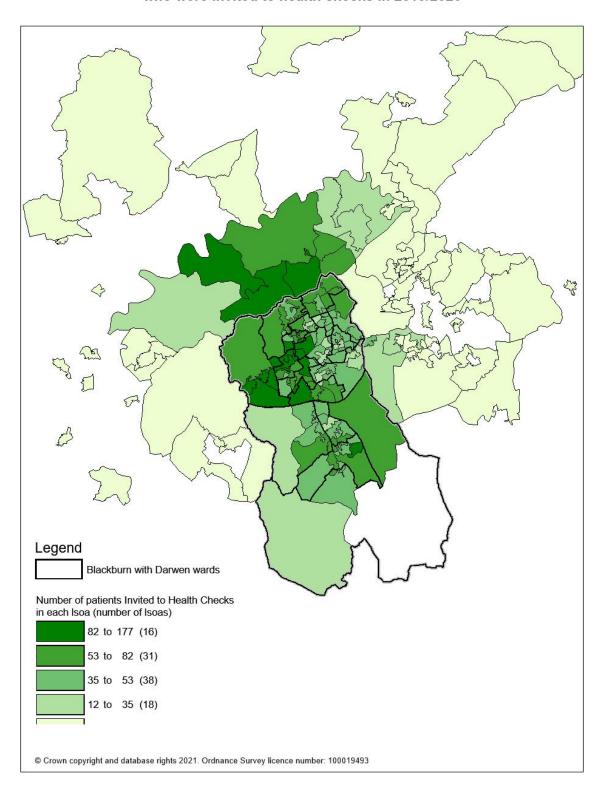


Figure 4: Location of patients with a GP in Blackburn with Darwen who were invited for an NHS Health Check  $2019/20^{23}$ 

# Location of patients, from GPs in Blackburn with Darwen, who had health checks completed in 2019/2020

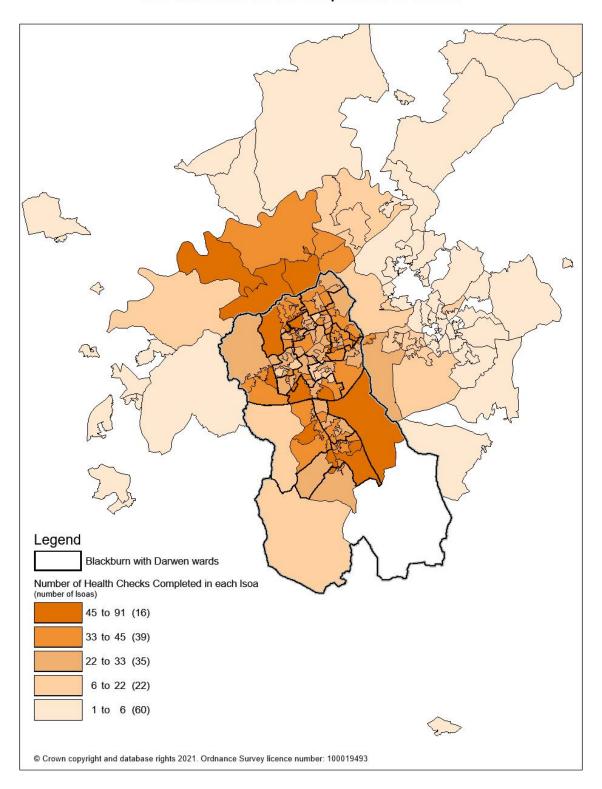


Figure 5: Location of patients with a GP in Blackburn with Darwen who attended for an NHS Health Check  $2019/20^{23}$ 

However, when we consider the QRisk2 Scores in relation to deprivation, there is a clear relationship which would be expected in line with other published studies. Those who live in more deprived areas in Blackburn with Darwen tend to have an average higher QRisk2 Score (Figure 6).

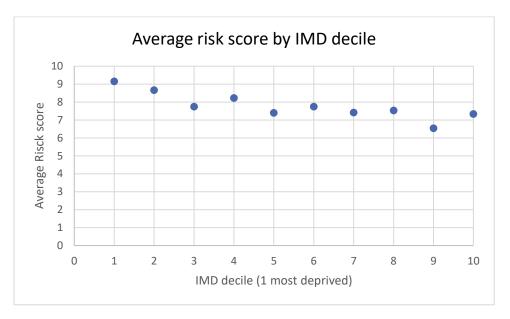


Figure 6: Average QRisk2 Score by Index of Multiple Deprivation Decile for Blackburn with Darwen 2019/2023<sup>23</sup>

In light of the evidence base and QRisk2 analysis provided above, there is the potential for increased health inequalities for those who live in the most deprived areas of Blackburn with Darwen. It may therefore be of benefit to target interventions that will increase the proportion of Health Checks completed that are for residents who live in the most deprived areas of Blackburn with Darwen. This might include increasing the proportion of invitations sent to those in the most deprived areas of Blackburn with Darwen, and to consider community outreach programmes delivered locally in these areas.

#### **Ethnicity**

It is widely recognised that there are inequalities in cardiovascular disease related to ethnic origin. Studies have shown that, compared to the population of the UK, people of South Asian ethnicity are at greatly elevated risk of both CHD and stroke. The reasons for this are multi-faceted, including the social determinants of health, lifestyle and cultural factors and genetic factors<sup>18</sup>. People of South Asian ethnic origin tend to develop more severe coronary artery disease at a younger age, and may also suffer from earlier myocardial infarction and heart failure<sup>19</sup>. Cardiovascular risk prediction is a cornerstone of preventive strategies. The QRISK2 risk score has been developed from UK primary care data and incorporates adjustments for ethnicity and socioeconomic position<sup>20</sup>.

<sup>&</sup>lt;sup>18</sup> Chaturvedi, N. (2003). Ethnic differences in Cardiovascular Disease. *Heart*, vol. 89(6), pp. 681-686.

<sup>&</sup>lt;sup>19</sup> Mangalmurti, S.S., Paley, A., Gany, F., Fisher, E.A. & Hochman, J.S. (2010). South Asians and risk of cardiovascular disease: current insights and trends. *Ethnicity and Disease*, vol. 20(4), pp. 474-478.

<sup>&</sup>lt;sup>20</sup> Tillin, T., Hughes, A.D., Whincup, P., Mayet, J., Sattar, N., McKeigue, P.M. & Chaturvedi, N. (2014). Ethnicity and prediction of cardiovascular disease: performance of QRISK2 and Framingham scores in a UK tri-ethnic

While we await the results of the 2021 Census, the 2011 Census is still the most recent source of official statistics on the ethnic breakdown of the borough's population. The proportion of Blackburn with Darwen residents who described themselves as Indian (13.4% BwD residents) or Pakistani (12.1% BwD residents) were the 11th highest and the 6th highest respectively of any local authority in England Proof Bookmark not defined. Given the associated increased risks for residents of South Asian origin, it is important that these groups have equitable access to the NHS Health Checks programme.

Unfortunately, the data available for access to NHS Health Checks in Blackburn with Darwen for ethnicity poses some limitations. Data relies on GP practice registrations, which can be inaccurate for a number or reasons for example, temporary residents not later removed from the register, residents registered with GPs outside of the Borough or inaccurate recording of ethnicity at practice level amongst other reasons. These potential limitations should caveat any findings within the data relating to ethnicity of those accessing the service. For this reason, nationally published data from NHS Digital<sup>12</sup> has been used in the following analysis, in order to try to ensure that the findings are as reliable as possible.

Figure 7 shows that in 2017/18, a total of 6,912 White residents were invited to attend an NHS Health Check in Blackburn with Darwen, with an uptake of 42%. 1,511 Residents recorded as Asian or Asian British were invited to attend for an NHS Health Check, with an uptake of 60%. It is positive that the uptake rate in the Asian or Asian British ethnic group is comparatively higher than those at a lower cardiovascular risk in the White ethnic group.

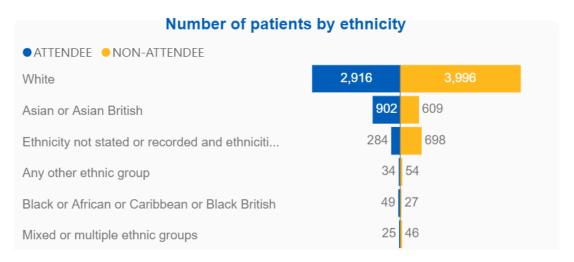


Figure 7: Number of Patients Invited and Called for NHS Health Check 2017/18 by Ethnicity  $^{12}$ 

prospective cohort study (SABRE—Southall And Brent REvisited). [online] available from URL Ethnicity and prediction of cardiovascular disease: performance of QRISK2 and Framingham scores in a UK tri-ethnic prospective cohort study (SABRE—Southall And Brent REvisited) | Heart (bmj.com) last accessed 15<sup>th</sup> November 2021.

In the 2011 Census (Figure 8)<sup>21</sup>, there were 45,355 White adults aged 40-74 in Blackburn with Darwen, and 9,583 recorded for the same age group as Asian/Asian British ethnicity. The proportion of those invited for an NHS Health Check in 2017/18 is proportionate to the population profile recorded in 2011, which suggests that there is equality in the proportion of each ethnic group being invited for an NHS Health Check. However, this should be reviewed once the 2021 Census results are available next year, as it is expected that the proportion of Blackburn with Darwen residents who identify as Asian or Asian British in this age group is likely to have increased in the ten years since the 2011 Census, and this would therefore then indicate that proportionately fewer residents of Asian or Asian British ethnic origin are being invited for the NHS Health Check than White residents.

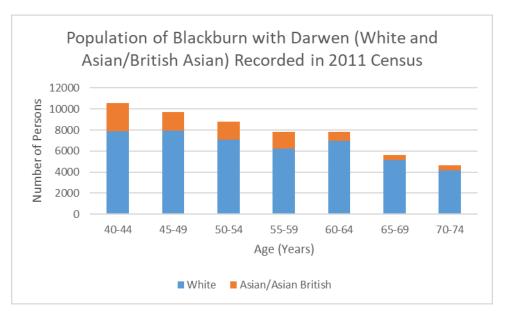


Figure 8: Population of Blackburn with Darwen (White and Asian/British Asian) Recorded in 2011 Census<sup>21</sup>

#### Gender

Although women usually have a lower incidence of Cardiovascular Disease than men, evidence suggests that women have a higher rate of mortality and poorer prognosis following an acute cardiovascular event. Figure 9 shows some of the possible causes of the gender differences in cardiovascular disease. Taking this into consideration, for prevention programmes, it is important that both men and women access the offer equally in order to primarily: 1) reduce mortality in women through early diagnosis and intervention, therefore reducing the risk of acute cardiovascular events; 2) reduce morbidity in men through early diagnosis and intervention, with benefits to both individuals and their families, and wider health service demand.

<sup>&</sup>lt;sup>21</sup> Office for National Statistics. *Nomis: official labour market statistics* [online] available from URL <u>Data Viewer</u> - Nomis - Official Labour Market Statistics (nomisweb.co.uk) last accessed 17<sup>th</sup> November 2021.

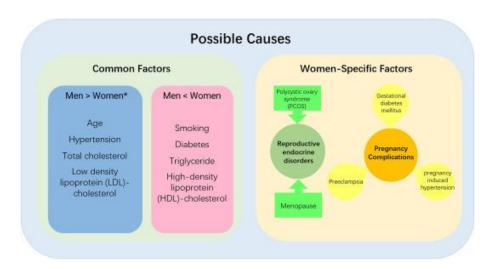


Figure 9: Gao et al (2019)22

Somewhat in contrast to the evidence base, gender inequalities in Blackburn with Darwen in preventable mortality for cardiovascular disease between men and women, show the rate for men in Blackburn with Darwen as 59.8 per 100,000 people, significantly worse than the England average for all persons; while the female rate of 23.5 per 100,000 people is significantly better than the England average for all persons.

Figure 10 utilises service data from 2019/20 to consider the gender of residents invited for an NHS Health Check and shows a largely equitable gender distribution in those invited for the check.

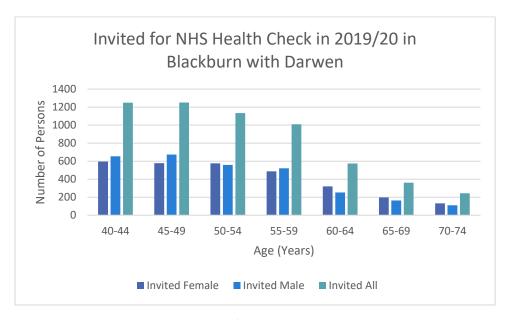


Figure 10: Invited for NHS Health Check in 19/20 in Blackburn with Darwen by Age and Gender  $^{23}$ 

<sup>&</sup>lt;sup>22</sup> Gao, z., Chen, Z., Sun, A. & Deng, X. (2019) Gender differences in cardiovascular disease. *Medicine in Novel Technology and Devices*, vol. 4.

<sup>&</sup>lt;sup>23</sup> Blackburn with Darwen Borough Council (2020) NHS Health Checks Commissioned Service Data.

However, Figures 11 and 12 show the gender of those residents invited who attended for an NHS Health Check in 2019/20, and the percentage of those in each age band for both men and women.

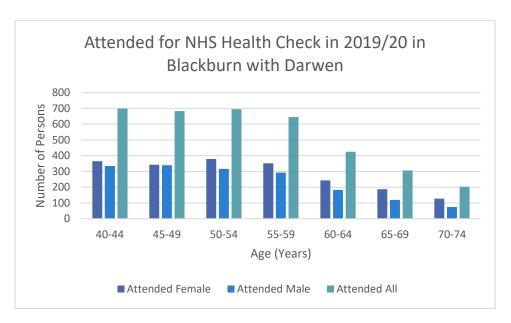
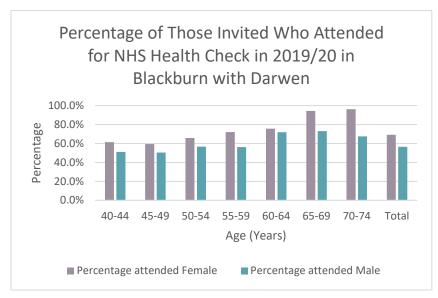


Figure 11: Attended for NHS Health Check in 19/20 in Blackburn with Darwen by Age and Gender<sup>23</sup>



	Percentage Attended		
Age (Years)	Female	Male	
40-44	61.3%	51.1%	
45-49	59.4%	50.4%	
50-54	65.8%	56.6%	
55-59	72.1%	56.2%	
60-64	75.7%	71.9%	
65-69	94.4%	73.0%	
70-74	96.2%	67.6%	
Total	69.1%	56.5%	

Figure 12: Percentage of those invited who attended for an NHS Health Check in 19/20 in Blackburn with Darwen by Age and Gender<sup>23</sup>

This data suggests that across all age groups, Females in Blackburn with Darwen who receive an invitation to an NHS Health Check are more likely to attend than Males. Further, the difference between attendances appears to increase over the age of 65 years.

#### Age

The NHS Health Checks Programme aims to identify risk factors and signs of Cardiovascular Disease early in order to prevent or reduce morbidity and mortality. Table 1 details the number of Blackburn with Darwen residents invited for and who attended an NHS Health Check in the financial year 2019/20 according to the service provider records<sup>23</sup>.

Table 1: NHS Health Checks in Blackburn with Darwen by Age<sup>23</sup>

	NHS Health Check			
Age	Invited	Attended	Percentage Attended	
40-44	1249	699	56.0%	
45-49	1251	683	54.6%	
50-54	1134	695	61.3%	
55-59	1009	645	63.9%	
60-64	574	425	74.0%	
65-69	361	306	84.8%	
70-74	243	202	83.1%	
Total	5821	3655	62.8%	

This data might suggest that the percentage of those invited who attend for their NHS Health Check increases with age. This could be due to a number of factors including health motivation or ability to attend the check at the current service venue, time or day. Given the potential long term health and economic benefits of early intervention and prevention of cardiovascular disease and therefore the importance of good service uptake by younger eligible groups, future service design and provision might consider evaluation of different strategies to improve this. Consideration of how accessible the current offer is for this predominantly working age group will be important, alongside health behaviour messaging and possible key performance indicators for service providers.

#### **Disability**

Epidemiological research on age-related rates of CVD in people with learning disabilities is scarce and inconclusive<sup>24</sup>. The prevalence of CVD in adults with learning disabilities may be greater and apparent earlier in life than that found in the general population<sup>25</sup>. However, there may be variation depending on type of CVD. Primary care records of nearly 15,000 adults with learning disabilities in England indicate that the prevalence of ischemic heart disease (IHD) is lower than in the general population (prevalence ratio 0.65 (95% CI 0.57, 0.74) but rates of heart failure are higher (prevalence

<sup>&</sup>lt;sup>24</sup> Glover, G. et al. (2017). Mortality in people with intellectual disabilities in England. *Journal of Intellectual Disability Research*, vol. 61(1), pp. 62-74.

<sup>&</sup>lt;sup>25</sup> Draheim, C.C. (2006) Cardiovascular disease prevalence and risk factors of persons with mental retardation. *Mental Retardation & Developmental Disabilities Research Reviews*, vol. 12(1), pp. 3-12.

ratio 2.26 (95% 1.84, 2.78) as are rates of stroke and transient ischemic attack (TIA) (prevalence ratio  $1.74 (95\% \text{ CI } 1.52 \text{ to } 1.98)^{26}$ .

Behaviour related risk factors for Cardiovascular Disease identified for the general population are common in people with learning disabilities. People with learning disabilities may have poor diets<sup>27</sup>, high rates of obesity<sup>28</sup>, high levels of sedentary behaviour<sup>29</sup>, and are 'incredibly inactive'<sup>30</sup>. Whilst people with learning disabilities known to specialist services may be less likely to smoke and drink alcohol than the general population, rates are higher amongst those with mild learning disabilities<sup>31</sup>. Evidence also suggests a significantly higher prevalence of diabetes in people with learning disabilities than in the general population<sup>32</sup> which is a risk factor for Cardiovascular Disease.

Unfortunately, the NHS Health Checks Service data in Blackburn with Darwen does not consistently record Disability status of those invited to or attending for NHS Health Checks. Given the potential for great health inequalities identified for people with Learning Disabilities, a further piece of work to understand the uptake of NHS Health Checks by this group in Blackburn with Darwen would be useful for future service planning.

# Causes of Inequalities

The Social Determinants of Health (Figure 13)<sup>33</sup> are widely recognised as the drivers of health inequalities and should be considered as the underlying causes for the identified potential inequalities in access to and uptake of the NHS Health Checks Programme in Blackburn with Darwen.

<sup>&</sup>lt;sup>26</sup> Carey, I.M. et al (2016). Health characteristics and consultation patterns of people with intellectual disability: a cross-sectional database study in English general practice. *British Journal of General Practice*, vol. 66(645), pp. e264-e270.

<sup>&</sup>lt;sup>27</sup> Humphries, K., Traci, M.A. & Seekins, T. (2009). Nutrition and adults with intellectual or developmental disabilities: systematic literature review results. *Intellect Dev Disabil*, vol. 47(3), pp. 163-85.

<sup>&</sup>lt;sup>28</sup> Harris, L. et al. (2018). The effects of multi-component weight management interventions on weight loss in adults with intellectual disabilities and obesity: A systematic review and meta-analysis of randomised controlled trials. *Research in Developmental Disabilities*, vol. 72, pp. 42-55.

<sup>&</sup>lt;sup>29</sup> Melville, C.A. et al. (2018). A population-based, cross-sectional study of the prevalence and correlates of sedentary behaviour of adults with intellectual disabilities. *Journal of Intellectual Disability Research*, vol. 62(1), pp. 60-71.

<sup>&</sup>lt;sup>30</sup> Dairo, Y.M. et al. (2016). Physical activity levels in adults with intellectual disabilities: A systematic review. *Preventive Medicine Reports*, vol. 4, pp. 209-219.

<sup>&</sup>lt;sup>31</sup> Emerson, E. & Hatton, C. (2013). *Health Inequalities and People with Intellectual Disabilities*. Cambridge: Cambridge University Press

<sup>&</sup>lt;sup>32</sup> MacRae, S. et al. (2015). Diabetes in people with intellectual disabilities: A systematic review of the literature. *Research in Developmental Disabilities*, vol. 47, pp. 352-374.

<sup>&</sup>lt;sup>33</sup> Dahlgren, G. & Whitehead, M. (1991). *Policies and Strategies to Promote Social Equity in Health.* Stockholm, Sweden: Institute for Futures Studies.

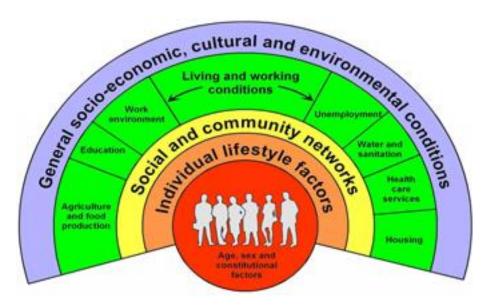


Figure 13: The Social Determinants of Health<sup>33</sup>

Underlying factors that should be considered in order to address the identified potential inequalities should consider (not limited to): employment; access to transport; health literacy and educational attainment; health motivation; the times, days, location and provider of the service offer.

### Recommendations

Taking into consideration the findings of this Health Equity Audit, the following recommendations are made when considering the future service planning and delivery for the NHS Health Checks Programme in Blackburn with Darwen:

#### 1. Deprivation:

- a. To consider targeted interventions that will increase the proportion of Health Checks completed for residents who live in the most deprived deciles of Blackburn with Darwen. To consider:
  - i. increasing the proportion of invitations sent to those in the most deprived areas of Blackburn with Darwen
  - ii. community outreach programmes delivered in areas of higher deprivation
- b. To improve recording of Employment status so that inequalities can be assessed

#### 2. Ethnicity:

- To consider the methods of invitation for all eligible residents, regardless of ethnicity, to increase uptake of the service offer, taking into account nationally evaluated methods and materials and local community engagement
- b. To ensure that any modifications to the invitation do not widen potential Health Inequalities for residents of South Asian origin
- To consider the 2021 Census results, to understand whether greater efforts need to be made to invite a representative proportion of the resident population from Asian or British/Asian ethnic groups
- d. To consider ways to ensure the quality of Ethnicity Data recording within the local service to provide a more reliable and informative picture of the service offer and uptake going forwards

#### 3. Gender

- a. To continue to ensure that all eligible persons are invited for the NHS Health Check regardless of gender
- b. To consider how we might increase the proportion of men invited who attend the NHS Health Check, particularly those over the age of 65 years. This might include: consideration of the invitation materials; the time, venue and days of the appointments; health motivation in older men and wider health messaging

#### 4. Age

a. Consideration of how to increase service uptake in the younger eligible population: service access, communications and health promotion messages, Key Performance Indicators for the commissioned service provider, opportunities for opportunistic checks for this age group

#### 5. Disability

- a. To undertake further work to understand the access to NHS Health Checks by people with a Learning Disability in Blackburn with Darwen
- b. To consider opportunities to link the NHS Health Check with the Learning Disability Annual Review undertaken within Primary Care