

EQUALITY IMPACT ASSESSMENT - RESULTS

Title of Policy	Heart Disease Action Plan 2021 - 2026
Summary of aims and desired outcome of policy	The overarching vision of the Heart Disease Action plan is to minimise preventable heart disease and to ensure that everyone with heart disease in Scotland has timely and equitable access to diagnosis, treatment and care that supports them in living well with their condition.
Directorate: Division: Team	Health and Social Care Directorate: Healthcare, Quality and Improvement: Clinical Priorities Unit 1

Executive summary

The overarching vision of the Heart Disease Action plan is to minimise preventable heart disease and to ensure that everyone with heart disease in Scotland has timely and equitable access to diagnosis, treatment and care that supports them in living well with their condition.

Heart disease continues to have a significant impact on people in Scotland. In addition, the Covid-19 pandemic has highlighted challenges and opportunities across the entire health care system and this is an appropriate point to take stock and refresh our actions over the coming years.

The actions set out in the Heart Disease Action Plan take a whole system approach, encouraging collaboration between primary, secondary and specialist care, community care and third sector services.

Our EQIA framing exercise identified a number of areas where we should make specific efforts to address inequalities throughout the implementation of the plan.

These include amplifying the voices of groups of people who face inequalities in outcomes from heart disease. In particular, we should focus on reaching out to, and listening to, people from areas of deprivation (including a focus on people who experience homelessness), people from the gypsy traveller community, women, people with learning disabilities, people from South Asian, African or African Caribbean backgrounds and older people. The evidence shows that people from these groups face disparities in outcomes from heart disease.

Furthermore, beyond particular disparities in outcomes from heart disease, our framing exercise identified that there are groups of people who face barriers to accessing health care in general but are typically overlooked when it comes to engagement and addressing inequalities. It was therefore identified that we should

take a specific focus on amplifying the voices of people from the LGBTI community, younger people and people living in rural or island communities.

The vision of the Heart Disease Action plan is to 'ensure equitable access to diagnosis, treatment and care for people with heart disease in Scotland' so we do not envision that the plan will have a negative impact on any individual or group, however, it is vital that in the implementation of the actions within the plan, we engage in a robust lived experience process that makes a particular effort to amplify the voices of those listed above.

Background

Heart disease remains a major cause of death and disability in Scotland, accounting for over 9000 deaths each year¹.

Ischaemic heart disease, which can lead to a heart attack, is still Scotland's single biggest killer, responsible for 11.2% of all deaths in 2019². It accounts for 25,000 hospital admissions each year³.

Other forms of heart disease also have a significant and growing impact on people in Scotland. The incidence of conditions like heart failure⁴, heart valve disease⁵ and atrial fibrillation are increasing, partly as a result of an ageing population, improved detection and increased survival from acute coronary events. Many people are living longer with heart disease and require care and support for significant lengths of time.

The Scope of the EQIA

We carried out a full EQIA process. We considered the protected characteristics of: age, disability, marriage and civil partnership, gender reassignment, sex, pregnancy and maternity, race, religion and belief, and sexual orientation. We also considered additional categories which were identified during the EQIA framing exercise.

Therefore, in making its assessment, the Scottish Government has considered relevant evidence relating to the protected characteristics, as well as the potential impact on wider health inequalities.

Key Findings

Age

A person may be diagnosed with heart disease at any stage during their lifetime, though prevalence increases in older age groups⁶. Despite this, Around 2,500 people under the age of 75 in Scotland die from ischaemic heart disease each year in Scotland⁷.

There is a gap in our understanding of how young people with inherited cardiac conditions experience services in Scotland. In particular, there is wider evidence that young people face challenges in discussing health issues with their GP, and we

should explore the impact that this could have on referral to cardiac services for young people.

Older people may face stereotypes as being dependant on others, with failing physical and mental health⁸. It is also recognised that older people are less likely to have access to the internet⁹ or may be less confident in the use of technology than the general population, and therefore could be adversely affected by the dominance of digital models of care. Such ways of accessing care have been particularly prevalent during the Covid-19 pandemic and are likely to remain as a blended approach to care. Full consideration of the benefits and cons of digital models of care were considered during the EQIA framing process.

Disability

People with intellectual disabilities die at a younger age than other people; on average, 20 years younger¹⁰, or 28 years younger specifically for people with Down syndrome¹¹. Coronary heart disease is usually experienced at a younger age in people with a learning disability¹², and is the second highest cause of death. Data from Scotland indicates higher rates of heart failure for those with learning disabilities than in the general population (2.5% versus 0.9%)¹³.

With the ageing and increasing population of older adults with learning disabilities, it can be anticipated that there will be a rise in morbidity and mortality from cardiac diseases in the future. It is therefore vital that our efforts to minimise preventable heart disease, and to ensure timely and equitable access to care take into account the needs and experiences of this group of people to ensure that we can reduce barriers to care and minimise disparities. There is a gap in our understanding of how people with learning disabilities experience cardiac services in Scotland.

Sex

Every year, ischaemic heart disease (including heart attacks and angina) kills around 2,600 women in Scotland. There are currently around 110,000 women in Scotland who are living with ischaemic heart disease¹⁴.

Women may be less likely to receive a timely diagnosis, may face disadvantages in treatment and may be less likely to be referred, or attend cardiac rehabilitation¹⁵.

Pregnancy and maternity

Cardiac disease is a leading cause of maternal death in pregnancy in many developed countries, including the UK. Pregnancy itself raises the risk of acute myocardial infarction by three- to four-fold, with the risk being 30 times higher for women over the age of 40 years compared with women aged less than 20 years¹⁶.

We know that cardiac disease remains the leading cause of indirect maternal death during or up to six weeks after the end of pregnancy (with a rate of 2.34 per 100,000 maternities¹⁷).

The Women's Health Plan, which sits alongside this strategy, includes cardiac disease as a key pillar and focuses on issues arising during pregnancy.

Gender Reassignment

It is not possible to find a precise estimate on the number of trans people in Scotland but ScotPHN report estimate the number stands at 0.5% of the population¹⁸, which would be around 27,000 people in Scotland¹⁹.

We have reason to suspect that cardiovascular disease is an important consideration when thinking about health outcomes for trans people. For example, the use of gender-affirming hormone therapy has been identified as a potential contributor to poor cardiovascular health in transgender people because of the potential cardiovascular effects of these treatments. Evidence of elevated cardiovascular risk in transgender men remains limited and is generally inconsistent²⁰.

Trans people report a number of barriers to accessing health care including prejudice and bias among health care staff, a lack of understanding of trans experience and health issues. In particular, trans people report particular challenges in engaging with primary care, who are often seen as 'gatekeepers' to other health services²¹.

Sexual Orientation

In 2016 (the latest statistics we have) after age standardisation, the proportion of the 'LGB or Other' group reporting good or very good general health is significantly lower than the rest of the population (64% compared with 73.8%²²).

There is much evidence to suggest that people who are LGBTI experience disparity in health outcomes, including disparity in cardiovascular health²³. The reasons for this are complex but can be related to increased psychosocial stressors (eg, discrimination and bias-motivated violence) across their lifespan which can have an impact on health.

Furthermore gender and sexually diverse populations experience reduced access to quality health care and under-utilization of health care services as a result of fear or lack of confidence, due to widespread and persistent individual and systemic discrimination against them²⁴.

There is a gap in our understanding of how LGBTI people experience cardiac care in Scotland and whether there are inequalities in outcomes. There is also evidence that LGBTI people are typically overlooked or excluded from participation and engagement.

Race

Those of South Asian (Indian, Pakistani, Bangladeshi or Sri Lankan) origin are at higher risk of developing coronary heart disease than those of White European origin

in the UK²⁵. A 2009 study showed that South Asians living in Scotland have a 60-70% higher incidence of heart attack than the general population²⁶.

We also know that people from African or African Caribbean backgrounds are at higher risk of developing high blood pressure and having a stroke than other ethnic groups²⁷.

People from a minority ethnic background are more likely to live in the most deprived areas of Scotland²⁸. They are also likely to face a number of barriers to effective communication about their health. This can include difficulties in accessing healthcare in an appropriate language and cultural context²⁹.

Religion or belief

After the age distribution of religious groups is taken into account, most of the apparent differences in good/very good general health disappear. Lower than average rates for “Muslims” and higher than average rates for “Other Christian” and “Church of Scotland” groups are significant, at 56.6%, 78.3% and 74.8% respectively³⁰. This may be reflective of the inequities described in the section above relating to race.

The perceived role of religion in illness and recovery is a primary influence upon health care beliefs and behaviours which may differ by religion. Most religions have traditional beliefs and practices relating to healthy living, illness and death. In particular, this may be relevant to work within the implementation of the plan to ensure that people with heart disease have timely and appropriate access to palliative care³¹.

Marriage and Civil Partnership

The refreshed strategy does not refer to work, therefore an assessment against this protected characteristic is not required. There is no evidence to suggest that this group will be negatively affected by the plan.

Deprivation index

There is significant evidence that people living in areas of deprivation in Scotland face inequities in outcomes from cardiovascular disease and that these disparities are heightened for people who have experienced homelessness.

Gypsy/Travellers

People from the Gypsy/Traveller community have much poorer health outcomes leading to lower life expectancy than either the general population or other disadvantaged groups in the UK³². In particular, people from the Gypsy/Traveller community have a high risk of premature death from cardiac disease, particularly for men³³. Gypsy and Traveller communities experience wide-ranging inequalities.

There is a gap in our understanding of how people from the Gypsy Traveller community engage with cardiac services and access care for cardiac disease in Scotland.

Severe Mental Illness

Mental health problems contribute to the burden of disease in Scotland. The rate of burden due to mental and substance use disorders in the most deprived areas was 4.4 times the rate in the least deprived areas.³⁴ Those with schizophrenia or bipolar disorder were reported to have a life expectancy of between 15–20 years³⁵ or 10–17.5³⁶ years shorter than the general population.

A Scottish study found schizophrenia, bipolar disorder and major depression is associated with higher myocardial infarction (MI) mortality but lower coronary revascularisation rates. Evidence over the last twenty years focussed on schizophrenia found similar outcomes.³⁷

Addiction

In Scotland, harmful alcohol and drug use remains high compared with similar countries. The prevalence of problem drug use in Scotland during 2015-2016 was in the range of 55,800 to 58,900³⁸. In total, there were over 1,136 alcohol-specific deaths and 1,187 drug-related deaths in Scotland in 2018.

A review of cardiovascular consequences of drug use highlights relationships between heavy alcohol consumption, coronary heart disease and alcohol cardiomyopathy. It quotes an analysis of 33 studies investigating marijuana use: 28 studies reported increased risk of acute coronary syndrome (ACS). Regarding cocaine, a multitude of studies have reported deleterious effects on the cardiovascular system.³⁹

Prisoners

The prison population in Scotland in 2019-20 was almost 8,200. Between 2010-11 and 2019-20, the 10% most deprived areas were over-represented in prison arrivals by a factor of three.⁴⁰

Heart disease was the most common natural cause of death among prisoners.⁴¹ An association between incarceration and cardiovascular risk factors, morbidity, and mortality was noted.⁴²

Digital

Particularly during the Covid-19 pandemic, it is likely that some appointments and/or rehabilitation sessions will be online-based.

In 2018, around 10% of Scotland's population were classed as internet non-users, meaning they have never used the internet or last used it more than 3 months ago⁴³. In 2017, 800,000 people in Scotland faced digital inequality⁴⁴.

According to a recent report, the Scottish Government estimates⁴⁵:

- Over a third of households in lower-income brackets do not have any internet access.
- 19% of Scottish people do not have the necessary digital skills.
- 400,000 people approx. do not live in areas that have 4G coverage.

Recommendations and Conclusion

Lived experience structure

The EQIA process identified a number of areas where people face disparities in outcomes from cardiac disease. Throughout the implementation of the action plan we will consider how best to address these inequalities.

We will do this by ensuring that the plan is supported by a robust lived experience structure which amplifies the voices of those facing inequalities. This includes people from areas of deprivation (including a focus on people who experience homelessness), people from the gypsy traveller community, women, people with learning disabilities, people from South Asian, African or African Caribbean backgrounds and older people.

We have also identified that there are gaps in our understanding of

- how young people with inherited cardiac conditions experience services in Scotland.
- how people with learning disabilities experience cardiac services in Scotland.
- how LGBTI people experience cardiac care in Scotland and whether there are inequalities in outcomes

We will use the lived experience structure to better understand these issues.

We know that there is evidence that the LGBTI community tend to be under-represented in participation and engagement efforts. To support engagement of people in this community we will enable anonymity, where there are specific areas addressed that involve disclosure of trans identity.

Furthermore, in order to effectively enable engagement with people from a variety of backgrounds we will support the translation of information through the lived experience structure in a variety of languages to make engagement as accessible as possible.

Data

There is a need for us to improve general data about heart disease service provision in Scotland. This will enable us to understand service delivery and its impact on outcomes for everyone with heart disease but it will also be possible to identify disparities where they exist. This will form a core part of priority Four: Effective Use of Data – within the Heart Disease Action Plan.

Women's Health Plan

Cardiac disease forms a core pillar of the Women's Health Plan due to be published in 2021. Throughout the implementation of the Heart Disease Action Plan, we will work collaboratively to embed the actions within the women's health plan relevant to cardiac disease and to understand and address the delivery of cardiac services for women in Scotland. The Scottish Obstetric Cardiology Network are a member of the Nationally Advisory Committee on Heart Disease and will therefore be involved in the implementation of the plan, ensuring that the needs of pregnancy women with heart disease are represented across the delivery of all the actions.

-
- ¹ National Records of Scotland, 'Vital Events Reference Tables (Table 6.04)' [Vital Events Reference Tables 2018 | National Records of Scotland \(nrscotland.gov.uk\)](#) [accessed 3rd July 2020]
- ² Ibid
- ³ Information Services Division Scotland (2020) *Main diagnosis discharges from hospital 2018/19*. Personal correspondence.
- ⁴ Public Health Scotland, 'Scottish Heart Disease Statistics - Year Ending 31 March 2018, IC3 - Heart failure incidence by health board, age group and sex' [Heart Disease | Publications | Data Tables | Health Topics | ISD Scotland](#) [accessed 13th January 2020]
- ⁵ Global Health Data Exchange 'Global Burden of Disease Study Data Resources: Scotland Heart Valve Disease Incidence 1990 – 2017' [Global Burden of Disease Study 2017 \(GBD 2017\) Data Resources | GHDx \(healthdata.org\)](#) [accessed 17th February 2021]
- ⁶ The Scottish Government, *The Scottish Health Survey 2018* (Edinburgh, 2020) pp. 39
- ⁷ [bhf-cvd-statistics-scotland-factsheet \(1\).pdf](#)
- ⁸ Roberts, E., 'Age discrimination in health and social care' [Age Discrimination in Health and Social Care | The King's Fund](#) [accessed 25th January 2020] pp. 1
- ⁹ Berry, R. 'Older people and the internet - Towards a "system map" of digital exclusion' *The International Longevity Centre* (2011) pp. 5
- ¹⁰ O'Leary L, Cooper S-A, Hughes-McCormack L. Early death and causes of death of people with intellectual disabilities: a systematic review. *J Appl Res Intellect Disabil* 2018;31:325–42.
- ¹¹ O'Leary L, Hughes-McCormack L, Dunn K, et al. Early death and causes of death of people with Down syndrome: a systematic review. *J Appl Res Intellect Disabil* 2018;31:687–708.
- ¹² Haveman, M., Heller, T., Lee, L., Maaskant, M., Shooshtari, S. & Strydom, A. 'Major health risks in aging persons with intellectual disabilities: An overview of recent studies' *Journal of Policy and Practice in Intellectual Disabilities* (2010) 7(1), pp. 59-69
- ¹³ Heslop, P., Blair, P., Fleming, P., Hoghton, M., Marriott, A., and Russ, L. *Confidential Inquiry into premature deaths of people with learning disabilities (CIPOLD) Final report* (Bristol, 2013)
- ¹⁴ [bhf-cvd-statistics-scotland-factsheet \(1\).pdf](#)
- ¹⁵ British Heart Foundation Scotland, *Bias and Biology* (Edinburgh, 2019) pp. 11
- ¹⁶ Royal College of Obstetricians and Gynaecologists, *Good Practice Guide 13 - Cardiac Disease and Pregnancy* (London, 2011) pp. 2
- ¹⁷ Knight, M., Nair, M., Tuffnell, D., Shakespeare, J., Kenyon, S., Kurinczuk, J., *Addressing the heart of the issue: Standards of good clinical practice in the shared obstetric and cardiology care of women of childbearing age*. (Oxford, 2017) pp. 3
- ¹⁸ Scottish Public Health Observatory, 'Lesbian, gay, bisexual and transgender (LGBT) people: number in Scotland' [Number in Scotland - ScotPHO](#) [accessed 18 February 2021]

-
- ¹⁹ National Records of Scotland, 'Population of Scotland' [Population of Scotland | National Records of Scotland \(nrscotland.gov.uk\)](https://www.nrscotland.gov.uk) [accessed 16 February 2021]
- ²⁰ Caceres, Billy A, Streed, Carl G, Corliss Heather L, et al, Assessing and Addressing Cardiovascular Health in LGBTQ Adults: A Scientific Statement From the American Heart Association, *Circulation*, Volume 142, Issue 19, 10 November 2020; Pages e321-e332
<https://doi.org/10.1161/CIR.0000000000000914>
- ²¹ Women and Equalities Committee, *Transgender Equality* (HC 2015-16, 390)
- ²² The Scottish Government, *Scottish Surveys Core Questions* (Edinburgh 2016) pp. 50-51
- ²³ Caceres, B., Streed Jr., C., Corliss, H., Lloyd-Jones, D., Matthews, P., Mukherjee, M., Poteat, T., Rosendale, N., Ross, L., 'Assessing and Addressing Cardiovascular Health in LGBTQ Adults: A Scientific Statement From the American Heart Association' *Circulation*, (2020) 142 (19) pp. 321 – 332
- ²⁴ Mulé, N., Ross, L., Deeprose, B., Jackson B., Daley. A., Travers, A., and Moore, D., 'Promoting LGBT health and wellbeing through inclusive policy development' *International Journal for Equity in Health* (2009) 8 (18)
- ²⁵ [South Asian background | BHF](#)
- ²⁶ Fischbacher, C., Bhopal, R., Steiner, M., Morris, A. and Chalmers, J. 'Is there equity of service delivery and intermediate outcomes in South Asians with type 2 diabetes?', *Journal of Public Health Medicine* (2009) 31, pp. 239–249.
- ²⁷ British Heart Foundation, 'African and African Caribbean background' [African and African Caribbean background | BHF](#) [Accessed 18 February 2021]
- ²⁸ The Scottish Government 'Impact of Covid-19 on Equality Groups' [Inequalities by ethnicity in the context of Covid-19 \(slide-pack\) - gov.scot \(www.gov.scot\)](#) [Accessed 18 February 2021]
- ²⁹ Lowth, M., 'Diseases and Different Ethnic Groups' *Patient Platform Ltd.*, 2015
<https://patient.info/doctor/diseases-and-different-ethnic-groups> [accessed 16th November 2020]
- ³⁰ The Scottish Government, *Scottish Surveys Core Questions* (Edinburgh 2016) pp. 40
- ³¹ BASU-ZHARKU, I. O. 2011. The Influence of Religion on Health. *Inquiries Journal/Student Pulse* [Online], 3. Available: <http://www.inquiriesjournal.com/a?id=367>
- ³² Cemlyn, S., Greenfields, M., Burnett, S., Matthews Z., and Whitwell, C., *Inequalities experienced by Gypsy and Traveller communities: A Review*, (Manchester, 2009) pp. 49
- ³³ Cemlyn, S., Greenfields, M., Burnett, S., Matthews Z., and Whitwell, C., *Inequalities experienced by Gypsy and Traveller communities: A Review*, (Manchester, 2009) pp. 49
- ³⁴ Scottish Burden of Disease: Deprivation report 2016. ScotPHO. pP11
[Scottish Burden of Disease: Deprivation Report \(scotpho.org.uk\)](https://www.scotpho.org.uk)
- ³⁵ Nielsen, R. E., Banner, J., Jensen, S. E. 'Cardiovascular disease in patients with severe mental illness' (2021). *Nature Reviews Cardiology* volume 18, pages 136–145
<https://www.nature.com/articles/s41569-020-00463-7>
- ³⁶ Mayor, S., 'Patients with severe mental illness have greatly increased cardiovascular risk' (2017). *BMJ* 2017;357:j2339
<https://www.bmj.com/content/357/bmj.j2339>

-
- ³⁷ Fleetwood K., Wild, S. H., Smith, D. J., Mercer, S. W., Licence, K., Sudlow, C. L. M., Jackson, C. A., Usher Institute, University of Edinburgh, Institute of Health and Wellbeing, University of Glasgow, Information Services Division, National Services Scotland, NHS Scotland. 'Severe mental illness and mortality and coronary revascularisation following a myocardial infarction: a retrospective cohort study' (2021) *BMC Medicine*: p2, 3, 11, 12.
<https://bmcmmedicine.biomedcentral.com/articles/10.1186/s12916-021-01937-2>
- ³⁸ Scottish Government: *Rights Respect and Recovery - alcohol and drug treatment strategy: Action Plan 2019 to 2021* (version to 31 March 2021) p6
<https://www.gov.scot/publications/rights-respect-recovery/>
- ³⁹ Beavers, C. J., 'The Cardiovascular Consequences of Drug Use' (2021). *Psychiatric Times*, Vol 38, Issue 2, Volume 02
<https://www.psychiatrictimes.com/view/cardiovascular-consequences-drug-use>
- ⁴⁰ Scottish Prison Population Statistics: Legal Status, 2019-20. p2, 22
<https://www.gov.scot/publications/scottish-prison-population-statistics-legal-status-2019-20/>
- ⁴¹ Packham C, and others. Cardiovascular risk profiles and the uptake of the NHS Healthcheck programme in male prisoners in six UK prisons: an observational cross-sectional survey. *BMJ Open*. 2020;10:1-8.
<https://bmjopen.bmj.com/content/10/5/e033498>
- ⁴² Wang, E. A., Redmond, N., Himmelfarb, C. R. D., Pettit, B., Stern, M., Chen J., Shero, S., Iturriaga, E., Sorlie, P., Roux, A. V. D. Cardiovascular Disease in Incarcerated Populations. *J Am Coll Cardiol*. 2017 June 20; 69(24): 2967–2976. doi:10.1016/j.jacc.2017.04.040.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6342510/>
- ⁴³ Office for National Statistics, 'Exploring the UK's digital divide' [Exploring the UK's digital divide - Office for National Statistics \(ons.gov.uk\)](#) [accessed 9 March 2021]
- ⁴⁴ Inspiring Scotland, 'Digital Exclusion in Scotland' [PowerPoint Presentation \(inspiringScotland.org.uk\)](#) [accessed 9 March 2021] pp. 8
- ⁴⁵ Inspiring Scotland, 'Digital Exclusion in Scotland' [PowerPoint Presentation \(inspiringScotland.org.uk\)](#) [accessed 9 March 2021] pp. 8