

# Adult Joint Strategic Needs Assessment 2024

## Health & Social Care Moray



## Summary and Acknowledgements

This Joint Strategic Needs Assessment (JSNA) has been produced in line with guidance from Scottish Government. It was developed by a short-life working group comprising representatives from Health and Social Care Moray, Moray Council, Public Health Scotland, NHS Information Services Division Scotland, and NHS Grampian. The JSNA is mainly based on already published data which has been quality assured; the working group also tried to make use of other relevant datasets or analysis, such as that captured through the Moray Local Housing Needs and Demands Survey.

However, there are gaps, for example, around the specific needs of people with learning disabilities, people who experience gender based violence, people who use services intensively and ethnicity data which is poorly recorded; it is recommended that further work takes place to understand the needs and views of particularly vulnerable populations in more depth. There are also limitations in the data; for example, service activity only tells us about those who use services and not about those who need services but are not able to access them. As such, the data used in this report must be interpreted with caution and used in conjunction with qualitative data from Moray residents and workforce.

The Needs Assessment attempts to provide a profile of the health of the Moray population, including the building blocks of health – housing, income, environment – which most significantly influence health. It then goes on to consider which diseases and illnesses pose the greatest threat to population health and well-being. This information is designed to help the Health and Social Care Partnership to consider how to use limited resources for maximum benefit, planning interventions and delivering services to enhance prevention, improve disease outcomes, and reduce health inequalities.

The following areas are highlighted from amongst the wealth of intelligence compiled.

1. There are continuing inequalities in health status across Moray, with an evident association between level of poverty and deprivation (including cost of living, poor housing, transport, employment) and ill health and death.
2. Lives are being cut short through suicide, drug and alcohol related deaths, conditions which are significantly affected by deprivation. In 2022, admissions for alcohol-related conditions were almost 4 times higher among those living in the most deprived areas in Moray as compared to the least deprived.

3. The population is predicted to continue ageing, with a growing proportion represented by adults over the age of sixty-five, and growing numbers of adults aged over eighty, with implications for increasing ill health.
4. Significant demand for health and social care services arise from sometimes preventable chronic disease, and a growing proportion of the population is experiencing more than one condition (“multi-morbidity”).
5. There is significant death and poor health due to often modifiable behaviours, such as lack of exercise, smoking, alcohol and drug use.
6. A small number of individuals, with higher numbers coming from more deprived areas, require significant amounts of healthcare spending. This warrants further detailed analysis.

The final section includes some thoughts about the future and the transformation that is required, recognising that our current system won't get us to where we need to be.

We need to work, internally, and externally with our community planning partners and national systems to:

- Be systematic about delaying disease and disability, prioritising, creating and maintaining good health and preventing ill health; this also means focusing support on the people and communities who need it the most
- Improve quality of life in our most deprived areas to the levels of those in the least deprived in order to compress years spent in poor health.
- Avoid over medicalising, testing and overtreatment
- Influence the social and economic factors that damage health and increase inequalities, recognising that commercial determinants<sup>1</sup> are the main drivers of non-communicable disease
- Adapt the environment to allow an individual with a set amount of disability in older age to live as independent and enjoyable a life as possible. (Accessible homes, transportation, community venues and public spaces are all important elements).

# Contents

|      |  |    |
|------|--|----|
| 1.   | Introduction.....                                    | 6  |
| 1.1  | Purpose and scope.....                               | 6  |
| 1.2  | The Wider Determinants of Health.....                | 7  |
| 2.   | Population demographics.....                         | 9  |
| 2.1  | Population structure (age & sex).....                | 9  |
| 2.2  | Population projections.....                          | 9  |
| 2.3  | Life expectancy & healthy life expectancy (HLE)..... | 10 |
| 2.4  | Ethnicity.....                                       | 13 |
| 2.5  | Armed Forces.....                                    | 13 |
| 2.6  | Housing and Household structure.....                 | 14 |
| 2.7  | Homelessness.....                                    | 15 |
| 2.8  | Scottish Index of Multiple Deprivation.....          | 16 |
| 2.9  | Work and Earnings.....                               | 19 |
| 2.10 | Urban/rural split.....                               | 21 |
| 2.11 | Benefits.....  | 21 |
| 2.12 | Fuel poverty.....                                    | 22 |
| 2.13 | Cost of living.....                                  | 22 |
| 2.14 | Child Poverty.....                                   | 23 |
| 3.   | Social, clinical and behavioural risk factors.....   | 24 |
| 3.1  | Introduction.....                                    | 24 |
| 3.2  | Smoking.....   | 25 |
| 3.3  | Alcohol.....   | 26 |
| 3.4  | Substance Use.....                                   | 27 |
| 3.5  | Physical activity.....                               | 28 |
| 3.6  | Diet.....  | 29 |
| 3.7  | Obesity.....   | 30 |
| 3.8  | High Blood pressure.....                             | 31 |
| 4.   | Population Health.....                               | 33 |
| 4.1  | Burden of disease.....                               | 33 |
| 4.2  | Long Term Conditions and Multi-morbidity.....        | 34 |
| 4.3  | Primary Care Disease Register.....                   | 35 |
| 4.6  | Causes of Death.....                                 | 36 |
| 4.6  | Avoidable Mortality (Deaths).....                    | 39 |
| 4.7  | Premature Mortality.....                             | 40 |

|      |  |    |
|------|--|----|
| 4.8  | Learning Disability.....   | 41 |
| 4.9  | Primary care activity.....   | 42 |
| 4.10 | Mental Health.....   | 44 |
| 4.11 | Prevention (screening and vaccination).....                            | 47 |
| 5.   | Secondary Care services.....   | 51 |
| 5.1  | Hospital Activity.....   | 51 |
| 5.2  | Potentially preventable admissions.....                                | 51 |
| 5.3  | Emergency care.....  | 52 |
| 5.4  | Unintentional injuries and falls.....                                  | 54 |
| 5.5  | End of Life Care.....  | 54 |
| 5.6  | Delayed Discharges.....  | 55 |
| 6.   | Social Care.....   | 56 |
| 6.1  | Care Home Residents.....   | 56 |
| 6.2  | Residents by Age and Length of Stay.....                               | 56 |
| 6.3  | Care Home Referral Sources.....  | 57 |
| 6.4  | Care at home.....  | 58 |
| 6.5  | Experience of Social Care.....   | 60 |
| 6.6  | Self-Directed Support (SDS).....                                       | 60 |
| 6.7  | Unpaid carers.....   | 60 |
| 6.8  | Service usage and Experience.....                                      | 61 |
| 7.   | Workforce and Finance.....   | 64 |
| 7.1  | Current Workforce.....   | 64 |
| 7.2  | Finance.....   | 67 |
| 8.   | Pulling it all together.....   | 70 |
| 8.1  | Christie Commission.....   | 70 |
| 8.2  | Using our community planning colleagues & structures.....              | 70 |
| 8.3  | Tackling Health Inequalities.....                                      | 71 |
| 8.4  | Healthy Aging.....   | 72 |
| 8.5  | Healthy Places.....  | 73 |
| 8.6  | Partnerships with People.....  | 74 |
| 8.7  | Different ways of working – the Liberated Method.....                  | 74 |
| 8.8  | Shift to Community.....  | 76 |
| 9.   | Endnotes.....  | 77 |
|      | Appendix 1: Responsibilities of the Moray Integration Joint Board..... | 79 |
|      | Glossary of terms:.....  | 80 |

# 1. Introduction

## 1.1 Purpose and scope

A Joint Strategic Needs Assessment (JSNA) is an assessment of the current and future health needs and social needs of the local community. This JSNA is intended to be a mechanism for setting strategic priorities for Moray Health and Social Care Partnership and informing local commissioning across health and social care services. It will also contribute to longer term planning undertaken by the Moray Community Planning Partnership, and the updating of the Moray Local Outcomes Improvement Plan.

The JSNA is set out under the following headings:

- Population demographics
- Social, clinical and behavioural risk factors
- Population health
- Secondary care services
- Social care
- Finance and workforce
- Recommendations for further action/analysis.

Although the concept of need is used in the planning and allocation of health and care services, there is no single definition. The need for healthcare is different from the need for health, which is much broader.

In the UK, the NHS often defines need as a 'capacity to benefit'. It depends on the potential of preventive or treatment services to remedy health problems<sup>1</sup>. Capacity to benefit is not fixed, but subject to current knowledge, the current research agenda, and the cultural and ethical determinants of contemporary society<sup>2</sup>. And supply (what is provided) and demand (what individuals/communities ask for) don't always match need. Demand is influenced by factors such as the social and educational background of an individual, the media and the medical profession. Supply is often influenced by historical patterns and public and political pressure.

Health and care systems are concerned not only with maximising health, but also with the fair distribution of health, a decision which is often a moral as well as an objective one.

The Christie Commission identified the benefit of 'Thorough analysis of joint strategic needs [in order to] identify population need, meaning services can be reshaped to meet needs more closely now and in the future. That gives services, in partnership with service providers, the space to innovate and inspire and to more effectively target resources at prevention.'<sup>3</sup>

Integration Joint Board Guidance on Strategic Commissioning reminds us that

'strategic commissioning plans should incorporate the important role of informal community capacity building and asset based approaches, to deliver more effective preventative and anticipatory interventions, in order to optimise the potential to reduce unnecessary demand at the 'front door' of the formal health and social care system.

Services cannot continue to be planned and delivered in the same way; the current situation is neither desirable in terms of optimising wellbeing, nor financially viable. With the full involvement of all stakeholders, and the creation of a single system for strategic commissioning of services, Integration Authorities can now think innovatively about how services might be provided in the future.

The focus should be less about how it is done now and more about how it should be done in future. This might mean, through a robust option appraisal process, that the Integration Authority makes decisions about disinvesting in current provision of services in order to reinvest in other services and supports that are required to meet on-going and changing demand.'<sup>4</sup>

## 1.2 The Wider Determinants of Health

The right to health is a fundamental human right: everyone has the right to the highest attainable standard of physical and mental health. To enable this, services and systems that help us to live long healthy lives should be accessible, available, appropriate and high quality. The existence of health inequalities in Scotland means that the right of everyone to the highest attainable standard of physical and mental health is not being enjoyed equally across the population.<sup>5</sup>

Our health is determined by the conditions in which we are born, grow, age, live and work. Often closely linked to inequalities, these 'social determinants of health' include:

- Housing (including quality, affordability, fuel poverty and homelessness)



- education
- employment (including job security and safety)
- social support
- family income (including poverty and deprivation)
- our communities (including physical environment factors such as access to green and blue space, public transport, crime and violence, and availability of amenities)
- childhood experience
- access to health services.

Mapping the relationship between an individual, their environment and their health, the Dahlgren and Whitehead model (Figure 1) is often used to describe the interconnection between these determinants and health inequalities.



Figure 1: The Dahlgren and Whitehead model of the main determinants of health<sup>6</sup>.



# 2. Population demographics

## 2.1 Population structure (age & sex)

While full statistics are not yet available from Scotland's Census 2022 at the time of writing (January 2024), emerging census outputs reveal Moray's population in March 2022 was 93,400.<sup>7</sup> This is a 0.1% increase on Moray's 2011 population (93,295). Over the same period, Scotland's population increased by 2.7%.

In terms of overall size, the 55 to 59 age group was the largest in 2022, with a population of 7,400. The next largest 5-year age groupings were 50–54 years (7,100), and 60–64 years (6,800), see Fig 1. In a similar pattern to Scotland overall, in 2022 there were more females (50.75%) than males (49.25%) living in Moray.

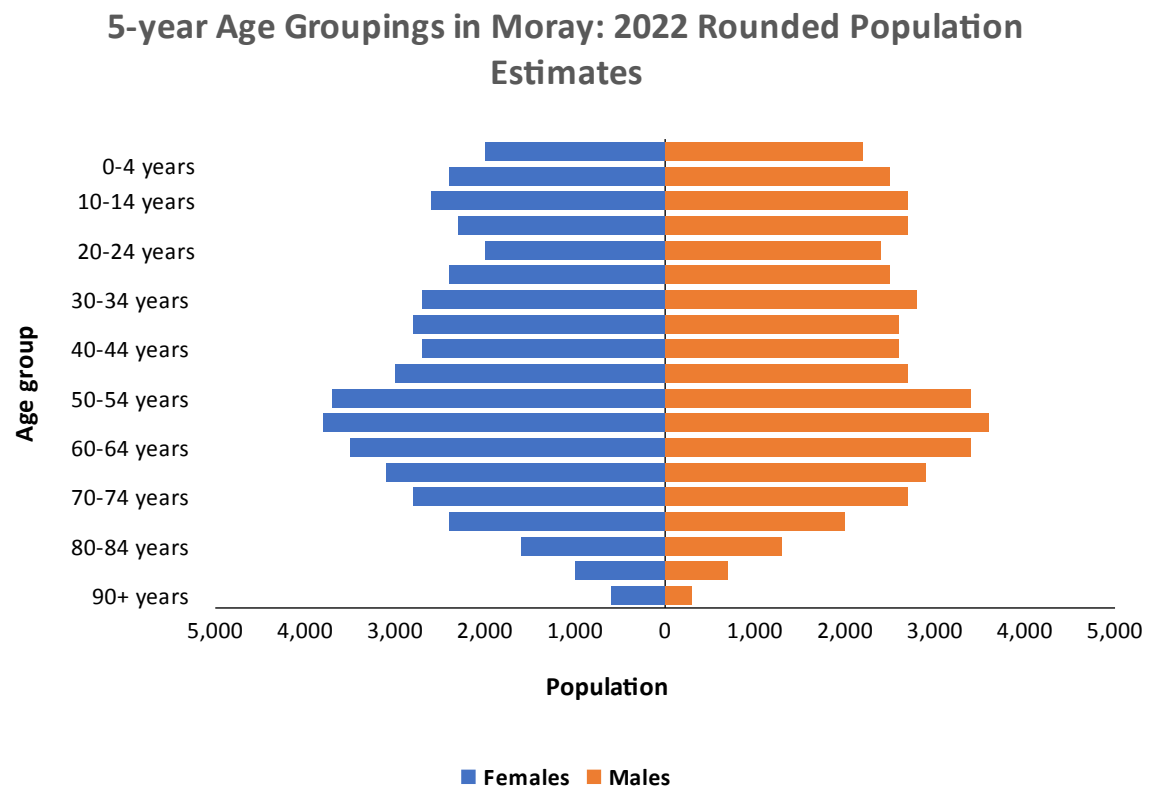


Figure 2: 5-year age groupings of males and females in Moray: 2022 rounded population estimates. Source: [NRS – Scotland's Census 2022 – Rounded population estimates](#)

## 2.2 Population projections

In common with the rest of Scotland and most Western countries, the age structure of Moray is changing. Since the 1950's, life expectancy has increased dramatically and birth rates have fallen, resulting in a rising proportion of older people.

The most recent NRS (National Records of Scotland) population projections, based on the 2018 population mid-year estimates, expect the population of Moray to decline by 0.1% between 2018 and 2028. This is in contrast with the expected 1.8% growth for Scotland over the same period (see Fig 3).<sup>8</sup> Although new 2022 census based population projections are scheduled to be released spring/summer 2024, it is worth pointing out that these projections are not always reliable! For example, the 2018-based projections expected our population to be 95,300 in 2022, while the 2016 projections anticipated it being 98,700.

### Population Projections in Moray and Scotland: 2018 - 2028

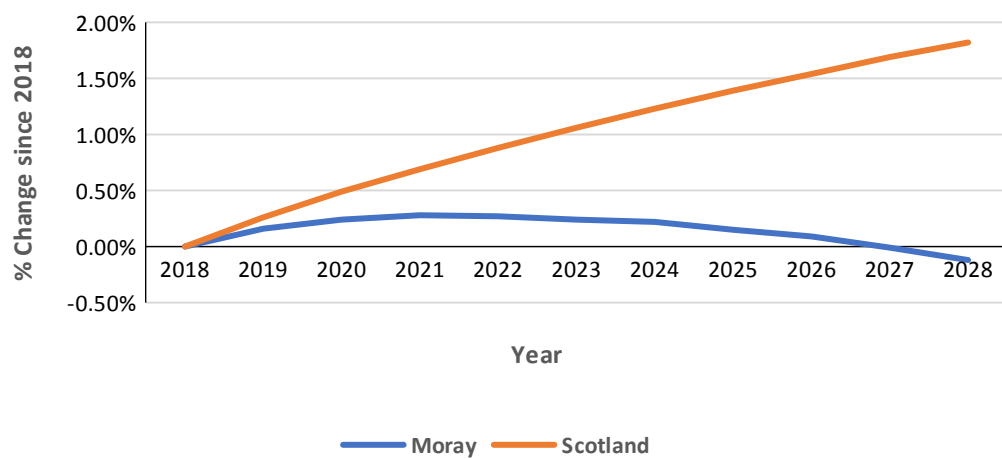


Figure 3: Population projections in Moray and Scotland: 2018 – 2028. Source: [NRS council profiles](#).

Moray is projected to have an increasingly ageing population structure. Between 2023 and 2038 it is projected that the number of 5-17 year-olds in Moray will decline by 19% (-11% for Scotland). Conversely, those aged 85 and over will increase by 63% in Moray and 47% in Scotland. Across all the over 65 age groups, the percentage growth in both males and females is expected to be higher in Moray than Scotland.<sup>9</sup>

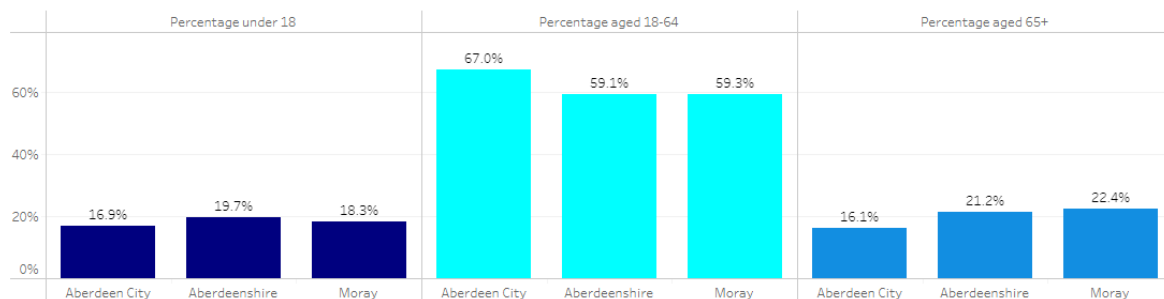


Figure 4 Differences in percentages within each age category by local authority area within Grampian:

This ageing population is further driven by a comparatively lower birth rate in Moray than Scotland overall: in 2022 the rate of live births in Moray was 7.6 per 1,000 population, compared to Scotland's 8.6 per 1,000 population.<sup>10</sup> In addition, the standardised death rate in Moray decreased from 12.2 per 1,000 population in 2021, to 10.3 in 2022. In the same period Scotland witnessed a smaller decrease, from 11.6 to 11.5 per 1,000 population.

## 2.3 Life expectancy & healthy life expectancy (HLE)

While Scotland, along with most industrialised countries, saw steady increases in life expectancy throughout the 20th century until the early 2010s, these increases then stalled and have fallen since 2018. Scotland has the highest inequality in life expectancy in Western Europe. These changes and those in Healthy Life Expectancy (see below) are largely attributable to austerity measures to cut public spending including social security payments in response to and then following on from the financial crisis of 2008/9 is the key driver. In the UK this disproportionately impacts on the most deprived and/or vulnerable in society<sup>11</sup>.

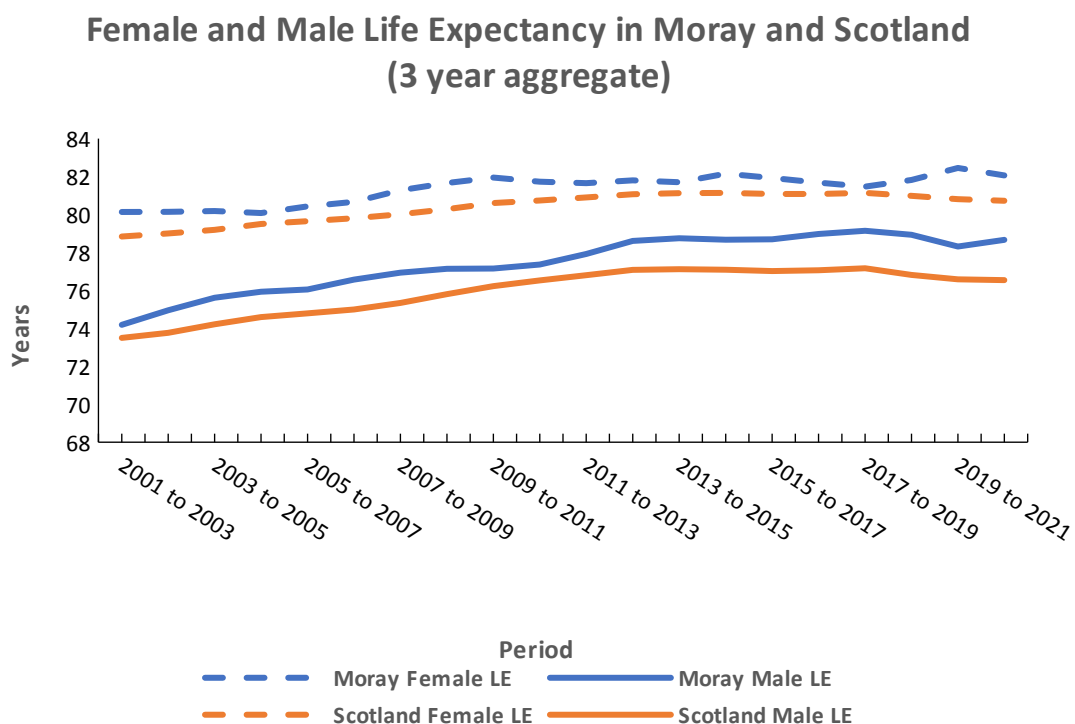


Figure 5: Life expectancy (LE) for males and females in Moray and Scotland. Source: [NRS – Life expectancy in Moray and Scotland: Both sexes](#)

Life expectancy at birth between 2020–2022 (3-year aggregate) was 82.6 years for females and 78.1 years for males in Moray. These were comparatively higher than the Scottish average of 80.7 years and 76.5 years for females and males respectively (see Figure 5).<sup>12</sup> Despite this, clear inequalities are present: females in the most deprived areas of Moray have a 3% lower life expectancy than Moray as a whole; males in the most deprived areas have a 5% lower life expectancy than Moray as a whole.<sup>13</sup>

Figures 6 (female) and 7 (male) show the percentage improvement in life expectancy since 2001-3. This improvement has since stalled for both men and women, though the trend in Moray is different by sex.

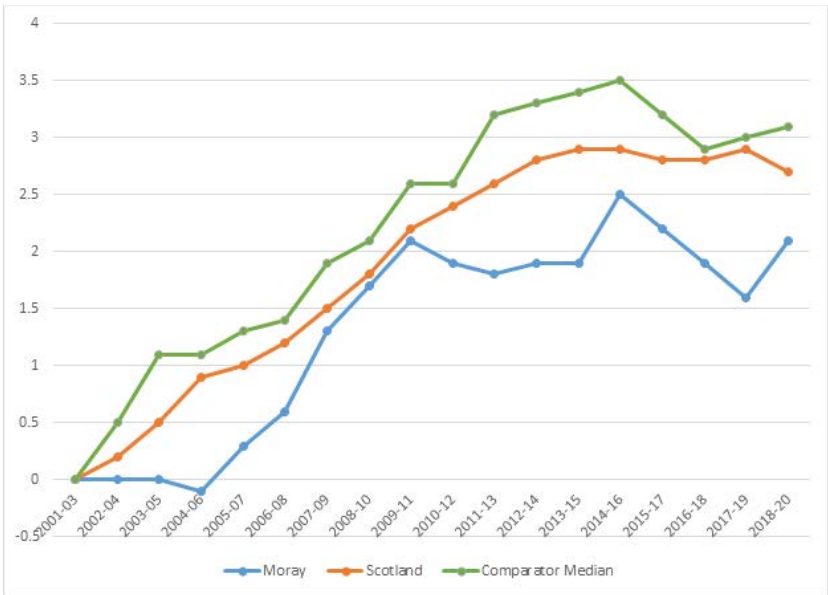


Figure 6: Percentage change in female life expectancy at birth from 2001-03

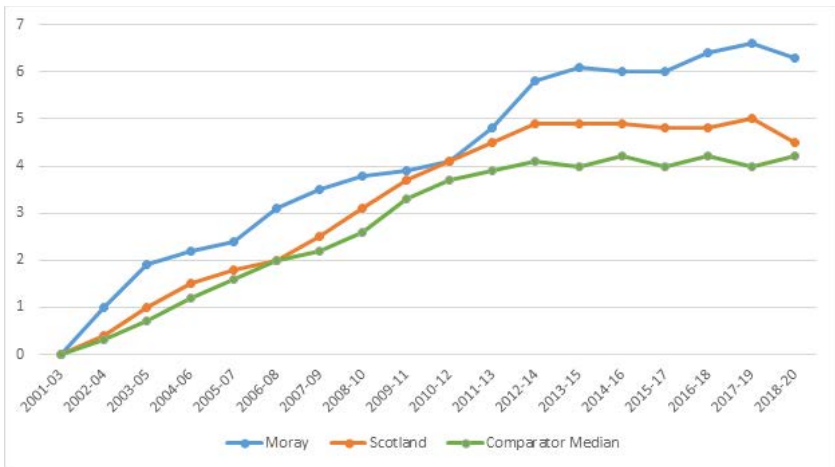


Figure 7: Percentage change in male life expectancy at birth from 2001-03

Healthy Life Expectancy (HLE) is the average number of years of life that people spend in good health. The definition of ‘Good health’ is based on how people rate their own health in the annual population survey<sup>14</sup>.

In Scotland overall, HLE has been decreasing since 2015-2017 for males and since 2014-2016 for females. In the latest 2019-2021 aggregate reporting period, HLE is now lower than it was in 2009-2011 at 61.1 years and 60.4 years for females and males respectively. In Moray, individuals could expect to spend slightly longer in good health, with HLE figures of 62.7 years for females and 62.4 years for males (Figure 8).<sup>15</sup> Once more, a clear inequality gap is present: in the most

deprived areas of Scotland, individuals spend approximately one third of their lives in poor health, compared to around 15% in the least deprived areas. Equivalently, healthy life expectancy for those in the most deprived areas of Scotland is around 25 years lower than for those in the least deprived areas<sup>16</sup>.

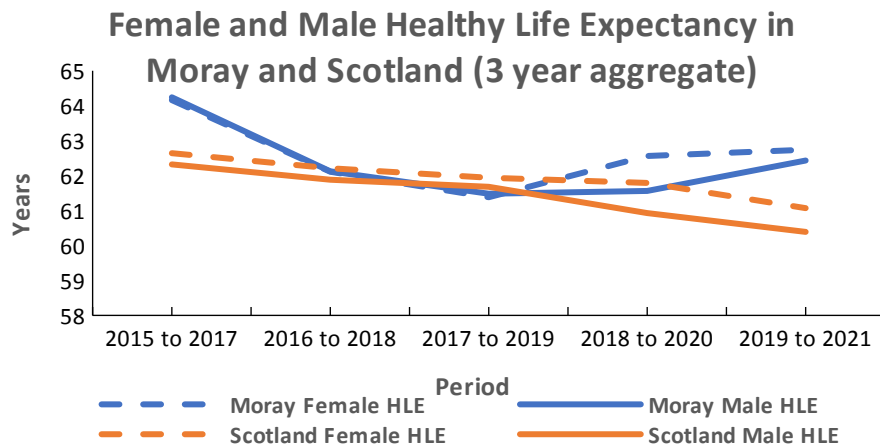


Figure 8: Healthy life expectancy for males and females in Moray and in Scotland. Source: [NRS – Healthy life expectancy in Scotland](#)

## 2.4 Ethnicity

Ethnicity data enables us to better understand the communities living in Moray. Limited ethnicity data is currently available, as it is not well collected, with the 2011 census currently providing the most recent national data on ethnicity in Scotland (as of January 2024); data on national identity, language and religion is due to be published in May 2024.

Based on the 2011 census results, the majority of Moray’s population (99%) identified as ‘White’ (including ‘White- Scottish’ at 77.7%, ‘White- Other British’ at 18%, ‘White – Other’ at 1.7%, ‘White – Polish’ at 1.1% and ‘White – Irish’ at 0.5%). Of the remaining 1.1%, 0.6% of people identified as Asian, Asian Scottish or Asian British, African, Caribbean, Mixed (or multiple), and 0.5% as other ethnic groups.<sup>17</sup>

In the 2022 census, 97.6% of Moray’s population identified as ‘White’, 2% as Asian, Asian Scottish or Asian British, African, Caribbean, Mixed (or multiple), and 0.75% as other ethnic groups.<sup>18</sup>

These figures show Moray to be less ethnically diverse than Scotland overall, where in 2011 96% of the population identified as ‘White’, and minority ethnic groups made up the remaining 4%. It is important to note that white non-British groups may also face marginalisation, stigma

and language barriers, and that lower levels of ethnic diversity may mean higher levels of cultural isolation.

Between 2014-Q1 and 2023-Q3, 37 people altogether were resettled in Moray under two different resettlement schemes: 20 between 2016 and 2019 under the Vulnerable Persons Resettlement Scheme; and another 17 in 2022 under the Afghan Relocations and Assistance Policy (ARAP).

## **2.5 Armed Forces**

There are two large military bases in Moray: RAF Lossiemouth and Kinloss Barracks, which employ around 4000 people at present. We also need to consider the health needs of veterans of the armed forces; where the population often differs in structure to the non-veteran population; usually older and more males than females. There were just over 7000 UK Armed Forces Veterans living in Moray in 2022<sup>19</sup>, the majority of whom had previously served in the Regular Armed Forces, and nearly 6000 of whom were male.

Some veterans will have severe and enduring life changing conditions or injuries; others will have unique needs based on their backgrounds and experiences. Others will typically require little support, or find mainstream services to be adequate.

Veterans and service personnel have higher rates of certain health conditions, giving rise to greater need for services than in the general population<sup>20</sup>. These conditions include:

- Mental health problems (e.g. PTSD, suicide, substance misuse)
- Severe and enduring physical health conditions (e.g. multiple, complex injuries; ongoing support through the national trauma network)
- Amputees, impaired mobility
- Musculoskeletal disorders
- Chronic pain
- Severe sensory impairment

## **2.6 Housing and Household structure**

In 2022, Moray had an estimated 43,995 households, an increase of 0.9% since 2021 and 8.7% since 2012.<sup>21</sup> In comparison, Scotland overall saw increases of 0.8% and 6.8% since 2021 and 2012 respectively. In 2021, the average household size for Moray was 2.16 people, a decrease from 2.28 in 2011.



Housing impacts individuals' health and wellbeing by influencing where people live, and by extension the physical and social environments that they experience, and their access to employment opportunities. Housing also plays a crucial role in enabling healthy independent living and care at home.<sup>22</sup> Housing, through its availability and affordability, is also part of the complex set of factors that cause homelessness. The Health Foundation identified four key factors which define a "healthy home" (see <https://www.health.org.uk/infographic/how-does-housing-influence-our-health>). The home must be:

- Affordable and offer a secure and stable base
- Able to provide for all the household's needs
- A place where we feel safe and comfortable
- Connected to community, work and services

The Moray Housing Need and Demand Assessment (HNDA) 2022 Household [Survey](#)<sup>23</sup> found that in total, 44% of Moray households contain a long-term sick or disabled person (LTSD) ranging from 51% in the Keith Housing Market Area to 31% in Speyside.<sup>24</sup>

Households in the social housing sector in Moray are most likely to contain a long-term sick or disabled person in with 66% of social rented households comprising one or more person with a health condition or disability, compared to 51% in the owner-occupied sector. It is estimated that 22% of households containing an individual with long term sickness or disability report their home as not being suitable for their needs. The largest percentage of households who feel their current property does not meet their health or disability needs was in the Keith area, 38%, followed by Speyside (28%) and Elgin (23%).

The Moray HDNA 2022 estimated 2,160 households across Moray who require to move to alternative housing to address housing unsuitability. The table below illustrates the main reasons for these needs.

*Table 1 Local Estimate of Existing Housing Need across Moray Housing Market Areas<sup>25</sup>*

| Existing Housing Need                          | Moray total | Buckie | Cairngorms | Elgin | Forres | Keith | Speyside |
|--|-------------|--------|------------|-------|--------|-------|----------|
| Homeless households in temporary accommodation | 99          | 12     |            | 55    | 19     | 12    | 1        |
| Households with insecure tenure                | 314         |        |            | 214   | 55     |       | 45       |

|                           |      |     |    |      |     |     |     |
|---------------------------|------|-----|----|------|-----|-----|-----|
| Concealed and overcrowded | 505  | 63  |    | 342  | 52  | 28  | 21  |
| Specialist Housing need   | 889  | 134 |    | 598  | 79  | 78  |     |
| Poor quality              | 353  | 47  | 21 | 1    | 84  | 50  | 60  |
| Total                     | 2160 | 256 | 21 | 1300 | 289 | 168 | 127 |

## 2.7 Homelessness

Homelessness increases the risk of poor health and death; the average age of death for people experiencing homelessness is 46 for men and 42 for women.

People sleeping on the street are almost 17 times more likely to have been victims of violence. More than one in three people sleeping rough have been deliberately hit or kicked or experienced some other form of violence whilst homeless. Homeless people are over nine times more likely to take their own life than the general population<sup>26</sup>.

Table 2: homeless applications for Moray between 2020 and 2023<sup>27</sup>. Small numbers are rounded to the nearest 5.

|   | 2020 | 2021 | 2022 | 2023 Jan-Sep |
|---|------|------|------|--------------|
| Homeless applications   |      |      |      |              |
|   | 460  | 502  | 567  | 432          |
| Households assessed as homeless or threatened with homelessness       |      |      |      |              |
|   | 338  | 366  | 413  | 271          |
| Households in temporary accommodation                                 |      |      |      |              |
|   | 549  | 465  | 426  | 358          |
| Households with children or pregnant women in temporary accommodation |      |      |      |              |
|   | 85   | 75   | 80   | 60           |
| Number of children in temporary accommodation                         |      |      |      |              |
|   | 165  | 110  | 145  | 115          |

## 2.8 Scottish Index of Multiple Deprivation

Deprivation in Scotland is most commonly discussed in terms of the Scottish Index of Multiple Deprivation (SIMD), an area-based measure which does not categorise individuals or families according to their personal experience of deprivation, but rather asks whether people live in a geographical area which has high or low levels of deprivation on average.

By ranking all of Scotland’s data zones from most to least deprived, it is possible to see what proportion of the population in Moray live in the 20% most deprived areas of the country (SIMD 1), as well as the other quintiles to the 20% least deprived (SIMD 5).

Moray contains 126 data zones, with populations ranging from 435 to 1,536 residents per data zone (mean 760), based on the SIMD 2020 use of 2017 mid-year population estimates. Based on the above methodology, around 1 in 36 people (2.76%) in Moray live in an area belonging to the most deprived quintile in Scotland (SIMD 1), whereas around 1 in 8 people (13.13%) live in the least deprived quintile in Scotland (SIMD 5) (see Figure 9). Overall, around half of Moray residents (50.78%) live in areas classified as the least deprived 40% of areas in Scotland (SIMD 4 and 5)<sup>28</sup>.

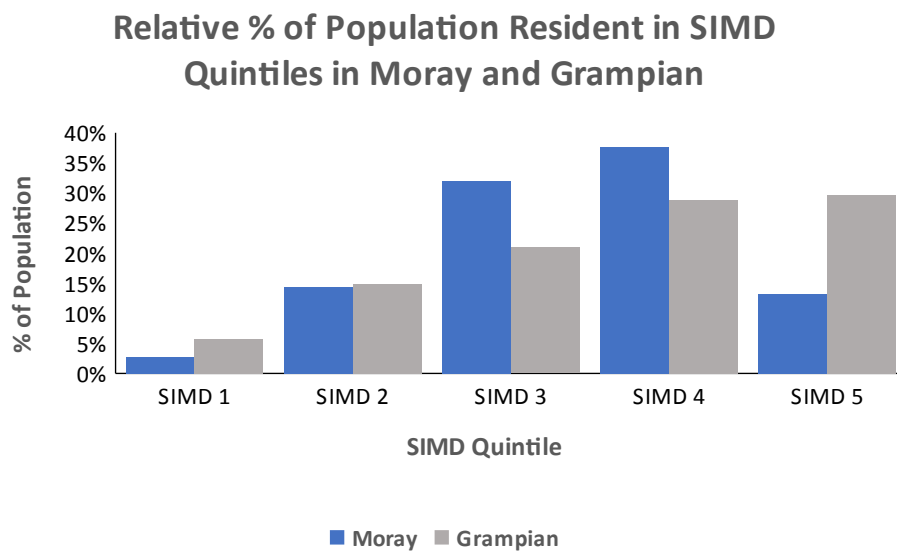


Figure 9: Relative percentage of population resident in SIMD quintiles in Moray and in Grampian. Source: [Scottish Index of Multiple Deprivation 2020](#)

However, as SIMD is a measure of area deprivation rather than individual deprivation, more affluent people can and do live in deprived areas and less affluent people live in less deprived areas. In rural areas, deprivation and affluence do not tend to cluster geographically in the same way as often happens in urban areas and so the SIMD categorisation tends to be a less reliable indicator of individual or household deprivation.

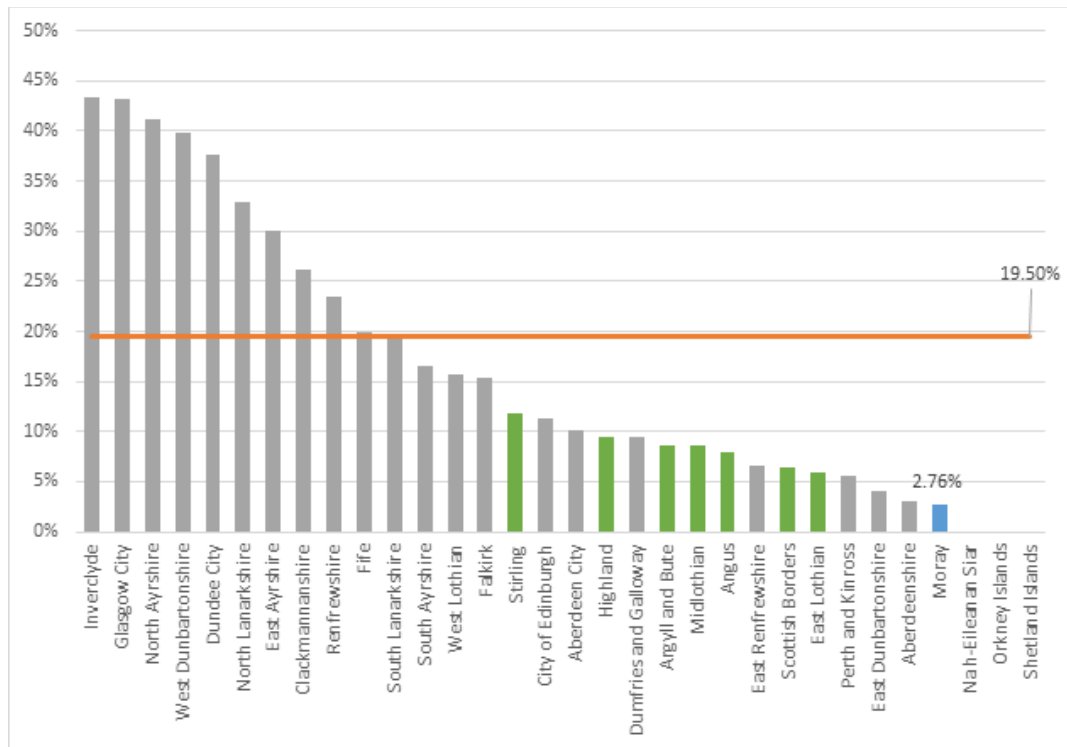


Figure 10: The proportion of people living in SIMD 1, the 20% most deprived areas in Scotland, by local authority, 2020. "Family Group" of comparator local authority areas are highlighted in green<sup>29</sup>.

Figure 10 above shows the proportion of the population in each local authority area who live in the 20% most deprived datazones (small geographic areas) in Scotland. There are very few datazones in Moray which fall into this group, meaning less than 3% of our population live in them. By this measure, Moray appears to be the local authority area with the lowest deprivation in mainland Scotland. Figure 11 (below) shows all the datazones of Moray together with their SIMD classification

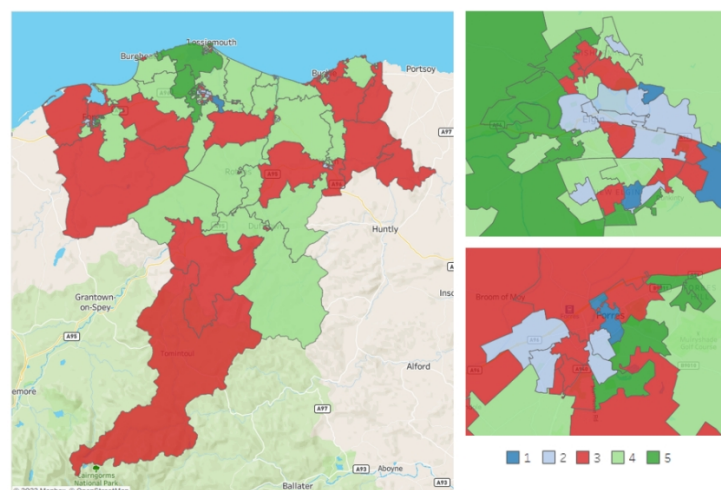


Figure 11: Datazones coloured according to SIMD 2020 quintiles.<sup>a</sup> Those in quintile 1 (dark blue) are in the 20% most deprived datazones in Scotland while those in quintile 5 (dark green) are in the 20% least deprived. Moray (left), Elgin (top right), Forres (bottom right) areas shown.

The SIMD rankings of deprivation are produced based on a number of different area deprivation measures including income, employment, crime, housing, health, education and access domains. The income and employment domains are the dominant ones and it is possible to look at where our population who are income- or employment-deprived in Moray live.

- Income-deprivation: People are defined as income-deprived if they are receiving one of a number of social security benefits (e.g. income support, universal credit, jobseeker's allowance etc.) or are a child dependent on somebody receiving those benefits.
- Employment-deprivation: People are defined as employment-deprived if they are of working age and receiving one of a number of employment-related social security benefits (e.g. jobseeker's allowance, incapacity benefit etc.)

Figure 12 shows the proportion of people in each SIMD quintile who are classified as income- and employment-deprived. As can clearly be seen, while the greatest concentration of deprivation can be found in the most deprived quintile, there are people classified as income- and employment-deprived in each of the quintiles.

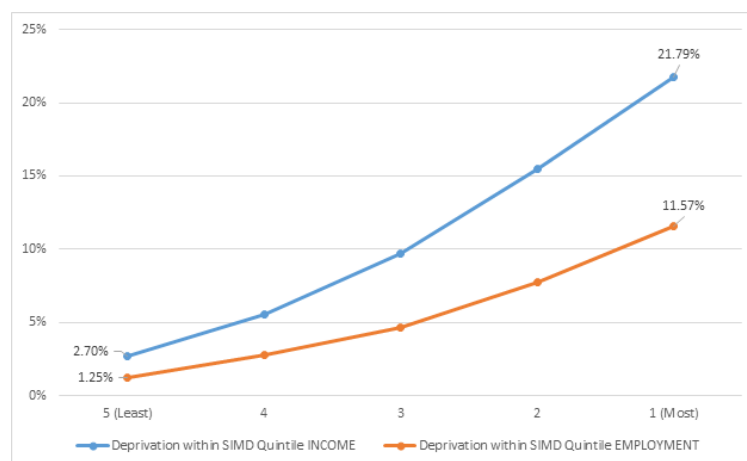


Figure 12: Proportion of the population living within SIMD quintiles in Moray who are classified as income- and employment-deprived<sup>30</sup>.

<sup>a</sup> Datazones in Scotland are ranked by deprivation according to SIMD and split into five equal groups, known as quintiles. Deprivation may also be discussed in terms of 'deciles' – this refers to the datazones being split into ten equal groups rather than five.

The figure below looks at all the people classified as income- or employment-deprived in Moray and asks which 2020 SIMD quintile they live in. Only 7.1% of Moray’s residents classified as income-deprived, and 7.6% of Moray’s residents classified as employment-deprived live in the most-deprived quintile. As such, approaches to deprivation and poverty in Moray must necessarily look beyond the SIMD approach to also address deprivation in the other four quintiles where more than 90% of our residents classed as income- and employment-deprived live.

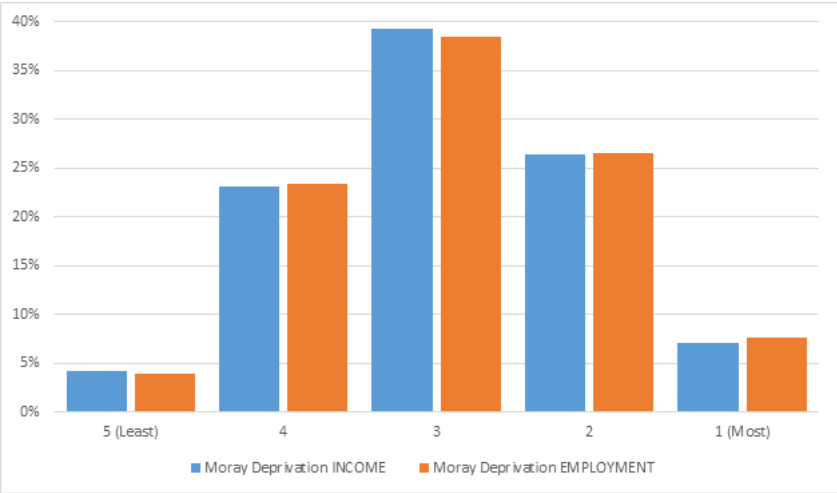


Figure 13: Proportion of income- and employment deprived people in Moray who live within 2020 SIMD quintiles<sup>50</sup>.

## 2.9 Work and Earnings

A key factor impacting on the quality of life of working people is the amount of money they earn and to what extent it is sufficient to meet their needs and aspirations. While access to work has traditionally been seen as the primary route out of poverty, the most recent data in Scotland (2017-20) found 68% of children in poverty lived in a working household. This has increased dramatically from 49% in 2007-10<sup>31</sup>. At a UK-wide level, even when looking only at ‘very deep poverty’ (less than 40% of median income), more than half of people in this category live in a working family.

An estimated 14.6% of Moray employees on adult rates of pay earn below the living wage as defined by the Living Wage Foundation (£10.90 per hour in 2023)<sup>32</sup>

Figure 14 (below) shows the average weekly earnings for those who live or work in Moray. Moray’s average earnings (£539 for residents and £525 for all people working in Moray) are lower than the Scottish average and are lower for residents than all but two of our comparator local authority areas

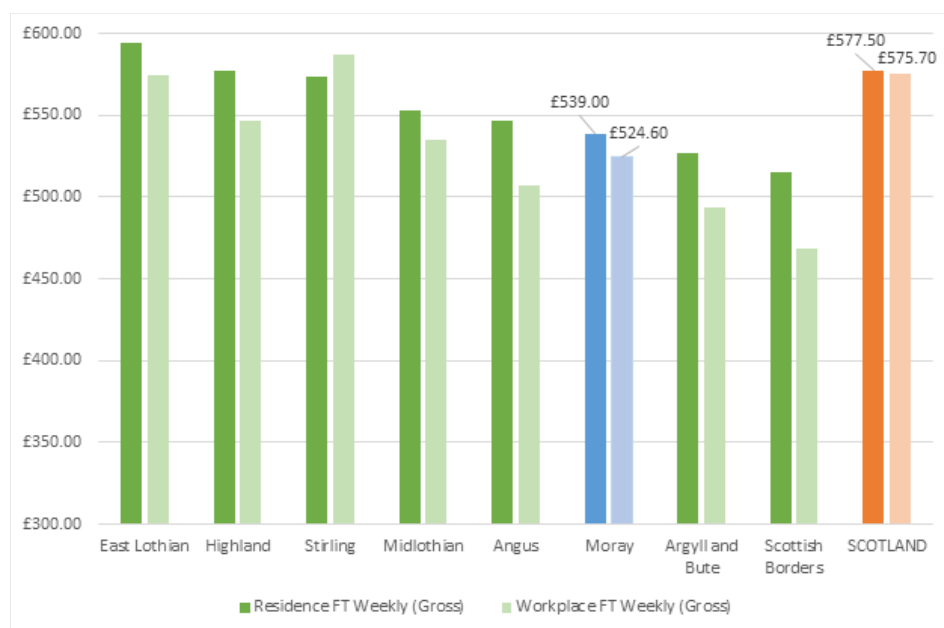


Figure 14: Median gross full-time weekly wage by place of residence (dark colours) and work (light colours), by local authority, 2020<sup>33</sup>.

Average earnings figures do not detail the distribution of earnings across Moray. Figure 15 shows the national minimum wage for different age groups as well as apprentices, and also shows the Real Living Wage. The Real Living Wage is calculated annually by the Resolution Foundation as an attempt to estimate the minimum standard to meet everyday living costs lviii. As is clear from the graph, none of the minimum wage levels comes close to meeting this minimum standard and younger people are paid significantly less than those 23 years old and over.

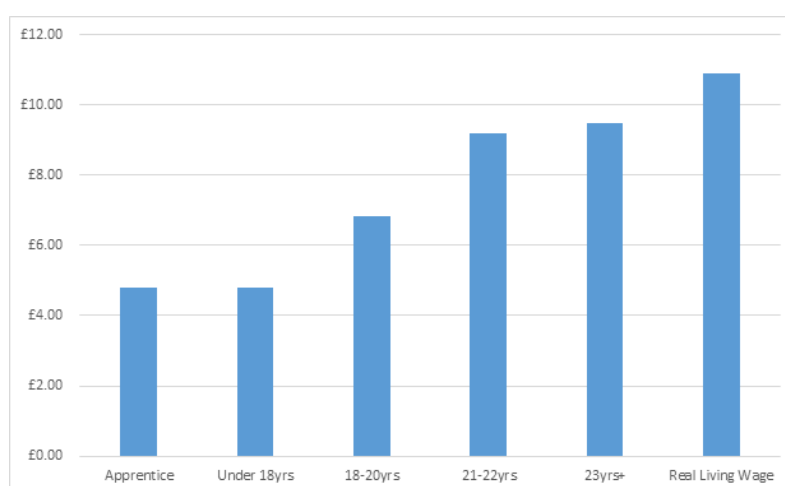


Figure 15: National hourly minimum wage by age group and apprenticeship<sup>34</sup>, and Real Living Wage<sup>35</sup> from Sep 2022.

The image below, from the Health Foundation, illustrates the impact that poverty can have on health.<sup>36</sup>





## Money and resources

**1<sup>IN</sup> 5** of the UK population live in poverty. Over half of these people live in working households. Poverty damages health and poor health increases the risk of poverty.

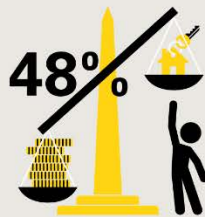
An inadequate income can cause poor health because it is more difficult to:

Avoid stress and feel in control



Living with the day-to-day stresses of poverty in early childhood can have damaging consequences for long-term health

Access experiences and material resources



Money can allow people to access the basics they need to fully participate in society. Yet, 48% of 21-24 year-olds earn less than the living wage

Adopt and maintain healthy behaviours



Healthy behaviours can feel unattainable. It is 3 times more expensive to get the energy we need from healthy foods than unhealthy foods

Feel supported by a financial safety net



A safety net enables people to invest in their future. In a recent study, 40% of people with unmanageable debt said they were less likely to study or retrain

## 2.10 Urban/rural split

Based on the Scottish Government's 2020 6-fold Urban Rural Classification, the majority of the Moray population (73.8%) lives in small towns or rural areas, compared to 28.3% of the Scottish population overall.<sup>37</sup> Moray's population is split as follows:

- 26.2% live in 'Other Urban' areas
- 26.9% live in 'Accessible Small Towns'
- 4.8% live in 'Remote Small Towns'
- 32.6% 'live in Accessible Rural areas'
- 9.5% live in 'Remote Rural' areas.

Given these comparatively high levels of rurality, availability of transport is of increased importance in Moray compared to more accessible urban areas. Approximately 86% of Moray households have access to one or more cars; conversely 14% do not have access to a car. This compares favourably with Scotland overall, where 28% of households do not have access to a

car.<sup>38</sup> However, the necessity of having a car in an area of high rurality with limited public transport availability can often contribute to poverty. Information on where people in Moray live in relation to services – for example, more than 20 minutes from shops, a pharmacy or school – would help to understand this issue in more detail.

## 2.11 Benefits

Between August 2022 and August 2023, the number of households on universal credit increased by 11.2% to 5,195 in Moray.<sup>39</sup>

The estimated take-up rate for the Scottish Child Payment (for all children under 16) in Moray in March 2023 was 78% of the eligible recipients.

Money Advice Moray provided the following snapshot of needs during 2021-22:

- Many in work people now have insufficient income to afford their ongoing priorities and for some because they just fall short of the Universal Credit entitlement they do not qualify for the Cost of Living payments.
- Lone parents are struggling to find affordable childcare in Moray to enable them to continue/ return to work
- Irregular public transport links for rural communities combined with the cost of fares to travel with Moray, means people feel stranded and this can impact on their ability to find or afford to go to work and their mental health welfare
- Long waiting lists for suitable housing
- Long waits for referrals for help with mental and physical health – this can also affect waiting times for people to be able to return to work
- Older people lacking confidence to re-enter work especially since COVID
- Cost of living overall impact and a shrinking income
- Poor mobile signal and broadband connections in rural areas, along with limited access to libraries for use of PCs to help make benefit claims, especially Universal Credit
- Lack of banking facilities in smaller towns and rural areas
- Businesses now struggling to keep on their staff or take on new people and some are closing
- The impact of travel costs to hospitals out with the area so people are turning down appointments

## 2.12 Fuel poverty

According to the latest definition, a household is described as being in fuel poverty “if, in order to maintain a satisfactory heating regime, total fuel costs necessary for the home are more than 10% of the household’s adjusted net income (after housing costs), and if after deducting fuel costs, benefits received for a care need or disability and childcare costs, the household’s remaining adjusted net income is insufficient to maintain an acceptable standard of living. The remaining adjusted net income must be at least 90% of the UK Minimum Income Standard to be considered an acceptable standard of living, with an additional amount added for households in remote rural, remote small town and island areas.”<sup>40</sup> Due to this new definition, statistics published prior to 2016–2018 are not comparable to these latest estimates.

Between 2017–2019, an estimated 32% of Moray residents faced fuel poverty, far higher than the overall Scottish figure of 24% over the same period.<sup>41</sup> Extreme fuel poverty<sup>b</sup> in Moray (2017–2019) was estimated to be 19%, higher than Scotland’s 12% over the same period. Fuel prices have increased dramatically since 2019 so this number is likely to be a significant underestimate. Much of Moray’s housing stock is very poorly insulated compared to the rest of Scotland and a high proportion of houses are not connected to the gas grid. This often means that heating must be paid for in large chunks (e.g. must buy at least 500l heating oil at a time).

## 2.13 Cost of living

The Moray HDNA<sup>42</sup> notes that 14% of Moray households are currently spending more than 25% of their income on mortgage or rent. Over 8% are spending between 30–40% of their income on housing costs. A further 4% of households in Moray are experiencing extreme housing affordability problems, spending more than 40% on rent and mortgage costs. Almost 40% of Moray households (39%) describe themselves as experiencing problems with meeting housing payments, which ranges from 42% in Buckie to 33% in Speyside. Difficulties in meeting housing payments are driven by:

- cost of heating the home (19%)
- unexpectedly high bills (13%)
- increases in mortgage/rent payments (6%)

---

<sup>b</sup> Extreme fuel poverty follows the same definition as fuel poverty, however a household must spend over 20% of its adjusted net income on total fuel costs.

- interest rate rises (4%)
- illness/disability of self/partner (4%).

The final element of the HDNA household survey asked households to ‘think back to the start of March 2020, before the coronavirus lockdown’ and to consider which of the following ‘best describes how your household was managing financially then and now?’. The results indicate that the pandemic and subsequent cost of living crisis has exacerbated financial inequalities across Moray. 15% of Moray households describe themselves as having financial difficulties now, in comparison to 4% pre COVID. One in five households in Keith were currently experiencing financial difficulties (20%). The cost of food is also a very important factor, with food inflation having been at extremely high rates in the last couple of years. Healthy food is also more expensive; the Food Foundation estimates that more than a quarter of households in the UK would need to spend more than a quarter of their income to be able to buy food which meets basic national nutritional guidelines<sup>43</sup>

## 2.14 Child Poverty

Child poverty needs to be understood in terms of family poverty as children and young people are dependent on their caregivers and wider household for their material resources. However, we also need to recognise the particular impacts of poverty on children and young people which will affect them throughout their childhood, through adolescence and into adulthood.

Child poverty in Moray is rising and doing so at a faster rate than Scotland as a whole. National data (End Child Poverty, 2021/22) for Moray, shows the percentage of children in poverty increased between 2014 and 2022 by 3.2% to 24.1% (4,228 individuals). Over the same period, Scotland saw a rise of 2.9% to 24.5%. Only seven Scottish Local Authority areas have increased at a greater rate than Moray during this time. In the last year alone (2020/21 - 2021/22), Moray has witnessed a 2.8% rise. In terms of ranking nationally against other authorities, Moray has fallen from 20/32 to 14/32 (where 1 is highest). Within our comparator authority group, from being placed 6/8 in 2014 Moray is now placed 2/8 in 2022. Of all Scottish Local Authority areas, only Renfrewshire saw a greater decline in ranking, falling from 25th to 17th.<sup>44</sup>

# 3. Social, clinical and behavioural risk factors

## 3.1 Introduction

There are a number of risk factors which are known to influence health, societal, behavioural and clinical. Behavioural risk factors include alcohol, diet and nutrition, drugs, gambling, physical activity, sexual health and tobacco use. However, we also know that these risk factors are very strongly influenced by the environments that we live in, and the commodities that we are able to access. Structural and fiscal interventions which challenge commercial drivers tend to target by default the least advantaged (e.g. who have higher price elasticity / responsiveness to taxation-based measures such as sugared beverage tax and minimum unit pricing), whereas behaviour based approaches are the most likely to exacerbate inequalities<sup>45</sup>.

Clinical risk factors are physiological attributes which at certain levels may be associated with an increased risk of certain diseases or death. They are 'clinical' in that they usually require some form of clinical assessment through measurement, or biochemical analysis of a blood sample. The three clinical risk factors included in this section are:

- High blood pressure, which makes a major contribution to stroke, heart disease and kidney failure
- High cholesterol, which substantially increases the risk of coronary heart disease (CHD) and stroke, and it is also linked to diabetes and high blood pressure.
- Obesity – being overweight shortens life expectancy and substantially increases the risk of type 2 diabetes, heart disease, some cancers, gall bladder disease and other conditions.

Many of these risk factors are both interlinked and closely related to other health determinants, such as housing, deprivation, and the physical or social environment that

people live in. People's behaviour, for example, can be constrained or strongly influenced by the circumstances in which they live.

As an example, for households in the lowest income decile, 75% of disposable income would need to be spent on food to meet the UK Government's Eatwell Guide costs<sup>46</sup>. Evidence also suggests that current social security levels do not currently allow families to make informed, healthy choices<sup>47</sup>.

Evidence shows a clear link between increased availability of alcohol<sup>48</sup>, tobacco<sup>49</sup> and high fat, salt and sugar (HFSS) food and drinks in communities and poorer health outcomes. Outlets selling health harming products are higher in density and disproportionately located in areas of deprivation<sup>50</sup>. Increased exposure to health harming products has been shown to influence our consumption and is driving health inequalities in Scotland.<sup>51</sup> Individual behaviours can also impact on other health-related factors, for example, the effect of alcohol on accidents and domestic abuse.

When considering and researching the health of populations, there can be a tendency to focus on single diseases and single risk factors. Often an individual has more than one risk factor present and there is an increasing awareness of the need to consider multiple risk factors and consider different ways of supporting or interacting with people with multiple risk factors [Source: [ScotPHO](#) ]

## 3.2 Smoking

Smoking is the single biggest avoidable risk factor for cancer and remains a leading cause of preventable disease and premature death. It is also the single biggest driver of cancer inequalities. The latest published two-year aggregate for Moray (calendar years 2020-2021), estimated 146 deaths (232 deaths per 100,000 population) in those aged 35 and over could be wholly or partially attributed to smoking.<sup>52</sup> The risk of developing smoking-related diseases (cancer, respiratory, circulatory – See main causes of death in Moray section above) increases with how long and how much someone has smoked. These risks fall substantially if smoking is stopped, even for long-term smokers.

In the 2018–2022 aggregate time period, 18% of Moray adults aged 16 years and over were smokers, above the Scottish average of 13% (Figure 16). E-cigarette use at 5% was below the Scottish average of 7%.<sup>53</sup>; however, we do not currently have good methods of measuring levels of vaping and use of e-cigarettes and this is likely to be an underestimate.

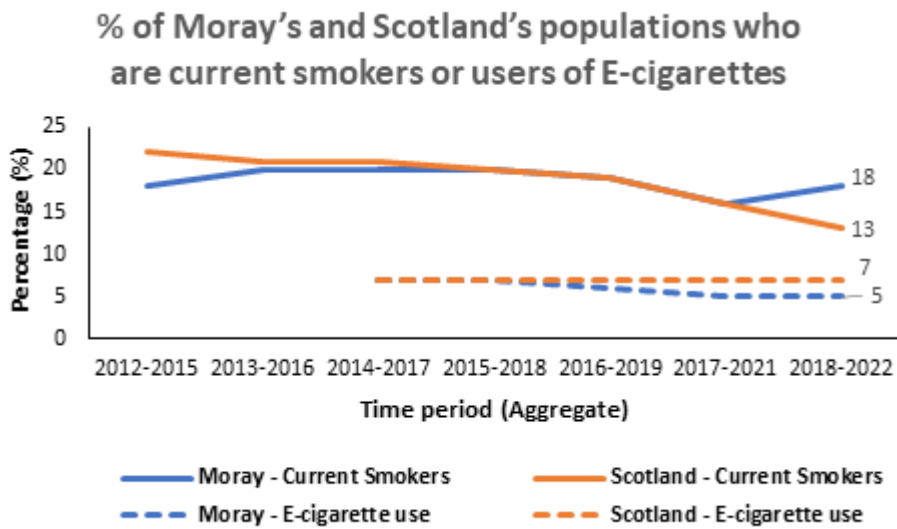


Figure 16: Percentage of Moray’s and Scotland’s populations who are current smokers or users of E-cigarettes. Note: Data for 2020 are not included in the 2017–2021 and 2018–2022 time periods, as they are not directly comparable with previous years. Source: Scottish Health Survey.

In 2019, smoking prevalence in Moray was highest for 16–34 year-olds at 27.4%, decreasing to 19.4% for 35–64 year-olds and 15.2% for over 65 year-olds.<sup>54</sup> In the 2019/20–2021/22 period, 14.7% of pregnant women in Moray smoked during pregnancy. The most deprived areas had a 63% higher incidence of women smoking during pregnancy than Moray as a whole.

In Moray in 2021/22, the number of attempts to stop smoking made with the help of NHS Stop Smoking Services fell for the tenth consecutive year to 451. This is a 6.6% reduction from 2020/21 and a 72.5% reduction from 2011/12<sup>55</sup>, and suggests that traditional approaches to offering smoking cessation support need to adapt to meet changing needs.



For comparison, the last time the Scottish smoking prevalence was 50%, was in 1974.



ASHScotland reports that people who suffer deprivation, people with mental health issues, and people in LGBTQ+ communities are more likely to smoke,<sup>57</sup> and state that probably the most effective way of reducing smoking rates is to reduce poverty and deprivation. Most people who smoke started as children<sup>58</sup>. This is why tobacco companies target children to start vaping and smoking as it's much harder to persuade adults to take up the habit. The Children's Joint Strategic Needs Assessment shows boys and young men smoking at greater rates than girls and young women, but that the reverse is true for vaping.

## 3.3 Alcohol

Alcohol problems are a major concern for public health in Scotland. Short-term problems such as intoxication increase risk of injury and are associated with violence and social disorder. In the longer term, excessive consumption can cause irreversible damage to parts of the body such as the liver and brain. Alcohol can also lead to, and result from, mental health problems; alcohol dependency is associated with an increased risk of suicide. Alcohol is also recognised as a contributory factor in many other diseases including cancer, stroke and heart disease. Wider social problems include family disruption, absenteeism from work and financial difficulties.

The Chief Medical Officers [recommend](#) drinking no more than 14 units a week on a regular basis to keep health risks from alcohol to a low level.<sup>59</sup> Between 2018–2022 the mean weekly alcohol consumption in Moray was 10.3 units, an increase of 0.2 units from the previous 2017–2021 reporting period (see Figure 17). While weekly consumption by males (11.8 units) lay significantly below the national average (15.6 units), weekly consumption by females (9 units) was above the national average (8.4 units).<sup>60</sup> It is worth noting that self-reported alcohol consumption always underestimates consumption due to stigma.

Binge drinking also has important health impacts. It matters whether the 10 units are drunk regularly across the week or are all drunk in one evening (the former being more harmful than the latter).

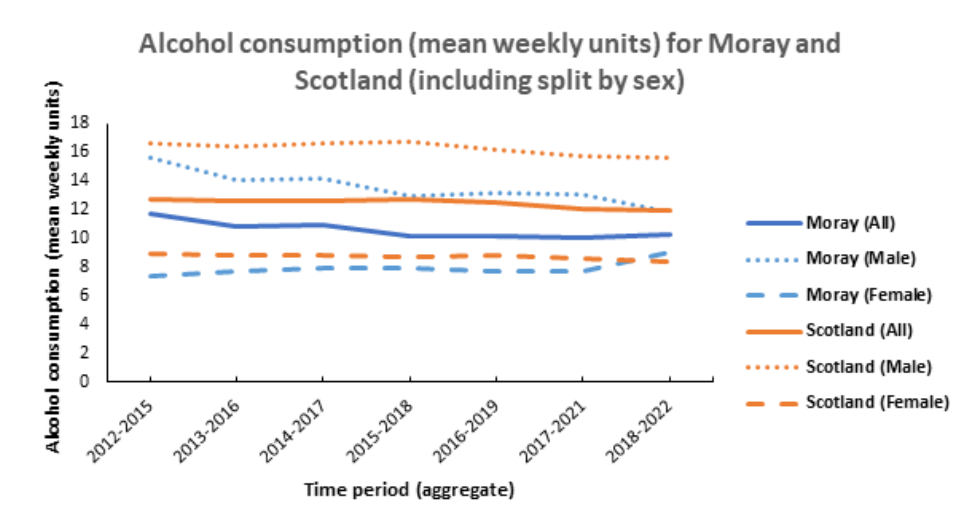


Figure 17: Alcohol consumption (mean weekly units) for Moray and Scotland (including split by sex)<sup>c</sup>.

In 2021/22 there were 450 alcohol-related hospital admissions in Moray (464.47 per 100,000, age-sex standardised rate), an 8.7% increase from 2020/21 (428.03 per 100,000) but below the 2019/20 rate (472.08 per 100,000).<sup>61</sup> At 14.05 per 100,000 (age-sex standardised rate), Moray's alcohol specific deaths during the 2017–2021 period were below the national average of 21.11 per 100,000.

## 3.4 Substance Use

The harmful use of illicit drugs and particularly opiates, benzodiazepines and psychostimulants, causes significant problems within Scotland, including prostitution, unemployment, family breakdown, homelessness (causes of, as well as consequences of substance use) and early death. Others are more clearly associated with health problems, for example, the transmission of communicable diseases (HIV, hepatitis), injecting-related injuries and increased demands upon health care services.<sup>62</sup>

Drug-related hospital stays for Moray remain consistently lower than the Scottish average, at 107.5 per 100,000 in 2021/22 (age-sex standardised rate) compared to 235.0 for Scotland. Stay rates increased sharply with deprivation: in 2021/22 the most deprived quintile in Moray had the highest rate at 717.7 per 100,000 (Figure 18).<sup>63</sup>

<sup>c</sup> Note: Data for 2020 were published as experimental statistics and they are not included in the time periods 2017–2021 and 2018–2022, as they are not directly comparable with previous years. Source: Scottish Health Survey.

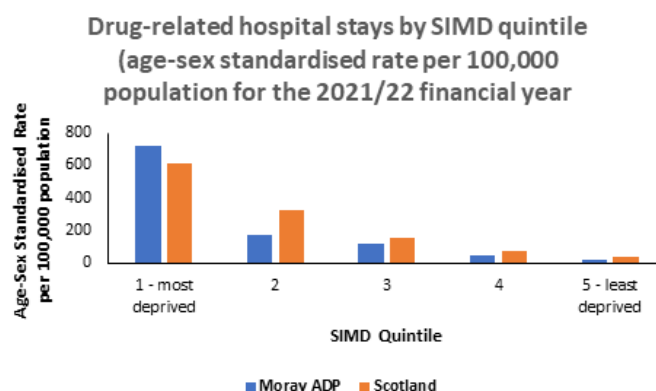


Figure 18: Drug-related hospital stays by SIMD quintile (age-sex standardised rate per 100,000 population for the 2021/22 financial year. Source: PHS.

For the period 2018–2022, Moray’s average drug misuse death rate was 14.9 per 100,000. This is an increase on the 2017–2021 rate of 14.3 per 100,000, but below Scotland’s 23.4 per 100,000 average. Across Scotland, deprivation has a notable impact on drug-related death rates: those in the most deprived areas of Scotland were almost 16 times as likely to die from drug misuse, which implies that deprivation could be regarded as a cause of these deaths.<sup>64</sup>

There were 331 drug-related crimes recorded in Moray in 2021/22. This is a 3.8% increase from 2020/21 but below the area’s 5-year average (386 per year).<sup>65</sup>

## 3.5 Physical activity

Regular physical activity of at least moderate intensity (such as brisk walking or cycling) provides general health benefits across a range of diseases and across all ages. The greatest improvements in health occur when the least active people become moderately active.

The UK Chief Medical Officers’ Physical Activity Guidelines recommend that each week adults aged 19–64 should accumulate: at least 150 minutes of moderate intensity activity (MPA); or 75 minutes of vigorous intensity activity (VPA); or even shorter durations of very vigorous intensity activity; or a combination of moderate, vigorous and very vigorous intensity activity. Adults should also do muscle strengthening activities at least two times a week and minimise sedentary time. The guidelines recommend that children should engage in an average of at least 60 minutes per day of MVPA, and minimise sedentary time.<sup>66</sup>

On average, 69% of Moray resident’s activity levels could be described as ‘meets recommendations’ during the 2018–2022 period.<sup>67</sup> This is the fourth consecutive rise, up from 60% in the 2014–2017 period (Figure 19), although self-reported physical activity levels are

often over estimated. In 2022, approximately 43% of Moray residents used local authority sport and leisure facilities, above the Scottish average of 29%. This figure reduces to 22% and 17% for disabled individuals in Moray and Scotland respectively.

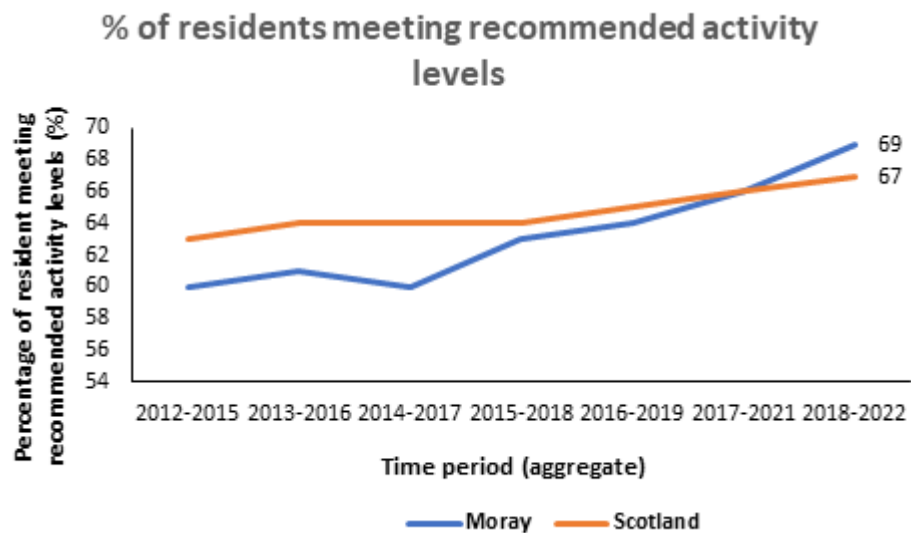


Figure 19: Percentage of residents meeting recommended activity levels. Source: Scottish Health Survey.

Moray has the third highest reported levels of active travel to work or further/higher education in Scotland at 26%, behind only City of Edinburgh (38%) and Argyll and Bute (28%).<sup>68</sup>

Investing in physical activity is still seen as a ‘best buy’ in public health terms<sup>69</sup>.

### 3.6 Diet

Good nutrition is essential to both current health and wellbeing, and health and wellbeing later in life. Eating a healthy diet can help reduce the risk of coronary heart disease, stroke, some cancers, obesity, type 2 diabetes, high blood pressure, osteoporosis and tooth decay.

In 2016, the Scottish Government revised the Scottish Dietary Goals, following recommendations from the Food Standards Scotland (FSS) Board that the Goals should reflect new recommendations on intakes of sugar and fibre from the independent Scientific Advisory Committee on Nutrition (SACN).

At 3.4 daily portions, fruit and vegetable consumption in Moray is slightly above the national average (3.2 portions), however it remains below the recommended 5 daily portions (2016-2019 aggregate data).<sup>70</sup>

Food insecurity has increased in Moray: in the 2018–2022 period 8% of residents were worried that they would run out of food, up from 7% in 2017–2021, and 6% in 2016–2019 (see Figure 20). While the aggregate levels of food insecurity in Scotland have remained at 9% during the 2016–2019 to 2018–2022 reporting periods, the proportion of individuals experiencing food insecurity has risen for those in the most deprived SIMD quintile, from 15% in 2018 to 18% in 2021.<sup>71</sup>

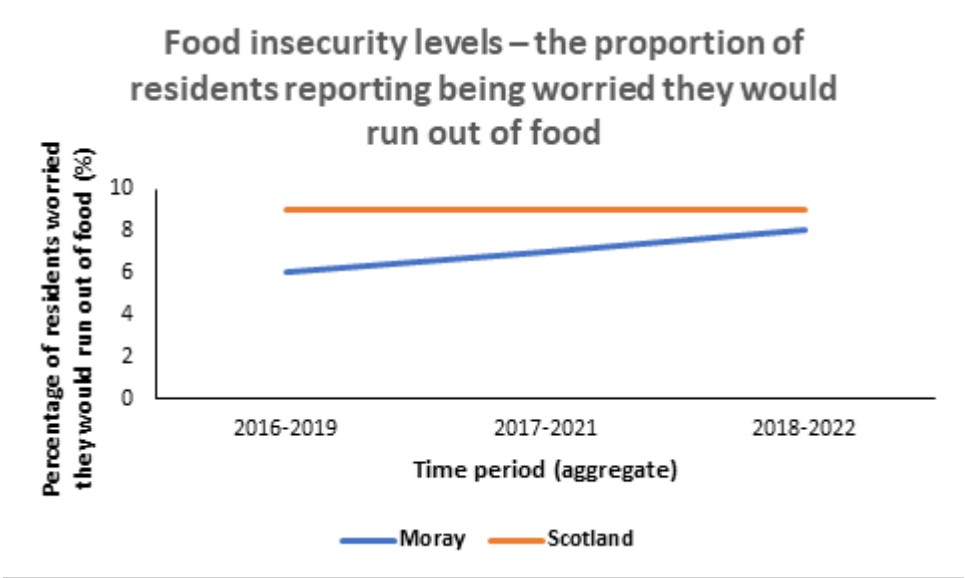


Figure 20: Food insecurity levels – the proportion of residents reporting being worried they would run out of food.<sup>d</sup>

### 3.7 Obesity

Obesity is recognised both as a complex issue in its own right and as a risk factor for other non-communicable diseases such as cancer, Type 2 Diabetes, hypertension, heart disease, cancers of the colon, ovary and breast, gall bladder disease, female infertility, osteoarthritis, stroke, and dementia. It also decreases life expectancy. Obesity is a major cause of disease and death in the population of Scotland. Tackling and preventing obesity is a key public health priority in Scotland.

More than 1 in 20 adult cancer cases are linked to excess weight in the UK making obesity possibly the second largest preventable cause of cancer<sup>72</sup>. Obesity, independently of diet, has also been linked to a range of health outcomes including type 2 diabetes, CVD and hypertension in addition to cancer<sup>e 73</sup>.

<sup>d</sup> Note: Data for 2020 were published as experimental statistics and they are not included in the time periods 2017–2021 and 2018–2022, as they are not directly comparable with previous years. Source: Scottish Health Survey.  
<sup>e</sup> Defined in adults as a body mass index (BMI) of 30 kg/m<sup>2</sup> or greater.

There is also an association between mental health problems such as depression and anxiety and living with obesity<sup>74</sup>. There is also evidence of a link between living with overweight and obesity in midlife and possible dementia in late life<sup>75</sup>. The evidence also suggests that younger people in the UK are living with a higher BMI at an earlier age and staying at that higher BMI for longer<sup>76</sup>. The longer a person lives with a higher BMI, the greater their risk of developing chronic diseases and some forms of cancer<sup>77</sup>.

People who live with obesity often experience stigma and discrimination, which is also associated with worsening health outcomes. Research has consistently shown that even healthcare professionals tend to be prejudiced towards people living with overweight or obesity, more so than other kinds of bodily difference<sup>78</sup>. There is also an inequality in obesity risk, with people who live in communities marginalised by poverty at an increased risk. Average BMI is patterned by level of deprivation with those from the most deprived areas consistently showing higher BMIs compared to the least deprived.

Scotland has among the highest levels of obesity prevalence for men and women among OECD countries. Estimates of the cost of obesity to Scotland put the total economic cost at as much as £4.6 billion per year in 2014. Obesity prevention efforts should focus on changes to the 'obesogenic environment' and the upstream wider determinants of health, including the availability of food and marketing approaches. There are many behavioural and societal factors that combine into a "complex web of societal and biological factors that have, in recent decades, exposed our inherent human vulnerability to weight gain".<sup>79</sup>

At 29%, the proportion of Moray residents in the 'Healthy Weight' category (BMI between 18.5 and 25 kgm<sup>-2</sup>) was below both the Scottish and Grampian averages of 33% for the 2016–2019 period (Figure 21).<sup>80</sup> In the 2022/23 school year, 16% of Primary 1 children in Moray were in the clinical categories of overweight, obese or severely obese. This is higher than the national average of 15.4%.<sup>81</sup>

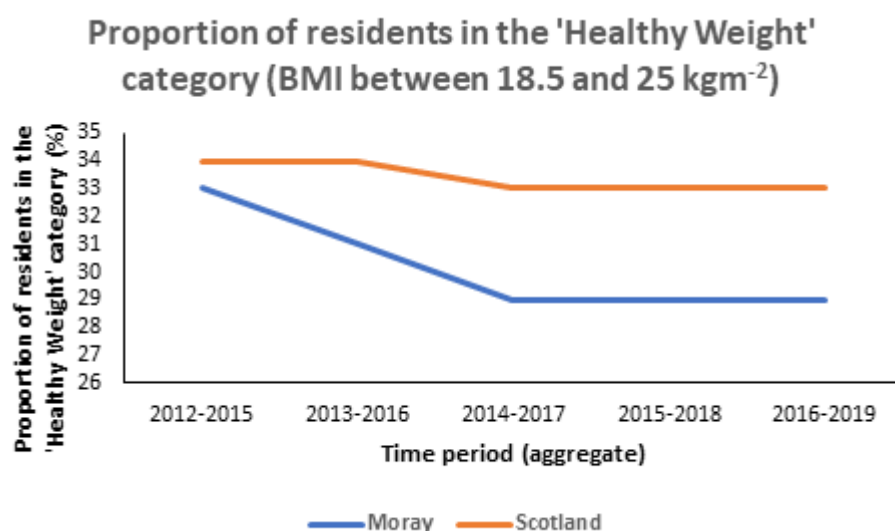


Figure 21: Proportion of residents in the 'Healthy Weight' category (BMI between 18.5 and 25 kgm<sup>-2</sup>). Source: Scottish Health Survey.

## 3.8 High Blood pressure

High blood pressure is a major risk factor for death, disease and health problems. 23% of Moray residents have doctor diagnosed high blood pressure (2018–2022 aggregate), higher than both the Grampian average of 20% and the Scottish average of 22%, but lower than previous reporting periods (Figure 22).<sup>82</sup> Prevalence increases sharply with age, although the pattern with age differs between men and women. Almost two thirds of those over 75 years have high blood pressure. A large proportion of those with high blood pressure do not attend their GP for treatment of the condition, or attend less frequently than once per year.<sup>83</sup>



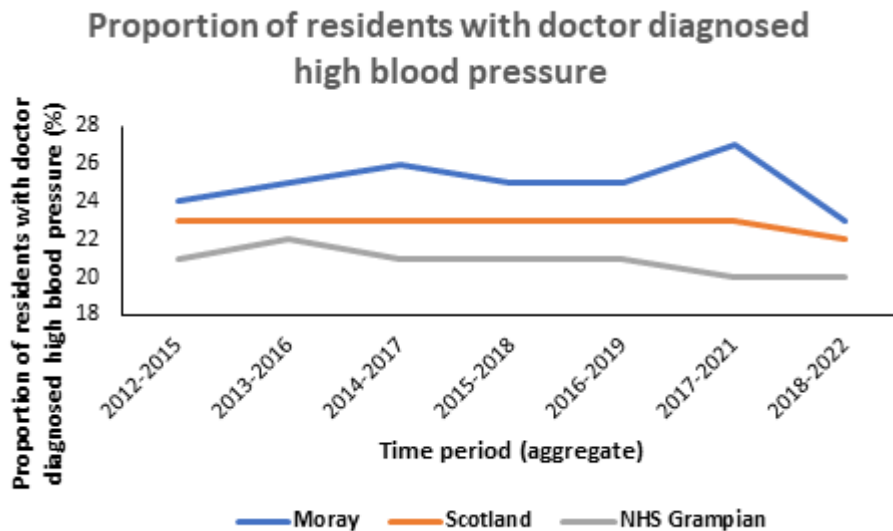


Figure 22: Proportion of residents with doctor diagnosed high blood pressure Source: Scottish Health Survey.

High blood pressure increases the risk of a range of diseases:

- coronary heart disease (angina, heart attack)
- stroke (both that due to a blood clot and that due to bleeding)
- heart failure (heart strain – especially left ventricular)
- aortic aneurysm (dilated aorta with risk of rupture and massive internal haemorrhage)
- peripheral vascular disease (reduced blood supply to the limbs)
- chronic kidney disease (including renal failure)
- retinal disease (visual impairment).

## Self harm

It has not been possible to source self harm data specifically for Moray. In Scotland in 2021, depression, anxiety, every attempting suicide and ever self-harmed were more common among younger than older age groups, and also more common in the most deprived areas. For example, 12% of those in the most deprived areas (quintile) reported having attempted suicide, compared to 3% in the least deprived. Similarly, 17% of those in the most deprived areas reporting having ever self-harmed, compared to 4% in the least deprived. Reported rates of ever having self-harmed increased further in 2021/22, to 10% of adults overall. Source: Scottish Health Surveys 2021 and 2022: Scottish Health Survey – gov.scot ([www.gov.scot](http://www.gov.scot))

# 4. Population Health

This section describes the diseases, illnesses and risk factors faced by the population of Moray. The purpose of this is to understand the future services which might be required, but also to understand what we might do differently to prevent, treat or support in different ways.

## 4.1 Burden of disease

The Scottish Burden of Disease (SBoD) study is a national, and local, population health surveillance system which monitors how diseases, injuries and risk factors prevent the Scottish population from living longer lives in better health.<sup>84</sup> Burden of disease summaries have been created for each local authority in Scotland to inform local decision-making: Moray's report is available [here](#), and is summarised below.<sup>85</sup>

The three leading groups of causes of ill-health and early death in Moray are cancers, cardiovascular diseases and neurological disorders. These groups of causes account for 50% of the total burden of health loss. The largest differences in burden – compared to Scotland – occur due to substance use disorders, digestive diseases and cancers. A large proportion of cancer and cardiovascular disease is preventable.

Some differences exist between males and females: ischaemic heart disease has the highest disease burden across Moray for men, with a Disability Adjusted Life Years (DALY<sup>f</sup>) of 3,230.8 per 100,000 population, more than double that for women.<sup>86</sup> Among women, it's cerebrovascular disease with a DALY of 1,682.7 per 100,000 population. Mental health conditions also appear on the list of most burdensome disease, with depression appearing in the list for both men and women, and anxiety disorders appearing in the top ten for women.

---

<sup>f</sup> One DALY represents the loss of the equivalent of one year of full health. DALYs for a disease or health condition are the sum of the years of life lost to due to premature mortality (YLLs) and the years lived with a disability (YLDs) due to prevalent cases of the disease or health condition in a population.

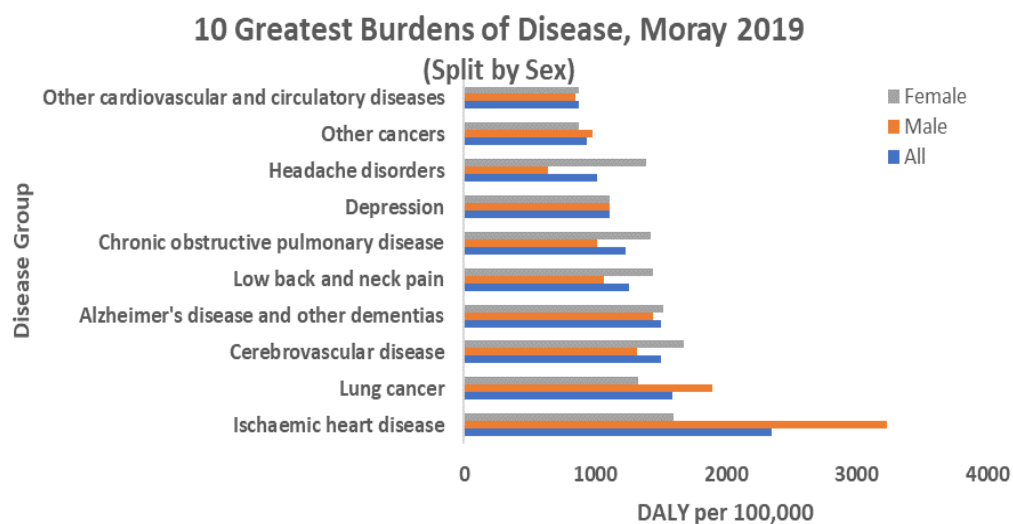


Figure 23: Ten greatest burdens of disease in Moray split by sex. Source: [Scottish Burden of Disease \(shinyapps.io\)](https://shinyapps.io/scottish-burden-of-disease/)

The SBoD study<sup>87</sup> reveals that the leading cause of ill health in Moray is low back and neck pain, the rate of which is 0.7% lower than in Scotland. The leading cause of early death in Moray is ischaemic heart disease, the rate of which is 8.4% lower than in Scotland.

Table 3: *Leading individual causes of ill health and early death*<sup>88</sup>

| Ill health |                                    |                                     | Early death |   |                                     |
|------------|------------------------------------|-------------------------------------|-------------|---|-------------------------------------|
|            |                                    | %<br>difference<br>from<br>Scotland |             |   | %<br>difference<br>from<br>Scotland |
| 1          | Low back and neck pain             | -0.7%                               | 1           | Ischaemic heart disease                       | -8.4%                               |
| 2          | Depression                         | -10.6%                              | 2           | Lung cancer                                   | -0.1%                               |
| 3          | Headache disorders                 | 3.5%                                | 3           | Alzheimer's disease and other dementias       | -16.3%                              |
| 4          | Anxiety disorders                  | -10.5%                              | 4           | Cerebrovascular disease                       | 7.8%                                |
| 5          | Osteoarthritis                     | -0.3%                               | 5           | Chronic obstructive pulmonary disease         | -4.5%                               |
| 6          | Diabetes mellitis                  | -3.6%                               | 6           | Other cancers                                 | -21.5%                              |
| 7          | Other musculoskeletal disorders    | 2.4%                                | 7           | Other cardiovascular and circulatory diseases | -3.6%                               |
| 8          | Age related and other hearing loss | 5.9%                                | 8           | Self harm and interpersonal violence          | 3.4%                                |
| 9          | Cerebrovascular disease            | -8%                                 | 9           | Lower respiratory infections                  | -12.4%                              |
| 10         | Skin and subcutaneous diseases     | 2.1%                                | 10          | Colorectal cancer                             | -29.0%                              |

Rate higher than Scotland

Rate lower than Scotland

Overall, health loss is split between the burden due to early death and the burden due to ill-health. In Moray, 63% of the burden is due to early death and 37% is due to ill-health in the population, but this does vary with age.

## 4.2 Long Term Conditions and Multi-morbidity

According to the 2022 Scottish Health Survey, approximately 40% of Moray residents live with limiting long term illnesses, above the Scottish average of 36%<sup>89</sup>. This may be because we have an older population. However, Moray has fewer individuals living with a *non-limiting* long term illness than Scotland overall (7% compared to 12%). Living with long term conditions and multi-morbidity doesn't always mean that a person doesn't enjoy quality of life or that they are economically inactive, although it may do.

The percentage of Scottish Health Survey respondents in Moray living with limiting long term illnesses has risen 17 percentage points, from 23% in 2012–2015, to 40% in 2018–2022. This rate of increase is much higher than Scotland overall, which has seen a rise from 32% to 36% over the same period.

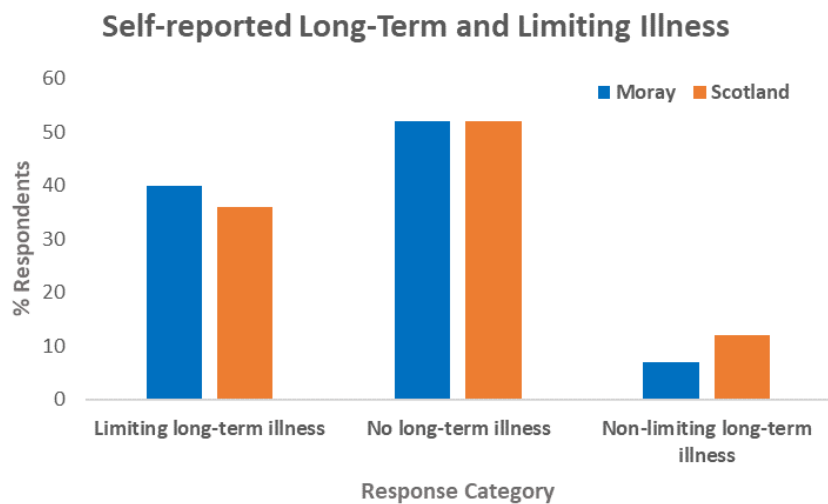


Figure 24: Self-reported long-term and limiting illness in Moray and Scotland.

The Moray HNDA estimates that across Moray, 45% of households described themselves as containing someone with a long term health condition or disability. This ranges from 51% in the Keith Housing Market Area to 39% in the Buckie area. Across Moray, 18% of households with a health condition or disability have a long term illness or disease, followed by 17% who have a physical disability and 16% who have mental health condition.

## 4.3 Primary Care Disease Register

Data extracted from General Practices in Moray shows the number of patients with Long Term Conditions recorded. 6,947 registered patients have Hypertension recorded, with Depression second at 4,005 patients<sup>90</sup>. Prevalence is the rate of certain conditions per 100 recorded on GP registers. In the latest release Moray has a higher prevalence for all diseases when compared to Scotland as a whole, the only exception being COPD.

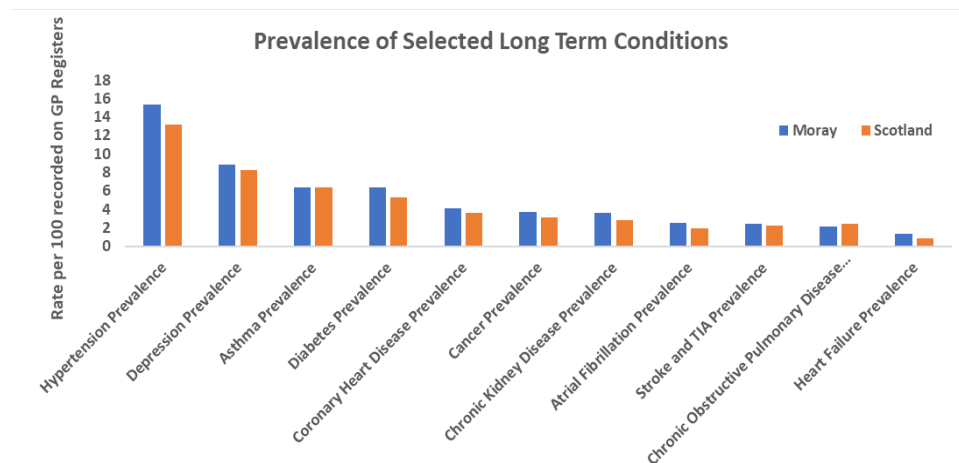


Figure 25: *Prevalence of selected long term conditions in Moray and Scotland*<sup>91g</sup>.

<sup>g</sup> NOTE: This should not be compared to previous publications on Primary Care Disease Prevalence published by PHS as these use a different data source, no longer supported Quality Outcomes Framework (QOF) calculator.

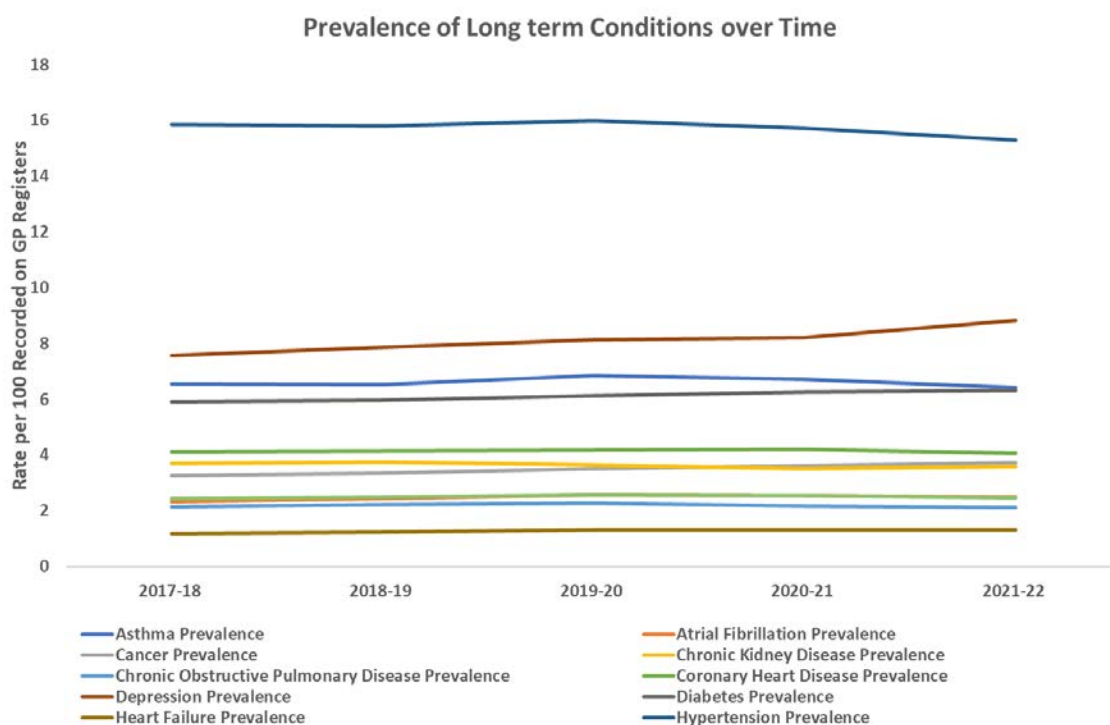


Figure 26: Prevalence of Long term conditions over time in Moray

The figure above shows changes in the numbers of Long term conditions in Moray over time. The main differences are in asthma and hypertension prevalence reducing slightly, but an increase in depression over the last couple of years.

## 4.6 Causes of Death

Scotland has one of the highest rates of death (mortality) in Western Europe, mirrored by its comparatively low life expectancy. According to NRS data, diseases of the circulatory system are the leading cause of death in Moray (320.5 per 100,000 population) while they are the second leading cause in Scotland overall (295.7 per 100,000 population). Cancer (neoplasms) is the second leading cause of death for Moray (314.3 per 100,000 population) but the leading cause of death in Scotland (305.2 per 100,000 respectively). Rates are also higher in Moray for diseases of the respiratory system and mental and behavioural disorders when compared to Scotland overall (see figure 27)<sup>92</sup>.

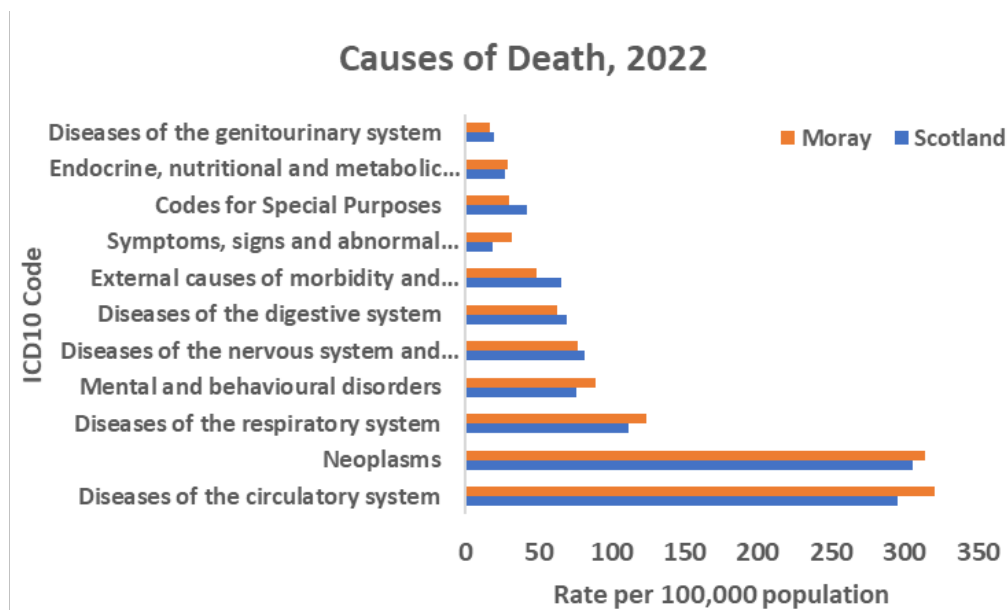


Figure 27: Causes of death in Moray and Scotland. Source: [Death Certificates and Coding the Causes of Death | National Records of Scotland \(nrsotland.gov.uk\)](https://nrsotland.gov.uk)

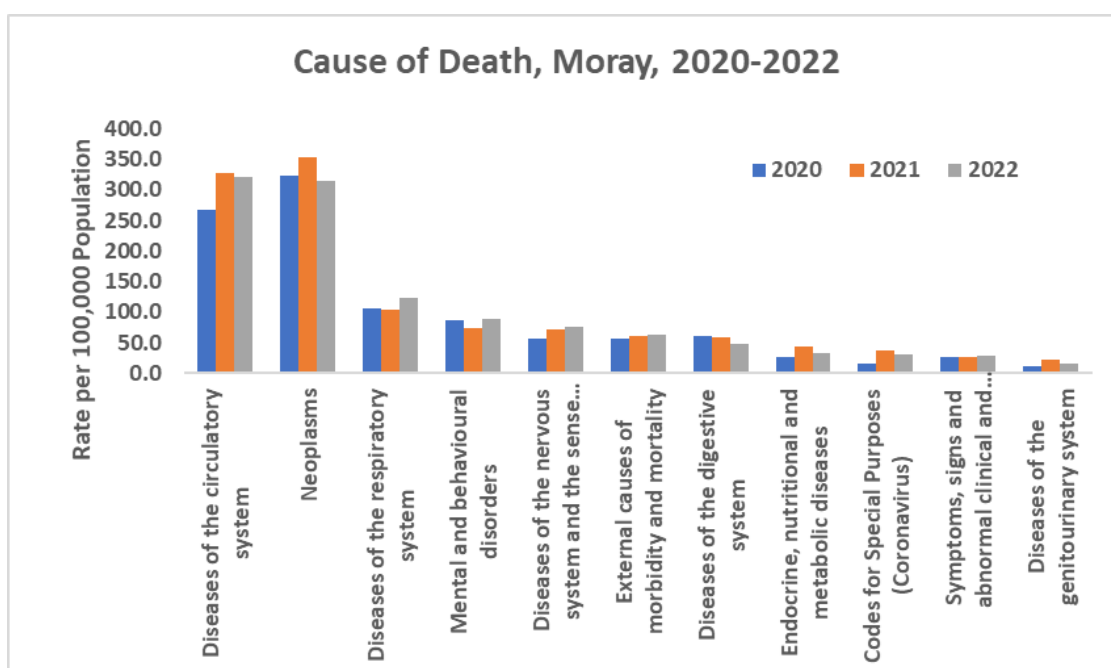


Figure 28: Causes of death in Moray. Source: [Death Certificates and Coding the Causes of Death | National Records of Scotland \(nrsotland.gov.uk\)](https://nrsotland.gov.uk)

Diseases of the circulatory system and Neoplasms are the leading cause of death in Moray during 2020, 2021 and 2022. However, rates fluctuate between the two and year-on-year, in 2020 the rate for Neoplasms was 323.6 compared with 268.6 for diseases of the circulatory system.

The chart below (all Grampian data) shows that the leading causes of death, heart disease and cancer, were about 50% more common among people from the most deprived than least



deprived areas (Figure 29). Every cause of death listed except ‘dementia and Alzheimer’s’ had a higher death rate among people from the most deprived areas than those from the least deprived areas. The causes with the largest differences are COPD (most deprived areas have a rate 3.3 times higher than least deprived), alcohol-related (2.7 times), accidents (2.4), suicide (2.4) and liver disease (2.3).

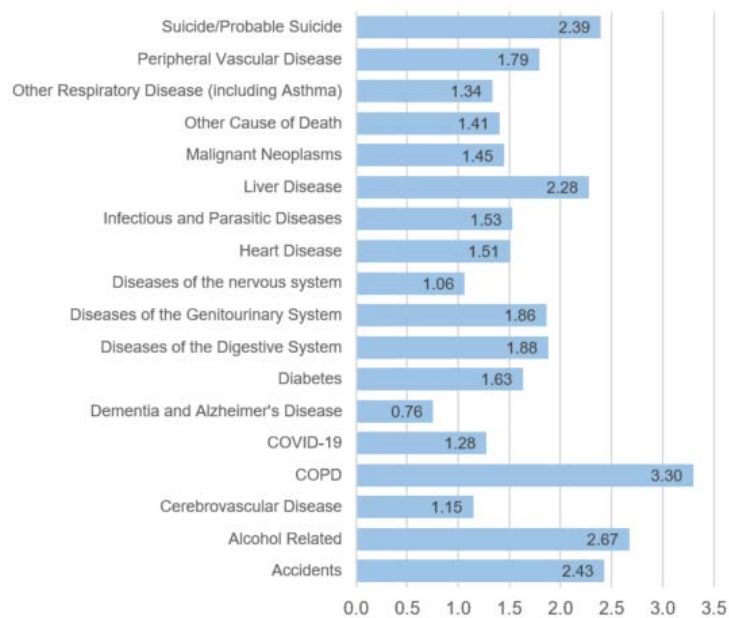


Figure 29: Ratio of mortality rate in most deprived quintile to mortality rate in least deprived quintile by cause, 2013-22.

Looking at suicide rates and drug-related deaths in particular, we can clearly see the strong associations with deprivation:

(i) Suicide rates show a clear association with deprivation. 691 people died from suicide in the decade to 2022 across Grampian (18.9 per 100,000 per year in the most deprived areas and 7.9 in the least deprived areas). The highest rates were among the most deprived areas of Aberdeenshire and Moray (Figure 30), with Moray levels exceeding the other two local authorities in four of the deprivation quintiles and Aberdeenshire showing the greatest gap between the most and least deprived areas. Both Aberdeenshire and Moray exceeded national figures for the most deprived areas.

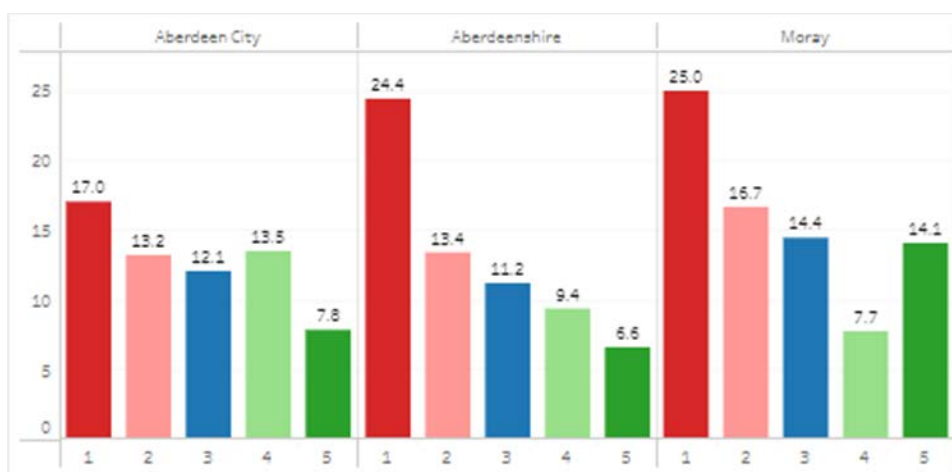


Figure 30: Suicide rates across Grampian between 2012 and 2022 mapped against deprivation indices.

(ii) Drug-related deaths show an even stronger relationship with deprivation (Figure 31). 35.5 per 100,000 per year died in 2022 from drug related deaths in the most deprived areas across Grampian compared to 5.1 in the least deprived.

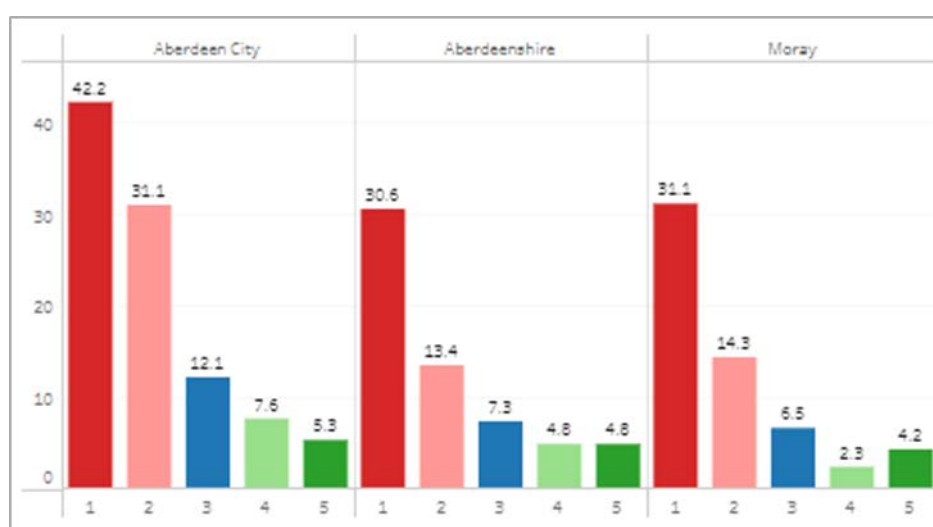


Figure 31: Drug-related deaths per 100,000 population in Grampian during 2022 mapped against deprivation quintiles.

## 4.6 Avoidable Mortality (Deaths)

An avoidable death is one that may have been prevented using either healthcare or public health interventions. These can include conditions such as heart disease, type 2 diabetes, HIV/AIDS and drug use disorders. Moray has lower avoidable, preventable and treatable mortality than both NHS Grampian and Scotland overall. In Moray the age standardised mortality rate per 100,000 population for avoidable deaths among males is 315.2, compared

with 411.5 in Scotland. Figure 32 below illustrates the most recent rates for avoidable, preventable and treatable mortality for Moray, NHS Grampian and Scotland.

For females this rate is 210.5 per 100,000 for Moray and 254 for Scotland. Avoidable, preventable and treatable mortality rates are higher for males than females, with preventable deaths 1.75 times more likely among males than females in Moray and avoidable deaths 1.5 times greater<sup>93</sup>.

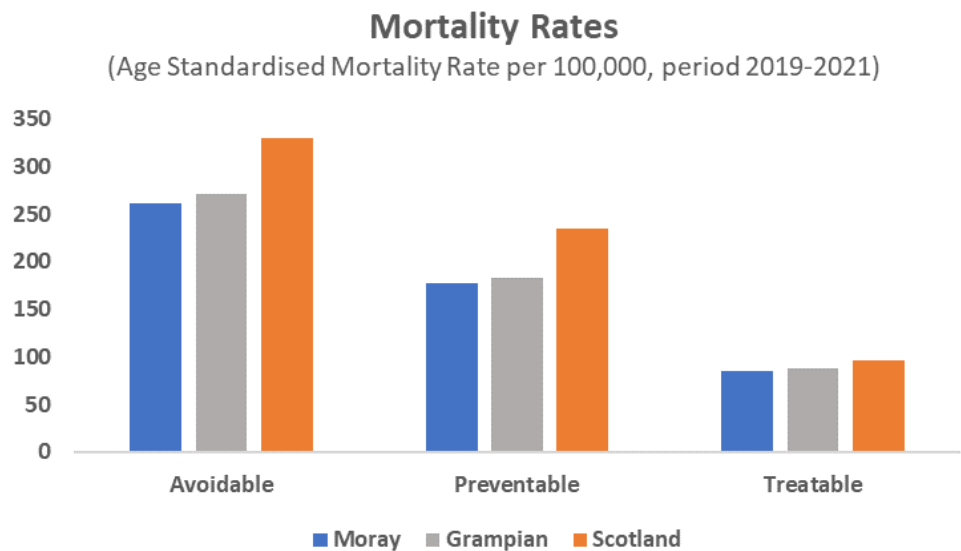


Figure 32: Mortality rates in Moray, Grampian and Scotland. Source: NRS -<https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/vital-events/deaths/avoidable-mortality>

## 4.7 Premature Mortality

A premature death is one that occurs before a person has reached the age of 75 years. Premature mortality remains consistently lower in Moray compared to Scotland overall: the age-standardised mortality rate for under 75's in Moray for 2019-2021 was 371.6, compared with 449.9 for Scotland (Figure 33)<sup>94</sup>. However, premature mortality rates are higher among the most deprived (SIMD1) at 505.3, almost double the rate for the least deprived (SIMD5) at 254.5 for Moray.

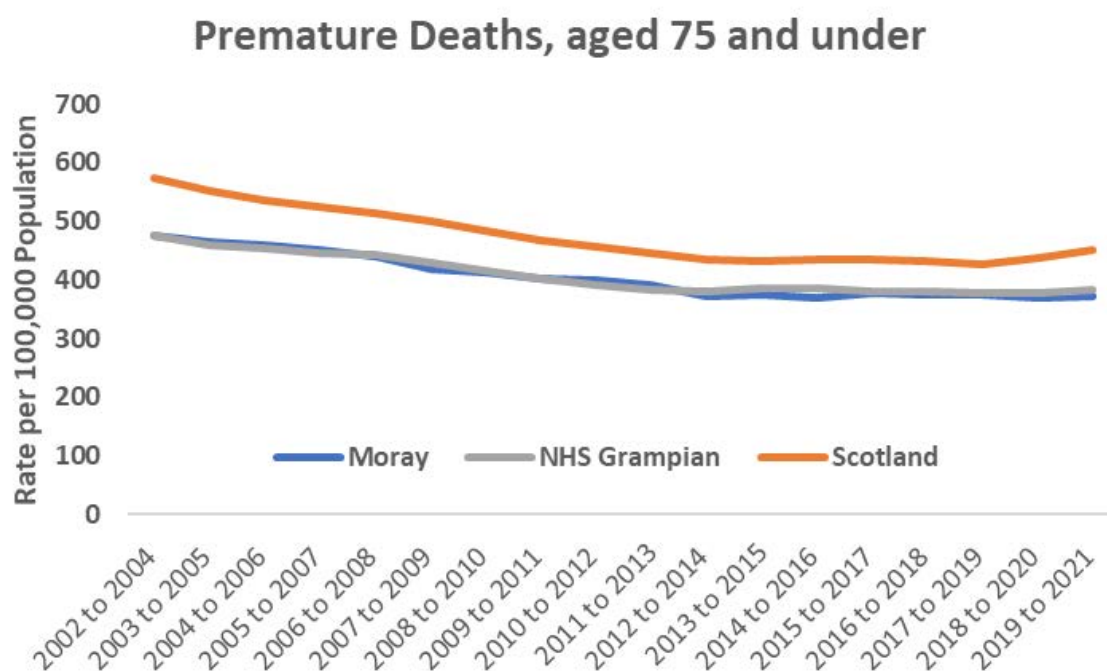


Figure 33: Premature deaths in population aged 75 and under in Moray, NHS Grampian and Scotland. Source: [https://scotland.shinyapps.io/ScotPHO\\_profiles\\_tool/](https://scotland.shinyapps.io/ScotPHO_profiles_tool/)

The three leading groups of causes of ill-health and early death in Moray are cancers, cardiovascular diseases and neurological disorders. These groups of causes account for 50% of the total burden of health loss. The largest differences in burden – compared to Scotland – occur due to substance use disorders, digestive diseases and cancers.

### Leading grouped causes of ill-health and early death in Moray

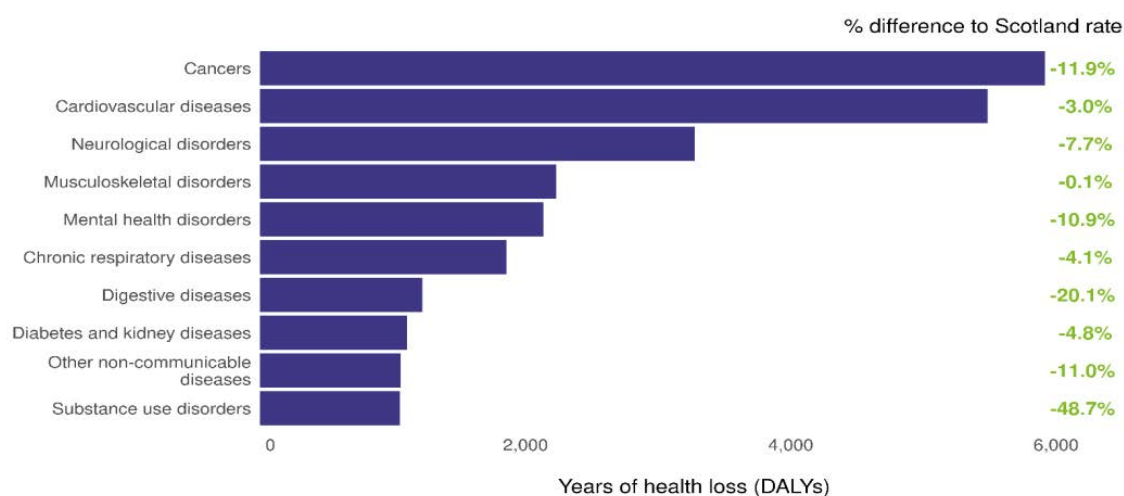


Figure 34: Leading grouped causes of ill-health and early death in Moray Source: ScotPHO Scottish Burden of Disease - <https://www.scotpho.org.uk/media/2324/2021-09-21-scottishburdenofdisease-moray-revised.pdf>

Overall, the rate of health loss in Moray is 9.5% lower than the Scottish rate. It is estimated that the total burden in 2019 had increased by 5.5% compared to the burden in 2016.

## 4.8 Learning Disability

NHS Boards are dependent on data from Primary Care GP practices for information on the learning disability and autism populations. However, individuals are no longer routinely coded as having a learning disability or autism, which presents difficulties for identifying the population and gaining an accurate understanding of screening uptake. Local authorities collect population data, but little health information. In addition, the population data collected by the local authorities are not necessarily analogous with the data collected by GP practices.

Statistics on learning disability and autism population size are based on local authority data published by the Scottish Commission for People with Learning Disabilities (SCLD). Data from 2019 indicates 430 adults with learning disabilities living in Moray (who are known to the local authority), 254 men and 176 women. Of these, 120 had an autism spectrum diagnosis. 10% were in employment, 43% lived with a family carer, and a further 40% lived in mainstream accommodation, either with or without support.<sup>95</sup>

While the data that we hold for people with learning disabilities in Moray may not be as robust as we would like it to be, we know that, across Scotland:

- People with learning disabilities have much poorer outcomes than other disabled people; for example, people with learning disabilities have a life expectancy 20 years lower than the general population.
- Employment rates are unknown, but are thought to be extremely low
- Covid-19 had a disproportionate impact on the lives of people with learning disabilities
- Unpaid carers provide significant public value – on average £114,000 per year – but often feel under-valued by society and feel they need more support
- Data is a significant barrier to effective support being put in place<sup>96</sup>

However, we do know from work conducted in Shetland and Orkney, that cancer screening rates are lower than in the general population, and participants in a recent study described high-level structural barriers to screening, including systems and processes, uncertainty around who takes responsibility for ensuring that the population is screened, and how cancer screening is viewed in the community<sup>xviii</sup>.

## 4.9 Primary care activity

The three charts below show changes in day time primary care activity by 'encounter type' i.e. patient being seen by a GP, another clinician or for administrative purposes between January 2018 and December 23<sup>97</sup>. It should be noted that this data is under development and more refinement is required; however, the data shows a gradual increase over five years, more substantially in the use of 'other clinicians', suggesting that implementation of the multi-disciplinary team model hasn't significantly reduced GP workload.<sup>h</sup>

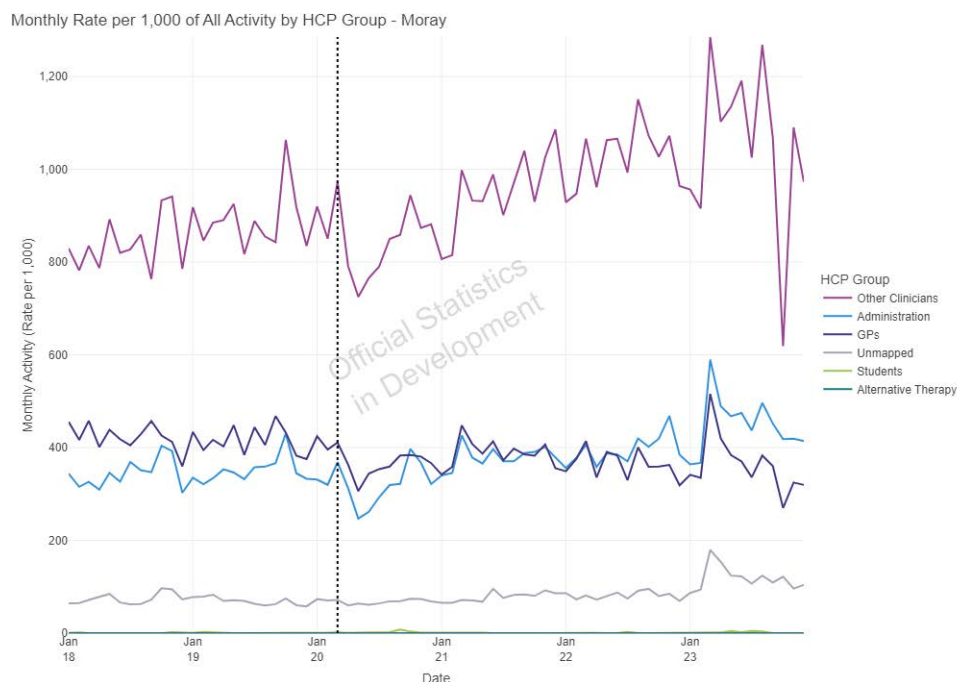


Figure 35: Monthly Rate per 1,000 of all activity by Multidisciplinary Team in Moray between January 2018 and December 2023

<sup>h</sup> Note: Dashed vertical line indicates March 2020 when the pandemic was declared and lockdown introduced.

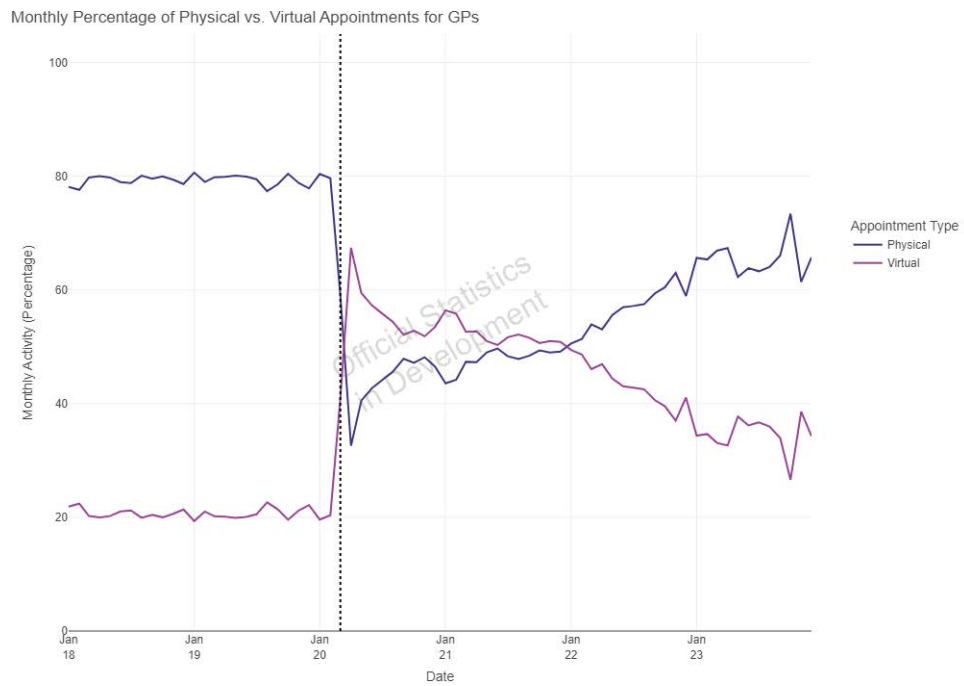


Figure 36: Type of presentation for GPs in Moray by physical or virtual consultation – by percentage.

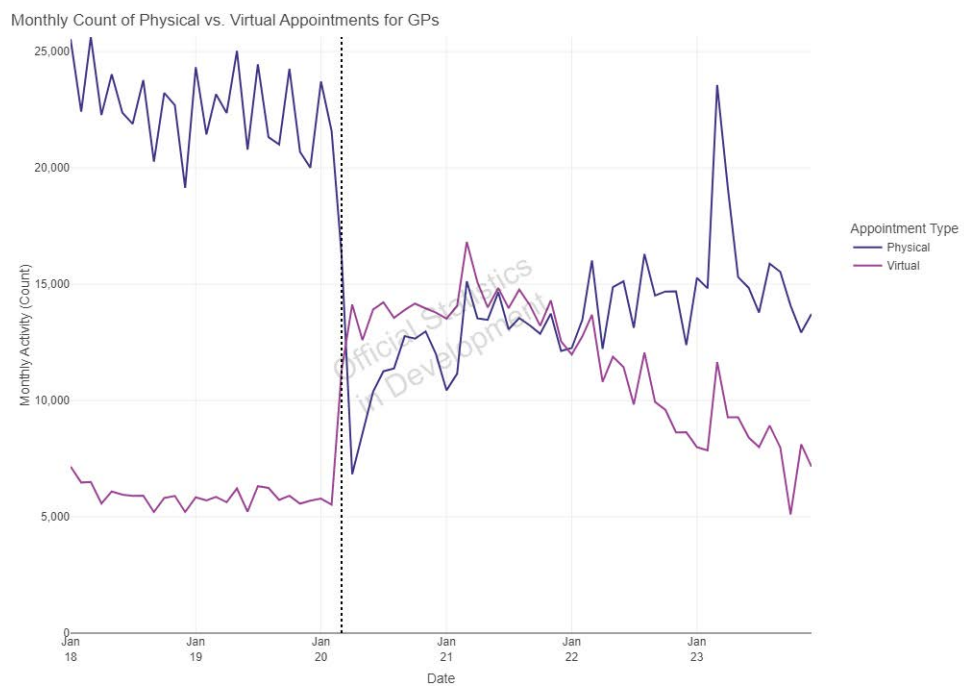


Figure 37: Type of presentation for GPs in Moray by physical or virtual consultation – by count.

## 4.10 Mental Health

### WEMWBS (Warwick-Edinburgh Mental Wellbeing score)

WEMWBS is a measure of **mental well-being** focusing entirely on positive aspects of mental health. It is usually used as a tool for monitoring mental well-being at a population level. For both Scotland and Moray, average levels of mental wellbeing (measured by mean WEMWBS scores) decreased between the 2017–2021 and 2018–2022 reporting periods. Furthermore, as presented in the latest 2022 Scottish Health Survey, Scottish WEMWBS scores decreased as levels of deprivation increased. (Source: Scottish Health Survey)

### Dementia Prevalence Rate

The prevalence of Dementia within the Moray population has increased from 4.9 per 1,000 population in 2017/18 to 5.6 in 2022/23. (See Figure 38) Conversely the rate for Scotland has fallen from 5.5 to 5.0 over the same period. This may illustrate increased case finding in Moray.

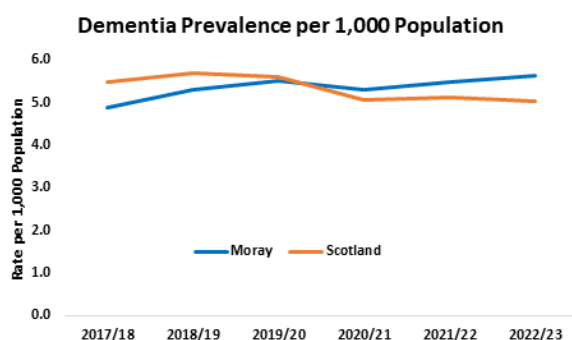


Figure 38: Dementia Prevalence per 1,000 population in Moray

Source: <https://publichealthscotland.scot/publications/general-practice-disease-prevalence-data-visualisation/general-practice-disease-prevalence-visualisation-27-june-2023/>

### Depression Prevalence Rate

The prevalence of Depression in both Moray and Scotland has risen between 2017/18 and 2022/23. The rate per 1,000 population in Moray has increased from 42.5 to 53.7, the corresponding Scottish rate increased from 52.2 to 59.7. (Figure 39)



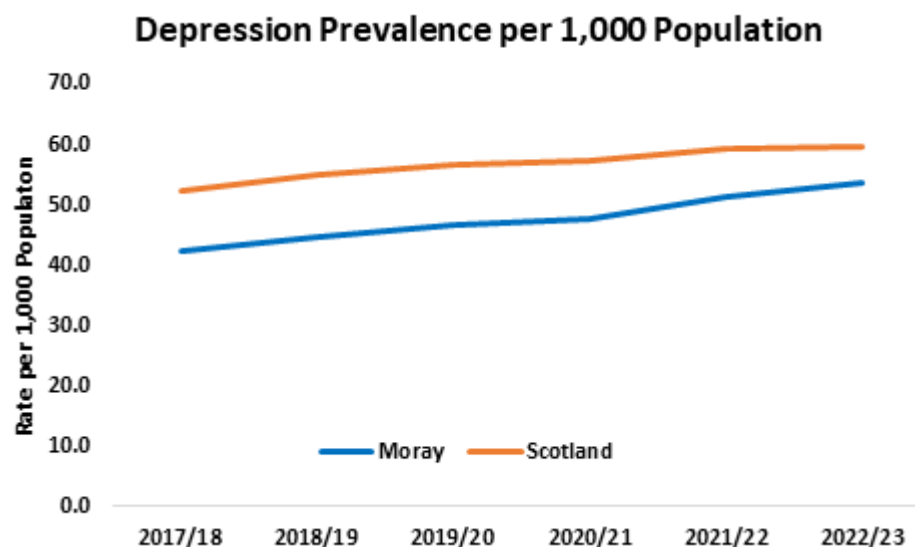


Figure 39: Depression Prevalence per 1,000 population in Moray Source: <https://publichealthscotland.scot/publications/general-practice-disease-prevalence-data-visualisation/general-practice-disease-prevalence-visualisation-27-june-2023/>

## Mental Health Primary Care prevalence

The prevalence rate per 1,000 population for mental health problems has risen by 0.9 in both Moray and Scotland over the period 2017/18 to 2022/23. Although rising, the rate for Moray remains consistently below Scotland during this period, reaching 6.4 per 1,000 in 2022/23 (compared to 7.5 for Scotland).

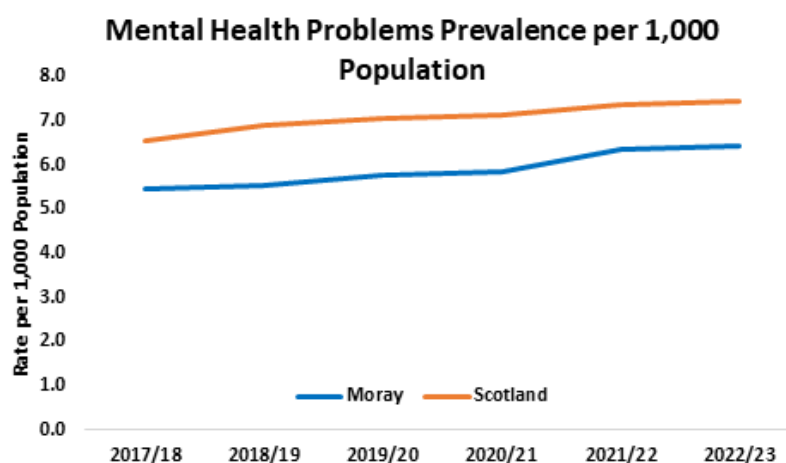


Figure 40: Mental Health Problems prevalence per 1,000 in Moray Source: <https://publichealthscotland.scot/publications/general-practice-disease-prevalence-data-visualisation/general-practice-disease-prevalence-visualisation-27-june-2023/>

# Psychological Therapy referrals

Although total psychological therapy referrals in NHS Grampian increased in the latest two reporting quarters, they remain at approximately half the national rate.

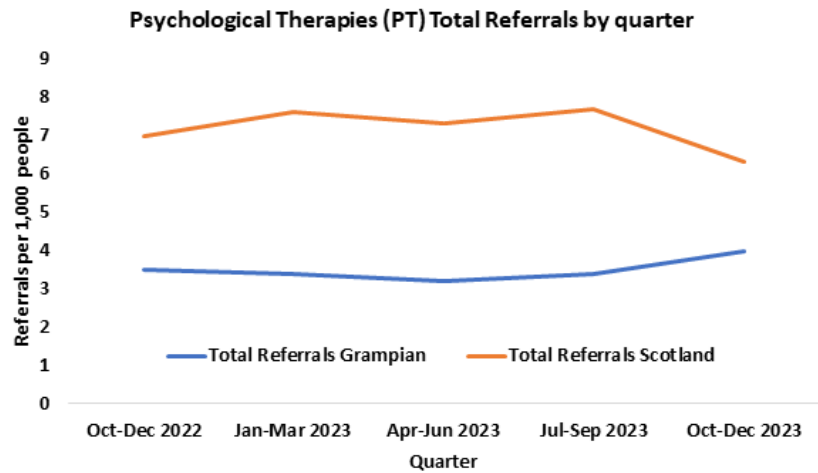


Figure 41: Source: Psychological therapies waiting times – Quarter ending September 2023 – Psychological therapies waiting times – Publications – Public Health Scotland.

# Psychiatry Outpatient Appointments

General psychiatry outpatient attendances have decreased significantly over the last ten years, with new attendances staying relatively stable over this period

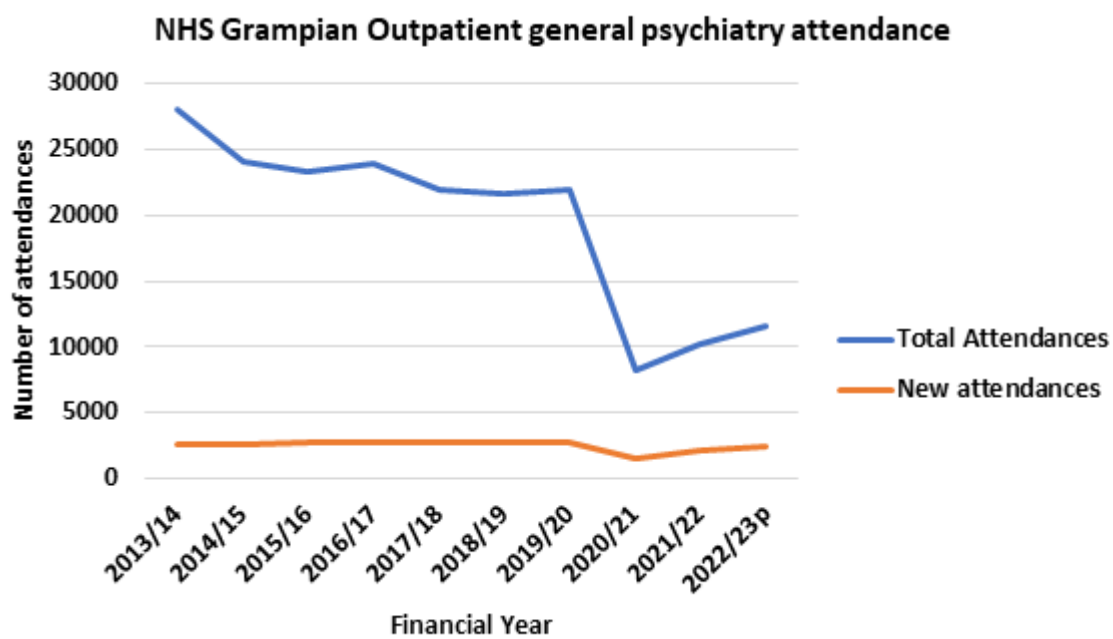


Figure 42: NHS Grampian Outpatient Psychiatry Attendances: Source: [Acute hospital activity and NHS beds information \(annual\) – Annual – year ending 31 March 2023 – Acute hospital activity and NHS beds information \(annual\) – Publications – Public Health Scotland](#), total outpatient attendances vs new attendances, general psychiatry (Mental Illness). Note 2022/23 data is provisional.

## Percentage of population prescribed drugs for Anxiety/Depression/Psychosis

In 2021/22, an estimated 18.6% of Moray's population were prescribed drugs for anxiety, depression or psychosis. (Figure 43) This was above the Grampian average of 17.5%, but below the Scottish value of 20.1%. For each geography this figure has generally increased over time.

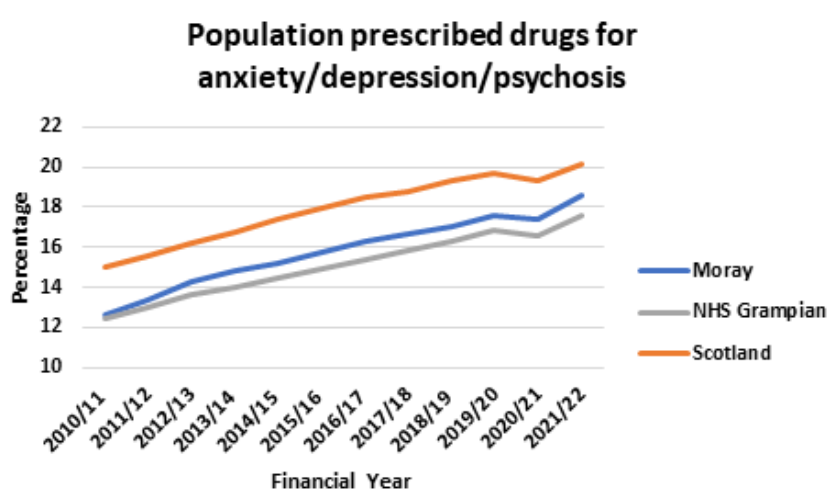


Figure 43: Source: ScotPHO Profiles – [https://scotland.shinyapps.io/ScotPHO\\_profiles\\_tool/](https://scotland.shinyapps.io/ScotPHO_profiles_tool/)

## 4.11 Prevention (screening and vaccination)

Screening is the process of identifying people who appear healthy but may be at increased risk of a disease or condition. There are a number of national screening programmes in Scotland. These are designed to detect early signs of a disease or condition and provide referral and treatment where necessary. Uptake of cancer screening (breast, bowel and cervical) is lower in more deprived areas.

### Bowel screening

The latest uptake rates for bowel screening are for financial year 2022/23. The rate for Moray was 70.6%, compared with 70.7% in NHS Grampian and 65.8% across Scotland. Over the period

2008 to 2021, there has been an increase in uptake in bowel screening rates across Moray, NHS Grampian and Scotland. (Figure 44).

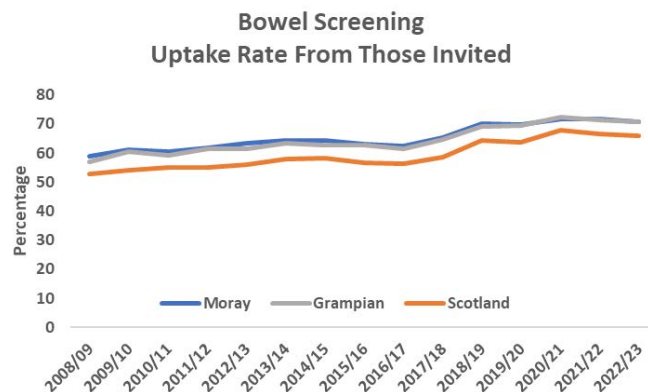


Figure 44: Uptake rates for bowel screening in Moray, NHS Grampian, and Scotland.

Bowel cancer is a major public health problem in Scotland. The Scottish Bowel Screening Programme invites men and women aged between 50 and 74 to take part in screening every two years. Bowel screening aims to find cancer at an early stage when treatment is likely to be more effective. Bowel screening is the only screening programme where the test is completed at home.

## Breast screening

The NHS offers breast screening to reduce the number of women who die from breast cancer. Screening does this by finding breast cancers at an early stage when they are too small to see or feel. Breast cancer is more common in women aged over 50.

There are inequalities in the risk factors for breast cancer, in the uptake of breast cancer screening and in survival rates.

- Lifestyle factors including post-menopausal obesity, alcohol consumption, inactivity and a high-fat diet increase the risk of breast cancer. Each of these factors is socially patterned, with people living in deprived areas more at risk.
- Women from lower socioeconomic groups are less likely to go for breast cancer screening.
- Breast cancer survival rates are worse in women from more deprived areas, in part due to the lower uptake of breast cancer screening.

Uptake rates for breast screening vary from 69.5% in the most deprived areas to 83.5% in the least deprived areas (2019–22) (Figure 45).

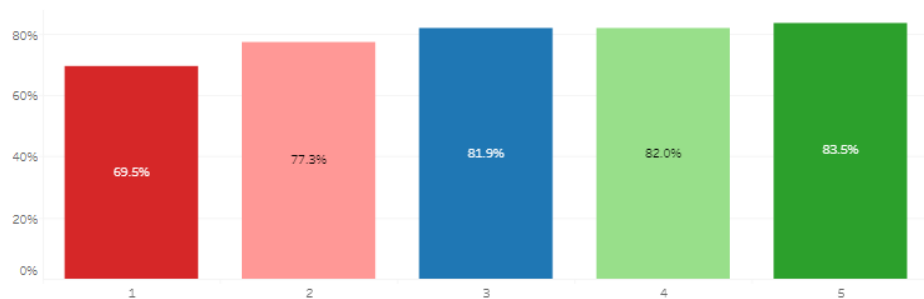
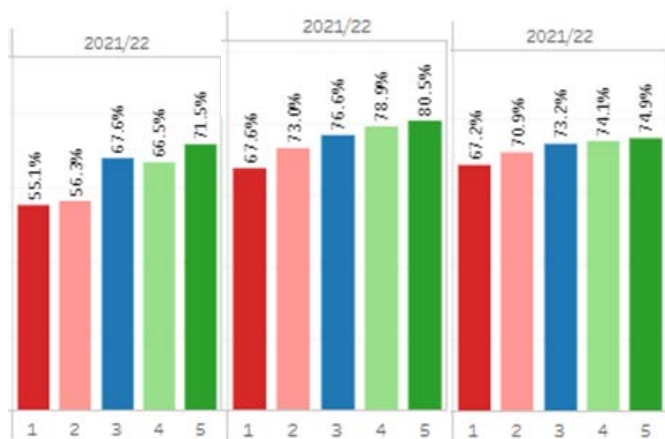


Figure 45: Breast screening uptake rates by local 2020 SIMD quintile 2019-22 (Grampian-wide)

### Cervical screening

Cervical screening looks for the presence of the HPV virus in the cervix. HPV is a common virus that can cause many different types of cancer, including 99% of all cervical cancers. Having both the HPV vaccination and cervical screening will dramatically reduce the number of people with cervical cancer in Scotland. Cervical screening is routinely offered every five years to anyone who:

- is a women and/or has a cervix
- lives in Scotland
- is between the ages of 25 and 64 years



Aberdeen      Aberdeenshire      Moray

Figure 46: Cervical screening uptake rates by SIMD quintile and H&SCP, 2021/22

GPs in Moray report that they are seeing and referring more people with cancer symptoms, but less cancer is being diagnosed and it is being diagnosed later. This is a concern as there will be increasing 'unfound' cancers, and later diagnosis means less will be treatable.

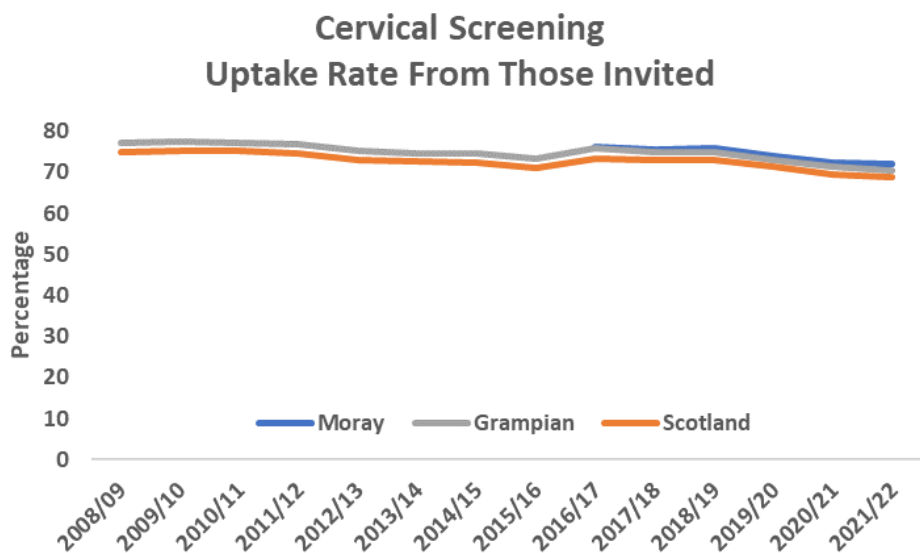


Figure 47: Cervical Screening Uptake rate from those invited

For Moray the invitation and uptake numbers for cervical screening have only been measured since 2016/17; the uptake rate for 2021/22 was 72.1%. This is higher than both Grampian (70.4%) and Scotland (68.7%). All three areas have experienced declining rates over the years since 2016/17.

## **Vaccination/immunisation**

Immunisation provides protection against a range of infections across the life course, enabling our population to live longer, healthier lives, reducing inequalities, and releasing health service capacity. Vaccination can prevent or reduce the severity of disease, minimise disability and save lives, often in many of the most disadvantaged people in society. It offers excellent value for money by reducing current and future public expenditure on health and social care provision. The European Region of WHO recommend coverage of 95% in a population is required to control or eliminate disease.

In 2022/23 Moray met the 95% target for all vaccinations up to 12 months of age except Rotavirus (94.4%).<sup>98</sup>

In addition to 6-in-1, PCV, Rotavirus and Men B, the second year of life introduces the vaccines for Men C, Hib, Men B booster and MMR. In 2022/23 Moray achieved the 95% mark for all primary and booster courses by 24 months.

For immunisations up to 5 years of age, Moray was below the 95% target for both the 4-in-1 and MMR2 vaccines (91.4% and 90.1%). By the age of 6, uptake for these vaccinations remains below target. This is of concern as MMR requires two doses for protection and 95% coverage for population protection. Measles is a particular concern because it is highly infectious, and the disease can have significant short- and long-term health complications and death. There is currently an immediate threat of ongoing outbreaks of measles in the UK.

# 5. Secondary Care services

## 5.1 Hospital Activity

In the 2022/23 financial year there were approximately 17,800 hospital admissions in Moray. This includes approximately 7,700 emergency admissions equating to over 43% of all admissions (Figure 48).<sup>99</sup> The most common diagnostic groupings accounting for hospital admissions in Moray were neoplasms (20.5%, for example breast cancer and prostate cancer) and diseases of the digestive system (16.4%, for example Crohn's disease and appendicitis). These two diagnostic groupings also accounted for the greatest number of hospital stays in Scotland overall.

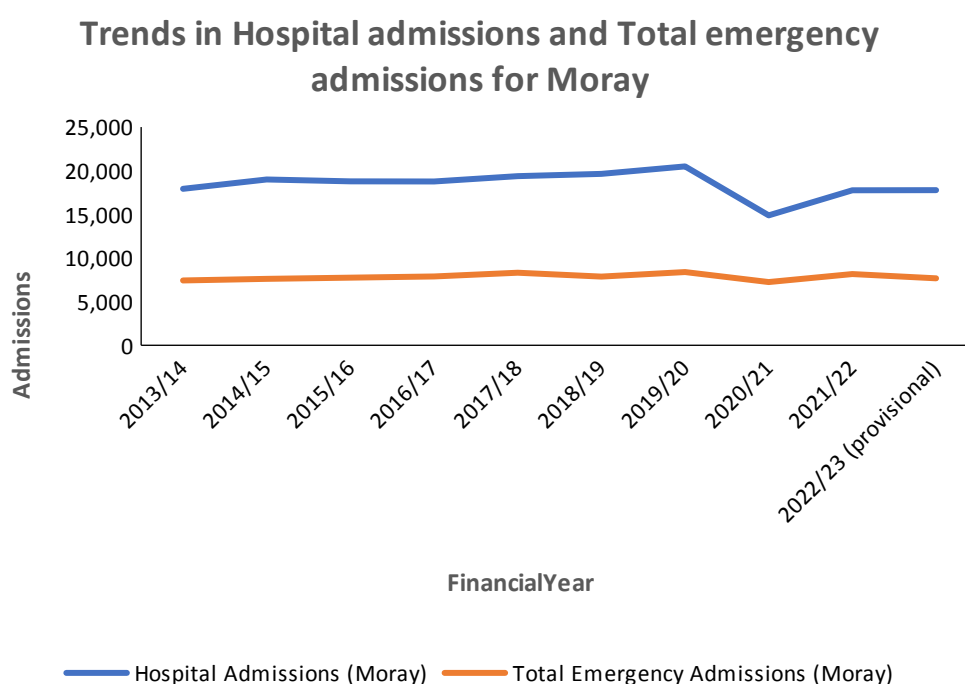


Figure 48: Hospital admissions and total emergency admissions trends for Moray. Source: Public Health Scotland.  
Note: 2022/23 data presented is provisional.



## 5.2 Potentially preventable admissions

Potentially preventable admissions (PPAs) are defined as emergency admissions (non-elective) of patients of all ages for conditions resulting from medical problems that may be avoidable with the application of public health measures and/or timely and effective treatment (usually delivered in the community by the primary care team).

The PPA bed day rate measures the number of PPA bed days in Moray as a proportion of the population. In Moray, the greatest demand is generated by those suffering from Influenza and Pneumonia (21.28 PPA Bed Day Rate per 1,000 population); complications from Diabetes, COPD and Congestive Heart Failure also have high unplanned bed day rates (Table 4).

Table 4: Source: NSS Discovery Level 2 Potentially Preventable Admissions Residence: Specialty – NSS Viz (scot.nhs.uk)

| PPA Condition                   | PPA Rate per 1,000 population | Bed Days Rate per 1,000 population |
|---------------------------------|-------------------------------|------------------------------------|
| Influenza and pneumonia         | 2.31                          | 21.28                              |
| Diabetes complications          | 1.10                          | 18.54                              |
| COPD                            | 1.62                          | 17.42                              |
| Congestive Heart Failure        | 1.54                          | 16.71                              |
| Cellulitis                      | 1.10                          | 7.28                               |
| Convulsions and epilepsy        | 0.81                          | 4.83                               |
| Gangrene                        | 0.09                          | 4.54                               |
| Perforated bleeding ulcer       | 0.15                          | 2.33                               |
| Dehydration and gastroenteritis | 0.38                          | 2.26                               |
| Diabetes complications          |                               |                                    |
| Gangrene                        | 0.02                          | 1.88                               |
| Angina                          | 0.53                          | 1.60                               |
| Pyelonephritis                  | 0.37                          | 1.18                               |

It would be interesting to look at Influenza vaccine uptake for the Influenza admissions and to consider what might enable timely and effective treatment in the community from the primary care team that might translate into admissions being avoided.

### 5.3 Emergency care

There were 119,808 A&E attendances in NHS Grampian in the 2022/23 financial year, a 14.8% increase from 2021/22, but remaining below pre-pandemic levels<sup>100</sup>. Conversely, Dr Gray’s Hospital in Moray saw 28,402 A&E attendances in 2022/23, an 11.2% increase on the previous financial year and reaching a value above pre-pandemic levels (see Figure 49).

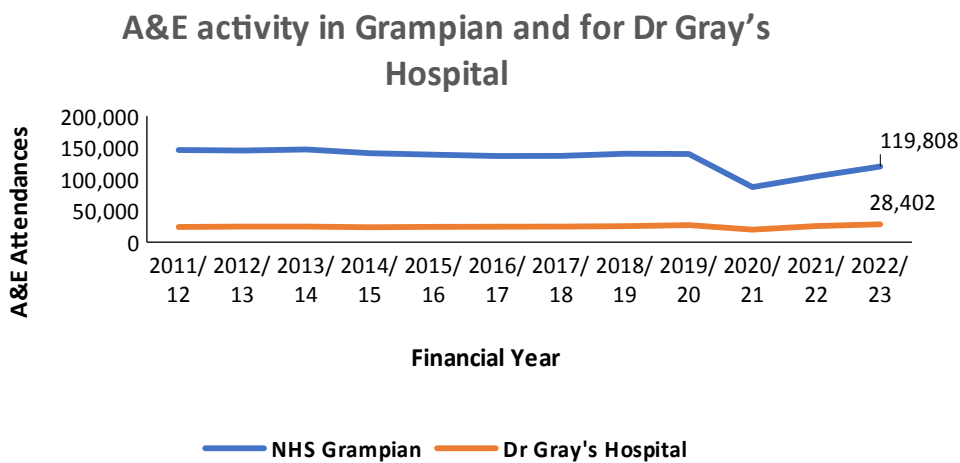


Figure 49: A&E activity in Grampian and for Dr Gray’s Hospital. Source: Public Health Scotland

On average, the 4-hour waiting time standard was met for 71.4% of attendees at Dr Gray’s Emergency Department in the 2022/23 financial year, higher than both the NHS Grampian board-level average of 69.3% and the Scottish average of 69.0%, but lower than all preceding years in the reporting period (July 2007 to March 2023)<sup>101</sup>.

Attendance levels at the Emergency Department in Moray are clearly associated with deprivation, with people from the most deprived areas having substantially higher usage than those from the least deprived areas (Figure 50). Moray has the highest levels of Emergency Department attendance within Grampian for each deprivation category.

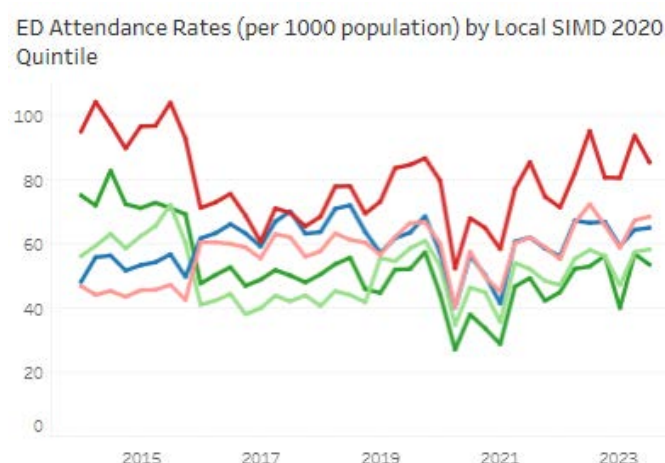


Figure 50: ED Attendance in Moray, per 1,000 population by local SIMD quintile

The charts below show High Intensity Users<sup>i</sup> of the Emergency Department in Moray. High Intensity Users are people who attend ED 5 or more times a year.

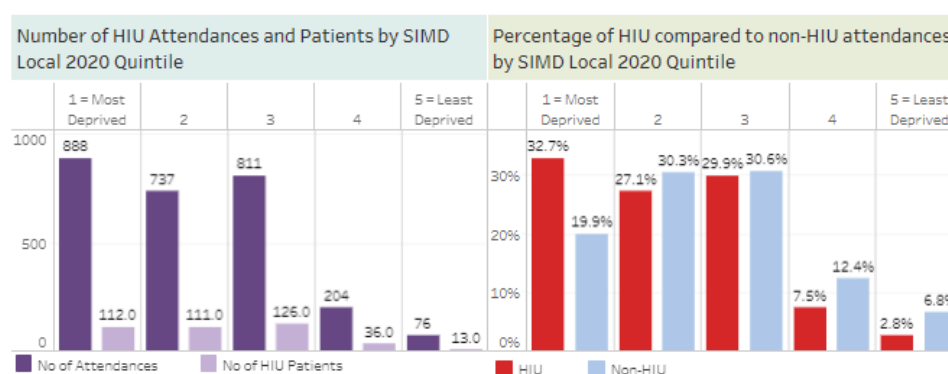


Figure 51: High Intensity ED Users year ending 31st Oct 2023

This pattern is not unique to Moray though. The British Red Cross note that across the UK, 'High intensity use is greatest in areas of deprivation, and across all age groups it is associated with issues such as homelessness, being out of work, mental health conditions, drug and alcohol problems, criminality, and loneliness and social isolation.'<sup>102</sup>. The organisation reports that provision of person-centred non-clinical specialist services which offer holistic support to address the practical, social and emotional issues that may underlie people's frequent attendance at A&E can reduce high intensity usage of Emergency Department services by 82%. This type of service also supports people to identify community-based services that can help them to better manage their physical and mental health.

<sup>i</sup> High Intensity Users are defined as people who attend Emergency Department 5 or more times per year

## 5.4 Unintentional injuries and falls

In the 2022/23 financial year there were 939 emergency hospital admissions in Moray due to unintentional injuries. This was an 8.6% decrease in admission rate per 100,000 population compared to the previous year, down from 1027 per 100,000 in 2021/22 to 974 per 100,000 in 2022/23.<sup>103</sup> In 2022/23 there were 579 emergency hospital admissions in Moray due to falls (accounting for 61.7% of all unintentional injuries). Hospital admissions due to falls were more common for females than males, with rates of 727 and 471 per 100,000 population respectively.

The human cost of falls includes pain, loss of confidence, independence and mortality. It can also affect other family members and carers of those who fall. Many falls are preventable through adjustments to the environment (home and community), strength and balance training, sight tests, avoidance of alcohol and medication reviews.

We also know that we see more falls, often concentrated in particular areas, during very cold/icy weather. There is potential to work with road gritting teams or community volunteers to target known cold spots in future.

## 5.5 End of Life Care

In the 2022/23 financial year, there were 1,166 deaths in Moray (including falls but excluding people who died from other external causes). For these individuals, 90.5% of their last six months of life was spent either at home or in a community setting, with the remaining 9.5% spent in hospital (Figure 52)<sup>104</sup>. This is equivalent to an average of 17 days in hospital in the six months prior to death, an increase of 3 days from 2021/22.

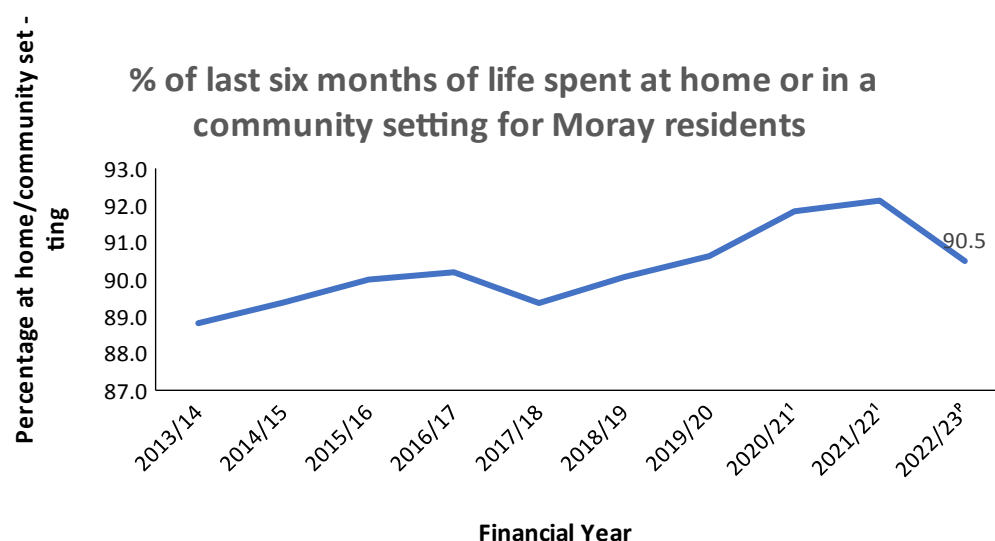


Figure 52: Percentage of last six months of life spent at home or in a community setting for Moray residents. Note: Data for 2022/23 are provisional. Figures in 2020/21 and 2021/22 are likely to have been affected by the impact of COVID-19 on hospital stays.

## 5.6 Delayed Discharges

In the 2022/23 financial year, 2% of all hospital discharges were delayed prior to discharge in Moray. This figure is consistent with the previous year, and remains below the Scottish average of 3%.<sup>105</sup> On average, 39 beds were occupied by delayed discharges each day in Moray in the 2022/23 financial year. This is a 34.5% increase on the 2021/22 value of 29 beds (Figure 53). Health and social care reasons were the leading factor for delayed discharge, responsible for 91% of delays (in 2022/23). Moray had the second highest proportion of discharge delays for health and social care reasons of all local authorities.

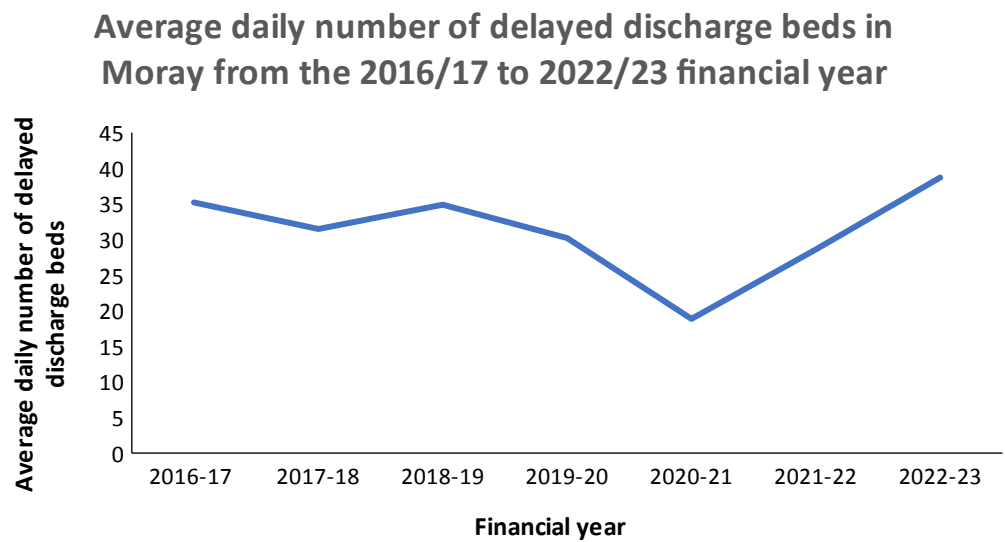


Figure 53: Average daily number of delayed discharge beds in Moray from the 2016/17 financial year to 2022/23. Source: PHS

# 6. Social Care

## 6.1 Care Home Residents

The rate per 1,000 population of long stay residents supported in care homes is similar in Scotland and Moray.<sup>106</sup> Pre-Covid, the Scottish rate was higher than Moray but since the summer of 2020 the Moray rate is consistently above Scotland (Figure 54)<sup>107</sup>.

Short stay and respite patients across Scotland and Moray have similar rates and follow a similar trend.

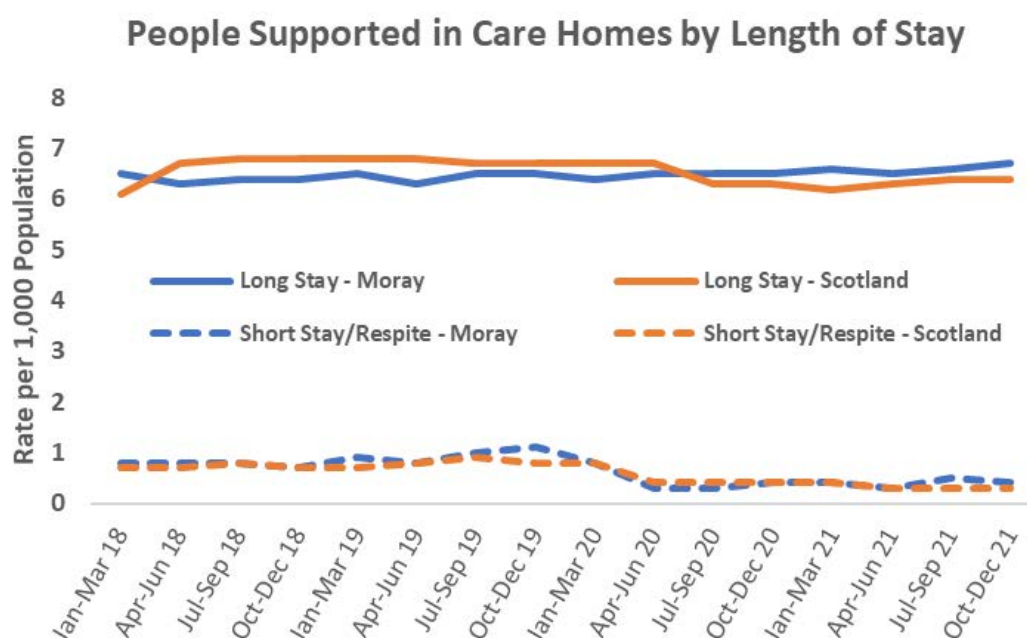


Figure 54: People supported in care homes by length of stay in Moray and Scotland, from 2018 to 2021.

## 6.2 Residents by Age and Length of Stay

Over 65-year-olds make up almost all of those in social care in both Scotland and in Moray.<sup>108</sup> Moray has higher rates of 65-84 year olds than Scotland, but Scotland has more aged over 85 in care (Figure 55)<sup>109</sup>.

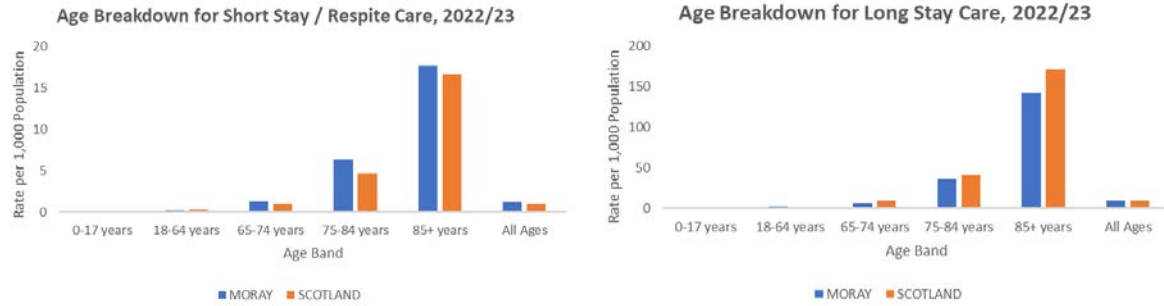


Figure 55: Age breakdowns of short and long stay care in Moray and Scotland

## 6.3 Care Home Referral Sources

Referrals to long term care are primarily instigated by the emergency services (see Figure 56). The fluctuations in Moray are due to smaller patient volumes<sup>110</sup>.

Since the beginning of 2021, GP referrals in Scotland have increased; in Moray they remain relatively low but increased in summer 2022.

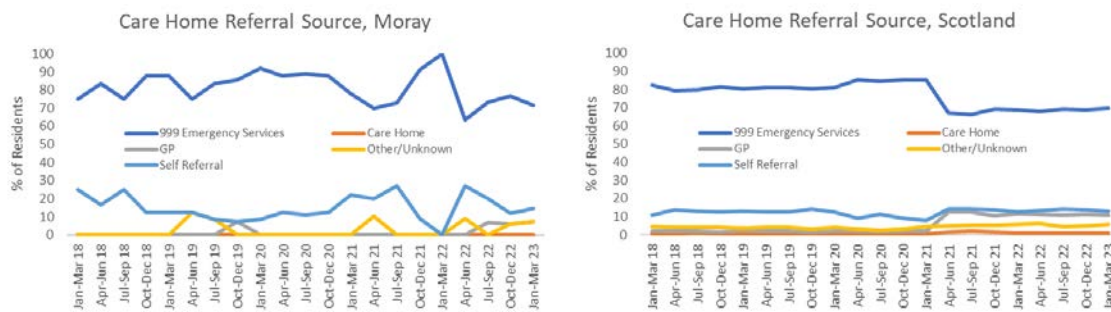


Figure 56: Care home referral sources in Moray and Scotland.

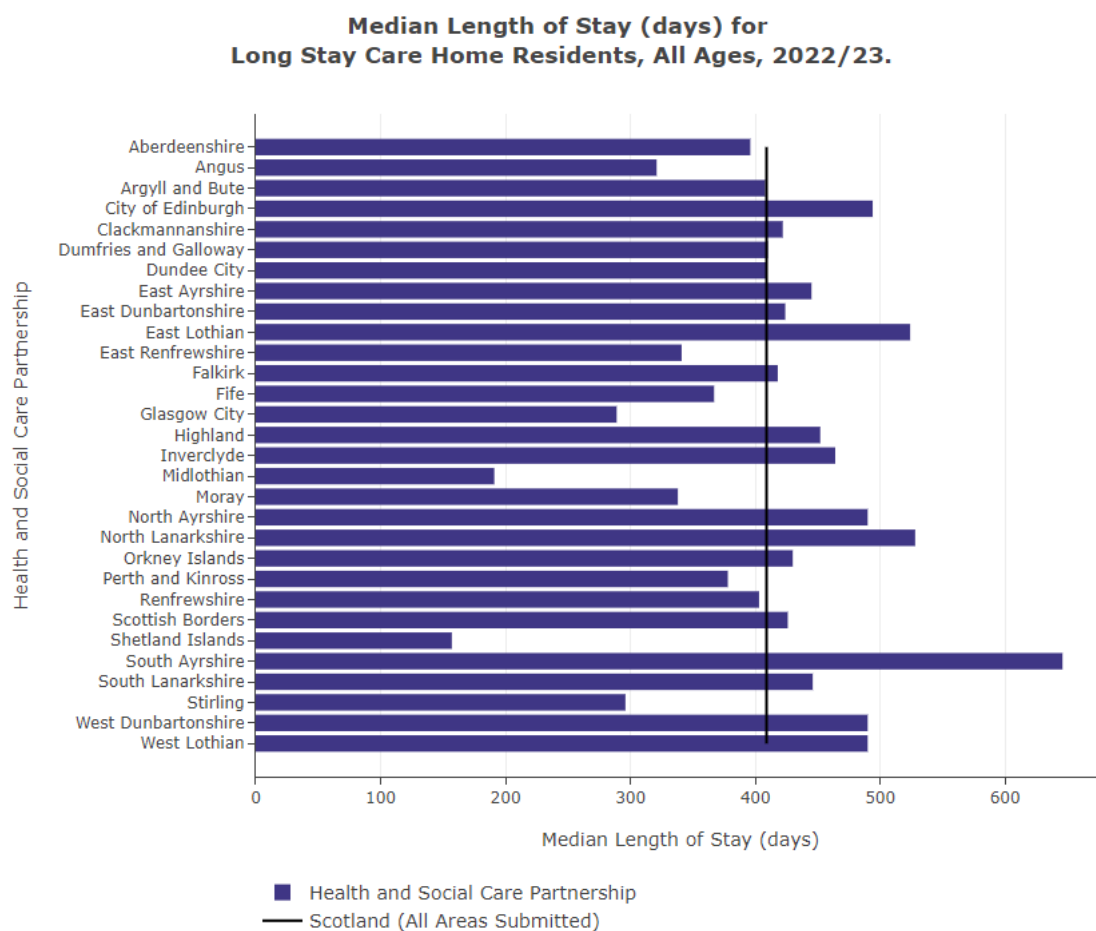


Figure 57: Median length of stay across Scotland



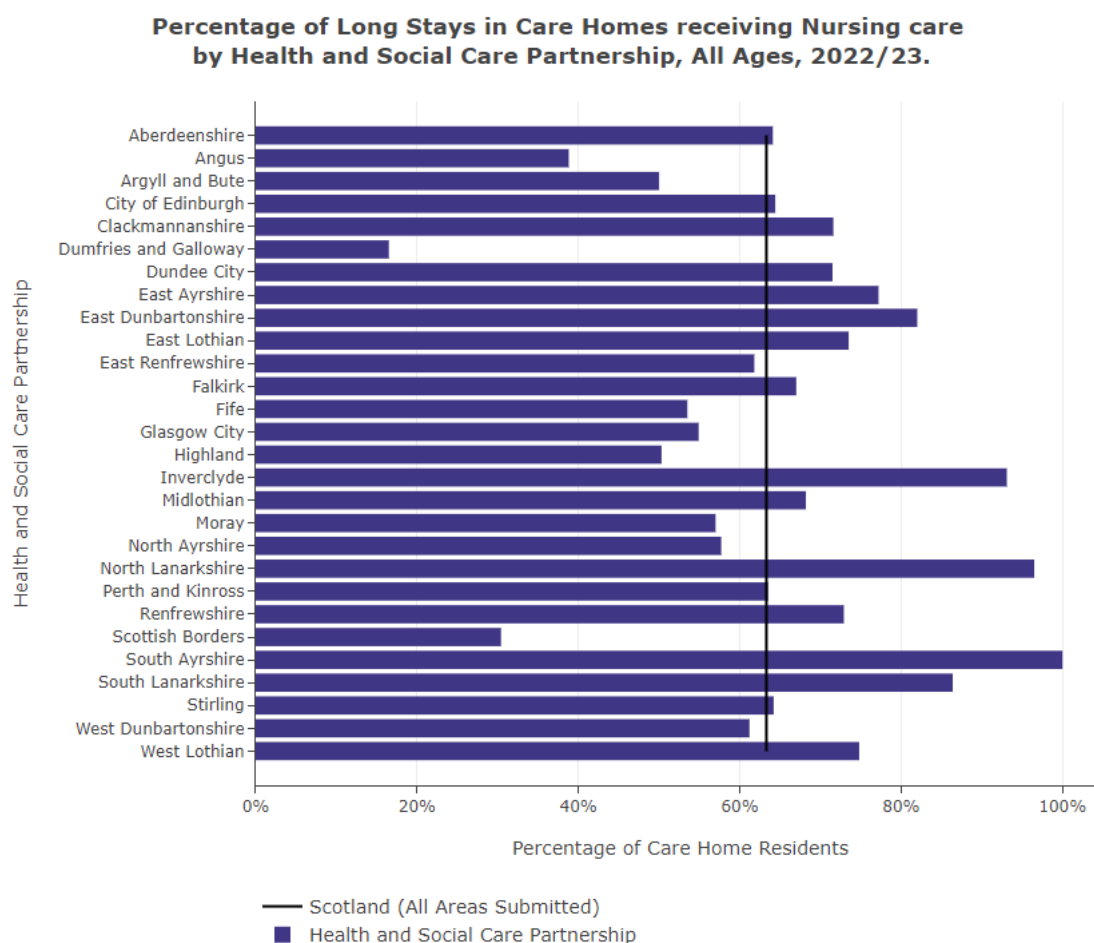


Figure 58: Percentage of Long stay cases receiving nursing care across Scotland

## 6.4 Care at home

Care at Home (previously named Home Care) includes a variety of support types intended to help people with assessed support needs to live at home, including in sheltered housing or equivalent accommodation. For reporting purposes, the term 'Care at Home' includes personal care and a wide range of practical support to enable a person to function as independently as possible in the community. Tasks involved may include housework, shopping, laundry and/or paying bills.<sup>111</sup> The measures put in place to respond to COVID-19 pandemic will have affected the services that the HSCPs were able to provide over the period of the pandemic. Differences in data from previous years are likely to be affected by ability of HSCPs to provide social care services while dealing with the impact of the pandemic.

In 2022/23, 1,170 people in Moray were supported with care at home provided/funded by Moray Health and Social Care Partnership, a decrease for the fourth consecutive year from 1,680 in 2018/19<sup>112</sup>. This equated to 785,155 hours of care, a decrease of 1.4% from 2021/22<sup>j</sup>.

<sup>j</sup> Note 2022/23 figures labelled as provisional at time of writing, subject to change following future data submissions

**Number of People Supported with Care at Home as a Rate per 1,000 Population, in Scotland (Estimated) and Moray during Financial Year 2018/19 - 2022/23.**

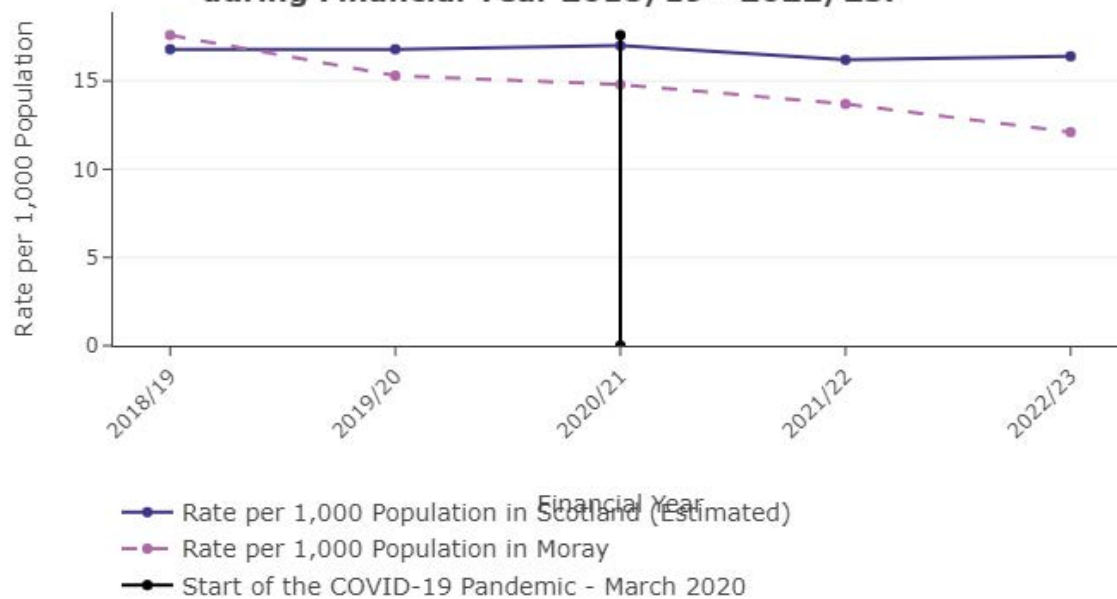


Figure 59: No of people supported with Care at Home per 1,000 pop in Scotland and Moray

Almost half of Care at Home recipients receive over 10 hours of care per week (48.1% in January–March 2023).

The most common client type for Care at Home services in Moray are elderly and frail individuals (see Figure 60).

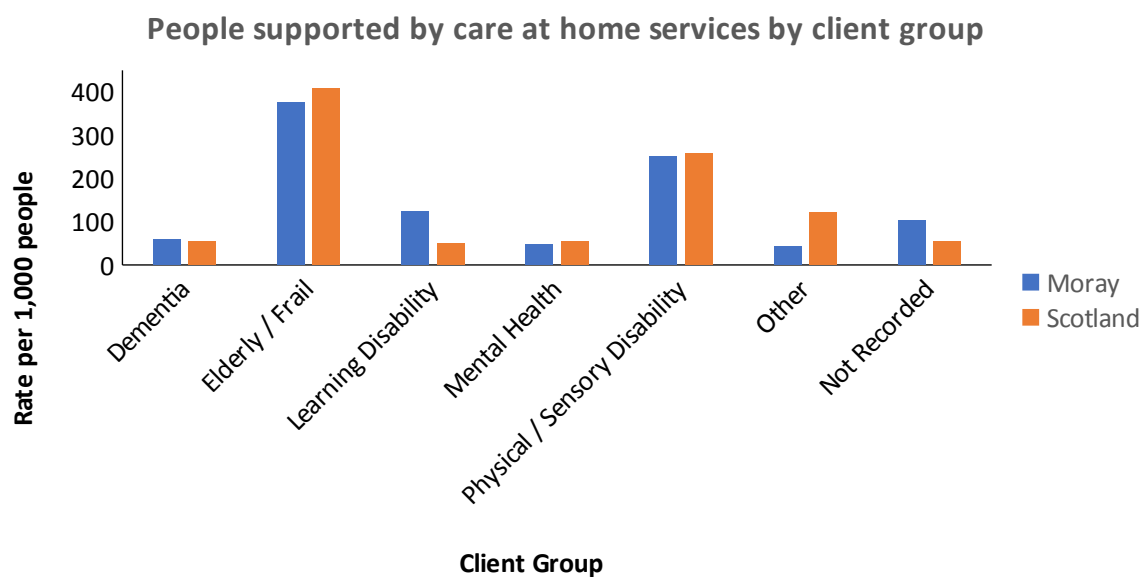


Figure 60: Number of people supported with care at home services in Moray and Scotland as a rate per 1,000, by client group

43.6% of people receiving Care at Home services in Moray have a community alarm and/or telecare, below the Scottish average of 51.4%.

Compared to Scotland, Moray’s Care at Home Service recipients have high levels of A&E attendances as a rate per 1,000 at 189.6 (Jan–Mar 2023) compared to 155.6 for Scotland. It would be worth exploring the reasons for this in more detail.

## 6.5 Experience of Social Care

The table below is taken from the Health and Social Care Experience Survey<sup>113</sup>:

Table 5: Moray HSCP Extract from Health and Social Care Experience Survey

| Select a question from the list below to compare a result to the equivalent 2020 result and the Scotland result, and display a time trend for all surveys since 2014, where questions are comparable. Statistical comparison against 2020 are available at Scotland, NHS Board and Health & Social Care Partnership level. |                     | Moray    |         |          |
|--|---------------------|----------|---------|----------|
|  | Number of Responses | Positive | Neutral | Negative |
| 32a Experience of Social Care: I was aware of the help, care and support options available to me   | 129                 | 44%      | 28%     | 28%      |
| 32b Experience of Social Care: I had a say in how my help, care or support was provided  | 118                 | 45%      | 32%     | 23%      |
| 32c Experience of Social Care: People took account of the things that mattered to me   | 118                 | 58%      | 28%     | 14%      |
| 32d Experience of Social Care: I was treated with compassion and understanding   | 123                 | 71%      | 20%     | 9%       |
| 32e Experience of Social Care: I felt safe   | 125                 | 64%      | 23%     | 13%      |
| 32f Experience of Social Care: I was supported to live as independently as possible  | 117                 | 60%      | 25%     | 14%      |
| 32g Experience of Social Care: My health, support and care services seemed to be well coordinated  | 118                 | 44%      | 34%     | 22%      |
| 32h Experience of Social Care: The help, care or support improved or maintained my quality of life   | 121                 | 57%      | 26%     | 17%      |
| 33 Overall, how would you rate your help, care or support services? Please exclude the care and help you get from friends and family.  | 125                 | 52%      | 29%     | 20%      |

## 6.6 Self-Directed Support (SDS)

In 2021/22, 1,720 people in Moray received social care services/support through SDS, corresponding to 98% implementation.<sup>114</sup> However, the majority of people chose Self-Directed Support option 3 (1,505 people), meaning they chose to allow the council to arrange and determine their services.

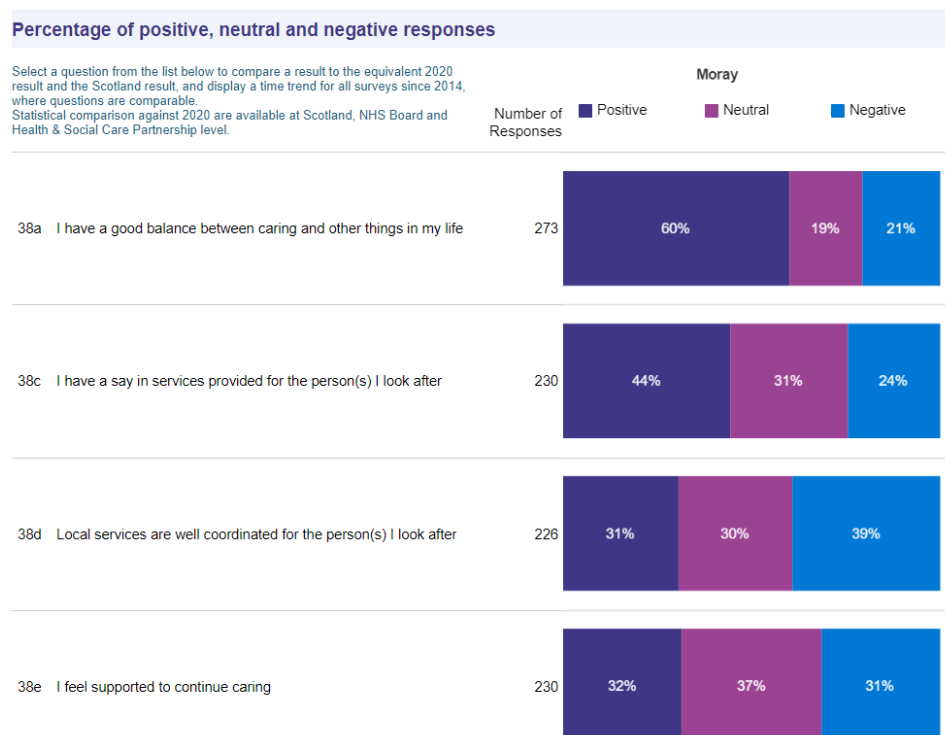
## 6.7 Unpaid carers

During the aggregate period 2018–2022, approximately 12% of Moray residents provided regular unpaid help or care for any sick, disabled or frail person. This is below the Scottish average of 15%.<sup>115</sup> Unpaid carers play a substantial and vital role in meeting social care needs. The care they provide has enormous value, both for the people they care for and for wider society. Many carers experience great satisfaction from their role, and through the help and support they provide to friends and family members they may also reduce the costs of formal social care provision.

At the same time, caring responsibilities can come at a high personal and financial cost and nationally 1 in 5 carers report feeling socially isolated; and 4 in 10 report financial difficulties because of their role.

The Health and Care Experience Survey from 2022 asked carers across Scotland about their experience of services in relation to their caring role. The results for Moray are displayed in the table below:

Table 6: Carers' experiences in Moray



## 6.8 Service usage and Experience

The Health and Social Care Experience Survey<sup>116</sup> asks about people's experiences of:

- accessing and using their general practice and out of hours services
- aspects of care and support provided by local authorities and other organisations
- caring responsibilities and related support.

This is an online and postal survey sent to a random sample of people registered with a general practice in Scotland. The survey has been run every two years since 2009, with the next results being available in May 2024.

A sample of results is provided below: most positive responses, most negative responses, and feedback on out of hours services.

Table 7: Most positive experiences 2022

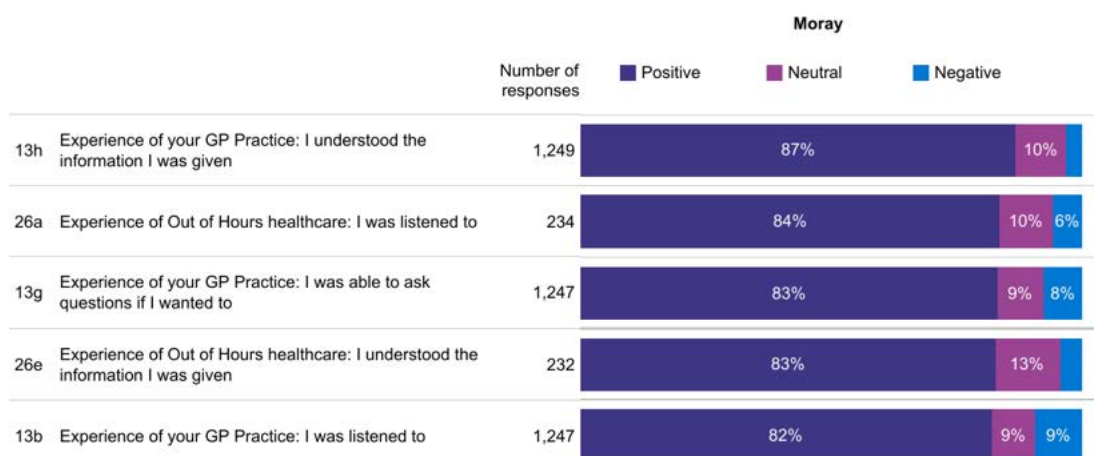
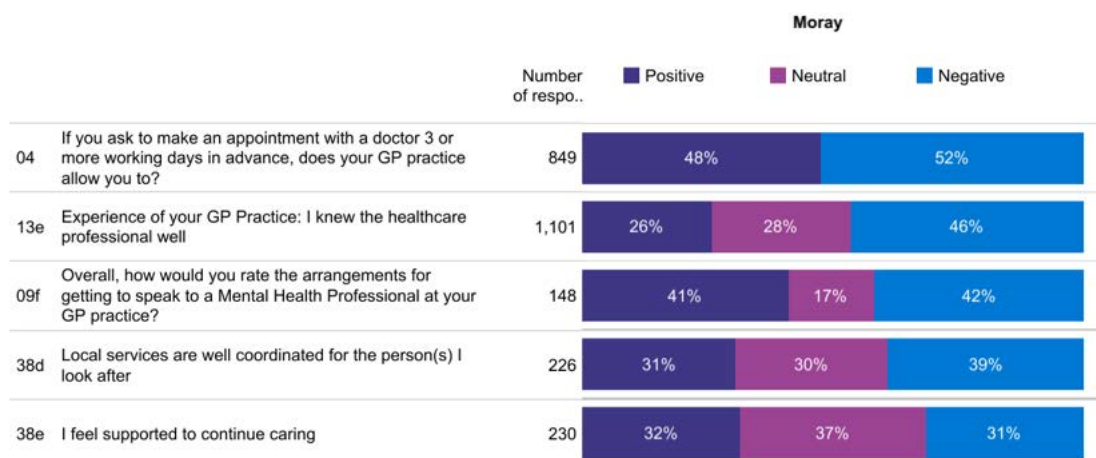


Table 8: Most negative experiences 2022



# Out of hours healthcare

Table 9: Responses to questions on Out of Hours Healthcare

Select a question from the list below to compare a result to the equivalent 2020 result and the Scotland result, and display a time trend for all surveys since 2014, where questions are comparable. Statistical comparison against 2020 are available at Scotland, NHS Board and Health & Social Care Partnership level.

|     |  | Number of Responses | Moray    |         |          |
|-----|--|---------------------|----------|---------|----------|
|     |  |                     | Positive | Neutral | Negative |
| 26a | Experience of Out of Hours healthcare: I was listened to   | 234                 | 84%      | 10%     | 6%       |
| 26b | Experience of Out of Hours healthcare: I was given enough time   | 229                 | 78%      | 12%     | 9%       |
| 26c | Experience of Out of Hours healthcare: I was treated with compassion and understanding                     | 232                 | 81%      | 10%     | 9%       |
| 26d | Experience of Out of Hours healthcare: I was given the opportunity to involve the people that matter to me | 199                 | 52%      | 35%     | 13%      |
| 26e | Experience of Out of Hours healthcare: I understood the information I was given                            | 232                 | 83%      | 13%     |          |
| 26f | Experience of Out of Hours healthcare: I was able to ask questions if I wanted to                          | 230                 | 81%      | 13%     | 7%       |
| 26g | Experience of Out of Hours healthcare: Staff helped me to feel in control of my treatment/care             | 212                 | 66%      | 23%     | 11%      |
| 26h | Experience of Out of Hours healthcare: My treatment/care was well coordinated                              | 219                 | 68%      | 18%     | 13%      |
| 27  | Overall, how would you rate the care you experienced from this Out of Hours service?                       | 240                 | 71%      | 18%     | 12%      |

# 7. Workforce and Finance

## 7.1 Current Workforce

The headcount of staff within Health and Social Care Moray (at April 2022) was 1795 with 1310.26 Whole Time equivalent posts (WTE). There was a 9% increase in NHS staffing numbers and 8.7 % increase in WTE for substantive posts since 2020. Health and Social Care Partnerships do not employ staff directly; staff are employed by either NHS Grampian or the Moray Council.

The workforce is becoming older, with some choosing to work part time or retire. In 2022, 44.5% of the workforce was working part-time. 30.4 % of the workforce is aged between 45 – 54 years with a further 17.2 aged between 55-60 years.

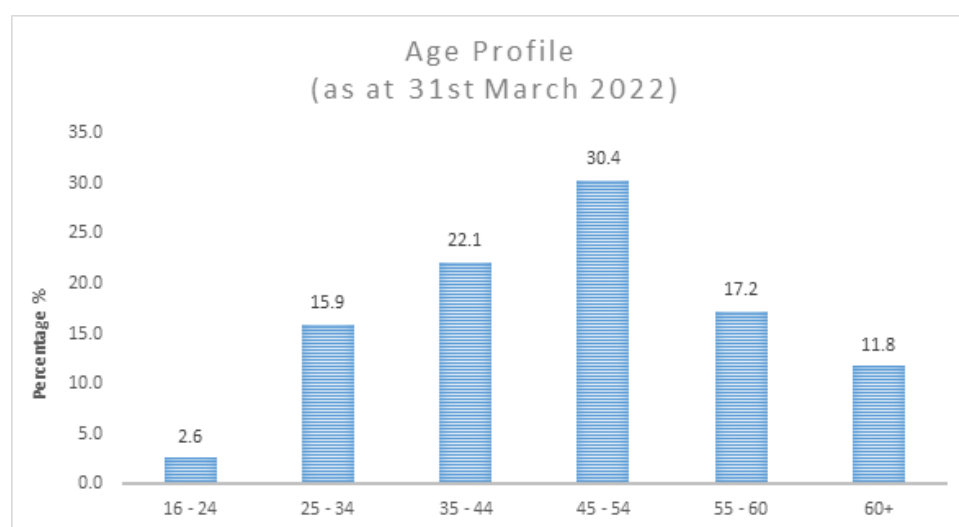


Figure 61: Age Profile of Staff within HSCM at April 2022

The sickness absence rate was 4.8% across the partnership in 2022.

# GP and GP practices in Moray

Number (headcount) of GPs in post in Moray: 2012 – 2022. Note that many GPs are part-time or have other duties.

Table 10: Headcount of GPs in Moray 2012 – 2022

|       | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| Moray | 86   | 83   | 88   | 89   | 84   | 81   | 89   | 85   | 91   | 90   | 92   | 96   |



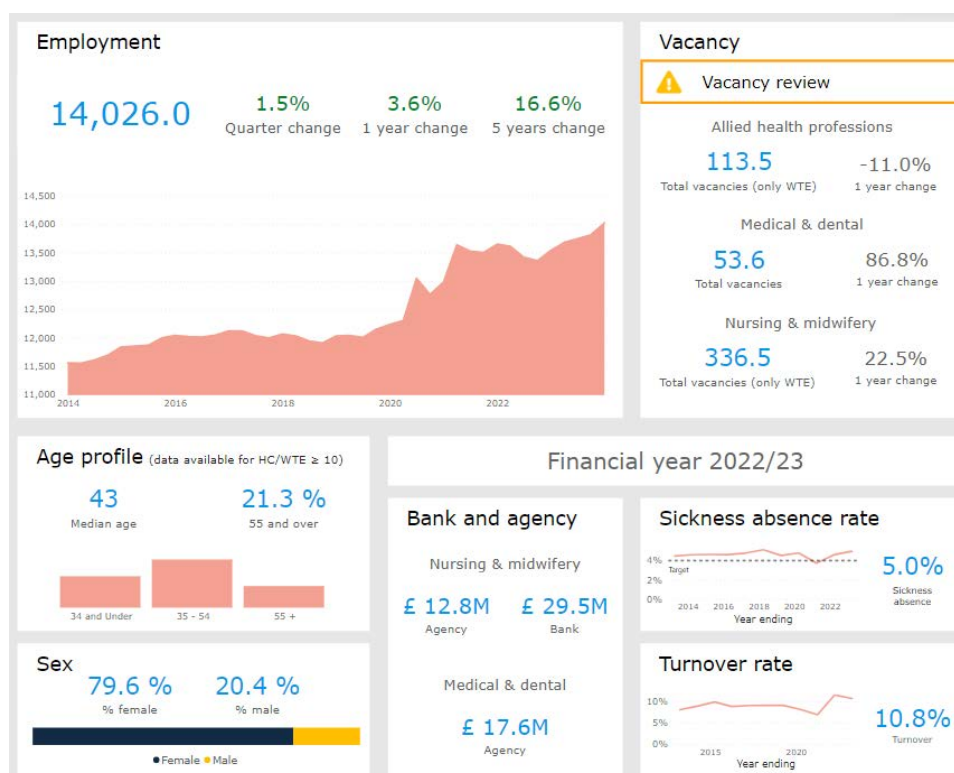
The numbers of patients registered with GP Practices in Moray illustrates the increase in older patients and reductions in younger ones since 2014.

Table 11: numbers of patients registered with GP Practices in Moray

| Number of practices |    | Patients age-group |        |        |        |        |        |       |       |          | Average practice list size |
|---------------------|----|--------------------|--------|--------|--------|--------|--------|-------|-------|----------|----------------------------|
|                     |    | 0-4                | 5-14   | 15-24  | 25-44  | 45-64  | 65-74  | 75-84 | 85+   | All ages |                            |
| 2014                | 13 | 4,861              | 9,939  | 10,667 | 20,980 | 26,631 | 10,474 | 6,070 | 2,158 | 91,780   | 7,060                      |
| 2015                | 13 | 4,823              | 9,956  | 10,533 | 21,049 | 26,811 | 10,727 | 6,184 | 2,164 | 92,247   | 7,096                      |
| 2016                | 13 | 4,774              | 10,055 | 10,181 | 21,017 | 27,128 | 10,936 | 6,253 | 2,227 | 92,571   | 7,121                      |
| 2017                | 13 | 4,678              | 10,155 | 9,935  | 20,995 | 27,466 | 11,060 | 6,382 | 2,327 | 92,998   | 7,154                      |
| 2018                | 13 | 4,546              | 10,353 | 9,732  | 21,031 | 27,564 | 11,218 | 6,559 | 2,415 | 93,418   | 7,186                      |
| 2019                | 13 | 4,433              | 10,448 | 9,660  | 21,092 | 27,674 | 11,321 | 6,722 | 2,453 | 93,803   | 7,216                      |
| 2020                | 13 | 4,321              | 10,468 | 9,580  | 21,129 | 27,609 | 11,571 | 6,769 | 2,590 | 94,037   | 7,234                      |
| 2021                | 12 | 4,222              | 10,596 | 9,674  | 21,410 | 27,632 | 11,717 | 7,074 | 2,583 | 94,908   | 7,909                      |
| 2022                | 12 | 4,154              | 10,582 | 9,288  | 21,765 | 27,493 | 11,707 | 7,461 | 2,601 | 95,051   | 7,921                      |

A snapshot of staffing across NHS Grampian as at December 2023<sup>117</sup> illustrates the increases in staffing since 2019-20, and also the numbers of vacancies, usage of bank and agency staff sickness absence rates and turnover rate. It has not been possible to break this information down for Moray specifically.

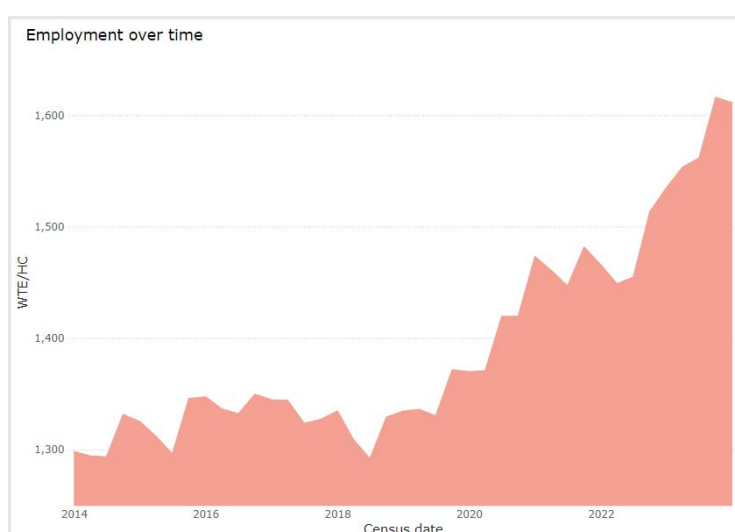
Table 12: snapshot of staffing across NHS Grampian as at December 2023



National challenges in recruitment and retention tend to be exacerbated in remote and rural communities; sickness absence rates remain high, the cost of living affects our staff as well as the people who live in our communities; and new recruits report challenges in finding appropriate and affordable accommodation which means that offers are sometimes not taken up by new staff.

A link to the most recent published Workforce Plan is here: [20220929 FINAL HSCM Integrated Workforce Plan 2022.2025 Appendix 1 \(cmis.uk.com\)](https://cmis.uk.com/20220929_FINAL_HSCM_Integrated_Workforce_Plan_2022.2025_Appendix_1)

The chart below (Figure 62) shows how medical and dental staffing levels have increased across NHS Grampian over time.



## NHS Volunteers

There are 60+ Volunteers working across NHS Acute and Community hospitals in Moray, in a variety of roles from Wayfinding to supporting patients on wards.

**Social Care Volunteers** – 120 Volunteers supporting people in the community to live safely in their own homes and avoid social isolation. Roles vary from Alarm Responder through to befrienders.

Volunteering opens up opportunities for people interested in gaining experience in health or social care for future career aspirations, it provides a meaningful activity which benefits our volunteer's wellbeing and it gives members of our communities the opportunity to be involved and make a difference.

In an NHS setting, volunteers are able to support some of the pressures on our staff and free them up to concentrate on clinical tasks. Most importantly, volunteers improve and enhance our patient and service user's journey with us. We also have 'Ambassadors' supporting us delivering eighteen well attended BALL groups across Moray and support and work in collaboration with many other groups.

(B.A.L.L GROUPS Be Active Life Long An active ageing group for older people, which provides an activity to keep you active and healthy later in life, improving mobility and lessening the risk of falls. Through fostering friendships and encouraging connections to their local community this helps to reduce social isolation and loneliness. Everyone has a choice, with a wide and varied programme of activities, catering for every taste and ability, you can choose to opt in or out of a session, as everyone is valued, respected and supported to achieve their own goal.)

## 7.2 Finance

Figure 63 shows real spending per person on health in Scotland, England and Wales since 1999<sup>118</sup>. Health spending per person has risen considerably over time in Scotland, from £1,659 per person in 1999–2000 to £2,801 per person in 2019–20 (in 2022–23 prices). Most of the increase took place in the 2000s, with spending per person growing by an average of 5.0% per year in real terms between 1999–2000 and 2009–10. But from 2010–11, health spending per person fell in real terms for some years (2010–11 to 2014–15 and 2017–18 to 2018–19). Between

2009–10 and 2019–20, health spending per person overall therefore grew on average by just 0.4% per year in real terms, far slower than during the previous decade.

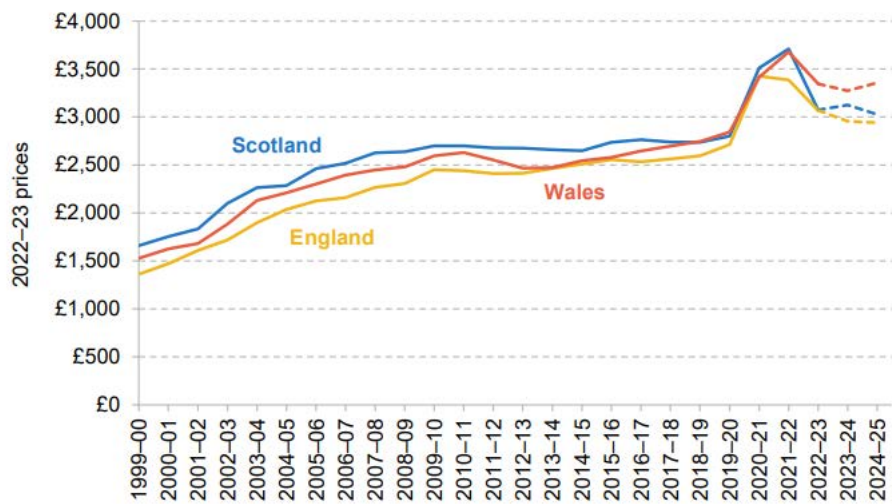


Figure 63: Spending per person on health in Scotland, England and Wales since 1999.

.

Although much lower than during the peak of the COVID-19 pandemic, real health spending per person was still 10% higher in 2022–23 than in 2019–20. However, it is possible to argue that the spending is in the wrong place.

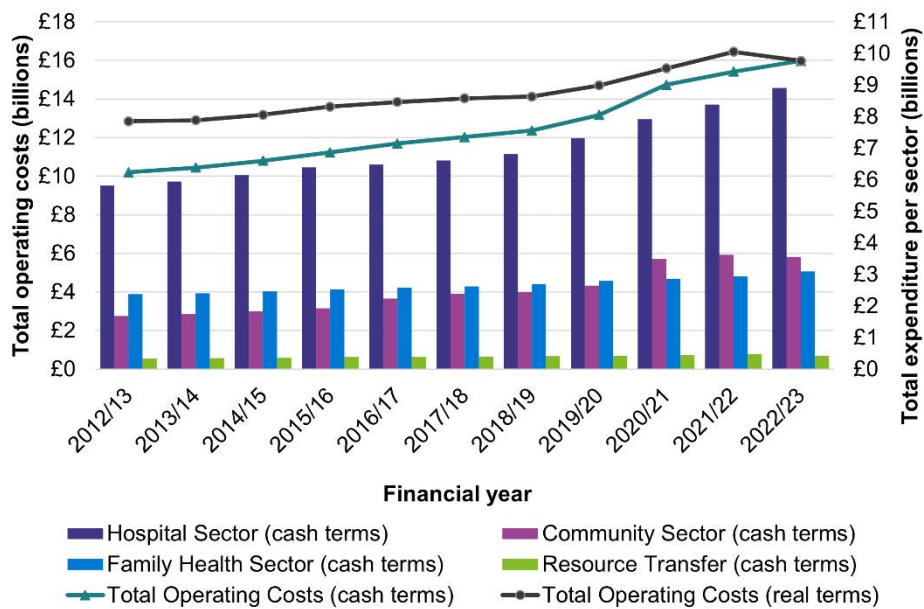


Figure 64: Trend in expenditure, 2012/13 to 2022/23 Scottish health service costs - summary for financial year 2022 to 2023 - Scottish health service costs - Publications - Public Health Scotland

Figure 64 illustrates the discrepancies between hospital and other health spending, given that at least 90% of all health contacts take place in primary care, in GP and dental practices and pharmacies<sup>119</sup>. Since 2016 there have been some significant increases in spending on national boards and areas such as psychiatry / social care. General practice's cumulative uplift of 23.0% is well behind inflation (38.1%), and represents a real terms cut in funding. It is also behind total health budget uplift (48.4%) and NHSG uplift (30.3%).

If general practice had kept up with acute budget there would be an extra £7.87M in Grampian General Medical Services, which equates to an extra £163k per year to global sum for a 12k practice. If we had kept up with increases to overall health spending (which has gone up 48.35%), that would equate to £491k per year to the global sum of a 12k practice.

## Health and Social Care funding, HSCMoray

In March 2023, Moray IJB approved the 2023/4 revenue budget, balancing it through the use of slippage in earmarked reserves. The budget setting for 23/24 included a savings plan totalling £4,141 million.

However, the funding gap rises to over £11million by 2027/28, with the financial pressures for 2024/25 and beyond being significant.

Table 13: Projected funding gaps for HSCMoray to 2027/28

|                                     | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28  |
|-------------------------------------|---------|---------|---------|---------|----------|
| <b>Estimated Budget Requirement</b> | 163,507 | 168,636 | 173,830 | 179,230 | 184,769  |
| <b>Total Funding</b>                | 162,139 | 164,820 | 167,520 | 170,377 | 173,325  |
| <b>Budget Surplus/(Deficit)</b>     | (1,368) | (3,816) | (6,310) | (8,853) | (11,444) |

Internal audit note financial risks including potential reduction in future funding, pay negotiations, rising inflation, cost of living crises and supply chain pressures. It goes on to say that a major and unprecedented transformation programme will be required to reduce the current funding gap, ensure efficient service delivery and bring about financial sustainability.

## **Public views on health and care finance**

In their response to the Health and Sport Committee into Primary Care Services<sup>120</sup> for the next generation, the public said that they wanted solutions to a number of areas, including access, speed of service, a more person centred approach with a preventative focus, and an increasing use of technology. They did not see the status quo as an option. The public message was very clearly that they wanted to avoid becoming unwell and requiring treatment.

This report recommended taking action on the importance of place, an end to the 9-5 service, five days a week, a focus on prevention and away from automatic provision of a prescription. Enabling wellness, embracing of new technology and sharing of patient records must become the norm.

Several reports note that health care is more expensive when delivered in a hospital-centric health system – in comparison with alternatives such as a primary care or network system. Many countries have made major efforts to shift services to outpatient or primary care clinics to reduce costs and deliver care closer to the community. At the same time evidence shows that hospital-based patients are more likely to receive unnecessary medical treatment that does not enhance quality of care or patient and family satisfaction<sup>121</sup>. Moving end-of-life care away from hospitals to settings that are less resource intensive and generally less costly such as the home or special palliative settings is also of central importance in helping to mitigate the impact of population ageing on health spending. Not only will this help contain health spending growth, but a growing body of research indicates that many people would prefer to die at home and outside of institutional settings<sup>122</sup>.

The King's Fund also stresses that financial and workforce growth is not aligned to a vision of care focused on communities, with larger growth in the acute hospital sector than in the primary and community sector. Its study found many reasons for this, noting a 'lack of agreement about the purpose underpinning the vision for the health and care system'.

The several different sets of assumptions, aims and asks about why the focus of the system needs to shift to primary and community services include

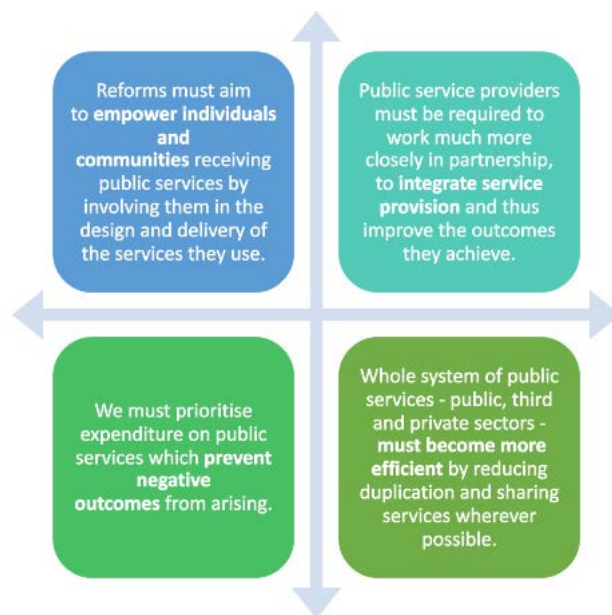
- cost savings

- reducing demand on hospitals (waiting lists, emergency admissions)
- better experiences and outcomes for people who use health and care services
- improved service alignment or integration
- developing population health and prevention at scale, including wellbeing, and tackling inequalities<sup>123</sup>.

# 8. Pulling it all together

## 8.1 Christie Commission

We're not alone..... Thirteen years ago the Christie Commission told us we should be thinking systematically about changing the way that we work.



## 8.2 Using our community planning colleagues & structures

The illustration below is an attempt to explain the level of impact and influence that different elements have on a person's health and encourages us to think more widely than the health and social care services we deliver in terms of improving population health and wellbeing.





Figure 65: Public Health Scotland Influences on Health

Clearly we can't fix or influence all of these areas on our own though, and we therefore need to look outwards, particularly towards our Community Planning partners.

Audit Scotland describes the role of a Community Planning Board as:

- having agreed shared outcomes based on evidence of local conditions
- being committed to reshaping, integrating and delivering better public services and to using public resources effectively, to deliver improvements on shared outcomes
- Being focused on tackling inequalities in outcomes for individuals and communities
- Ensuring local services are designed and resources deployed with and for people and communities

All the themes that are of concern to the health and social care partnership should be the concerns of the community planning partnership too. Just one example: Poor health predicts higher economic inactivity; a one per cent increase in the number of people reporting bad or very bad health is associated with a 2.1 per cent increase in the proportion of working age people who are economically inactive.<sup>124</sup>

## 8.3 Tackling Health Inequalities

The scale of health inequalities in Scotland is not inevitable. The pandemic demonstrated that agility in policy delivery and local practice is possible and the need to act at pace presents an

opportunity for change and renewal. Yet for that change to have lasting impact it must be developed and owned by Scotland. Taking action and making progress is possible and can be achieved within existing powers, and by maximising their use. For Scotland, the human and economic cost of inaction is simply too high.<sup>125</sup>

During 2022 the Health Foundation undertook an independent review of the powers that exist at Scottish Government and Parliament and local authorities' level to tackle health inequalities. A synopsis is available here: [IPPR Scotland Report .pdf \(health.org.uk\)](#) It provides an overview of the powers available, their use to date and relevant policy examples, and highlights where they could potentially be further utilised to tackle health inequalities. It also provides an overview of where powers remain reserved to the UK Parliament and where further action may be required.

In 2008, the Marmot review was commissioned to provide evidence-based recommendations for a strategy to reduce health inequalities in England. A review, 10 years on, found that little had changed<sup>126</sup>:

1. Health inequalities must be addressed in the interests of fairness and social justice.
2. There exists a social gradient in health: health improves as social status goes up.
3. Social inequalities result in health inequalities; therefore to reduce health inequalities we must consider all the social determinants of health.
4. Health inequalities cannot be properly addressed by only targeting those worst off. Reducing the steepness of the social gradient in health requires universal actions, concentrated according to levels of deprivation ('proportionate universalism').
5. Taking action to reduce health inequalities will have a positive effect on society in many ways, such as bringing economic benefits by reducing population illness and increasing productivity.
6. A country's success is measured by more than economic growth: fair distribution of health, wellbeing and sustainability are also important. Climate change and social inequalities in health should be addressed simultaneously.
7. Policy to reduce health inequalities must cover all of the following objectives:
  - Give every child the best start in life
  - Enable all children young people and adults to maximise their capabilities and have control over their lives
  - Create fair employment and good work for all
  - Ensure healthy standard of living for all
  - Create and develop healthy and sustainable places and communities
  - Strengthen the role and impact of ill health prevention

8. These policy objectives can only be delivered through effective involvement of central and local government, the NHS, third and private sectors, individuals and communities.

## 8.4 Healthy Aging

Professor Chris Whitty, the Chief Medical Officer for England, recommends that our focus should be on quality of life rather than quantity of life, which we have been successful in increasing. His 2023 Annual Report notes that ill health and disability in older age is not inevitable; we can maintain independence by reducing disease and adapting the environment to allow an individual with a set amount of disability in older age to live as independent and enjoyable a life as possible. (This includes accessible transportation, community venues and public spaces as important elements). Delaying disease onset enables adults to live for a much shorter proportion of life with significant disability.

Key points include:

- Drop in life expectancy coincided with economic downturn
- Deprivation and age are the big drivers of premature mortality
- Good news: People are entering old age now with lower levels of CHD – 75% reduction since the 1970s. This is because of primary prevention, and secondary prevention as well as curative treatment.
- We should be systematic about delaying disease and disability
- We should improve quality of life in most deprived areas to the levels of those in the least deprived in order to compress years spent in poor health.
- We should avoid over testing and overtreatment
- We need to tackle commercial determinants of health which are the drivers of non-communicable disease
- We should do what we can to adapt the environment<sup>127</sup>.

## 8.5 Healthy Places

The recent publication of new Place and Wellbeing Outcomes gives us an opportunity to review how well we see ourselves as an integrated part of public services, our communities and the places we live in<sup>128</sup>.

The Institute for Public Policy Research (IPPR), in their report 'Healthy Places, Prosperous Lives'<sup>129</sup> gives practical examples of transformative place-level interventions, including the

Wigan Deal (see below), which managed to transform outcomes for people within their community as well as saving money.

The IPPR notes that people see safety, security, opportunity and stability as the foundations of a healthy life: this encompasses the quality of local jobs, safety from crime and opportunities to improve their lives through and beyond education.

- Spaces, places and relationships are key priorities: public spaces and places were seen as the anchor for improving relationships, ensuring connection and community, and having a profound impact on people’s mental health, happiness and enjoyment of their place.
- Power and community cohesion are central: people want an active role in determining their health, but currently feel disempowered – as individuals and as communities.
- Good health should be everyone’s business: participants noted the limits of individual responsibility and saw the role of business (big and small), central, regional and local government, the NHS, and communities in delivering better health.

This report recommends developing ‘missions’ that we can sign up to, as opposed to setting targets.



Figure 66: Seven foundations for a Healthier, more prosperous and fairer country from the IPPR

## 8.6 Partnerships with People

Although other areas have explored similar approaches, Wigan, in the north of England, has managed to achieve substantial savings while protecting or improving outcomes in what has become known as the Wigan Deal; this has relied on genuine transformation of services and upfront investment to help bring about new ways of working. The approach involved widespread cultural changes and challenging engrained ways of working through bold leadership and a long-term strategic commitment to working differently with local people and communities. The Deal is not seen as a panacea, but it does illustrate the kind of work that is needed to shift to a new model of public service delivery in which patients, service users and communities are involved as active partners in improving health and care.

Notable elements include

- Development of a shared way of working across all of the services operating in a place. In Wigan, the local authority has led the development of the Deal, but a key part of the process has been closer working with the NHS, voluntary sector organisations and others to establish a common approach.
- Transformation of the relationship between public services and the people who use them needs to be transformed to allow people to take greater control of their health and wellbeing. Existing ways of delivering services can sometimes disempower the people they are there to help, leaving people feeling unable to make positive changes in their lives and their communities. In the case of health and social care services, changing this means striking a new relationship that puts more power in the hands of patients and service users and emphasises 'working with' rather than 'doing to'. The Deal has been an attempt both to manage demand for services and to transform how public servants and local people understand their roles in creating successful, healthy communities.
- Evidence of constancy of purpose in the senior leadership team, executive and political leaders, with a clear narrative about the changes required and why they were needed.
- Enabling style of leadership allows staff to have considerable freedom to develop their own ideas about how the principles of the Deal can be put into practice in their work.
- Need to hold nerve in the face of significant obstacles and enable positive risk taking
- Political leadership – requires councillors willing to make change a non-partisan issue and find common ground despite political differences.

- NHS needs to adopt a culture that gives patients more control and staff freedom to innovate
- Almost certainly requires upfront investment, but leads to substantial financial savings<sup>130</sup>.

## 8.7 Different ways of working – the Liberated Method

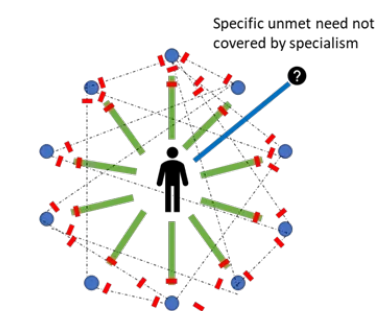
The people behind the ‘Liberated Method’<sup>131</sup> argue that we, as public services, should focus on **efficacy** rather than **efficiency**, and that by doing so, we can get better results for less money. They argue that designing public services around relationships is far more effective, with people who have ‘bounced around’ various public services for years starting to positively change how they see themselves, the community and the world when they are contributing to a relationship and are understood.

Public services over the last 80 years have tended to be designed around specific, describable problems (e.g., debt, diabetes) or specific and observable consequences of them (e.g., addiction, homelessness), but this means that people with lots of problems tend to be offered lots of different service solutions.

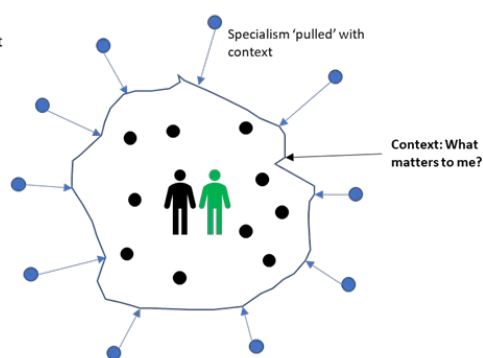
‘Those with a lot of connected and acute problems are deemed to be ‘complex’ or have ‘multiple and complex needs’. For such people, efforts to reform services that might help them and to address rising demand is often framed as a ‘navigation’ problem, i.e., how can we help people access the services they need? This despite there being little evidence as to whether services are having the desired effect; measures of efficacy are rare compared to those of industry or compliance.’

However, focusing on efficiency means that we are less likely to focus on the reality of people’s lives, their problems and their context.

Current: Requires 'navigation'



**Liberated Method: Requires a relationship**



iv

This system is based around generic caseworkers who work to 'two rules and five principles' and hold small amounts of cash in order to ameliorate immediate issues that usually take time and effort.

Table 14: 2R5P – The 2 rules and 5 principles of the Liberated Method

| Rules  |  |
|--|--|
| 1. Do no harm                                |  |
| 2. Stay legal                                |  |
| Principles                                   |  |
| What we do                                   | What we are trying to avoid  |
| 1. Understand, not assess                    | Standardised assessments that avoid what matters   |
| 2. Pull for help (or refer and 'hold')       | Doing our bit and passing someone on   |
| 3. Decisions about the work made in the work | Referrals to managers who have no knowledge of context   |
| 4. The caseworker/citizen set the scope      | Missing nuances that could unlock engagement and progress that are not pre-specified, e.g., carpentry, |
| 5. The caseworker/citizen set the timescales | Restricting support to arbitrary timescales  |

## 8.8 Shift to Community

The King's Fund describes the 'failure to grow and invest in primary and community health and care services ranks as one of the most significant and long-running failures of policy and implementation in the NHS and social care for more than 30 years.' They warn that 'if this shift in focus does not happen, more expensive hospitals will need to be built to manage people with acute needs that could have been prevented or better managed.'

The report notes:

- a 'cycle of invisibility' for primary and community health and care services; they are hard to quantify and easy to overlook.
- Hierarchies of care mean that urgent problems take priority over longer-term issues, for example treatments for urgent medical problems take priority over services that prevent the development of problems.
- misconceptions about how the public think health and care services should be prioritised.
- The financial architecture for health and care does not support a focus on primary and community health and care.
- short-term approaches to return on investment.
- The health and care system – including the way the workforce is trained and organised – is not set up to deal with the complexity of people's needs.
- Policies and strategies are not aligned with the vision of care focused on communities<sup>132</sup>.



# 9. Endnotes

The challenges that face us include poverty and cost of living, an aging population, with more complex health issues, children who will become adults with poorer health status than recent generations, ongoing recruitment and retention challenges, a growing burden of poor mental health, buildings that are becoming less fit for purpose and less money.

The following areas are highlighted from amongst the wealth of intelligence compiled.

1. There are continuing inequalities in health status across Moray, with an evident association between level of poverty and deprivation (including cost of living, poor housing, transport, employment) and ill health and death.
2. Lives are being cut short through suicide, drug and alcohol related deaths, conditions which are significantly affected by deprivation. In 2022, admissions for alcohol-related conditions were almost 4 times higher among those living in the most deprived areas in Moray as compared to the least deprived.
3. The population is predicted to continue ageing, with a growing proportion represented by adults over the age of sixty-five, and growing numbers of adults aged over eighty, with implications for increasing ill health.
4. Significant demand for health and social care services arise from sometimes preventable chronic disease, and a growing proportion of the population is experiencing more than one condition ("multi-morbidity").
5. There is significant death and poor health due to often modifiable behaviours, such as lack of exercise, smoking, alcohol and drug use.
6. A small number of individuals, with higher numbers coming from more deprived areas, require significant amounts of healthcare spending. This warrants further detailed analysis.

A Joint Strategic Needs Assessment for Children and Young People in Moray was completed in 2023. Identified priorities included:

- Poverty
- Mental Wellbeing
- Support for Parents
- Child Development

- Gender-based violence and domestic abuse
- Support required for specific groups such as people who are neuro-diverse or live with trauma.

All the issues in the Children's JSNA will become adult issues unless we clearly focus on making change happen, and move upstream rather than waiting to deal with the consequences. One option is to struggle on, trying to do ever more with less, trying to become ever more efficient and meet all the demands which are placed on us. An alternative is to construct a different system.

We need to work, internally, and externally with our community planning partners and national systems to:

- Be systematic about delaying disease and disability, prioritising, creating and maintaining good health and preventing ill health; this also means focusing support on the people and communities who need it the most
- Improve quality of life in our most deprived areas to the levels of those in the least deprived in order to compress years spent in poor health.
- Avoid over medicalising, testing and overtreatment
- Influence the social and economic factors that damage health and increase inequalities, recognising that commercial determinants are the main drivers of non-communicable disease
- Adapt the environment to allow an individual with a set amount of disability in older age to live as independent and enjoyable a life as possible. (Accessible homes, transportation, community venues and public spaces are all important elements).

# Appendix 1: Responsibilities of the Moray Integration Joint Board

The Moray Integration Joint Board has responsibility for planning and delivery of services:

- Inpatient hospital services provided by general medical practitioners
- Geriatric medicine services provided out with hospital
- Mental health services provided by health
- Substance misuse services provided by health
- Learning disability services provided by health
- GPs and primary care medical services
- Out-of-hours health care (e.g. G-Meds, etc.)
- District nursing services
- Community pharmacy services
- Services provided by AHPs in outpatients, clinic, or out with hospital
- Dental services
- Optician/optometrists (eye tests, eye health test, etc.)
- Continence services provided out with a hospital
- Kidney dialysis services provided out with a hospital
- Public health
- Social work/community care services and support for older people
- Services and support for adults with physical disabilities and learning disabilities
- Services and support for people with mental health problems
- Services and support for people with substance misuse issues
- Occupational therapy services (including aids/adaptations, reablement services, equipment and telecare)
- Adult support and protection
- Support services for unpaid and paid carers
- Day services (including day centres)
- Respite provision
- Justice Services
- Children and Families Services including:
  - Health Visiting
  - School Nursing
  - Allied Health Professionals i.e. Occupational Therapy, Physiotherapy, Speech and Language Therapy

The following services are provided by NHS Grampian and delegated to the board for strategic planning only:

- Accident and Emergency services provided in a hospital.
- inpatient hospital services including:
  - General medicine
  - Geriatric medicine
  - Rehabilitation medicine
  - Respiratory medicine
  - Palliative care services

# Glossary of terms:

|                                      |   |
|--------------------------------------|---|
| Avoidable mortality                  | Deaths that are considered to be either preventable or treatable through timely and effective healthcare or public health interventions for those aged under 75 years   |
| Commercial determinants of health    | Commercial determinants of health (CDoH) are the private sector activities impacting public health, either positively or negatively, and the enabling political economic systems and norms.   |
| Communicable disease                 | Communicable diseases are illnesses caused by viruses or bacteria that people spread to one another through contact with contaminated surfaces, bodily fluids, blood products, insect bites, or through the air.  |
| COPD                                 | Chronic Obstructive Pulmonary Disorder  |
| DALY (Disability-Adjusted Life Year) | One DALY represents the loss of the equivalent of one year of full health. DALYs for a disease or health condition are the sum of the years of life lost to due to premature mortality (YLLs) and the years lived with a disability (YLDs) due to prevalent cases of the disease or health condition in a population. |
| High Intensity Users                 | High Intensity Users are defined as people who attend Emergency Department 5 or more times per year   |
| Incidence                            | The rate of new cases of a disease or condition occurring in a specific population over a particular period of time   |
| Morbidity                            | The state of having an illness or medical condition, mental or physical   |
| Mortality                            | The occurrence of death in a population, often expressed as a percentage or rate to understand how many people are dying from a specific cause or in a specific period.   |
| Non-communicable disease             | A disease that is not transmissible from one person to another, such as heart disease, stroke, cancer   |
| Prevalence                           | The proportion of a population with a disease or condition at a specific point in time or over a specific period of time  |
| Preventable mortality                | causes of death among people aged under 75 years that can be mainly avoided through effective public health and primary prevention interventions (i.e. before the onset of  |

|      |  |
|------|--|
|      | disease/injury, to reduce incidence)   |
| PTSD | Post Traumatic Stress Disorder         |
| SIMD | Scottish Index of Multiple Deprivation |

<sup>1</sup> Stevens A, Raftery J, Mant J. "An introduction to HCNA". <http://www.hcna.bham.ac.uk/introduction.shtml>

<sup>2</sup> Stevens A (1991) "Needs assessment needs assessment...". *Health trends* 23: 20-3

<sup>3</sup> [1. Introduction - Strategic commissioning plans: guidance - gov.scot \(www.gov.scot\)](#)

<sup>4</sup> As above

<sup>5</sup> PHS, The right to health - <https://www.healthscotland.scot/health-inequalities/the-right-to-health/overview-of-the-right-to-health>

<sup>6</sup> Dahlgren G, Whitehead M (1993). Tackling inequalities in health: what can we learn from what has been tried? Working paper prepared for The King's Fund International Seminar on Tackling Inequalities in Health, September 1993, Ditchley Park, Oxfordshire. London, The King's Fund, accessible in: Dahlgren G, Whitehead M. (2007) European strategies for tackling social inequities in health: Levelling up Part 2. Copenhagen: WHO Regional office for Europe: [http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0018/103824/E89384.pdf](http://www.euro.who.int/__data/assets/pdf_file/0018/103824/E89384.pdf)

<sup>7</sup> NRS - [Scotland's Census 2022 - Rounded population estimates - https://www.scotlandscensus.gov.uk/documents/scotland-s-census-2022-rounded-population-estimates-data/](#)

<sup>8</sup> [NRS council profiles - https://www.nrscotland.gov.uk/files/statistics/council-area-data-sheets/moray-council-profile.html#Population\\_Estimates](#)

<sup>9</sup> [NRS council profiles - https://www.nrscotland.gov.uk/files/statistics/council-area-data-sheets/moray-council-profile.html#Population\\_Estimates](#)

<sup>10</sup> [NRS council profiles - https://www.nrscotland.gov.uk/files/statistics/council-area-data-sheets/moray-council-profile.html#Population\\_Estimates](#)

<sup>11</sup> <https://jech.bmj.com/content/jech/76/8/743.full.pdf>

<sup>12</sup> [NRS, Life Expectancy - https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/life-expectancy](#)

<sup>13</sup> [ScotPHO, Profiles tool - https://scotland.shinyapps.io/ScotPHO\\_profiles\\_tool/](#)

<sup>14</sup> [Healthy Life Expectancy 2019-2021 \(nrscotland.gov.uk\)](#)

<sup>15</sup> [NRS, Healthy Life Expectancy - https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/life-expectancy/healthy-life-expectancy-in-scotland](#)

<sup>16</sup> [ScotPHO, Profiles tool - https://scotland.shinyapps.io/ScotPHO\\_profiles\\_tool/](#)

<sup>17</sup> NRS – Scotland Census 2011 - <https://www.scotlandscensus.gov.uk/search-the-census#/explore/snapshot>

<sup>18</sup> [SuperWEB2\(tm\) - Table View \(scotlandscensus.gov.uk\)](#)

<sup>19</sup> [SuperWEB2\(tm\) - Table View \(scotlandscensus.gov.uk\)](#)

<sup>20</sup> [Veterans' health and wellbeing: a distinctive Scottish approach - gov.scot \(www.gov.scot\)](#)

<sup>21</sup> NRS – Household estimates for Scotland, 2022 - <https://scotland.shinyapps.io/nrs-household-estimates/>

<sup>22</sup> ScotPHO, Housing: introduction - <https://www.scotpho.org.uk/wider-determinants/housing/introduction/>

<sup>23</sup> [Microsoft Word - 2023-12-20 Moray 2023 HNDA Study Final Report](#)

<sup>24</sup> Moray Housing Market Partnership, Housing Need & Demand Assessment Final Report, December 2023 - <http://www.moray.gov.uk/downloads/file152976.pdf>

<sup>25</sup> [Microsoft Word - 2023-12-20 Moray 2023 HNDA Study Final Report](#)

<sup>26</sup> [https://doi.org/10.1016/S0140-6736\(19\)32267-6](https://doi.org/10.1016/S0140-6736(19)32267-6)

Aldridge RW, Menezes D, Lewer D *et al.* Causes of death among homeless people: a population-based cross-sectional study of linked hospitalisation and mortality data in England. [version 1; peer review: 2 approved]. Wellcome Open Res 2019, 4:49 (<https://doi.org/10.12688/wellcomeopenres.15151.1>)

[Homelessness: Causes, Types and Facts | Crisis UK](#)

<sup>27</sup> [Homelessness+in+Scotland+update+to+30+Sep+2023+-+Final.xlsx \(live.com\)](#)

<sup>28</sup> [Scottish Index of Multiple Deprivation 2020 - https://www.gov.scot/collections/scottish-index-of-multiple-deprivation-2020/#revisionnotice](#)

- <sup>29</sup> Scottish Government, SIMD rank to quintile, decile, vigintile <https://www.gov.scot/publications/simd-rank-to-quintile-decile-and-vigintile/>
- <sup>30</sup> Scottish Government, Scottish Index of Multiple Deprivation 2020 [https://www.gov.scot/collections/scottish-index-of-multiple-deprivation-2020/?utm\\_source=redirect&utm\\_medium=shorturl&utm\\_campaign=SIMD](https://www.gov.scot/collections/scottish-index-of-multiple-deprivation-2020/?utm_source=redirect&utm_medium=shorturl&utm_campaign=SIMD)
- <sup>31</sup> [Working-age poverty - ScotPHO](#)
- <sup>32</sup> [Number and proportion of employee jobs with hourly pay below the living wage - Office for National Statistics \(ons.gov.uk\)](#)
- <sup>33</sup> Nomis, Official Census and Labour Market Statistics <https://www.nomisweb.co.uk/>
- <sup>34</sup> UK Government (2022) National Minimum Wage and National Living Wage rates <https://www.gov.uk/national-minimum-wage-rates>
- <sup>35</sup> Living Wage Foundation (2022) What is the real living wage. <https://www.livingwage.org.uk/what-real-living-wage>
- <sup>36</sup> [Poverty and health](#)
- <sup>37</sup> Scottish Government Urban Rural Classification 2020 - <https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2022/05/scottish-government-urban-rural-classification-2020/documents/scottish-government-urban-rural-classification-2020/scottish-government-urban-rural-classification-2020/govscot%3Adocument/scottish-government-urban-rural-classification-2020.pdf>
- <sup>38</sup> Scottish household survey 2019: Supplementary analysis - <https://www.gov.scot/publications/scottish-household-survey-2019-supplementary-analysis/documents/>
- <sup>39</sup> DWP , Stat-Xplore - <https://stat-xplore.dwp.gov.uk/>
- <sup>40</sup> Scottish Government, Scottish House Condition Survey: 2017-2019 Local Authority Tables - <https://www.gov.scot/binaries/content/documents/govscot/publications/statistics/2021/02/scottish-house-condition-survey-local-authority-analyses-2017-2019/documents/scottish-house-condition-survey-2017-2019-local-authority-tables/scottish-house-condition-survey-2017-2019-local-authority-tables/govscot%3Adocument/scottish-house-condition-survey-2017-2019-local-authority-tables.pdf>
- <sup>41</sup> Scottish Government, Scottish House Condition Survey: 2017-2019 Local Authority Tables - <https://www.gov.scot/binaries/content/documents/govscot/publications/statistics/2021/02/scottish-house-condition-survey-local-authority-analyses-2017-2019/documents/scottish-house-condition-survey-2017-2019-local-authority-tables/scottish-house-condition-survey-2017-2019-local-authority-tables/govscot%3Adocument/scottish-house-condition-survey-2017-2019-local-authority-tables.pdf>
- <sup>42</sup> [Microsoft Word - 2023-12-20 Moray 2023 HNDA Study Final Report](#)
- <sup>43</sup> [https://foodfoundation.org.uk/sites/default/files/2021-10/Affordability-of-the-Eatwell-Guide\\_Final\\_Web-Version.pdf](https://foodfoundation.org.uk/sites/default/files/2021-10/Affordability-of-the-Eatwell-Guide_Final_Web-Version.pdf)
- <sup>44</sup> Iain Sneddon, Research and Information Officer, Moray Council
- <sup>45</sup> [Commercial determinants of health \(thelancet.com\)](#)
- <sup>46</sup> [Microsoft Word - Affordability of the Eatwell Guide\\_Final\\_Web Version.docx \(foodfoundation.org.uk\)](#)
- <sup>47</sup> [The normalisation of food aid: what happened to feeding people well? | Emerald Insight](#)
- <sup>48</sup> Centre for Research on Environment, Society and Health at the Universities of Edinburgh and Glasgow and Alcohol Focus Scotland (2018) Alcohol Outlet Availability and Harm in Scotland April 2018, <https://www.alcohol-focus-scotland.org.uk/media/310762/alcohol-outlet-availability-and-harm-in-scotland.pdf>.
- <sup>49</sup> Riches, E., et al. (2018) What is the causal link between tobacco outlet density and smoking prevalence? What is the causal link between the tobacco outlet density and smoking prevalence? (healthscotland.scot) Edinburgh: NHS Health Scotland.
- <sup>50</sup> Macdonald, L. Olsen, J. Shortt, N. Ellaway, A. (2018) Do environmental bads' such as alcohol, fast food, tobacco, and gambling outlets cluster and co-locate in more deprived areas in Glasgow City, Scotland? Health & Place. Vol. 51, <https://www.sciencedirect.com/science/article/pii/S1353829217310778>.
- <sup>51</sup> Shortt, N. Tisch, C. Pearce, J. Mitchell, R. Richardson, E. Hill, S. Collin, J. (2015) A cross-sectional analysis of the relationship between tobacco and alcohol outlet density and neighbourhood deprivation, <https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-015-2321-1#:~:text=There%20was%20a%20positive%20linear%20relationship%20between%20neighbourhood,of%20neighbourhoods%20had%20the%20highest%20densities%20of>



%20both.

<sup>52</sup> ScotPHO, Profiles tool - [https://scotland.shinyapps.io/ScotPHO\\_profiles\\_tool/](https://scotland.shinyapps.io/ScotPHO_profiles_tool/)

<sup>53</sup> Scottish Health Survey Dashboard, December 2023 - <https://scotland.shinyapps.io/sg-scottish-health-survey/>

<sup>54</sup> ScotPHO, Profiles tool - [https://scotland.shinyapps.io/ScotPHO\\_profiles\\_tool/](https://scotland.shinyapps.io/ScotPHO_profiles_tool/)

<sup>55</sup> ScotPHO, Profiles tool - [https://scotland.shinyapps.io/ScotPHO\\_profiles\\_tool/](https://scotland.shinyapps.io/ScotPHO_profiles_tool/)

<sup>56</sup> [Smoking-and-Mental-Health-Report-Final.pdf](https://ashscotland.org.uk/Smoking-and-Mental-Health-Report-Final.pdf) (ashscotland.org.uk)

<sup>57</sup> [Health inequalities: Why do people smoke if they know it's bad for them?](https://ash.org.uk/resources/view/young-people-and-smoking) - Cancer Research UK - Cancer News

<sup>58</sup> <https://ash.org.uk/resources/view/young-people-and-smoking>

<sup>59</sup> Scottish Government, Lower-risk drinking guidelines: factsheet, 2016 - <https://www.gov.scot/publications/lower-risk-drinking-guidelines-factsheet/>

<sup>60</sup> Scottish Health Survey Dashboard, December 2023 - <https://scotland.shinyapps.io/sg-scottish-health-survey/>

<sup>61</sup> ScotPHO, Profiles tool - [https://scotland.shinyapps.io/ScotPHO\\_profiles\\_tool/](https://scotland.shinyapps.io/ScotPHO_profiles_tool/)

<sup>62</sup> ScotPHO, Drug Use: Introduction, 2023 - <https://www.scotpho.org.uk/risk-factors/drugs/introduction/>

<sup>63</sup> PHS, Drug Related Hospital Statistics: Scotland 2021 to 2022 (All diagnoses – General acute and psychiatric) - <https://www.publichealthscotland.scot/publications/drug-related-hospital-statistics/drug-related-hospital-statistics-scotland-2021-to-2022/summary/>

<sup>64</sup> NRS, Drug related deaths in Scotland in 2022 - <https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/vital-events/deaths/drug-related-deaths-in-scotland/2022>

<sup>65</sup> ScotPHO, Profiles tool - [https://scotland.shinyapps.io/ScotPHO\\_profiles\\_tool/](https://scotland.shinyapps.io/ScotPHO_profiles_tool/)

<sup>66</sup> ScotPHO, Physical Activity: Key Points - <https://www.scotpho.org.uk/risk-factors/physical-activity/key-points/>

<sup>67</sup> Scottish Health Survey Dashboard, December 2023 - <https://scotland.shinyapps.io/sg-scottish-health-survey/>

<sup>68</sup> Scottish Government, Scottish Household Survey 2022: Key Findings - <https://www.gov.scot/publications/scottish-household-survey-2022-key-findings/documents/>

<sup>69</sup> van der Ploeg, H.P., Bull, F.C. Invest in physical activity to protect and promote health: the 2020 WHO guidelines on physical activity and sedentary behaviour. *Int J Behav Nutr Phys Act* **17**, 145 (2020). <https://doi.org/10.1186/s12966-020-01051-1>

<sup>70</sup> Scottish Health Survey Dashboard, December 2023 - <https://scotland.shinyapps.io/sg-scottish-health-survey/>

<sup>71</sup> Scottish Health Survey Dashboard, December 2023 - <https://scotland.shinyapps.io/sg-scottish-health-survey/>

<sup>72</sup> Brown, K. F. et al. The fraction of cancer attributable to modifiable risk factors in England, Wales, Scotland, Northern Ireland, and the United Kingdom in 2015. *Br. J. Cancer* **118**, 1130–1141 (2018). Available at: <https://www.nature.com/articles/s41416-018-0029-6>

<sup>73</sup> Abdelaal M, le Roux, C and Docherty, N (2017). Morbidity and mortality associated with obesity. *Annals of Translational Medicine*; 5(7): 101: p.1. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5401682/>

<sup>74</sup> Floriana, S, Luppino, MD, Leonore, M, de Wit, MS, Paul, F, Bouvy, MD et al. (2010). Overweight, obesity and depression: A systematic review and meta-analysis of longitudinal studies. *Arch Gen Psychiatry*. 2010 Mar;67(3):220-9. doi: 10.1001/archgenpsychiatry.2010.2. Available at: <https://www.ncbi.nlm.nih.gov/pubmed/20194822>

Gatineau, M, Dent, M (2011). Obesity and mental health. National Obesity Observatory. SCIE Social Care [Online]. Available at: <https://www.scie-socialcareonline.org.uk/obesity-and-mentalhealth/r/a11G00000017trJIAQ>

Rivenes, AC, Harvey, SB, Mykletun, A (2009). The relationship between abnormal fat, obesity and common mental disorders: Results from the HUNT study. *Journal of Psychosomatic Research*, 66(4): 269-275: <https://www.ncbi.nlm.nih.gov/pubmed/19302883>

<sup>75</sup> Anstey, KJ, Cherbuin, N, Budge, M, and Young, J (2011). Body mass index in midlife and late-life as a risk factor for dementia: a meta-analysis of prospective studies. *Obesity Reviews*; 12(5):426-37. Available at: <https://www.ncbi.nlm.nih.gov/pubmed/21348917>

Xu, WL, Atti, AR, Gatz, M, Pedersen, NL, Johansson, B, and Fratiglioni, L. Midlife overweight and obesity increase late-life dementia risk: a population-based twin study. *Neurology*; 76(18): 1568-74. Available at:

<https://www.ncbi.nlm.nih.gov/pubmed/21536637>

Loef, M and Walach, H. Midlife obesity and dementia: meta-analysis and adjusted forecast of dementia prevalence in the United States and China. *Obesity*; 21(1): 51-5. Available at: <https://www.ncbi.nlm.nih.gov/pubmed/23401370>

<sup>76</sup> Johnson, W, Li, L, Kuh, D, Hardy, R (2015) How Has the Age-Related Process of Overweight or Obesity Development Changed over Time? Coordinated Analyses of Individual Participant Data from Five United Kingdom Birth Cohorts. *PLoS Med* 12(5). Available at: <https://pubmed.ncbi.nlm.nih.gov/25993005/>

<sup>77</sup> Arnold, M. et al. Overweight duration in older adults and cancer risk: a study of cohorts in Europe and the United States. *Eur. J. Epidemiol.* **31**, 893–904 (2016). Available at: <https://pubmed.ncbi.nlm.nih.gov/27300353/>

<sup>78</sup> <https://onlinelibrary.wiley.com/doi/full/10.1111/obr.12266>

<sup>79</sup> ScotPHO, Obesity, introduction - Scottish Health Survey Dashboard, December 2023 - <https://www.scotpho.org.uk/risk-factors/obesity/introduction/>

<sup>80</sup> Scottish Health Survey Dashboard, December 2023 - <https://scotland.shinyapps.io/sg-scottish-health-survey/>

<sup>81</sup> PHS, Primary 1 Body Mass Index (BMI) statistics Scotland : School year 2022 to 2023, <https://publichealthscotland.scot/publications/primary-1-body-mass-index-bmi-statistics-scotland/primary-1-body-mass-index-bmi-statistics-scotland-school-year-2022-to-2023/>

<sup>82</sup> Scottish Health Survey Dashboard, December 2023 - <https://scotland.shinyapps.io/sg-scottish-health-survey/>

<sup>83</sup> ScotPHO, High Blood Pressure: key points - <https://www.scotpho.org.uk/risk-factors/high-blood-pressure/key-points/>

<sup>84</sup> ScotPHO, Burden of disease: overview - <https://www.scotpho.org.uk/comparative-health/burden-of-disease/overview/>

<sup>85</sup> PHS, Scottish Burden of Disease Study 2019, Summary of Health Loss in Moray, Revised October 2022 - <https://www.scotpho.org.uk/media/2324/2021-09-21-scottishburdenofdisease-moray-revised.pdf>

<sup>86</sup> Scottish Burden of Disease - <https://scotland.shinyapps.io/phs-local-trends-scottish-burden-diseases/>

<sup>87</sup> [Scottish Burden of Disease Study 2019 \(scotpho.org.uk\)](https://www.scotpho.org.uk/scottish-burden-of-disease-study-2019)

<sup>88</sup> [Scottish Burden of Disease Study 2019 \(scotpho.org.uk\)](https://www.scotpho.org.uk/scottish-burden-of-disease-study-2019)

<sup>89</sup> Scottish Health Survey (shinyapps.io)

<sup>90</sup> General practice - disease prevalence data visualisation – 2023, PHS, <https://publichealthscotland.scot/publications/general-practice-disease-prevalence-data-visualisation/general-practice-disease-prevalence-visualisation-27-june-2023/>

<sup>91</sup> Source: [General Practice - disease prevalence visualisation 27 June 2023 - General practice - disease prevalence data visualisation - Publications - Public Health Scotland](https://www.scotpho.org.uk/general-practice-disease-prevalence-visualisation-27-june-2023).

<sup>92</sup> NRS, Death Certificates and Coding the Causes of Death - <https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/vital-events/deaths/deaths-background-information/death-certificates-and-coding-the-causes-of-death>

<sup>93</sup> NRS, Avoidable Mortality, November 2022 - <https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/vital-events/deaths/avoidable-mortality>

<sup>94</sup> ScotPHO, Profiles tool - [https://scotland.shinyapps.io/ScotPHO\\_profiles\\_tool/](https://scotland.shinyapps.io/ScotPHO_profiles_tool/)

<sup>95</sup> [2019 Report - SCLD](https://www.scotpho.org.uk/2019-report-sclld)

<sup>96</sup> [New research on learning disabilities in Scotland | FAI \(fraserofallander.org\)](https://www.fraserofallander.org/new-research-on-learning-disabilities-in-scotland)

<sup>97</sup> [Dashboard - Primary Care in-hours General Practice activity visualisation - as at 31 December 2023 - Primary Care in-hours General Practice activity visualisation - Publications - Public Health Scotland](https://www.scotpho.org.uk/dashboard-primary-care-in-hours-general-practice-activity-visualisation-as-at-31-december-2023)

<sup>98</sup> NHS Grampian, Grampian Vaccination and Immunisation Programme Annual Report 2023

<sup>99</sup> PHS, Acute hospital activity and NHS beds information (annual) Year ending March 2023 - <https://www.publichealthscotland.scot/publications/acute-hospital-activity-and-nhs-beds-information-annual/acute-hospital-activity-and-nhs-beds-information-annual-year-ending-31-march-2023/>

<sup>100</sup> PHS, [A&E activity and waiting times statistics](https://www.publichealthscotland.scot/publications/ae-activity-and-waiting-times/ae-activity-and-waiting-times-month-ending-31-march-2023/) – Month ending March 2023 - <https://www.publichealthscotland.scot/publications/ae-activity-and-waiting-times/ae-activity-and-waiting-times-month-ending-31-march-2023/>

- <sup>101</sup> PHS, [A&E activity and waiting times statistics](https://publichealthscotland.scot/publications/ae-activity-and-waiting-times/ae-activity-and-waiting-times-month-ending-31-march-2023/) – Month ending March 2023 - <https://publichealthscotland.scot/publications/ae-activity-and-waiting-times/ae-activity-and-waiting-times-month-ending-31-march-2023/>
- <sup>102</sup> [Exploring high-intensity use of Accident and Emergency \(redcross.org.uk\)](https://www.redcross.org.uk/)
- <sup>103</sup> PHS, [Unintentional Injuries Publication](https://publichealthscotland.scot/publications/unintentional-injuries-publication/) - Hospital admissions year ending 31 March 2023 and deaths year ending 31 December 2022, [Dashboard - Unintentional injuries - Hospital admissions year ending 31 March 2023 and deaths year ending 31 December 2022 - Unintentional injuries - Publications - Public Health Scotland](https://publichealthscotland.scot/publications/unintentional-injuries-publication/)
- <sup>104</sup> PHS, [Percentage of end of life spent at home or in a community setting statistical report](https://publichealthscotland.scot/publications/percentage-of-end-of-life-spent-at-home-or-in-a-community-setting-statistical-report/) - Financial years ending 31 March 2014 to 2023, <https://publichealthscotland.scot/publications/percentage-of-end-of-life-spent-at-home-or-in-a-community-setting/percentage-of-end-of-life-spent-at-home-or-in-a-community-setting-financial-years-ending-31-march-2014-to-2023/>
- <sup>105</sup> PHS, [Delayed discharges in NHSScotland annual statistics](https://publichealthscotland.scot/publications/delayed-discharges-in-nhsscotland-annual-statistics/) : Annual summary of occupied bed days and census figures – data to March 2023 planned revision, <https://publichealthscotland.scot/publications/delayed-discharges-in-nhsscotland-annual/delayed-discharges-in-nhsscotland-annual-annual-summary-of-occupied-bed-days-and-census-figures-data-to-march-2023-planned-revision/>
- <sup>106</sup> PHS, Insights in social care: statistics for Scotland 2022/23, <https://publichealthscotland.scot/publications/insights-in-social-care-statistics-for-scotland/insights-in-social-care-statistics-for-scotland-care-home-services-funded-by-local-authorities-in-scotland-financial-year-202223/care-home-services-dashboard/>
- <sup>107</sup> Source: [Care home services dashboard - Insights in social care statistics for Scotland - Care home services funded by local authorities in Scotland, financial year 2022/23 - Insights in social care: statistics for Scotland - Publications - Public Health Scotland](https://publichealthscotland.scot/publications/insights-in-social-care-statistics-for-scotland/insights-in-social-care-statistics-for-scotland-care-home-services-funded-by-local-authorities-in-scotland-financial-year-202223/care-home-services-dashboard/)
- <sup>108</sup> PHS, Insights in social care: statistics for Scotland 2022/23, <https://publichealthscotland.scot/publications/insights-in-social-care-statistics-for-scotland/insights-in-social-care-statistics-for-scotland-care-home-services-funded-by-local-authorities-in-scotland-financial-year-202223/care-home-services-dashboard/>
- <sup>109</sup> Source: [Care home services dashboard - Insights in social care statistics for Scotland - Care home services funded by local authorities in Scotland, financial year 2022/23 - Insights in social care: statistics for Scotland - Publications - Public Health Scotland](https://publichealthscotland.scot/publications/insights-in-social-care-statistics-for-scotland/insights-in-social-care-statistics-for-scotland-care-home-services-funded-by-local-authorities-in-scotland-financial-year-202223/care-home-services-dashboard/)
- <sup>110</sup> PHS, Insights in social care: statistics for Scotland 2022/23, <https://publichealthscotland.scot/publications/insights-in-social-care-statistics-for-scotland/insights-in-social-care-statistics-for-scotland-care-home-services-funded-by-local-authorities-in-scotland-financial-year-202223/care-home-services-dashboard/>
- <sup>111</sup> PHS, Social Care Insights Dashboard - <https://publichealthscotland.scot/publications/insights-in-social-care-statistics-for-scotland/insights-in-social-care-statistics-for-scotland-care-at-home-services-provided-and-or-funded-by-health-and-social-care-partnerships-in-scotland-20222023/care-at-home-dashboard/>
- <sup>112</sup> PHS, Insights in social care: statistics for Scotland: Care at home services provided and/or funded by health and social care partnerships in Scotland 2022/2023, [Care at home dashboard - Insights in social care statistics for Scotland - Care at home services provided and/or funded by health and social care partnerships in Scotland 2022/2023 - Insights in social care: statistics for Scotland - Publications - Public Health Scotland](https://publichealthscotland.scot/publications/insights-in-social-care-statistics-for-scotland/insights-in-social-care-statistics-for-scotland-care-at-home-services-provided-and-or-funded-by-health-and-social-care-partnerships-in-scotland-20222023/care-at-home-dashboard/)
- <sup>113</sup> [Detailed experience ratings - results - Health and Care Experience survey - 2022 - Health and Care Experience survey - Publications - Public Health Scotland](https://publichealthscotland.scot/publications/health-and-care-experience-survey-2022/)
- <sup>114</sup> PHS, Self-directed Support - Implementation Trend, 2021/22 - <https://publichealthscotland.scot/publications/insights-in-social-care-statistics-for-scotland/insights-in-social-care-statistics-for-scotland-support-provided-or-funded-by-health-and-social-care-partnerships-in-scotland-202122/self-directed-support/>
- <sup>115</sup> Scottish Health Survey Dashboard, December 2023 - <https://scotland.shinyapps.io/sg-scottish-health-survey/>
- <sup>116</sup> [Summary of results - Health and Care Experience survey - 2022 - Health and Care Experience survey - Publications - Public Health Scotland](https://publichealthscotland.scot/publications/health-and-care-experience-survey-2022/)
- <sup>117</sup> [NHS Scotland workforce | Turas Data Intelligence](https://www.nhs.uk/workforce/turas-data-intelligence/)
- <sup>118</sup> [Healthcare spending staffing and activity-IFS-Report-R298.pdf](https://www.nhs.uk/workforce/turas-data-intelligence/healthcare-spending-staffing-and-activity-IFS-Report-R298.pdf)
- <sup>119</sup> [Primary Care | NHS Research Scotland | NHS Research Scotland](https://www.nhs.uk/workforce/turas-data-intelligence/primary-care/)
- <sup>120</sup> [What should primary care look like for the next generation? \(azureedge.net\)](https://www.azureedge.net/)

- <sup>121</sup> Bijlmakers L, Mueller D, Kahveci R, Chen Y, van der Wilt GJ. Integrate-HTA: A low and middle income perspective. *Int J Technol Assess Health Care*. 2017;33(5):599–604. 23
- <sup>122</sup> Hunter J, Orlovic M. End of life care in England. London: Institute for Public Policy Research; 2018
- <sup>123</sup> [Making Care Closer To Home A Reality | The King's Fund \(kingsfund.org.uk\)](https://kingsfund.org.uk/making-care-closer-to-home-a-reality)
- <sup>124</sup> IPPR: Institute for Public Policy Research – Healthy Places, Prosperous Lives.
- <sup>125</sup> [Leave no one behind - The Health Foundation](https://www.healthfoundation.org.uk/leave-no-one-behind)
- <sup>126</sup> Michael Marmot, Jessica Allen, Tammy Boyce, Peter Goldblatt, Joana Morrison (2020) Health equity in England: The Marmot Review 10 years on. London: Institute of Health Equity
- <sup>127</sup> [Chief Medical Officer's Annual Report 2023 – Health in an Ageing Society \(publishing.service.gov.uk\)](https://publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/912341/Chief-Medical-Officer-s-Annual-Report-2023-Health-in-an-Ageing-Society.pdf)
- <sup>128</sup> [Place and Wellbeing Outcomes | Improvement Service](https://www.improvementservice.org.uk/place-and-wellbeing-outcomes)
- <sup>129</sup> [Healthy places prosperous lives\\_Jan24.pdf \(svdcdn.com\)](https://svdcdn.com/healthy_places_prosperous_lives_Jan24.pdf)
- <sup>130</sup> [Lessons From The Wigan Deal | The King's Fund \(kingsfund.org.uk\)](https://kingsfund.org.uk/lessons-from-the-wigan-deal)
- <sup>131</sup> [The Liberated Method - Rethinking public service \(changingfuturesnorthumbria.co.uk\)](https://changingfuturesnorthumbria.co.uk/the-liberated-method)
- <sup>132</sup> [Making Care Closer To Home A Reality | The King's Fund \(kingsfund.org.uk\)](https://kingsfund.org.uk/making-care-closer-to-home-a-reality)



**Find out more about the Moray Integration Joint Board and Health & Social Care Moray on our website:**

**<https://hscmoray.co.uk/index.html>**

**Follow us on social media**

**Facebook @hscmoray  
Instagram @hscmoray**

**For further information about this document or to request it in another format or language, please contact:**

**Health & Social Care Moray  
Moray Council Offices  
High Street  
Elgin  
Moray IV30 1BX**

**[Gram.hscmcorporate@nhs.scot](mailto:Gram.hscmcorporate@nhs.scot)**

